



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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, June 30, 2016

***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, July 01, 2016.**

Current rates as of:

**Thursday, June 30, 2016.**

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>AGRICULTURE - Outright Rates</b>            |              |             |          |     |                 |                     |             |                 |
| <b>CLASS IV MILK FUTURE (DK)</b>               |              |             |          |     |                 |                     |             |                 |
| DK   | Spec         | Months 6+   | Increase | USD | 1,540           | 1,400               | 1,760       | 1,600           |
| DK   | Hedge/Member | Months 6+   | Increase | USD | 1,400           | 1,400               | 1,600       | 1,600           |
| <b>MINI-SIZED SOYBEANS FUTURES (YK)</b>        |              |             |          |     |                 |                     |             |                 |
| YK   | Spec         | Months 1-4  | Increase | USD | 572             | 520                 | 638         | 580             |
| YK   | Hedge/Member | Months 1-4  | Increase | USD | 520             | 520                 | 580         | 580             |
| <b>NYMEX COCOA (CJ)</b>                        |              |             |          |     |                 |                     |             |                 |
| CJ   | Spec         |             | Increase | USD | 1,430           | 1,300               | 1,705       | 1,550           |
| CJ   | Hedge/Member |             | Increase | USD | 1,300           | 1,300               | 1,550       | 1,550           |
| <b>SOYBEAN CRUSH COMBO (31)</b>                |              |             |          |     |                 |                     |             |                 |
| 31   | Spec         | Old Crop    | Increase | USD | 17,078          | 15,525              | 17,969      | 16,335          |
| 31   | Hedge/Member | Old Crop    | Increase | USD | 15,525          | 15,525              | 16,335      | 16,335          |
| 31   | Spec         | New Crop    | Increase | USD | 17,078          | 15,525              | 17,969      | 16,335          |
| 31   | Hedge/Member | New Crop    | Increase | USD | 15,525          | 15,525              | 16,335      | 16,335          |
| <b>SOYBEAN FUTURES (S)</b>                     |              |             |          |     |                 |                     |             |                 |
| S  | Spec         | Months 1-4  | Increase | USD | 2,860           | 2,600               | 3,190       | 2,900           |
| S  | Hedge/Member | Months 1-4  | Increase | USD | 2,600           | 2,600               | 2,900       | 2,900           |
| <b>SOYBEAN TAS FUTURE (SBT)</b>                |              |             |          |     |                 |                     |             |                 |
| SBT  | Spec         | Months 1-4  | Increase | USD | 2,860           | 2,600               | 3,190       | 2,900           |
| SBT  | Hedge/Member | Months 1-4  | Increase | USD | 2,600           | 2,600               | 2,900       | 2,900           |
| <b>COAL - Outright Rates</b>                   |              |             |          |     |                 |                     |             |                 |
| <b>COAL API 8 CFR SOUTH CHINA (SSI)</b>        |              |             |          |     |                 |                     |             |                 |
| SSI  | Spec         | Month 1     | Increase | USD | 2,860           | 2,600               | 3,300       | 3,000           |
| SSI  | Hedge/Member | Month 1     | Increase | USD | 2,600           | 2,600               | 3,000       | 3,000           |
| SSI  | Spec         | Month 2     | Increase | USD | 2,750           | 2,500               | 3,163       | 2,875           |
| SSI  | Hedge/Member | Month 2     | Increase | USD | 2,500           | 2,500               | 2,875       | 2,875           |
| SSI  | Spec         | Months 3+   | New      | USD |                 |                     | 3,025       | 2,750           |
| SSI  | Hedge/Member | Months 3+   | New      | USD |                 |                     | 2,750       | 2,750           |
| <b>INDONESIAN COAL MCCLOSKEY SUBBIT. (MCC)</b> |              |             |          |     |                 |                     |             |                 |
| MCC  | Spec         | Mths 2-6    | Increase | USD | 1,650           | 1,500               | 2,090       | 1,900           |
| MCC  | Hedge/Member | Mths 2-6    | Increase | USD | 1,500           | 1,500               | 1,900       | 1,900           |
| MCC  | Spec         | Mths 7+     | Increase | USD | 2,090           | 1,900               | 2,640       | 2,400           |
| MCC  | Hedge/Member | Mths 7+     | Increase | USD | 1,900           | 1,900               | 2,400       | 2,400           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |              |             |          |     |                 |                     |             |                 |
| <b>ELECTRICITY - Outright Rates</b>              |              |             |          |     |                 |                     |             |                 |
| <b>ISO NEW ENGLAND PEAK LMP FUT (NI)</b>         |              |             |          |     |                 |                     |             |                 |
| NI   | Spec         | Mnths 3-5   | Increase | USD | 2,970           | 2,700               | 3,850       | 3,500           |
| NI   | Hedge/Member | Mnths 3-5   | Increase | USD | 2,700           | 2,700               | 3,500       | 3,500           |
| <b>MISO INDIANA HUB 5MW OFPK CAL MO RT (FTM)</b> |              |             |          |     |                 |                     |             |                 |
| FTM  | Spec         | Mnth 1      | Increase | USD | 22              | 20                  | 28          | 25              |
| FTM  | Hedge/Member | Mnth 1      | Increase | USD | 20              | 20                  | 25          | 25              |
| <b>MISO INDIANA HUB 5MW OFPK CALDAY DA (FAD)</b> |              |             |          |     |                 |                     |             |                 |
| FAD  | Spec         | Days 1-11   | Increase | USD | 83              | 75                  | 149         | 135             |
| FAD  | Hedge/Member | Days 1-11   | Increase | USD | 75              | 75                  | 135         | 135             |
| <b>MISO INDIANA HUB 5MW OFPK CALDAY RT (FTD)</b> |              |             |          |     |                 |                     |             |                 |
| FTD  | Spec         | Days 1-11   | Increase | USD | 99              | 90                  | 165         | 150             |
| FTD  | Hedge/Member | Days 1-11   | Increase | USD | 90              | 90                  | 150         | 150             |
| <b>MISO INDIANA HUB 5MW PK CAL DAYHD (PDD)</b>   |              |             |          |     |                 |                     |             |                 |
| PDD  | Spec         | Days 1-11   | Increase | USD | 1,650           | 1,500               | 2,200       | 2,000           |
| PDD  | Hedge/Member | Days 1-11   | Increase | USD | 1,500           | 1,500               | 2,000       | 2,000           |
| <b>MISO INDIANA HUB 5MW PK CAL-DAY RT (PTD)</b>  |              |             |          |     |                 |                     |             |                 |
| PTD  | Spec         | Days 1-11   | Increase | USD | 2,750           | 2,500               | 3,300       | 3,000           |
| PTD  | Hedge/Member | Days 1-11   | Increase | USD | 2,500           | 2,500               | 3,000       | 3,000           |
| <b>MISO INDIANA HUB OFF-PEAK MO FUT (EJ)</b>     |              |             |          |     |                 |                     |             |                 |
| EJ   | Spec         | Mnth 1      | Increase | USD | 1,870           | 1,700               | 2,090       | 1,900           |
| EJ   | Hedge/Member | Mnth 1      | Increase | USD | 1,700           | 1,700               | 1,900       | 1,900           |
| <b>NEPOOL CNCTCT 5MW D AH O PK (P3)</b>          |              |             |          |     |                 |                     |             |                 |
| P3   | Spec         | Mnth 2      | Increase | USD | 28              | 25                  | 33          | 30              |
| P3   | Hedge/Member | Mnth 2      | Increase | USD | 25              | 25                  | 30          | 30              |
| <b>NEPOOL CONECTIC 5MW D AH PK (P2)</b>          |              |             |          |     |                 |                     |             |                 |
| P2   | Spec         | Mnths 3-5   | Increase | USD | 385             | 350                 | 440         | 400             |
| P2   | Hedge/Member | Mnths 3-5   | Increase | USD | 350             | 350                 | 400         | 400             |
| <b>NEPOOL NE MASS 5MW D AH PK (P7)</b>           |              |             |          |     |                 |                     |             |                 |
| P7   | Spec         | Mnths 3-5   | Increase | USD | 440             | 400                 | 605         | 550             |
| P7   | Hedge/Member | Mnths 3-5   | Increase | USD | 400             | 400                 | 550         | 550             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC  | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                           |              |             |          |     |                 |                     |             |                 |
| <b>NEPOOL RHD ISLD 5MW D AH PK (U4)</b>         |              |             |          |     |                 |                     |             |                 |
| U4  | Spec         | Mnth 2      | Increase | USD | 451             | 410                 | 605         | 550             |
| U4  | Hedge/Member | Mnth 2      | Increase | USD | 410             | 410                 | 550         | 550             |
| U4  | Spec         | Mnths 3-4   | Increase | USD | 330             | 300                 | 440         | 400             |
| U4  | Hedge/Member | Mnths 3-4   | Increase | USD | 300             | 300                 | 400         | 400             |
| <b>NEW ENGLAND HUB PEAK DAILY (CE)</b>          |              |             |          |     |                 |                     |             |                 |
| CE  | Spec         | Days 16+    | Increase | USD | 2,750           | 2,500               | 3,300       | 3,000           |
| CE  | Hedge/Member | Days 16+    | Increase | USD | 2,500           | 2,500               | 3,000       | 3,000           |
| <b>NYISO ZONE A DA OP DAILY (ZAO)</b>           |              |             |          |     |                 |                     |             |                 |
| ZAO   | Spec         | Days 1-10   | Increase | USD | 110             | 100                 | 165         | 150             |
| ZAO   | Hedge/Member | Days 1-10   | Increase | USD | 100             | 100                 | 150         | 150             |
| <b>NYISO ZONE G DA OP DAILY (ZGO)</b>           |              |             |          |     |                 |                     |             |                 |
| ZGO   | Spec         | Days 1-10   | Increase | USD | 165             | 150                 | 220         | 200             |
| ZGO   | Hedge/Member | Days 1-10   | Increase | USD | 150             | 150                 | 200         | 200             |
| <b>PJM AEP DAYTON HUB DA OP DAILY (PEO)</b>     |              |             |          |     |                 |                     |             |                 |
| PEO   | Spec         | Days 1 - 11 | Increase | USD | 110             | 100                 | 165         | 150             |
| PEO   | Hedge/Member | Days 1 - 11 | Increase | USD | 100             | 100                 | 150         | 150             |
| <b>PJM AEP DAYTON HUB DA PEAK DAILY (PAP)</b>   |              |             |          |     |                 |                     |             |                 |
| PAP   | Spec         | Days 1-11   | Increase | USD | 2,200           | 2,000               | 2,750       | 2,500           |
| PAP   | Hedge/Member | Days 1-11   | Increase | USD | 2,000           | 2,000               | 2,500       | 2,500           |
| <b>PJM AEP-DAYTON HUB RT PK CALDAY 5MW (VD)</b> |              |             |          |     |                 |                     |             |                 |
| VD  | Spec         | Days 1-6    | Increase | USD | 2,750           | 2,500               | 3,025       | 2,750           |
| VD  | Hedge/Member | Days 1-6    | Increase | USD | 2,500           | 2,500               | 2,750       | 2,750           |
| <b>PJM DAILY (JD)</b>                           |              |             |          |     |                 |                     |             |                 |
| JD  | Spec         | Days 1-6    | Increase | USD | 2,530           | 2,300               | 3,520       | 3,200           |
| JD  | Hedge/Member | Days 1-6    | Increase | USD | 2,300           | 2,300               | 3,200       | 3,200           |
| <b>PJM NORTERN ILL HUB DA OP DAILY (PNO)</b>    |              |             |          |     |                 |                     |             |                 |
| PNO   | Spec         | Days 1-10   | Increase | USD | 99              | 90                  | 165         | 150             |
| PNO   | Hedge/Member | Days 1-10   | Increase | USD | 90              | 90                  | 150         | 150             |
| <b>PJM NORTERN ILL HUB DA PEAK DAILY (PNP)</b>  |              |             |          |     |                 |                     |             |                 |
| PNP   | Spec         | Days 1-8    | Increase | USD | 2,530           | 2,300               | 3,300       | 3,000           |
| PNP   | Hedge/Member | Days 1-8    | Increase | USD | 2,300           | 2,300               | 3,000       | 3,000           |
| <b>PJM WESTERN HUB DA OP DAILY FUT (PWO)</b>    |              |             |          |     |                 |                     |             |                 |
| PWO   | Spec         | Days 1-10   | Increase | USD | 110             | 100                 | 165         | 150             |
| PWO   | Hedge/Member | Days 1-10   | Increase | USD | 100             | 100                 | 150         | 150             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC | Rate Type | Description | Change | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|----|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|
|----|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|

