



23-006

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, January 5, 2023

***To receive advanced notification of Performance Bond (margin) changes, through our free automated mailing list, go to***

***<http://www.cmegroup.com/newsletter/web2lead/web2sf-old.html>***

***and subscribe to the Performance Bond Rates Advisory Notice listserver.***

As per the normal review of market volatility to ensure adequate collateral coverage, the Chicago Mercantile Exchange Inc., Clearing House Risk Management staff approved the performance bond requirements for the following products listed below. Please email any questions to [Clearing.RiskManagement@cmegroup.com](mailto:Clearing.RiskManagement@cmegroup.com).

The rates will be effective after the close of business on

**Friday, January 6, 2023.**

Current rates as of:

**Thursday, January 5, 2023.**

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### CRUDE OIL SPREADS - Outright Rates

#### WTS (ARGUS) V WTI TRD MTH FUT (FH)

|    |         |        |          |     |     |     |     |     |
|----|---------|--------|----------|-----|-----|-----|-----|-----|
| FH | Non-HRP | Mnth 1 | Increase | USD | 740 | 740 | 800 | 800 |
| FH | HRP     | Mnth 1 | Increase | USD | 814 | 740 | 880 | 800 |

#### ETHANOL - Outright Rates

#### CHICAGO ETHANOL FUT (CU)

|    |         |         |          |     |       |       |       |       |
|----|---------|---------|----------|-----|-------|-------|-------|-------|
| CU | Non-HRP | Mth 1   | Decrease | USD | 7,200 | 7,200 | 6,500 | 6,500 |
| CU | HRP     | Mth 1   | Decrease | USD | 7,920 | 7,200 | 7,150 | 6,500 |
| CU | Non-HRP | Mths 2  | Decrease | USD | 7,000 | 7,000 | 6,200 | 6,200 |
| CU | HRP     | Mths 2  | Decrease | USD | 7,700 | 7,000 | 6,820 | 6,200 |
| CU | Non-HRP | Mth 3-7 | Decrease | USD | 6,500 | 6,500 | 5,800 | 5,800 |
| CU | HRP     | Mth 3-7 | Decrease | USD | 7,150 | 6,500 | 6,380 | 5,800 |
| CU | Non-HRP | Mnth 8+ | Decrease | USD | 6,500 | 6,500 | 5,800 | 5,800 |
| CU | HRP     | Mnth 8+ | Decrease | USD | 7,150 | 6,500 | 6,380 | 5,800 |

#### NEW YORK ETHANOL FUT (EZ)

|    |         |          |          |     |       |       |       |       |
|----|---------|----------|----------|-----|-------|-------|-------|-------|
| EZ | Non-HRP | Mth 1    | Decrease | USD | 7,500 | 7,500 | 6,800 | 6,800 |
| EZ | HRP     | Mth 1    | Decrease | USD | 8,250 | 7,500 | 7,480 | 6,800 |
| EZ | Non-HRP | Mth 2    | Decrease | USD | 7,000 | 7,000 | 6,200 | 6,200 |
| EZ | HRP     | Mth 2    | Decrease | USD | 7,700 | 7,000 | 6,820 | 6,200 |
| EZ | Non-HRP | Mths 3-7 | Decrease | USD | 6,200 | 6,200 | 5,500 | 5,500 |
| EZ | HRP     | Mths 3-7 | Decrease | USD | 6,820 | 6,200 | 6,050 | 5,500 |
| EZ | Non-HRP | Mnths 8+ | Decrease | USD | 6,200 | 6,200 | 5,500 | 5,500 |
| EZ | HRP     | Mnths 8+ | Decrease | USD | 6,820 | 6,200 | 6,050 | 5,500 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                    | Rate Type | Description | Change | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-----------------------|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b> |           |             |        |     |                 |                     |             |                 |

### FREIGHT - Outright Rates

#### CONTAINER FREIGHT (FBX01)BALTIC FUT (CS1)

|     |         |         |          |     |       |       |       |       |
|-----|---------|---------|----------|-----|-------|-------|-------|-------|
| CS1 | Non-HRP | Mnth 1  | Decrease | USD | 2,500 | 2,500 | 1,800 | 1,800 |
| CS1 | HRP     | Mnth 1  | Decrease | USD | 2,750 | 2,500 | 1,980 | 1,800 |
| CS1 | Non-HRP | Mnth 2  | Decrease | USD | 2,300 | 2,300 | 1,700 | 1,700 |
| CS1 | HRP     | Mnth 2  | Decrease | USD | 2,530 | 2,300 | 1,870 | 1,700 |
| CS1 | Non-HRP | Mnth 3  | Decrease | USD | 1,500 | 1,500 | 1,100 | 1,100 |
| CS1 | HRP     | Mnth 3  | Decrease | USD | 1,650 | 1,500 | 1,210 | 1,100 |
| CS1 | Non-HRP | Mnth 4  | Decrease | USD | 1,500 | 1,500 | 1,100 | 1,100 |
| CS1 | HRP     | Mnth 4  | Decrease | USD | 1,650 | 1,500 | 1,210 | 1,100 |
| CS1 | Non-HRP | Mtnh 5+ | Decrease | USD | 1,500 | 1,500 | 1,100 | 1,100 |
| CS1 | HRP     | Mtnh 5+ | Decrease | USD | 1,650 | 1,500 | 1,210 | 1,100 |

#### CONTAINER FREIGHT(FBX11)BALTIC FUT (CS4)

|     |         |         |          |     |       |       |       |       |
|-----|---------|---------|----------|-----|-------|-------|-------|-------|
| CS4 | Non-HRP | Mnth 1  | Decrease | USD | 1,500 | 1,500 | 1,100 | 1,100 |
| CS4 | HRP     | Mnth 1  | Decrease | USD | 1,650 | 1,500 | 1,210 | 1,100 |
| CS4 | Non-HRP | Mnth 2  | Decrease | USD | 1,300 | 1,300 | 1,100 | 1,100 |
| CS4 | HRP     | Mnth 2  | Decrease | USD | 1,430 | 1,300 | 1,210 | 1,100 |
| CS4 | Non-HRP | Mnth 3  | Decrease | USD | 1,300 | 1,300 | 1,000 | 1,000 |
| CS4 | HRP     | Mnth 3  | Decrease | USD | 1,430 | 1,300 | 1,100 | 1,000 |
| CS4 | Non-HRP | Mnth 4  | Decrease | USD | 900   | 900   | 750   | 750   |
| CS4 | HRP     | Mnth 4  | Decrease | USD | 990   | 900   | 825   | 750   |
| CS4 | Non-HRP | Mtnh 5+ | Decrease | USD | 900   | 900   | 750   | 750   |
| CS4 | HRP     | Mtnh 5+ | Decrease | USD | 990   | 900   | 825   | 750   |