### Outright Rates

#### **ENVIRONMENTAL - Outright Rates**

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

|    |              |         |          |     |     |     |     |     |
|----|--------------|---------|----------|-----|-----|-----|-----|-----|
| 6T | Spec         | Mth 1   | Increase | EUR | 605 | 550 | 715 | 650 |
| 6T | Hedge/Member | Mth 1   | Increase | EUR | 550 | 550 | 650 | 650 |
| 6T | Spec         | Mths 2+ | Increase | EUR | 605 | 550 | 715 | 650 |
| 6T | Hedge/Member | Mths 2+ | Increase | EUR | 550 | 550 | 650 | 650 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |              |             |          |     |                 |                     |             |                 |
| <b>EQUITY INDEX - Outright Rates</b>             |              |             |          |     |                 |                     |             |                 |
| <b>E-MINI NIKKEI 225 YEN DENOMINATED (ENY)</b>   |              |             |          |     |                 |                     |             |                 |
| ENY  | Spec         |             | Increase | JPY | 121,000         | 110,000             | 132,000     | 120,000         |
| ENY  | Hedge/Member |             | Increase | JPY | 110,000         | 110,000             | 120,000     | 120,000         |
| <b>EMINI SP500 - FINANCIAL SECT INDEX (XAF)</b>  |              |             |          |     |                 |                     |             |                 |
| XAF  | Spec         |             | Increase | USD | 2,750           | 2,500               | 3,190       | 2,900           |
| XAF  | Hedge/Member |             | Increase | USD | 2,500           | 2,500               | 2,900       | 2,900           |
| <b>E-MINI SP500 CONS DISCRET SECTOR IX (XAY)</b> |              |             |          |     |                 |                     |             |                 |
| XAY  | Spec         |             | Increase | USD | 2,860           | 2,600               | 3,300       | 3,000           |
| XAY  | Hedge/Member |             | Increase | USD | 2,600           | 2,600               | 3,000       | 3,000           |
| <b>E-MINI SP500 CONS DISCRET SYNTHETIC (1YT)</b> |              |             |          |     |                 |                     |             |                 |
| 1YT  | Spec         |             | Increase | USD | 2,860           | 2,600               | 3,300       | 3,000           |
| 1YT  | Hedge/Member |             | Increase | USD | 2,600           | 2,600               | 3,000       | 3,000           |
| <b>E-MINI SP500 CONS DISCRET TAI (XYT)</b>       |              |             |          |     |                 |                     |             |                 |
| XYT  | Spec         |             | Increase | USD | 2,860           | 2,600               | 3,300       | 3,000           |
| XYT  | Hedge/Member |             | Increase | USD | 2,600           | 2,600               | 3,000       | 3,000           |
| <b>EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK)</b> |              |             |          |     |                 |                     |             |                 |
| XAK  | Spec         |             | Increase | USD | 1,650           | 1,500               | 1,870       | 1,700           |
| XAK  | Hedge/Member |             | Increase | USD | 1,500           | 1,500               | 1,700       | 1,700           |
| <b>NIKKEI 225 DOLLAR FUTURES (NK)</b>            |              |             |          |     |                 |                     |             |                 |
| NK   | Spec         |             | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| NK   | Hedge/Member |             | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| <b>NIKKEI 225 YEN FUT (N1)</b>                   |              |             |          |     |                 |                     |             |                 |
| N1   | Spec         |             | Increase | JPY | 605,000         | 550,000             | 660,000     | 600,000         |
| N1   | Hedge/Member |             | Increase | JPY | 550,000         | 550,000             | 600,000     | 600,000         |
| <b>SP 500 FINANCIAL SECTOR TIC (XFT)</b>         |              |             |          |     |                 |                     |             |                 |
| XFT  | Spec         |             | Increase | USD | 2,750           | 2,500               | 3,190       | 2,900           |
| XFT  | Hedge/Member |             | Increase | USD | 2,500           | 2,500               | 2,900       | 2,900           |
| <b>SP 500 FINANCIAL SLCT SEC SYNT (1FT)</b>      |              |             |          |     |                 |                     |             |                 |
| 1FT  | Spec         |             | Increase | USD | 2,750           | 2,500               | 3,190       | 2,900           |
| 1FT  | Hedge/Member |             | Increase | USD | 2,500           | 2,500               | 2,900       | 2,900           |
| <b>SP 500 TECHNOLOGY SECTOR SYNTH (1KT)</b>      |              |             |          |     |                 |                     |             |                 |
| 1KT  | Spec         |             | Increase | USD | 1,650           | 1,500               | 1,870       | 1,700           |
| 1KT  | Hedge/Member |             | Increase | USD | 1,500           | 1,500               | 1,700       | 1,700           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC  | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                     |              |             |          |     |                 |                     |             |                 |
| <b>SP 500 TECHNOLOGY SECTOR TIC (XKT)</b> |              |             |          |     |                 |                     |             |                 |
| XKT                                       | Spec         |             | Increase | USD | 1,650           | 1,500               | 1,870       | 1,700           |
| XKT                                       | Hedge/Member |             | Increase | USD | 1,500           | 1,500               | 1,700       | 1,700           |
| <b>FX - Outright Rates</b>                |              |             |          |     |                 |                     |             |                 |
| <b>AFRICAN RAND FUTURES (RA)</b>          |              |             |          |     |                 |                     |             |                 |
| RA  | Spec         |             | Increase | USD | 1,595           | 1,450               | 1,705       | 1,550           |
| RA  | Hedge/Member |             | Increase | USD | 1,450           | 1,450               | 1,550       | 1,550           |
| <b>BPSF FUTURE (BF)</b>                   |              |             |          |     |                 |                     |             |                 |
| BF  | Spec         |             | Increase | CHF | 6,600           | 6,000               | 7,920       | 7,200           |
| BF  | Hedge/Member |             | Increase | CHF | 6,000           | 6,000               | 7,200       | 7,200           |
| <b>CD/JY FUTURES (CY)</b>                 |              |             |          |     |                 |                     |             |                 |
| CY  | Spec         |             | Increase | JPY | 594,000         | 540,000             | 715,000     | 650,000         |
| CY  | Hedge/Member |             | Increase | JPY | 540,000         | 540,000             | 650,000     | 650,000         |
| <b>E-MICRO JPY/USD (MJY)</b>              |              |             |          |     |                 |                     |             |                 |
| MJY                                       | Spec         |             | Increase | USD | 402             | 365                 | 451         | 410             |
| MJY                                       | Hedge/Member |             | Increase | USD | 365             | 365                 | 410         | 410             |
| <b>E-MINI J-YEN FUTURE (J7)</b>           |              |             |          |     |                 |                     |             |                 |
| J7  | Spec         |             | Increase | USD | 2,008           | 1,825               | 2,255       | 2,050           |
| J7  | Hedge/Member |             | Increase | USD | 1,825           | 1,825               | 2,050       | 2,050           |
| <b>EURO FX/JY FUTURE (RY)</b>             |              |             |          |     |                 |                     |             |                 |
| RY  | Spec         |             | Increase | JPY | 550,000         | 500,000             | 660,000     | 600,000         |
| RY  | Hedge/Member |             | Increase | JPY | 500,000         | 500,000             | 600,000     | 600,000         |
| <b>JAPANESE YEN FUTURES (JY)</b>          |              |             |          |     |                 |                     |             |                 |
| JY  | Spec         |             | Increase | USD | 4,015           | 3,650               | 4,510       | 4,100           |
| JY  | Hedge/Member |             | Increase | USD | 3,650           | 3,650               | 4,100       | 4,100           |
| <b>NKR/USD FUTURES (UN)</b>               |              |             |          |     |                 |                     |             |                 |
| UN  | Spec         |             | Increase | USD | 7,700           | 7,000               | 8,030       | 7,300           |
| UN  | Hedge/Member |             | Increase | USD | 7,000           | 7,000               | 7,300       | 7,300           |
| <b>POLISH ZLOTY FUTURES (PZ)</b>          |              |             |          |     |                 |                     |             |                 |
| PZ  | Spec         |             | Increase | USD | 3,850           | 3,500               | 4,180       | 3,800           |
| PZ  | Hedge/Member |             | Increase | USD | 3,500           | 3,500               | 3,800       | 3,800           |
| <b>SFJY FUTURES (SJ)</b>                  |              |             |          |     |                 |                     |             |                 |
| SJ  | Spec         |             | Increase | JPY | 935,000         | 850,000             | 1,122,000   | 1,020,000       |
| SJ  | Hedge/Member |             | Increase | JPY | 850,000         | 850,000             | 1,020,000   | 1,020,000       |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |              |             |          |     |                 |                     |             |                 |
| <b>METALS - Outright Rates</b>                   |              |             |          |     |                 |                     |             |                 |
| <b>10 TROY OZ GOLD FUTURES (MGC)</b>             |              |             |          |     |                 |                     |             |                 |
| MGC  | Spec         | Mths 1-4    | Increase | USD | 605             | 550                 | 660         | 600             |
| MGC  | Hedge/Member | Mths 1-4    | Increase | USD | 550             | 550                 | 600         | 600             |
| MGC  | Spec         | Mths 5-6    | Increase | USD | 605             | 550                 | 660         | 600             |
| MGC  | Hedge/Member | Mths 5-6    | Increase | USD | 550             | 550                 | 600         | 600             |
| MGC  | Spec         | Mths 7-12   | Increase | USD | 605             | 550                 | 660         | 600             |
| MGC  | Hedge/Member | Mths 7-12   | Increase | USD | 550             | 550                 | 600         | 600             |
| MGC  | Spec         | Mths 13-16  | Increase | USD | 605             | 550                 | 660         | 600             |
| MGC  | Hedge/Member | Mths 13-16  | Increase | USD | 550             | 550                 | 600         | 600             |
| MGC  | Spec         | Mths 17+    | Increase | USD | 605             | 550                 | 660         | 600             |
| MGC  | Hedge/Member | Mths 17+    | Increase | USD | 550             | 550                 | 600         | 600             |
| <b>ALUMINIUM EURO PREM DUTY-PAID FUT (EDP)</b>   |              |             |          |     |                 |                     |             |                 |
| EDP  | Spec         | Mth 1       | Decrease | USD | 275             | 250                 | 248         | 225             |
| EDP  | Hedge/Member | Mth 1       | Decrease | USD | 250             | 250                 | 225         | 225             |
| EDP  | Spec         | Mths 2-9    | Decrease | USD | 275             | 250                 | 248         | 225             |
| EDP  | Hedge/Member | Mths 2-9    | Decrease | USD | 250             | 250                 | 225         | 225             |
| EDP  | Spec         | Mths 10+    | Decrease | USD | 275             | 250                 | 248         | 225             |
| EDP  | Hedge/Member | Mths 10+    | Decrease | USD | 250             | 250                 | 225         | 225             |
| <b>ALUMINIUM EURO PREM METAL BULLETIN (AEP)</b>  |              |             |          |     |                 |                     |             |                 |
| AEP  | Spec         | Mth 1       | Decrease | USD | 275             | 250                 | 193         | 175             |
| AEP  | Hedge/Member | Mth 1       | Decrease | USD | 250             | 250                 | 175         | 175             |
| AEP  | Spec         | Mths 2-9    | Decrease | USD | 275             | 250                 | 193         | 175             |
| AEP  | Hedge/Member | Mths 2-9    | Decrease | USD | 250             | 250                 | 175         | 175             |
| AEP  | Spec         | Mths 10+    | Decrease | USD | 275             | 250                 | 193         | 175             |
| AEP  | Hedge/Member | Mths 10+    | Decrease | USD | 250             | 250                 | 175         | 175             |
| <b>ALUMINUM MW TRANS PREM PLATTS SWAPS (AUP)</b> |              |             |          |     |                 |                     |             |                 |
| AUP  | Spec         | Mth 1       | Decrease | USD | 495             | 450                 | 330         | 300             |
| AUP  | Hedge/Member | Mth 1       | Decrease | USD | 450             | 450                 | 300         | 300             |
| AUP  | Spec         | Mths 2-9    | Decrease | USD | 495             | 450                 | 330         | 300             |
| AUP  | Hedge/Member | Mths 2-9    | Decrease | USD | 450             | 450                 | 300         | 300             |
| AUP  | Spec         | Mths 10+    | Decrease | USD | 495             | 450                 | 330         | 300             |
| AUP  | Hedge/Member | Mths 10+    | Decrease | USD | 450             | 450                 | 300         | 300             |
| <b>CLEARED OTC LONDON GOLD COLLATERAL (GB)</b>   |              |             |          |     |                 |                     |             |                 |
| GB   | Spec         |             | Increase | USD | 68              | 62                  | 75          | 68              |
| GB   | Hedge/Member |             | Increase | USD | 62              | 62                  | 68          | 68              |



## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC  | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                           |              |             |          |     |                 |                     |             |                 |
| <b>CLEARED OTC LONDON GOLD FWD (CM) (GBC)</b>   |              |             |          |     |                 |                     |             |                 |
| GBC   | Spec         |             | Increase | USD | 68              | 62                  | 75          | 68              |
| GBC   | Hedge/Member |             | Increase | USD | 62              | 62                  | 68          | 68              |
| <b>COMEX 100 GOLD FUTURES (GC)</b>              |              |             |          |     |                 |                     |             |                 |
| GC  | Spec         | Mths 1-4    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GC  | Hedge/Member | Mths 1-4    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GC  | Spec         | Mths 5-6    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GC  | Hedge/Member | Mths 5-6    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GC  | Spec         | Mths 7-12   | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GC  | Hedge/Member | Mths 7-12   | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GC  | Spec         | Mths 13-16  | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GC  | Hedge/Member | Mths 13-16  | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GC  | Spec         | Mths 17+    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GC  | Hedge/Member | Mths 17+    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| <b>COMEX 100 GOLD TRADE AT SETTLEMENT (GCT)</b> |              |             |          |     |                 |                     |             |                 |
| GCT   | Spec         | Mths 1-4    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GCT   | Hedge/Member | Mths 1-4    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GCT   | Spec         | Mths 5-6    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GCT   | Hedge/Member | Mths 5-6    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GCT   | Spec         | Mths 7-12   | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GCT   | Hedge/Member | Mths 7-12   | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GCT   | Spec         | Mths 13-16  | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GCT   | Hedge/Member | Mths 13-16  | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| GCT   | Spec         | Mths 17+    | Increase | USD | 6,050           | 5,500               | 6,600       | 6,000           |
| GCT   | Hedge/Member | Mths 17+    | Increase | USD | 5,500           | 5,500               | 6,000       | 6,000           |
| <b>E-MINI GOLD FUTURES (QO)</b>                 |              |             |          |     |                 |                     |             |                 |
| QO  | Spec         | Mths 1-4    | Increase | USD | 3,025           | 2,750               | 3,300       | 3,000           |
| QO  | Hedge/Member | Mths 1-4    | Increase | USD | 2,750           | 2,750               | 3,000       | 3,000           |
| QO  | Spec         | Mths 5-6    | Increase | USD | 3,025           | 2,750               | 3,300       | 3,000           |
| QO  | Hedge/Member | Mths 5-6    | Increase | USD | 2,750           | 2,750               | 3,000       | 3,000           |
| QO  | Spec         | Mths 7-12   | Increase | USD | 3,025           | 2,750               | 3,300       | 3,000           |
| QO  | Hedge/Member | Mths 7-12   | Increase | USD | 2,750           | 2,750               | 3,000       | 3,000           |
| QO  | Spec         | Mths 13-16  | Increase | USD | 3,025           | 2,750               | 3,300       | 3,000           |
| QO  | Hedge/Member | Mths 13-16  | Increase | USD | 2,750           | 2,750               | 3,000       | 3,000           |
| QO  | Spec         | Mths 17+    | Increase | USD | 3,025           | 2,750               | 3,300       | 3,000           |
| QO  | Hedge/Member | Mths 17+    | Increase | USD | 2,750           | 2,750               | 3,000       | 3,000           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC  | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                           |              |             |          |     |                 |                     |             |                 |
| <b>HVYMELT SCRP GRD 1/2 CFR TRKEY FUT (FSF)</b> |              |             |          |     |                 |                     |             |                 |
| FSF   | Spec         |             | Decrease | USD | 1,650           | 1,500               | 1,100       | 1,000           |
| FSF   | Hedge/Member |             | Decrease | USD | 1,500           | 1,500               | 1,000       | 1,000           |
| <b>IRON ORE FUTURES (TIO)</b>                   |              |             |          |     |                 |                     |             |                 |
| TIO   | Spec         | Mnths 2-4   | Decrease | USD | 3,025           | 2,750               | 2,750       | 2,500           |
| TIO   | Hedge/Member | Mnths 2-4   | Decrease | USD | 2,750           | 2,750               | 2,500       | 2,500           |
| TIO   | Spec         | Mnths 5+    | Decrease | USD | 3,025           | 2,750               | 2,750       | 2,500           |
| TIO   | Hedge/Member | Mnths 5+    | Decrease | USD | 2,750           | 2,750               | 2,500       | 2,500           |
| <b>IRON ORE(PLATTS) FUT (PIO)</b>               |              |             |          |     |                 |                     |             |                 |
| PIO   | Spec         | Mnths 2-4   | Decrease | USD | 3,025           | 2,750               | 2,750       | 2,500           |
| PIO   | Hedge/Member | Mnths 2-4   | Decrease | USD | 2,750           | 2,750               | 2,500       | 2,500           |
| PIO   | Spec         | Mnths 5+    | Decrease | USD | 3,025           | 2,750               | 2,750       | 2,500           |
| PIO   | Hedge/Member | Mnths 5+    | Decrease | USD | 2,750           | 2,750               | 2,500       | 2,500           |
| <b>PALLADIUM FUTURES NYMEX (PA)</b>             |              |             |          |     |                 |                     |             |                 |
| PA  | Spec         | Mnth 1      | Decrease | USD | 4,620           | 4,200               | 3,850       | 3,500           |
| PA  | Hedge/Member | Mnth 1      | Decrease | USD | 4,200           | 4,200               | 3,500       | 3,500           |
| PA  | Spec         | Mnth 2+     | Decrease | USD | 4,620           | 4,200               | 3,850       | 3,500           |
| PA  | Hedge/Member | Mnth 2+     | Decrease | USD | 4,200           | 4,200               | 3,500       | 3,500           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |              |             |          |     |                 |                     |             |                 |
| <b>NATURAL GAS - Outright Rates</b>              |              |             |          |     |                 |                     |             |                 |
| <b>CIG BASIS (CI)</b>                            |              |             |          |     |                 |                     |             |                 |
| CI   | Spec         | Mnth 1      | Increase | USD | 154             | 140                 | 198         | 180             |
| CI   | Hedge/Member | Mnth 1      | Increase | USD | 140             | 140                 | 180         | 180             |
| <b>HOUSTON SHIP CHANNEL BASIS FUT (NH)</b>       |              |             |          |     |                 |                     |             |                 |
| NH   | Spec         | Mnth 1      | Increase | USD | 66              | 60                  | 88          | 80              |
| NH   | Hedge/Member | Mnth 1      | Increase | USD | 60              | 60                  | 80          | 80              |
| <b>NGPL MIDCONTINENT BASIS FUT (NL)</b>          |              |             |          |     |                 |                     |             |                 |
| NL   | Spec         | Mnth 1      | Increase | USD | 121             | 110                 | 154         | 140             |
| NL   | Hedge/Member | Mnth 1      | Increase | USD | 110             | 110                 | 140         | 140             |
| <b>NORTHERN NATURAL GAS DEMAR BASIS FUT (PE)</b> |              |             |          |     |                 |                     |             |                 |
| PE   | Spec         | Mnth 1      | Increase | USD | 330             | 300                 | 429         | 390             |
| PE   | Hedge/Member | Mnth 1      | Increase | USD | 300             | 300                 | 390         | 390             |
| <b>NORTHWEST PIPELINE BASIS FUT (NR)</b>         |              |             |          |     |                 |                     |             |                 |
| NR   | Spec         | Mnth 1      | Increase | USD | 132             | 120                 | 171         | 155             |
| NR   | Hedge/Member | Mnth 1      | Increase | USD | 120             | 120                 | 155         | 155             |
| <b>PERMIAN BASIS FUT (PM)</b>                    |              |             |          |     |                 |                     |             |                 |
| PM   | Spec         | Mths 1      | Increase | USD | 193             | 175                 | 253         | 230             |
| PM   | Hedge/Member | Mths 1      | Increase | USD | 175             | 175                 | 230         | 230             |
| <b>SAN JUAN BASIS FUT (NJ)</b>                   |              |             |          |     |                 |                     |             |                 |
| NJ   | Spec         | Mth 1       | Increase | USD | 165             | 150                 | 215         | 195             |
| NJ   | Hedge/Member | Mth 1       | Increase | USD | 150             | 150                 | 195         | 195             |
| <b>WAHA TEXAS BASIS FUT (NW)</b>                 |              |             |          |     |                 |                     |             |                 |
| NW   | Spec         | Mnth 1      | Increase | USD | 110             | 100                 | 143         | 130             |
| NW   | Hedge/Member | Mnth 1      | Increase | USD | 100             | 100                 | 130         | 130             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC | Rate Type | Description | Change | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|----|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|
|----|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|

### Outright Rates

#### PETROLEUM CRACKS AND SPREADS - Outright Rates

##### MINI 380CST VS 3.5% FUEL OIL FUT (MSB)

|     |              |            |          |     |     |     |     |     |
|-----|--------------|------------|----------|-----|-----|-----|-----|-----|
| MSB | Spec         | Mnth 2     | Decrease | USD | 550 | 500 | 440 | 400 |
| MSB | Hedge/Member | Mnth 2     | Decrease | USD | 500 | 500 | 400 | 400 |
| MSB | Spec         | Mnths 3-6  | Decrease | USD | 385 | 350 | 275 | 250 |
| MSB | Hedge/Member | Mnths 3-6  | Decrease | USD | 350 | 350 | 250 | 250 |
| MSB | Spec         | Mnths 7-15 | Decrease | USD | 396 | 360 | 275 | 250 |
| MSB | Hedge/Member | Mnths 7-15 | Decrease | USD | 360 | 360 | 250 | 250 |
| MSB | Spec         | Mths 16+   | Decrease | USD | 374 | 340 | 275 | 250 |
| MSB | Hedge/Member | Mths 16+   | Decrease | USD | 340 | 340 | 250 | 250 |

##### SING 380 FUEL OIL VS FUEL OIL ROTDM (EVC)

|     |              |            |          |     |       |       |       |       |
|-----|--------------|------------|----------|-----|-------|-------|-------|-------|
| EVC | Spec         | Mnth 2     | Decrease | USD | 5,500 | 5,000 | 4,400 | 4,000 |
| EVC | Hedge/Member | Mnth 2     | Decrease | USD | 5,000 | 5,000 | 4,000 | 4,000 |
| EVC | Spec         | Mnths 3-6  | Decrease | USD | 3,850 | 3,500 | 2,750 | 2,500 |
| EVC | Hedge/Member | Mnths 3-6  | Decrease | USD | 3,500 | 3,500 | 2,500 | 2,500 |
| EVC | Spec         | Mnths 7-15 | Decrease | USD | 3,960 | 3,600 | 2,750 | 2,500 |
| EVC | Hedge/Member | Mnths 7-15 | Decrease | USD | 3,600 | 3,600 | 2,500 | 2,500 |
| EVC | Spec         | Mths 16+   | Decrease | USD | 3,740 | 3,400 | 2,750 | 2,500 |
| EVC | Hedge/Member | Mths 16+   | Decrease | USD | 3,400 | 3,400 | 2,500 | 2,500 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>   |              |             |          |     |                 |                     |             |                 |
| <b>AGRICULTURE - Intra Spreads</b>   |              |             |          |     |                 |                     |             |                 |
| <b>Butter (DB) - Months 1-4 vs Months 5+ (CASH BUTTER FUTURES)</b>   |              |             |          |     |                 |                     |             |                 |
| CB   | Spec         |             | Increase | USD | 743             | 675                 | 1,100       | 1,000           |
| CB   | Hedge/Member |             | Increase | USD | 675             | 675                 | 1,000       | 1,000           |
| <b>COAL - Intra Spreads</b>  |              |             |          |     |                 |                     |             |                 |
| <b>Coal (API 8) CFR South China (Argus/McCloskey) Swap Futures - All Months (COAL API 8 CFR SOUTH CHINA)</b>             |              |             |          |     |                 |                     |             |                 |
| SSI  | Spec         |             | Increase | USD | 1,540           | 1,400               | 2,310       | 2,100           |
| SSI  | Hedge/Member |             | Increase | USD | 1,400           | 1,400               | 2,100       | 2,100           |
| <b>ELECTRICITY - Intra Spreads</b>   |              |             |          |     |                 |                     |             |                 |
| <b>ERCOT North Zone MCPE 50 MW Peak Calendar Day Swap Futures -(2T) - All Months ()</b>                                  |              |             |          |     |                 |                     |             |                 |
| 2T   | Spec         |             | Increase | USD | 11,000          | 10,000              | 16,500      | 15,000          |
| 2T   | Hedge/Member |             | Increase | USD | 10,000          | 10,000              | 15,000      | 15,000          |
| <b>ERCOT North Zone MCPE 50 MW Peak Calendar Day Swap Futures -(2T) - All Months (ERCOT NRTH 345 KV HUB PEAK CLND D)</b> |              |             |          |     |                 |                     |             |                 |
| I7   | Spec         |             | Increase | USD | 1,100           | 1,000               | 1,650       | 1,500           |
| I7   | Hedge/Member |             | Increase | USD | 1,000           | 1,000               | 1,500       | 1,500           |
| <b>EQUITY INDEX - Intra Spreads</b>  |              |             |          |     |                 |                     |             |                 |
| <b>All Months (S&amp;P 500 ANNUAL DIVIDEND INDEX FUT)</b>  |              |             |          |     |                 |                     |             |                 |
| SDA  | Spec         |             | Increase | USD | 33              | 30                  | 55          | 50              |
| SDA  | Hedge/Member |             | Increase | USD | 30              | 30                  | 50          | 50              |
| <b>Dow Jones (CBOT) (11) - All Months (\$10DOW JONES FUTURES)</b>  |              |             |          |     |                 |                     |             |                 |
| 11   | Spec         |             | Increase | USD | 605             | 550                 | 880         | 800             |
| 11   | Hedge/Member |             | Increase | USD | 550             | 550                 | 800         | 800             |
| <b>Dow Jones (CBOT) (11) - All Months ()</b>   |              |             |          |     |                 |                     |             |                 |
| DO   | Spec         |             | Increase | USD | 1,513           | 1,375               | 2,200       | 2,000           |
| DO   | Hedge/Member |             | Increase | USD | 1,375           | 1,375               | 2,000       | 2,000           |
| <b>Dow Jones (CBOT) (11) - All Months (BTIC ON E-MINI DJIA FUTURES)</b>  |              |             |          |     |                 |                     |             |                 |
| YMT  | Spec         |             | Increase | USD | 303             | 275                 | 440         | 400             |
| YMT  | Hedge/Member |             | Increase | USD | 275             | 275                 | 400         | 400             |
| <b>Dow Jones (CBOT) (11) - All Months (E-MINI DJIA FUTURES MARKER)</b>   |              |             |          |     |                 |                     |             |                 |
| YMI  | Spec         |             | Increase | USD | 303             | 275                 | 440         | 400             |
| YMI  | Hedge/Member |             | Increase | USD | 275             | 275                 | 400         | 400             |
| <b>Dow Jones (CBOT) (11) - All Months (E-MINI DOW JONES INDEX)</b>   |              |             |          |     |                 |                     |             |                 |
| YM   | Spec         |             | Increase | USD | 303             | 275                 | 440         | 400             |
| YM   | Hedge/Member |             | Increase | USD | 275             | 275                 | 400         | 400             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC   | Rate Type    | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|--------------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>   |              |             |          |     |                 |                     |             |                 |
| <b>FX - Intra Spreads</b>  |              |             |          |     |                 |                     |             |                 |
| <b>INRUSD Futures (E-MICRO INR/USD FUTURE)</b>                         |              |             |          |     |                 |                     |             |                 |
| MIR  | Spec         |             | Increase | USD | 66              | 60                  | 79          | 72              |
| MIR  | Hedge/Member |             | Increase | USD | 60              | 60                  | 72          | 72              |
| <b>INRUSD Futures (INR/USD FUTURE)</b>                                 |              |             |          |     |                 |                     |             |                 |