#### FREIGHT ROUTE TD20 (BALTIC) FUTURES (T2D)

|     |         |           |          |     |       |       |       |       |
|-----|---------|-----------|----------|-----|-------|-------|-------|-------|
| T2D | Non-HRP | Mth 1     | Decrease | USD | 3,100 | 3,100 | 2,500 | 2,500 |
| T2D | HRP     | Mth 1     | Decrease | USD | 3,410 | 3,100 | 2,750 | 2,500 |
| T2D | Non-HRP | Mths 2-3  | Decrease | USD | 3,100 | 3,100 | 2,500 | 2,500 |
| T2D | HRP     | Mths 2-3  | Decrease | USD | 3,410 | 3,100 | 2,750 | 2,500 |
| T2D | Non-HRP | Mnths 4-5 | Decrease | USD | 2,600 | 2,600 | 2,200 | 2,200 |
| T2D | HRP     | Mnths 4-5 | Decrease | USD | 2,860 | 2,600 | 2,420 | 2,200 |
| T2D | Non-HRP | Months 6+ | Decrease | USD | 2,600 | 2,600 | 2,200 | 2,200 |
| T2D | HRP     | Months 6+ | Decrease | USD | 2,860 | 2,600 | 2,420 | 2,200 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### **LNG FREIGHT ROUTE BLNG2G (LNG FUEL) (BL2)**

|     |         |           |          |     |        |        |        |        |
|-----|---------|-----------|----------|-----|--------|--------|--------|--------|
| BL2 | Non-HRP | Mnths 1   | Decrease | USD | 36,000 | 36,000 | 30,000 | 30,000 |
| BL2 | HRP     | Mnths 1   | Decrease | USD | 39,600 | 36,000 | 33,000 | 30,000 |
| BL2 | Non-HRP | Mnths 2   | Decrease | USD | 36,000 | 36,000 | 30,000 | 30,000 |
| BL2 | HRP     | Mnths 2   | Decrease | USD | 39,600 | 36,000 | 33,000 | 30,000 |
| BL2 | Non-HRP | Mnths 3   | Decrease | USD | 22,000 | 22,000 | 20,000 | 20,000 |
| BL2 | HRP     | Mnths 3   | Decrease | USD | 24,200 | 22,000 | 22,000 | 20,000 |
| BL2 | Non-HRP | Mnths 4-7 | Decrease | USD | 19,000 | 19,000 | 17,500 | 17,500 |
| BL2 | HRP     | Mnths 4-7 | Decrease | USD | 20,900 | 19,000 | 19,250 | 17,500 |
| BL2 | Non-HRP | Mnths 8+  | Decrease | USD | 19,000 | 19,000 | 17,500 | 17,500 |
| BL2 | HRP     | Mnths 8+  | Decrease | USD | 20,900 | 19,000 | 19,250 | 17,500 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                              | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                           |           |             |          |     |                 |                     |             |                 |
| <b>INTEREST RATES - Outright Rates</b>          |           |             |          |     |                 |                     |             |                 |
| <b>10 YR TREA NOTE TAS FUTURES (ZNS)</b>        |           |             |          |     |                 |                     |             |                 |
| ZNS                                             | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,950       | 1,950           |
| ZNS                                             | HRP       |             | Decrease | USD | 2,420           | 2,200               | 2,145       | 1,950           |
| <b>10Y TREASURY NOTE FUTURES (21)</b>           |           |             |          |     |                 |                     |             |                 |
| 21                                              | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,950       | 1,950           |
| 21                                              | HRP       |             | Decrease | USD | 2,420           | 2,200               | 2,145       | 1,950           |
| <b>2 YEAR TAS FUTURES (ZTT)</b>                 |           |             |          |     |                 |                     |             |                 |
| ZTT                                             | Non-HRP   | Mnth 1      | Decrease | USD | 1,125           | 1,125               | 1,000       | 1,000           |
| ZTT                                             | HRP       | Mnth 1      | Decrease | USD | 1,238           | 1,125               | 1,100       | 1,000           |
| ZTT                                             | Non-HRP   | Mnths 2+    | Decrease | USD | 1,175           | 1,175               | 1,050       | 1,050           |
| ZTT                                             | HRP       | Mnths 2+    | Decrease | USD | 1,293           | 1,175               | 1,155       | 1,050           |
| <b>2 YEAR TREASURY NOTE FUTURES (26)</b>        |           |             |          |     |                 |                     |             |                 |
| 26                                              | Non-HRP   | Mnth 1      | Decrease | USD | 1,125           | 1,125               | 1,000       | 1,000           |
| 26                                              | HRP       | Mnth 1      | Decrease | USD | 1,238           | 1,125               | 1,100       | 1,000           |
| 26                                              | Non-HRP   | Mnths 2+    | Decrease | USD | 1,175           | 1,175               | 1,050       | 1,050           |
| 26                                              | HRP       | Mnths 2+    | Decrease | USD | 1,293           | 1,175               | 1,155       | 1,050           |
| <b>20-YEAR U.S. TREASURY BOND FUTURES (TWE)</b> |           |             |          |     |                 |                     |             |                 |
| TWE                                             | Non-HRP   |             | Decrease | USD | 5,300           | 5,300               | 4,900       | 4,900           |
| TWE                                             | HRP       |             | Decrease | USD | 5,830           | 5,300               | 5,390       | 4,900           |
| <b>3 YEAR TREASURY NOTE FUTURE (3YR)</b>        |           |             |          |     |                 |                     |             |                 |
| 3YR                                             | Non-HRP   |             | Decrease | USD | 1,850           | 1,850               | 1,500       | 1,500           |
| 3YR                                             | HRP       |             | Decrease | USD | 2,035           | 1,850               | 1,650       | 1,500           |
| <b>5 YEAR TAS FUTURES (ZFT)</b>                 |           |             |          |     |                 |                     |             |                 |
| ZFT                                             | Non-HRP   | All Months  | Decrease | USD | 1,500           | 1,500               | 1,300       | 1,300           |
| ZFT                                             | HRP       | All Months  | Decrease | USD | 1,650           | 1,500               | 1,430       | 1,300           |
| <b>5 YR TREASURY NOTE FUTURES (25)</b>          |           |             |          |     |                 |                     |             |                 |
| 25                                              | Non-HRP   | All Months  | Decrease | USD | 1,500           | 1,500               | 1,300       | 1,300           |
| 25                                              | HRP       | All Months  | Decrease | USD | 1,650           | 1,500               | 1,430       | 1,300           |
| <b>ULTRA 10-YEAR U S TREASURY NOTE FUT (TN)</b> |           |             |          |     |                 |                     |             |                 |
| TN                                              | Non-HRP   |             | Decrease | USD | 3,000           | 3,000               | 2,750       | 2,750           |
| TN                                              | HRP       |             | Decrease | USD | 3,300           | 3,000               | 3,025       | 2,750           |
| <b>ULTRA 10-YR U S TREA TAS FUT (TNT)</b>       |           |             |          |     |                 |                     |             |                 |
| TNT                                             | Non-HRP   |             | Decrease | USD | 3,000           | 3,000               | 2,750       | 2,750           |
| TNT                                             | HRP       |             | Decrease | USD | 3,300           | 3,000               | 3,025       | 2,750           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### METALS - Outright Rates