| SIR  | Spec         |             | Increase | USD | 330             | 300                 | 396         | 360             |
| SIR  | Hedge/Member |             | Increase | USD | 300             | 300                 | 360         | 360             |
| <b>Japanese Yen (JY) - Contract 1-4 vs. 9+ (E-MICRO JPY/USD)</b>       |              |             |          |     |                 |                     |             |                 |
| MJY  | Spec         |             | Increase | USD | 74              | 68                  | 110         | 100             |
| MJY  | Hedge/Member |             | Increase | USD | 68              | 68                  | 100         | 100             |
| <b>Japanese Yen (JY) - Contract 1-4 vs. 9+ (E-MINI J-YEN FUTURE)</b>   |              |             |          |     |                 |                     |             |                 |
| J7   | Spec         |             | Increase | USD | 371             | 338                 | 550         | 500             |
| J7   | Hedge/Member |             | Increase | USD | 338             | 338                 | 500         | 500             |
| <b>Japanese Yen (JY) - Contract 1-4 vs. 9+ (JAPANESE YEN FUTURES)</b>  |              |             |          |     |                 |                     |             |                 |
| JY   | Spec         |             | Increase | USD | 743             | 675                 | 1,100       | 1,000           |
| JY   | Hedge/Member |             | Increase | USD | 675             | 675                 | 1,000       | 1,000           |
| <b>Japanese Yen (JY) - Contracts 5-8 vs. 9+ (E-MICRO JPY/USD)</b>      |              |             |          |     |                 |                     |             |                 |
| MJY  | Spec         |             | Increase | USD | 74              | 68                  | 110         | 100             |
| MJY  | Hedge/Member |             | Increase | USD | 68              | 68                  | 100         | 100             |
| <b>Japanese Yen (JY) - Contracts 5-8 vs. 9+ (E-MINI J-YEN FUTURE)</b>  |              |             |          |     |                 |                     |             |                 |
| J7   | Spec         |             | Increase | USD | 371             | 338                 | 550         | 500             |
| J7   | Hedge/Member |             | Increase | USD | 338             | 338                 | 500         | 500             |
| <b>Japanese Yen (JY) - Contracts 5-8 vs. 9+ (JAPANESE YEN FUTURES)</b> |              |             |          |     |                 |                     |             |                 |
| JY   | Spec         |             | Increase | USD | 743             | 675                 | 1,100       | 1,000           |
| JY   | Hedge/Member |             | Increase | USD | 675             | 675                 | 1,000       | 1,000           |
| <b>Japanese Yen (JY) - Contracts 9+ vs. 9+ (E-MICRO JPY/USD)</b>       |              |             |          |     |                 |                     |             |                 |
| MJY  | Spec         |             | Increase | USD | 74              | 68                  | 110         | 100             |
| MJY  | Hedge/Member |             | Increase | USD | 68              | 68                  | 100         | 100             |
| <b>Japanese Yen (JY) - Contracts 9+ vs. 9+ (E-MINI J-YEN FUTURE)</b>   |              |             |          |     |                 |                     |             |                 |
| J7   | Spec         |             | Increase | USD | 371             | 338                 | 550         | 500             |
| J7   | Hedge/Member |             | Increase | USD | 338             | 338                 | 500         | 500             |
| <b>Japanese Yen (JY) - Contracts 9+ vs. 9+ (JAPANESE YEN FUTURES)</b>  |              |             |          |     |                 |                     |             |                 |
| JY   | Spec         |             | Increase | USD | 743             | 675                 | 1,100       | 1,000           |
| JY   | Hedge/Member |             | Increase | USD | 675             | 675                 | 1,000       | 1,000           |

## 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>10 Year Treasury Note (21) - All Months Butterfly (10Y TREASURY NOTE FUTURES)</b>     |              |             |          |     |                 |                     |             |                 |
| 21   | Spec         |             | Increase | USD | 385             | 350                 | 550         | 500             |
| 21   | Hedge/Member |             | Increase | USD | 350             | 350                 | 500         | 500             |
| <b>Fed Funds (CBOT) (41) - Butterfly [Mos. 3] (30 DAY FED FUND FUTURES)</b>              |              |             |          |     |                 |                     |             |                 |
| 41   | Spec         |             | Increase | USD | 11              | 10                  | 28          | 25              |
| 41   | Hedge/Member |             | Increase | USD | 10              | 10                  | 25          | 25              |
| <b>Fed Funds (CBOT) (41) - Butterfly [Mos. 4] (30 DAY FED FUND FUTURES)</b>              |              |             |          |     |                 |                     |             |                 |
| 41   | Spec         |             | Increase | USD | 11              | 10                  | 28          | 25              |
| 41   | Hedge/Member |             | Increase | USD | 10              | 10                  | 25          | 25              |
| <b>U.S. Treasury Bond (17) - All Months Butterfly (30 YR U.S. TREASURY BOND FUTURES)</b> |              |             |          |     |                 |                     |             |                 |
| 17   | Spec         |             | Increase | USD | 1,100           | 1,000               | 1,265       | 1,150           |
| 17   | Hedge/Member |             | Increase | USD | 1,000           | 1,000               | 1,150       | 1,150           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type | Change | Ratio | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-----------|--------|-------|-----------------|---------------------|-------------|-----------------|
|-----------|--------|-------|-----------------|---------------------|-------------|-----------------|

### Inter-commodity Spread Rates

#### AGRICULTURE - Inter-commodity Spread Rates

##### (DK - CME) vs (CSC - CME)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 50% | 50% | 30% | 30% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### Urea FOB US Gulf Swap (UFN) vs UAN FOB NOLA Swap (UFU)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 50% | 50% | 30% | 30% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### Class IV Milk (DK) vs. CME Dry Whey Futures (DY)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 50% | 50% | 30% | 30% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### CORN (C - CME) vs SOYBEAN OIL (07 - CME)

|                    |          |       |     |     |    |    |
|--------------------|----------|-------|-----|-----|----|----|
| Spread Credit Rate | Decrease | +1:-1 | 30% | 30% | 0% | 0% |
|--------------------|----------|-------|-----|-----|----|----|

##### Corn vs. Feeder Cattle

|                    |          |       |    |    |     |     |
|--------------------|----------|-------|----|----|-----|-----|
| Spread Credit Rate | Increase | +1:-1 | 0% | 0% | 30% | 30% |
|--------------------|----------|-------|----|----|-----|-----|

##### DAP FOB Nola Swap (DFL) vs DAP FOB Tampa Swap (DFT)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 55% | 55% | 45% | 45% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### Live Cattle (LC) vs. Lean Hogs (LN)

|                    |          |       |     |     |    |    |
|--------------------|----------|-------|-----|-----|----|----|
| Spread Credit Rate | Decrease | +1:-1 | 40% | 40% | 0% | 0% |
|--------------------|----------|-------|-----|-----|----|----|

##### NONFAT DRY MILK (NF - CME) vs CASH SETTLED BUTTER (DB - CME)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 60% | 60% | 50% | 50% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### UAN FOB Nola Swap (UFU) vs DAP FOB Tampa Swap (DFT)

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +2:-1 | 50% | 50% | 30% | 30% |
|--------------------|----------|-------|-----|-----|-----|-----|

##### WHEAT (W - CME) vs ROUGH RICE (14 - CME)

|                    |          |       |     |     |    |    |
|--------------------|----------|-------|-----|-----|----|----|
| Spread Credit Rate | Decrease | +1:-2 | 40% | 40% | 0% | 0% |
|--------------------|----------|-------|-----|-----|----|----|

#### COAL - Inter-commodity Spread Rates

##### COPPER FUTURES (CX-HG - CME) vs COAL (API 2) CIF ARA (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MTF - CME)

|                    |     |       |  |  |     |     |
|--------------------|-----|-------|--|--|-----|-----|
| Spread Credit Rate | New | +1:-1 |  |  | 30% | 30% |
|--------------------|-----|-------|--|--|-----|-----|

##### COPPER FUTURES (CX-HG - CME) vs COAL (API 4) FOB RICHARDS BAY (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MFF - CME)

|                    |     |       |  |  |     |     |
|--------------------|-----|-------|--|--|-----|-----|
| 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>CRUDE OIL - Inter-commodity Spread Rates</b>  |          |        |                 |                     |             |                 |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>               |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b>          |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME).</b>         |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME)</b>                   |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME).</b>                  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs SINGAPORE 380CST FUEL OIL (PLATTS) SWAP (NYM-SE - CME)</b>                    |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs SINGAPORE FUEL OIL 180CST CALENDAR SWAP (NYM-UA - CME)</b>                    |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>      |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME)</b>          |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type                           | Change | Ratio | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-------------------------------------|--------|-------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b> |        |       |                 |                     |             |                 |

### ELECTRICITY - Inter-commodity Spread Rates

**HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)**

|                    |          |        |     |     |     |     |
|--------------------|----------|--------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-11 | 50% | 50% | 40% | 40% |
|--------------------|----------|--------|-----|-----|-----|-----|

**PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs PJM JCPL ZONE PEAK CAL DA LMP SWAP FUT (NY-J2- CME)**

|                    |          |       |     |     |     |     |
|--------------------|----------|-------|-----|-----|-----|-----|
| Spread Credit Rate | Decrease | +1:-1 | 60% | 60% | 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>EQUITY INDEX - Inter-commodity Spread Rates</b>   |          |        |                 |                     |             |                 |
| <b>BTIC FTSE EMERGING INDEX FUTURES (DVE - CME) vs S&amp;P 500 (SP - CME)</b>                      |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +20:-1 | 60%             | 60%                 | 45%         | 45%             |
| <b>E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs DOW JONES (11 - CME)</b>                     |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 45%             | 45%                 | 30%         | 30%             |
| <b>E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs E-MINI S&amp;P MIDCAP 400 (ME - CME)</b>     |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +2:-1  | 45%             | 45%                 | 30%         | 30%             |
| <b>E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs NIKKEI 225 DOLLAR-BASED (NK - CME)</b>       |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 45%             | 45%                 | 30%         | 30%             |
| <b>E-MINI FTSE CHINA 50 INDEX FUTURES (FT5 - CME) vs NIKKEI 225 DOLLAR-BASED (NK - CME)</b>        |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +2:-1  | 30%             | 30%                 | 45%         | 45%             |
| <b>E-MINI IPOX US INDEX FUTURES (IPO - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)</b>             |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +5:-1  | 50%             | 50%                 | 70%         | 70%             |
| <b>E-MINI IPOX US INDEX FUTURES (IPO - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)</b>            |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +4:-1  | 50%             | 50%                 | 70%         | 70%             |
| <b>E-MINI IPOX US INDEX FUTURES (IPO - CME) vs S&amp;P 500 (SP - CME)</b>                          |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +25:-1 | 55%             | 55%                 | 70%         | 70%             |
| <b>E-Mini Nasdaq Biotechnology Index Futures (BQ) vs. S&amp;P 500 (SP)</b>                         |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +2:-1  | 80%             | 80%                 | 55%         | 55%             |
| <b>E-MINI RUSSELL 1000 VALUE INDEX FUTURES (RSV - CME) vs E-MINI S&amp;P MIDCAP 400 (ME - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +2:-1  | 81%             | 81%                 | 75%         | 75%             |
| <b>E-Mini S&amp;P 500 (ES) vs. E-Mini Nasdaq Composite Index (QN)</b>                              |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 92%             | 92%                 | 85%         | 85%             |
| <b>EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs NIKKEI 225 FUTURES (NK)</b>                        |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +3:-2  | 35%             | 35%                 | 25%         | 25%             |
| <b>EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs S&amp;P 500 FUTURES (SP)</b>                       |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +2:-1  | 75%             | 75%                 | 70%         | 70%             |
| <b>EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs EMINI SP 500 CONS STAPLES SECTOR IX (XAP)</b>       |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 60%             | 60%                 | 50%         | 50%             |
| <b>EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs EMINI SP500-UTILITIES SECTOR INDEX (XAU)</b>        |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 30%             | 30%                 | 25%         | 25%             |
| <b>EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs NIKKEI 225 FUTURES (NK)</b>                        |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 45%             | 45%                 | 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>NIKKEI 225 DOLLAR-BASED (NK - CME) vs JAPANESE YEN (JY - CME)</b>  |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:+1 | 30%             | 30%                 | 45%         | 45%             |
| <b>S&amp;P 500 Stock Index (SP) vs. S&amp;P 500/Citigroup Value Index (SU)</b>                                  |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:-2 | 60%             | 60%                 | 82%         | 82%             |
| <b>S&amp;P SELECT SECTOR - FINANCIAL (XAF - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)</b>                     |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +2:-1 | 75%             | 75%                 | 65%         | 65%             |
| <b>S&amp;P SELECT SECTOR - INDUSTRIAL (XAI - CME) vs NIKKEI 225 YEN-BASED (N1 - CME)</b>                        |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 50%             | 50%                 | 35%         | 35%             |
| <b>S&amp;P SELECT SECTOR - UTILITIES (XAU - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)</b>                     |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +3:-2 | 60%             | 60%                 | 50%         | 50%             |