##### ALUMINA FOB AUSTRALIA PLATT FUTURES (ALA)

|     |         |              |          |     |       |       |       |       |
|-----|---------|--------------|----------|-----|-------|-------|-------|-------|
| ALA | Non-HRP | Month(s) 01  | Decrease | USD | 5,000 | 5,000 | 4,500 | 4,500 |
| ALA | HRP     | Month(s) 01  | Decrease | USD | 5,500 | 5,000 | 4,950 | 4,500 |
| ALA | Non-HRP | Month(s) 02  | Decrease | USD | 5,000 | 5,000 | 4,500 | 4,500 |
| ALA | HRP     | Month(s) 02  | Decrease | USD | 5,500 | 5,000 | 4,950 | 4,500 |
| ALA | Non-HRP | Month(s) 03+ | Decrease | USD | 5,000 | 5,000 | 4,500 | 4,500 |
| ALA | HRP     | Month(s) 03+ | Decrease | USD | 5,500 | 5,000 | 4,950 | 4,500 |

##### ALUMINIUM EURO PREM DUTY-PAID FUT (EDP)

|     |         |                |          |     |       |       |       |       |
|-----|---------|----------------|----------|-----|-------|-------|-------|-------|
| EDP | Non-HRP | Month(s) 01    | Decrease | USD | 800   | 800   | 700   | 700   |
| EDP | HRP     | Month(s) 01    | Decrease | USD | 880   | 800   | 770   | 700   |
| EDP | Non-HRP | Month(s) 02    | Decrease | USD | 1,700 | 1,700 | 1,400 | 1,400 |
| EDP | HRP     | Month(s) 02    | Decrease | USD | 1,870 | 1,700 | 1,540 | 1,400 |
| EDP | Non-HRP | Month(s) 03-09 | Decrease | USD | 1,700 | 1,700 | 1,400 | 1,400 |
| EDP | HRP     | Month(s) 03-09 | Decrease | USD | 1,870 | 1,700 | 1,540 | 1,400 |
| EDP | Non-HRP | Month(s) 10+   | Decrease | USD | 1,700 | 1,700 | 1,400 | 1,400 |
| EDP | HRP     | Month(s) 10+   | Decrease | USD | 1,870 | 1,700 | 1,540 | 1,400 |

##### ALUMINIUM EURO PREM METAL BULLETIN (AEP)

|     |         |                |          |     |       |       |       |       |
|-----|---------|----------------|----------|-----|-------|-------|-------|-------|
| AEP | Non-HRP | Month(s) 01    | Decrease | USD | 900   | 900   | 700   | 700   |
| AEP | HRP     | Month(s) 01    | Decrease | USD | 990   | 900   | 770   | 700   |
| AEP | Non-HRP | Month(s) 02    | Decrease | USD | 1,300 | 1,300 | 1,000 | 1,000 |
| AEP | HRP     | Month(s) 02    | Decrease | USD | 1,430 | 1,300 | 1,100 | 1,000 |
| AEP | Non-HRP | Month(s) 03-09 | Decrease | USD | 1,500 | 1,500 | 1,200 | 1,200 |
| AEP | HRP     | Month(s) 03-09 | Decrease | USD | 1,650 | 1,500 | 1,320 | 1,200 |
| AEP | Non-HRP | Month(s) 10+   | Decrease | USD | 1,800 | 1,800 | 1,500 | 1,500 |
| AEP | HRP     | Month(s) 10+   | Decrease | USD | 1,980 | 1,800 | 1,650 | 1,500 |

##### ALUMINUM FUTURES (ALI)

|     |         |          |          |     |       |       |       |       |
|-----|---------|----------|----------|-----|-------|-------|-------|-------|
| ALI | Non-HRP | Mths 1-4 | Decrease | USD | 4,000 | 4,000 | 3,600 | 3,600 |
| ALI | HRP     | Mths 1-4 | Decrease | USD | 4,400 | 4,000 | 3,960 | 3,600 |
| ALI | Non-HRP | Mths 5+  | Decrease | USD | 4,000 | 4,000 | 3,600 | 3,600 |
| ALI | HRP     | Mths 5+  | Decrease | USD | 4,400 | 4,000 | 3,960 | 3,600 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                               | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |           |             |          |     |                 |                     |             |                 |
| <b>ALUMINUM JAPAN PREMIUM (PLATTS) FUT (MJP)</b> |           |             |          |     |                 |                     |             |                 |
| MJP                                              | Non-HRP   | Mths 01     | Decrease | USD | 400             | 400                 | 350         | 350             |
| MJP                                              | HRP       | Mths 01     | Decrease | USD | 440             | 400                 | 385         | 350             |
| MJP                                              | Non-HRP   | Mths 02-03  | Decrease | USD | 400             | 400                 | 350         | 350             |
| MJP                                              | HRP       | Mths 02-03  | Decrease | USD | 440             | 400                 | 385         | 350             |
| MJP                                              | Non-HRP   | Mths 04-09  | Decrease | USD | 400             | 400                 | 350         | 350             |
| MJP                                              | HRP       | Mths 04-09  | Decrease | USD | 440             | 400                 | 385         | 350             |
| MJP                                              | Non-HRP   | Mths 10+    | Decrease | USD | 400             | 400                 | 350         | 350             |
| MJP                                              | HRP       | Mths 10+    | Decrease | USD | 440             | 400                 | 385         | 350             |
| <b>ALUMINUM MW TRANS PREM PLATTS FUT (AUP)</b>   |           |             |          |     |                 |                     |             |                 |
| AUP                                              | Non-HRP   | Mth 1       | Increase | USD | 1,500           | 1,500               | 1,700       | 1,700           |
| AUP                                              | HRP       | Mth 1       | Increase | USD | 1,650           | 1,500               | 1,870       | 1,700           |
| AUP                                              | Non-HRP   | Mths 2-12   | Increase | USD | 1,200           | 1,200               | 1,500       | 1,500           |
| AUP                                              | HRP       | Mths 2-12   | Increase | USD | 1,320           | 1,200               | 1,650       | 1,500           |
| AUP                                              | Non-HRP   | Mths 13-21  | Increase | USD | 1,200           | 1,200               | 1,400       | 1,400           |
| AUP                                              | HRP       | Mths 13-21  | Increase | USD | 1,320           | 1,200               | 1,540       | 1,400           |
| <b>COMEX 100 GOLD FUTURES (GC)</b>               |           |             |          |     |                 |                     |             |                 |
| GC                                               | Non-HRP   | Mnth1       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth1       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth2       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth2       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth3       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth3       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth4       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth4       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth5       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth5       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth6       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth6       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth7       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth7       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GC                                               | Non-HRP   | Mnth8+      | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GC                                               | HRP       | Mnth8+      | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### COMEX 100 GOLD TRADE AT SETTLEMENT (GCT)

|     |         |        |          |     |       |       |       |       |
|-----|---------|--------|----------|-----|-------|-------|-------|-------|
| GCT | Non-HRP | Mnth1  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth1  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth2  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth2  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth3  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth3  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth4  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth4  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth5  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth5  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth6  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth6  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth7  | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth7  | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |
| GCT | Non-HRP | Mnth8+ | Increase | USD | 6,300 | 6,300 | 6,900 | 6,900 |
| GCT | HRP     | Mnth8+ | Increase | USD | 6,930 | 6,300 | 7,590 | 6,900 |