| <b>S&amp;P SELECT SECTOR - UTILITIES (XAU - CME) vs NIKKEI 225 YEN-BASED (N1 - CME)</b>                         |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 50%             | 50%                 | 15%         | 15%             |
| <b>FX - Inter-commodity Spread Rates</b>  |          |       |                 |                     |             |                 |
| <b>AUSTRALIAN DOLLAR (AD - CME) vs GOLD FUTURES (CX-GC - CME)</b>   |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 30%             | 30%                 | 0%          | 0%              |
| <b>COPPER FUTURES (CX-HG - CME) vs AUSTRALIAN DOLLAR (AD - CME)</b>   |          |       |                 |                     |             |                 |
| Spread Credit Rate  | New      | +1:-2 |                 |                     | 20%         | 20%             |
| <b>CROSS RATE AUSTRALIAN DOLLAR/JAPANESE YEN (AJ - CME) vs CROSS RATE BRITISH POUND/JAPANESE YEN (BY - CME)</b> |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 50%             | 50%                 | 40%         | 40%             |
| <b>CROSS RATE BRITISH POUND/JAPANESE YEN (BY - CME) vs CROSS RATE EURO FX/JAPANESE YEN (RY - CME)</b>           |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 55%             | 55%                 | 45%         | 45%             |
| <b>GOLD FUTURES (CX-GC - CME) vs SWISS FRANC (SF - CME)</b>   |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +1:-1 | 20%             | 20%                 | 0%          | 0%              |
| <b>KILO GOLD FUTURES (CX-GCK - CME) vs AUSTRALIAN DOLLAR (AD - CME)</b>   |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +3:-1 | 25%             | 25%                 | 0%          | 0%              |
| <b>NIKKEI 225 DOLLAR-BASED (NK - CME) vs JAPANESE YEN (JY - CME)</b>  |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:+1 | 30%             | 30%                 | 45%         | 45%             |
| <b>INTEREST RATES - Inter-commodity Spread Rates</b>  |          |       |                 |                     |             |                 |
| <b>Fed Funds (CBOT) (41) Tier 2 [contracts 2-4] vs. Eurodollar (ED) Tier 1 [contracts 1-4]</b>                  |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +3:-5 | 70%             | 70%                 | 65%         | 65%             |
| <b>Fed Funds (CBOT) (41) Tier 3 [contracts 5-12] vs. Eurodollar (ED) Tier 1 [contracts 1-4]</b>                 |          |       |                 |                     |             |                 |
| Spread Credit Rate  | Decrease | +3:-5 | 55%             | 55%                 | 50%         | 50%             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type  | Change   | Ratio  | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|----------|--------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b>  |          |        |                 |                     |             |                 |
| <b>METALS - Inter-commodity Spread Rates</b>   |          |        |                 |                     |             |                 |
| <b>AUSTRALIAN DOLLAR (AD - CME) vs GOLD FUTURES (CX-GC - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 30%             | 30%                 | 0%          | 0%              |
| <b>COMEX COPPER (CMX-HG - CME) vs PLATINUM FUTURES (NYM-PL - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 55%             | 55%                 | 50%         | 50%             |
| <b>COPPER FUTURES (CX-HG - CME) vs AUSTRALIAN DOLLAR (AD - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | New      | +1:-2  |                 |                     | 20%         | 20%             |
| <b>COPPER FUTURES (CX-HG - CME) vs COAL (API 2) CIF ARA (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MTF - CME)</b>                        |          |        |                 |                     |             |                 |
| Spread Credit Rate   | New      | +1:-1  |                 |                     | 30%         | 30%             |
| <b>COPPER FUTURES (CX-HG - CME) vs COAL (API 4) FOB RICHARDS BAY (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MFF - CME)</b>               |          |        |                 |                     |             |                 |
| Spread Credit Rate   | New      | +1:-1  |                 |                     | 30%         | 30%             |
| <b>GOLD FUTURES (CX-GC - CME) vs SWISS FRANC (SF - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 20%             | 20%                 | 0%          | 0%              |
| <b>KILO GOLD FUTURES (CX-GCK - CME) vs ALUMINUM FUTURES (CX-ALI - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +3:-1  | 25%             | 25%                 | 0%          | 0%              |
| <b>KILO GOLD FUTURES (CX-GCK - CME) vs AUSTRALIAN DOLLAR (AD - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +3:-1  | 25%             | 25%                 | 0%          | 0%              |
| <b>SILVER FUTURES (CX-SI - CME) vs IRON ORE FUTURES (NY-TIO - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate   | New      | +1:-1  |                 |                     | 30%         | 30%             |
| <b>ZINC FUTURES (CX-ZNC - CME) vs GOLD FUTURES (CX-GC - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-1  | 40%             | 40%                 | 30%         | 30%             |
| <b>NATURAL GAS - Inter-commodity Spread Rates</b>  |          |        |                 |                     |             |                 |
| <b>HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Decrease | +1:-11 | 50%             | 50%                 | 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>REFINED PRODUCTS - Inter-commodity Spread Rates</b>  |          |        |                 |                     |             |                 |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b>                                     |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME).</b>                                    |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME).</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs SINGAPORE 380CST FUEL OIL (PLATTS) SWAP (NYM-SE - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs SINGAPORE FUEL OIL 180CST CALENDAR SWAP (NYM-UA - CME)</b>   |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>                                 |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b>                            |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +33:-5 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME)</b>                                     |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +19:-3 | 75%             | 75%                 | 85%         | 85%             |
| <b>BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>                              |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:-1  | 75%             | 75%                 | 85%         | 85%             |
| <b>EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>      |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +3:-19 | 85%             | 85%                 | 90%         | 90%             |
| <b>EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate  | Increase | +1:-1  | 85%             | 85%                 | 90%         | 90%             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type  | Change   | Ratio  | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|----------|--------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b>  |          |        |                 |                     |             |                 |
| <b>EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME) vs SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 85%             | 85%                 | 90%         | 90%             |
| <b>EUROPEAN 3.5% FUEL OIL ROTTERDAM BALMO CALENDAR SWAP (NYM-UV - CME) vs SINGAPORE 380CST FUEL OIL (PLATTS) SWAP (NYM-SE - CME)</b>                         |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 85%             | 85%                 | 90%         | 90%             |
| <b>EUROPEAN 3.5% FUEL OIL ROTTERDAM CALENDAR SWAP (NYM-UV - CME) vs EUROPEAN SINGAPORE FUEL OIL 180CST CALENDAR SWAP (NYM-UA - CME)</b>                      |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +1:-1  | 85%             | 85%                 | 90%         | 90%             |
| <b>EUROPEAN 3.5% FUEL OIL ROTTERDAM CALENDAR SWAP (NYM-UV - CME) vs GULF COAST #6 FUEL 3.0% SWAP (NYM-MF - CME)</b>  |          |        |                 |                     |             |                 |
| Spread Credit Rate   | Increase | +3:-19 | 80%             | 80%                 | 90%         | 90%             |

| Rate Type  | Tier Description | Change   | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--|------------------|----------|-----------------|---------------------|-------------|-----------------|
| <b>Volatility Scan (volScan) Rate</b>  |                  |          |                 |                     |             |                 |
| <b>COAL - Volatility Scan (volScan) Rate</b>   |                  |          |                 |                     |             |                 |
| <b>COAL (API 8) CFR SOUTH CHINA (ARGUS/MCCLOSKEY) SWAP FUTURES (A8A, SSI) - volScan</b>  |                  |          |                 |                     |             |                 |
| Clearing Member Rate   | Months 3+        | New      |                 |                     |             | 0.080           |
| <b>FX - Volatility Scan (volScan) Rate</b>   |                  |          |                 |                     |             |                 |
| <b>BRITISH POUND (BP, BP, M6B, YB) - volScan</b>   |                  |          |                 |                     |             |                 |
| Clearing Member Rate   |                  | Increase |                 | 0.035               |             | 0.045           |
| <b>EURO FX (E7, EC, EC, M6E, YT) - volScan</b>   |                  |          |                 |                     |             |                 |
| Clearing Member Rate   |                  | Increase |                 | 0.035               |             | 0.040           |
| <b>JAPANESE YEN (J7, JY, JY, MJY, YJ) - volScan</b>  |                  |          |                 |                     |             |                 |
| Clearing Member Rate   |                  | Increase |                 | 0.040               |             | 0.045           |
| <b>METALS - Volatility Scan (volScan) Rate</b>   |                  |          |                 |                     |             |                 |
| <b>GOLD FUTURES (8Q, GC, GCT, L01, L02, L03, L04, L05, L06, L07, L08, L09, L10, L11, L12, L13, L14, L15, L16, L17, L18, L19, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30, L31, MGC, OG, OGW, QO, QS) - volScan</b> |                  |          |                 |                     |             |                 |
| Clearing Member Rate   | Mths 1-4         | Increase |                 | 0.035               |             | 0.040           |
| Clearing Member Rate   | Mths 5-6         | Increase |                 | 0.025               |             | 0.030           |
| Clearing Member Rate   | Mths 7-12        | Increase |                 | 0.015               |             | 0.020           |
| Clearing Member Rate   | Mths 13-16       | Increase |                 | 0.010               |             | 0.015           |
| Clearing Member Rate   | Mths 17+         | Increase |                 | 0.010               |             | 0.015           |
| <b>SILVER FUTURES (6Q, QI, SI, SIL, SIT, SO, SOW) - volScan</b>  |                  |          |                 |                     |             |                 |
| Clearing Member Rate   | Mnths 1-4        | Decrease |                 | 0.060               |             | 0.050           |
| Clearing Member Rate   | Mnths 5-6        | Decrease |                 | 0.035               |             | 0.030           |