#### E-MINI GOLD FUTURES (QO)

|    |         |        |          |     |       |       |       |       |
|----|---------|--------|----------|-----|-------|-------|-------|-------|
| QO | Non-HRP | Mnth1  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth1  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth2  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth2  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth3  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth3  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth4  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth4  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth5  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth5  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth6  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth6  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth7  | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth7  | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |
| QO | Non-HRP | Mnth8+ | Increase | USD | 3,150 | 3,150 | 3,450 | 3,450 |
| QO | HRP     | Mnth8+ | Increase | USD | 3,465 | 3,150 | 3,795 | 3,450 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                    | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                 |           |             |          |     |                 |                     |             |                 |
| <b>GOLD LONDON TAM FIRST PM (GCD)</b> |           |             |          |     |                 |                     |             |                 |
| GCD                                   | Non-HRP   | Mnth1       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth1       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth2       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth2       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth3       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth3       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth4       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth4       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth5       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth5       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth6       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth6       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth7       | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth7       | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| GCD                                   | Non-HRP   | Mnth8+      | Increase | USD | 6,300           | 6,300               | 6,900       | 6,900           |
| GCD                                   | HRP       | Mnth8+      | Increase | USD | 6,930           | 6,300               | 7,590       | 6,900           |
| <b>MICRO GOLD FUTURES (MGC)</b>       |           |             |          |     |                 |                     |             |                 |
| MGC                                   | Non-HRP   | Mnth1       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth1       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth2       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth2       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth3       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth3       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth4       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth4       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth5       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth5       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth6       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth6       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth7       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth7       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGC                                   | Non-HRP   | Mnth8+      | Increase | USD | 630             | 630                 | 690         | 690             |
| MGC                                   | HRP       | Mnth8+      | Increase | USD | 693             | 630                 | 759         | 690             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                   | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                |           |             |          |     |                 |                     |             |                 |
| <b>MICRO GOLD TAS (MGT)</b>          |           |             |          |     |                 |                     |             |                 |
| MGT                                  | Non-HRP   | Mnth1       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth1       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth2       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth2       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth3       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth3       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth4       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth4       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth5       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth5       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth6       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth6       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth7       | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth7       | Increase | USD | 693             | 630                 | 759         | 690             |
| MGT                                  | Non-HRP   | Mnth8+      | Increase | USD | 630             | 630                 | 690         | 690             |
| MGT                                  | HRP       | Mnth8+      | Increase | USD | 693             | 630                 | 759         | 690             |
| <b>MICRO PALLADIUM FUTURES (PAM)</b> |           |             |          |     |                 |                     |             |                 |
| PAM                                  | Non-HRP   | Mnth 1      | Decrease | USD | 2,400           | 2,400               | 2,100       | 2,100           |
| PAM                                  | HRP       | Mnth 1      | Decrease | USD | 2,640           | 2,400               | 2,310       | 2,100           |
| PAM                                  | Non-HRP   | Mnth 2      | Decrease | USD | 2,350           | 2,350               | 2,050       | 2,050           |
| PAM                                  | HRP       | Mnth 2      | Decrease | USD | 2,585           | 2,350               | 2,255       | 2,050           |
| PAM                                  | Non-HRP   | Mnth 3      | Decrease | USD | 2,300           | 2,300               | 2,000       | 2,000           |
| PAM                                  | HRP       | Mnth 3      | Decrease | USD | 2,530           | 2,300               | 2,200       | 2,000           |
| PAM                                  | Non-HRP   | Mnth 4+     | Decrease | USD | 2,300           | 2,300               | 2,000       | 2,000           |
| PAM                                  | HRP       | Mnth 4+     | Decrease | USD | 2,530           | 2,300               | 2,200       | 2,000           |
| <b>PALLADIUM FUTURES NYMEX (PA)</b>  |           |             |          |     |                 |                     |             |                 |
| PA                                   | Non-HRP   | Mnth 1      | Decrease | USD | 24,000          | 24,000              | 21,000      | 21,000          |
| PA                                   | HRP       | Mnth 1      | Decrease | USD | 26,400          | 24,000              | 23,100      | 21,000          |
| PA                                   | Non-HRP   | Mnth 2      | Decrease | USD | 23,500          | 23,500              | 20,500      | 20,500          |
| PA                                   | HRP       | Mnth 2      | Decrease | USD | 25,850          | 23,500              | 22,550      | 20,500          |
| PA                                   | Non-HRP   | Mnth 3      | Decrease | USD | 23,000          | 23,000              | 20,000      | 20,000          |
| PA                                   | HRP       | Mnth 3      | Decrease | USD | 25,300          | 23,000              | 22,000      | 20,000          |
| PA                                   | Non-HRP   | Mnth 4+     | Decrease | USD | 23,000          | 23,000              | 20,000      | 20,000          |
| PA                                   | HRP       | Mnth 4+     | Decrease | USD | 25,300          | 23,000              | 22,000      | 20,000          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                               | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |           |             |          |     |                 |                     |             |                 |
| <b>PALLADIUM TAS (PAT)</b>                       |           |             |          |     |                 |                     |             |                 |
| PAT                                              | Non-HRP   | Mnth 1      | Decrease | USD | 24,000          | 24,000              | 21,000      | 21,000          |
| PAT                                              | HRP       | Mnth 1      | Decrease | USD | 26,400          | 24,000              | 23,100      | 21,000          |
| PAT                                              | Non-HRP   | Mnth 2      | Decrease | USD | 23,500          | 23,500              | 20,500      | 20,500          |
| PAT                                              | HRP       | Mnth 2      | Decrease | USD | 25,850          | 23,500              | 22,550      | 20,500          |
| PAT                                              | Non-HRP   | Mnth 3      | Decrease | USD | 23,000          | 23,000              | 20,000      | 20,000          |
| PAT                                              | HRP       | Mnth 3      | Decrease | USD | 25,300          | 23,000              | 22,000      | 20,000          |
| PAT                                              | Non-HRP   | Mnth 4+     | Decrease | USD | 23,000          | 23,000              | 20,000      | 20,000          |
| PAT                                              | HRP       | Mnth 4+     | Decrease | USD | 25,300          | 23,000              | 22,000      | 20,000          |
| <b>PLATINUM FUTURES NYMEX (PL)</b>               |           |             |          |     |                 |                     |             |                 |
| PL                                               | Non-HRP   | Mths 1      | Increase | USD | 2,800           | 2,800               | 3,200       | 3,200           |
| PL                                               | HRP       | Mths 1      | Increase | USD | 3,080           | 2,800               | 3,520       | 3,200           |
| PL                                               | Non-HRP   | Mths 2+     | Increase | USD | 2,800           | 2,800               | 3,200       | 3,200           |
| PL                                               | HRP       | Mths 2+     | Increase | USD | 3,080           | 2,800               | 3,520       | 3,200           |
| <b>PLATINUM FUTURES TAS (PLT)</b>                |           |             |          |     |                 |                     |             |                 |
| PLT                                              | Non-HRP   | Mths 1      | Increase | USD | 2,800           | 2,800               | 3,200       | 3,200           |
| PLT                                              | HRP       | Mths 1      | Increase | USD | 3,080           | 2,800               | 3,520       | 3,200           |
| PLT                                              | Non-HRP   | Mths 2+     | Increase | USD | 2,800           | 2,800               | 3,200       | 3,200           |
| PLT                                              | HRP       | Mths 2+     | Increase | USD | 3,080           | 2,800               | 3,520       | 3,200           |
| <b>U.S. MIDWEST #1 BUSHELING FERROUS S (BUS)</b> |           |             |          |     |                 |                     |             |                 |
| BUS                                              | Non-HRP   | Mth 1       | Decrease | USD | 1,000           | 1,000               | 800         | 800             |
| BUS                                              | HRP       | Mth 1       | Decrease | USD | 1,100           | 1,000               | 880         | 800             |
| BUS                                              | Non-HRP   | Mths 2-4    | Decrease | USD | 1,000           | 1,000               | 800         | 800             |
| BUS                                              | HRP       | Mths 2-4    | Decrease | USD | 1,100           | 1,000               | 880         | 800             |
| BUS                                              | Non-HRP   | Mths 6+     | Decrease | USD | 1,000           | 1,000               | 800         | 800             |
| BUS                                              | HRP       | Mths 6+     | Decrease | USD | 1,100           | 1,000               | 880         | 800             |
| <b>U.S. MIDWEST DOM STEEL PREM(CRU)FUT (HDG)</b> |           |             |          |     |                 |                     |             |                 |
| HDG                                              | Non-HRP   | Mths 1-4    | Decrease | USD | 1,200           | 1,200               | 1,000       | 1,000           |
| HDG                                              | HRP       | Mths 1-4    | Decrease | USD | 1,320           | 1,200               | 1,100       | 1,000           |
| HDG                                              | Non-HRP   | Mths 5+     | Decrease | USD | 1,200           | 1,200               | 1,000       | 1,000           |
| HDG                                              | HRP       | Mths 5+     | Decrease | USD | 1,320           | 1,200               | 1,100       | 1,000           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                    | Rate Type | Description | Change | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-----------------------|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b> |           |             |        |     |                 |                     |             |                 |

### NATURAL GAS - Outright Rates

#### DUTCH TTF NAT GAS FIN M-1 AVG PRC (TTB)

|     |         |            |          |     |         |         |         |         |
|-----|---------|------------|----------|-----|---------|---------|---------|---------|
| TTB | Non-HRP | Mnth 1     | Decrease | USD | 200,000 | 200,000 | 100,000 | 100,000 |
| TTB | HRP     | Mnth 1     | Decrease | USD | 220,000 | 200,000 | 110,000 | 100,000 |
| TTB | Non-HRP | Mnths 2    | Decrease | USD | 200,000 | 200,000 | 100,000 | 100,000 |
| TTB | HRP     | Mnths 2    | Decrease | USD | 220,000 | 200,000 | 110,000 | 100,000 |
| TTB | Non-HRP | Mnths 3    | Decrease | USD | 185,000 | 185,000 | 97,500  | 97,500  |
| TTB | HRP     | Mnths 3    | Decrease | USD | 203,500 | 185,000 | 107,250 | 97,500  |
| TTB | Non-HRP | Mnths 4-6  | Decrease | USD | 180,000 | 180,000 | 97,500  | 97,500  |
| TTB | HRP     | Mnths 4-6  | Decrease | USD | 198,000 | 180,000 | 107,250 | 97,500  |
| TTB | Non-HRP | Mnths 7-18 | Decrease | USD | 180,000 | 180,000 | 95,000  | 95,000  |
| TTB | HRP     | Mnths 7-18 | Decrease | USD | 198,000 | 180,000 | 104,500 | 95,000  |

#### DUTCH TTF NATURAL GAS (USD/MMBTU) (TFU)

|     |         |            |          |     |         |         |         |         |
|-----|---------|------------|----------|-----|---------|---------|---------|---------|
| TFU | Non-HRP | Mnth 1     | Decrease | USD | 200,000 | 200,000 | 100,000 | 100,000 |
| TFU | HRP     | Mnth 1     | Decrease | USD | 220,000 | 200,000 | 110,000 | 100,000 |
| TFU | Non-HRP | Mnth 2     | Decrease | USD | 200,000 | 200,000 | 100,000 | 100,000 |
| TFU | HRP     | Mnth 2     | Decrease | USD | 220,000 | 200,000 | 110,000 | 100,000 |
| TFU | Non-HRP | Mnth 3     | Decrease | USD | 185,000 | 185,000 | 97,500  | 97,500  |
| TFU | HRP     | Mnth 3     | Decrease | USD | 203,500 | 185,000 | 107,250 | 97,500  |
| TFU | Non-HRP | Mnths 4-6  | Decrease | USD | 180,000 | 180,000 | 97,500  | 97,500  |
| TFU | HRP     | Mnths 4-6  | Decrease | USD | 198,000 | 180,000 | 107,250 | 97,500  |
| TFU | Non-HRP | Mnths 7-18 | Decrease | USD | 180,000 | 180,000 | 95,000  | 95,000  |
| TFU | HRP     | Mnths 7-18 | Decrease | USD | 198,000 | 180,000 | 104,500 | 95,000  |

#### DUTCH TTF NATURAL GAS CAL MONTH FUT (TTF)

|     |         |            |          |     |        |        |        |        |
|-----|---------|------------|----------|-----|--------|--------|--------|--------|
| TTF | Non-HRP | Mnth 1     | Decrease | EUR | 50,000 | 50,000 | 24,000 | 24,000 |
| TTF | HRP     | Mnth 1     | Decrease | EUR | 55,000 | 50,000 | 26,400 | 24,000 |
| TTF | Non-HRP | Mnth 2     | Decrease | EUR | 50,000 | 50,000 | 24,000 | 24,000 |
| TTF | HRP     | Mnth 2     | Decrease | EUR | 55,000 | 50,000 | 26,400 | 24,000 |
| TTF | Non-HRP | Mnth 3     | Decrease | EUR | 47,000 | 47,000 | 22,500 | 22,500 |
| TTF | HRP     | Mnth 3     | Decrease | EUR | 51,700 | 47,000 | 24,750 | 22,500 |
| TTF | Non-HRP | Mnths 4-6  | Decrease | EUR | 41,000 | 41,000 | 22,500 | 22,500 |
| TTF | HRP     | Mnths 4-6  | Decrease | EUR | 45,100 | 41,000 | 24,750 | 22,500 |
| TTF | Non-HRP | Mnths 7-18 | Decrease | EUR | 40,000 | 40,000 | 24,000 | 24,000 |
| TTF | HRP     | Mnths 7-18 | Decrease | EUR | 44,000 | 40,000 | 26,400 | 24,000 |
| TTF | Non-HRP | Mnths 19+  | Decrease | EUR | 35,000 | 35,000 | 21,000 | 21,000 |
| TTF | HRP     | Mnths 19+  | Decrease | EUR | 38,500 | 35,000 | 23,100 | 21,000 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                               | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                            |           |             |          |     |                 |                     |             |                 |
| <b>DUTCH TTF NATURAL GAS FIN CAL M (TTG)</b>     |           |             |          |     |                 |                     |             |                 |
| TTG                                              | Non-HRP   | Mnth 1      | Decrease | EUR | 50,000          | 50,000              | 24,000      | 24,000          |
| TTG                                              | HRP       | Mnth 1      | Decrease | EUR | 55,000          | 50,000              | 26,400      | 24,000          |
| TTG                                              | Non-HRP   | Mnth 2      | Decrease | EUR | 50,000          | 50,000              | 24,000      | 24,000          |
| TTG                                              | HRP       | Mnth 2      | Decrease | EUR | 55,000          | 50,000              | 26,400      | 24,000          |
| TTG                                              | Non-HRP   | Mnth 3      | Decrease | EUR | 47,000          | 47,000              | 22,500      | 22,500          |
| TTG                                              | HRP       | Mnth 3      | Decrease | EUR | 51,700          | 47,000              | 24,750      | 22,500          |
| TTG                                              | Non-HRP   | Mnths 4-6   | Decrease | EUR | 41,000          | 41,000              | 22,500      | 22,500          |
| TTG                                              | HRP       | Mnths 4-6   | Decrease | EUR | 45,100          | 41,000              | 24,750      | 22,500          |
| TTG                                              | Non-HRP   | Mnths 7-18  | Decrease | EUR | 40,000          | 40,000              | 24,000      | 24,000          |
| TTG                                              | HRP       | Mnths 7-18  | Decrease | EUR | 44,000          | 40,000              | 26,400      | 24,000          |
| TTG                                              | Non-HRP   | Mnth 19+    | Decrease | EUR | 35,000          | 35,000              | 21,000      | 21,000          |
| TTG                                              | HRP       | Mnth 19+    | Decrease | EUR | 38,500          | 35,000              | 23,100      | 21,000          |
| <b>DUTCH TTF NATURAL GAS FIN DAY AHEAD (TTI)</b> |           |             |          |     |                 |                     |             |                 |
| TTI                                              | Non-HRP   | Mnth 1      | Decrease | EUR | 50,000          | 50,000              | 24,000      | 24,000          |
| TTI                                              | HRP       | Mnth 1      | Decrease | EUR | 55,000          | 50,000              | 26,400      | 24,000          |
| TTI                                              | Non-HRP   | Mnth 2      | Decrease | EUR | 50,000          | 50,000              | 24,000      | 24,000          |
| TTI                                              | HRP       | Mnth 2      | Decrease | EUR | 55,000          | 50,000              | 26,400      | 24,000          |
| TTI                                              | Non-HRP   | Mnth 3      | Decrease | EUR | 47,000          | 47,000              | 22,500      | 22,500          |
| TTI                                              | HRP       | Mnth 3      | Decrease | EUR | 51,700          | 47,000              | 24,750      | 22,500          |
| TTI                                              | Non-HRP   | Mnths 4-5   | Decrease | EUR | 41,000          | 41,000              | 22,500      | 22,500          |
| TTI                                              | HRP       | Mnths 4-5   | Decrease | EUR | 45,100          | 41,000              | 24,750      | 22,500          |
| TTI                                              | Non-HRP   | Mnths 6-12  | Decrease | EUR | 40,000          | 40,000              | 24,000      | 24,000          |
| TTI                                              | HRP       | Mnths 6-12  | Decrease | EUR | 44,000          | 40,000              | 26,400      | 24,000          |
| TTI                                              | Non-HRP   | Mnth 13+    | Decrease | EUR | 35,000          | 35,000              | 21,000      | 21,000          |
| TTI                                              | HRP       | Mnth 13+    | Decrease | EUR | 38,500          | 35,000              | 23,100      | 21,000          |
| <b>DUTCH TTF NATURAL GAS FRONT MTH FUT (TTE)</b> |           |             |          |     |                 |                     |             |                 |
| TTE                                              | Non-HRP   | Mnth 1      | Decrease | USD | 200,000         | 200,000             | 100,000     | 100,000         |
| TTE                                              | HRP       | Mnth 1      | Decrease | USD | 220,000         | 200,000             | 110,000     | 100,000         |
| TTE                                              | Non-HRP   | Mnths 2     | Decrease | USD | 200,000         | 200,000             | 100,000     | 100,000         |
| TTE                                              | HRP       | Mnths 2     | Decrease | USD | 220,000         | 200,000             | 110,000     | 100,000         |
| TTE                                              | Non-HRP   | Mnths 3     | Decrease | USD | 185,000         | 185,000             | 97,500      | 97,500          |
| TTE                                              | HRP       | Mnths 3     | Decrease | USD | 203,500         | 185,000             | 107,250     | 97,500          |
| TTE                                              | Non-HRP   | Mnths 4-7   | Decrease | USD | 180,000         | 180,000             | 97,500      | 97,500          |
| TTE                                              | HRP       | Mnths 4-7   | Decrease | USD | 198,000         | 180,000             | 107,250     | 97,500          |
| TTE                                              | Non-HRP   | Mnths 8-13  | Decrease | USD | 180,000         | 180,000             | 95,000      | 95,000          |
| TTE                                              | HRP       | Mnths 8-13  | Decrease | USD | 198,000         | 180,000             | 104,500     | 95,000          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### LNG JAPAN KOREA MARKER PLATTS FUT (JKM)

|     |         |              |          |     |         |         |         |         |
|-----|---------|--------------|----------|-----|---------|---------|---------|---------|
| JKM | Non-HRP | Month 1      | Decrease | USD | 135,000 | 135,000 | 118,000 | 118,000 |
| JKM | HRP     | Month 1      | Decrease | USD | 148,500 | 135,000 | 129,800 | 118,000 |
| JKM | Non-HRP | Month 2      | Decrease | USD | 130,000 | 130,000 | 92,000  | 92,000  |
| JKM | HRP     | Month 2      | Decrease | USD | 143,000 | 130,000 | 101,200 | 92,000  |
| JKM | Non-HRP | Month 3      | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKM | HRP     | Month 3      | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKM | Non-HRP | Mnths 4-8    | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKM | HRP     | Mnths 4-8    | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKM | Non-HRP | Mnths 9-14   | Decrease | USD | 125,000 | 125,000 | 95,000  | 95,000  |
| JKM | HRP     | Mnths 9-14   | Decrease | USD | 137,500 | 125,000 | 104,500 | 95,000  |
| JKM | Non-HRP | Mnths 21+    | New      | USD |         |         | 80,000  | 80,000  |
| JKM | HRP     | Mnths 21+    | New      | USD |         |         | 88,000  | 80,000  |
| JKM | Non-HRP | Months 15-20 | Decrease | USD | 120,000 | 120,000 | 82,000  | 82,000  |
| JKM | HRP     | Months 15-20 | Decrease | USD | 132,000 | 120,000 | 90,200  | 82,000  |

#### LNG JAPAN KOREA MRK YEN FUT (JKY)

|     |         |             |          |     |  |            |            |            |
|-----|---------|-------------|----------|-----|--|------------|------------|------------|
| JKY | Non-HRP | Month 1     | Decrease | JPY |  | 18,800,000 | 15,500,000 | 15,500,000 |
| JKY | HRP     | Month 1     | Decrease | JPY |  | 18,800,000 | 17,050,000 | 15,500,000 |
| JKY | Non-HRP | Month 2     | Decrease | JPY |  | 18,100,000 | 12,000,000 | 12,000,000 |
| JKY | HRP     | Month 2     | Decrease | JPY |  | 18,100,000 | 13,200,000 | 12,000,000 |
| JKY | Non-HRP | Month 3     | Decrease | JPY |  | 17,400,000 | 11,700,000 | 11,700,000 |
| JKY | HRP     | Month 3     | Decrease | JPY |  | 17,400,000 | 12,870,000 | 11,700,000 |
| JKY | Non-HRP | Mnths 4-8   | Decrease | JPY |  | 17,400,000 | 11,500,000 | 11,500,000 |
| JKY | HRP     | Mnths 4-8   | Decrease | JPY |  | 17,400,000 | 12,650,000 | 11,500,000 |
| JKY | Non-HRP | Mnths 9-14  | Decrease | JPY |  | 17,400,000 | 12,350,000 | 12,350,000 |
| JKY | HRP     | Mnths 9-14  | Decrease | JPY |  | 17,400,000 | 13,585,000 | 12,350,000 |
| JKY | Non-HRP | Mnths 15-20 | Decrease | JPY |  | 16,700,000 | 10,500,000 | 10,500,000 |
| JKY | HRP     | Mnths 15-20 | Decrease | JPY |  | 16,700,000 | 11,550,000 | 10,500,000 |
| JKY | Non-HRP | Mnths 21+   | Decrease | JPY |  | 11,000,000 | 10,400,000 | 10,400,000 |
| JKY | HRP     | Mnths 21+   | Decrease | JPY |  | 11,000,000 | 11,440,000 | 10,400,000 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Outright Rates

#### LNG JAPAN/KOREA MARKER (PLATTS) BAC (JKB)

|     |         |             |          |     |         |         |         |         |
|-----|---------|-------------|----------|-----|---------|---------|---------|---------|
| JKB | Non-HRP | Month 1     | Decrease | USD | 135,000 | 135,000 | 118,000 | 118,000 |
| JKB | HRP     | Month 1     | Decrease | USD | 148,500 | 135,000 | 129,800 | 118,000 |
| JKB | Non-HRP | Month 2     | Decrease | USD | 130,000 | 130,000 | 92,000  | 92,000  |
| JKB | HRP     | Month 2     | Decrease | USD | 143,000 | 130,000 | 101,200 | 92,000  |
| JKB | Non-HRP | Month 3     | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKB | HRP     | Month 3     | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKB | Non-HRP | Mnths 4-8   | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKB | HRP     | Mnths 4-8   | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKB | Non-HRP | Mnths 9-14  | Decrease | USD | 125,000 | 125,000 | 95,000  | 95,000  |
| JKB | HRP     | Mnths 9-14  | Decrease | USD | 137,500 | 125,000 | 104,500 | 95,000  |
| JKB | Non-HRP | Mnths 15-20 | Decrease | USD | 120,000 | 120,000 | 82,000  | 82,000  |
| JKB | HRP     | Mnths 15-20 | Decrease | USD | 132,000 | 120,000 | 90,200  | 82,000  |

#### LNG JAPAN/KOREA MARKER (PLATTS) FRO (JKF)

|     |         |           |          |     |         |         |         |         |
|-----|---------|-----------|----------|-----|---------|---------|---------|---------|
| JKF | Non-HRP | Month 1   | Decrease | USD | 135,000 | 135,000 | 118,000 | 118,000 |
| JKF | HRP     | Month 1   | Decrease | USD | 148,500 | 135,000 | 129,800 | 118,000 |
| JKF | Non-HRP | Month 2   | Decrease | USD | 130,000 | 130,000 | 92,000  | 92,000  |
| JKF | HRP     | Month 2   | Decrease | USD | 143,000 | 130,000 | 101,200 | 92,000  |
| JKF | Non-HRP | Month 3   | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKF | HRP     | Month 3   | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKF | Non-HRP | Mnths 4-8 | Decrease | USD | 125,000 | 125,000 | 90,000  | 90,000  |
| JKF | HRP     | Mnths 4-8 | Decrease | USD | 137,500 | 125,000 | 99,000  | 90,000  |
| JKF | Non-HRP | Mnths 9-4 | Decrease | USD | 125,000 | 125,000 | 95,000  | 95,000  |
| JKF | HRP     | Mnths 9-4 | Decrease | USD | 137,500 | 125,000 | 104,500 | 95,000  |
| JKF | Non-HRP | Mnths 15+ | Decrease | USD | 120,000 | 120,000 | 82,000  | 82,000  |
| JKF | HRP     | Mnths 15+ | Decrease | USD | 132,000 | 120,000 | 90,200  | 82,000  |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                             | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b>                          |           |             |          |     |                 |                     |             |                 |
| <b>LNG NW EUROPE MARKER (PLATTS) FUT (NWM)</b> |           |             |          |     |                 |                     |             |                 |
| NWM                                            | Non-HRP   | Month 1     | Decrease | USD | 160,000         | 160,000             | 110,000     | 110,000         |
| NWM                                            | HRP       | Month 1     | Decrease | USD | 176,000         | 160,000             | 121,000     | 110,000         |
| NWM                                            | Non-HRP   | Month 2     | Decrease | USD | 150,000         | 150,000             | 70,000      | 70,000          |
| NWM                                            | HRP       | Month 2     | Decrease | USD | 165,000         | 150,000             | 77,000      | 70,000          |
| NWM                                            | Non-HRP   | Month 3     | Decrease | USD | 140,000         | 140,000             | 62,000      | 62,000          |
| NWM                                            | HRP       | Month 3     | Decrease | USD | 154,000         | 140,000             | 68,200      | 62,000          |
| NWM                                            | Non-HRP   | Mnths 4     | Decrease | USD | 140,000         | 140,000             | 60,000      | 60,000          |
| NWM                                            | HRP       | Mnths 4     | Decrease | USD | 154,000         | 140,000             | 66,000      | 60,000          |
| NWM                                            | Non-HRP   | Mnths 5-7   | Decrease | USD | 140,000         | 140,000             | 50,000      | 50,000          |
| NWM                                            | HRP       | Mnths 5-7   | Decrease | USD | 154,000         | 140,000             | 55,000      | 50,000          |
| NWM                                            | Non-HRP   | Mnths 20+   | Decrease | USD | 75,000          | 75,000              | 35,000      | 35,000          |
| NWM                                            | HRP       | Mnths 20+   | Decrease | USD | 82,500          | 75,000              | 38,500      | 35,000          |
| NWM                                            | Non-HRP   | Months 8-19 | Decrease | USD | 125,000         | 125,000             | 40,000      | 40,000          |
| NWM                                            | HRP       | Months 8-19 | Decrease | USD | 137,500         | 125,000             | 44,000      | 40,000          |
| <b>UK NBP NAT GAS CAL MTH FUT (UKG)</b>        |           |             |          |     |                 |                     |             |                 |
| UKG                                            | Non-HRP   | Mnth 1      | Decrease | GBP | 41,000          | 41,000              | 16,500      | 16,500          |
| UKG                                            | HRP       | Mnth 1      | Decrease | GBP | 45,100          | 41,000              | 18,150      | 16,500          |
| UKG                                            | Non-HRP   | Mnth 2      | Decrease | GBP | 37,000          | 37,000              | 15,000      | 15,000          |
| UKG                                            | HRP       | Mnth 2      | Decrease | GBP | 40,700          | 37,000              | 16,500      | 15,000          |
| UKG                                            | Non-HRP   | Mnth 3      | Decrease | GBP | 35,000          | 35,000              | 14,000      | 14,000          |
| UKG                                            | HRP       | Mnth 3      | Decrease | GBP | 38,500          | 35,000              | 15,400      | 14,000          |
| UKG                                            | Non-HRP   | Mnths 4-8   | Decrease | GBP | 33,000          | 33,000              | 13,000      | 13,000          |
| UKG                                            | HRP       | Mnths 4-8   | Decrease | GBP | 36,300          | 33,000              | 14,300      | 13,000          |
| UKG                                            | Non-HRP   | Mnths 9+    | Decrease | GBP | 33,000          | 33,000              | 12,000      | 12,000          |
| UKG                                            | HRP       | Mnths 9+    | Decrease | GBP | 36,300          | 33,000              | 13,200      | 12,000          |
| <b>UK NBP NATURAL GAS FRONT MTH FUT (NBP)</b>  |           |             |          |     |                 |                     |             |                 |
| NBP                                            | Non-HRP   | Mnth 1      | Decrease | USD | 175,000         | 175,000             | 63,000      | 63,000          |
| NBP                                            | HRP       | Mnth 1      | Decrease | USD | 192,500         | 175,000             | 69,300      | 63,000          |
| NBP                                            | Non-HRP   | Mnths 2     | Decrease | USD | 150,000         | 150,000             | 60,000      | 60,000          |
| NBP                                            | HRP       | Mnths 2     | Decrease | USD | 165,000         | 150,000             | 66,000      | 60,000          |
| NBP                                            | Non-HRP   | Mnths 3     | Decrease | USD | 130,000         | 130,000             | 55,000      | 55,000          |
| NBP                                            | HRP       | Mnths 3     | Decrease | USD | 143,000         | 130,000             | 60,500      | 55,000          |
| NBP                                            | Non-HRP   | Mnths 4+    | Decrease | USD | 130,000         | 130,000             | 50,000      | 50,000          |
| NBP                                            | HRP       | Mnths 4+    | Decrease | USD | 143,000         | 130,000             | 55,000      | 50,000          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                    | Rate Type | Description | Change | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-----------------------|-----------|-------------|--------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Outright Rates</b> |           |             |        |     |                 |                     |             |                 |

### REFINED PRODUCTS - Outright Rates

#### GAS EURO-BOB OXY (ARG) NEW BRG (7H)

|    |         |           |          |     |        |        |        |        |
|----|---------|-----------|----------|-----|--------|--------|--------|--------|
| 7H | Non-HRP | Mnth 1    | Decrease | USD | 72,000 | 72,000 | 62,000 | 62,000 |
| 7H | HRP     | Mnth 1    | Decrease | USD | 79,200 | 72,000 | 68,200 | 62,000 |
| 7H | Non-HRP | Mnths 2-6 | Decrease | USD | 67,000 | 67,000 | 60,000 | 60,000 |
| 7H | HRP     | Mnths 2-6 | Decrease | USD | 73,700 | 67,000 | 66,000 | 60,000 |

#### MINI GAS EUROBOB OXY BARGES FUT (MEO)

|     |         |           |          |     |        |        |        |        |
|-----|---------|-----------|----------|-----|--------|--------|--------|--------|
| MEO | Non-HRP | Mnth 1    | Decrease | USD | 72,000 | 72,000 | 62,000 | 62,000 |
| MEO | HRP     | Mnth 1    | Decrease | USD | 79,200 | 72,000 | 68,200 | 62,000 |
| MEO | Non-HRP | Mnths 2-6 | Decrease | USD | 67,000 | 67,000 | 60,000 | 60,000 |
| MEO | HRP     | Mnths 2-6 | Decrease | USD | 73,700 | 67,000 | 66,000 | 60,000 |

#### SYNTH 116 GAS EURO-BOB OXY (ARG) (116)

|     |         |           |          |     |       |       |       |       |
|-----|---------|-----------|----------|-----|-------|-------|-------|-------|
| 116 | Non-HRP | Mnth 1    | Decrease | USD | 7,200 | 7,200 | 6,200 | 6,200 |
| 116 | HRP     | Mnth 1    | Decrease | USD | 7,920 | 7,200 | 6,820 | 6,200 |
| 116 | Non-HRP | Mnths 2-6 | Decrease | USD | 6,700 | 6,700 | 6,000 | 6,000 |
| 116 | HRP     | Mnths 2-6 | Decrease | USD | 7,370 | 6,700 | 6,600 | 6,000 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

### Intra Spreads

#### AGRICULTURE - Intra Spreads

##### Rough Rice (CBOT) (14) - Months 1 vs Months 2+ (ROUGH RICE FUTURES)

|    |         |          |     |     |     |     |     |
|----|---------|----------|-----|-----|-----|-----|-----|
| 14 | Non-HRP | Increase | USD | 550 | 550 | 650 | 650 |
| 14 | HRP     | Increase | USD | 605 | 550 | 715 | 650 |

##### Rough Rice (CBOT) (14) - Months 2+ vs Months 2+ (ROUGH RICE FUTURES)

|    |         |          |     |     |     |     |     |
|----|---------|----------|-----|-----|-----|-----|-----|
| 14 | Non-HRP | Increase | USD | 550 | 550 | 625 | 625 |
| 14 | HRP     | Increase | USD | 605 | 550 | 688 | 625 |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                              | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                            |           |             |          |     |                 |                     |             |                 |
| <b>EQUITY INDEX - Intra Spreads</b>                                             |           |             |          |     |                 |                     |             |                 |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 2 (BTIC ON E-MINI DJIA FUTURES)</b>       |           |             |          |     |                 |                     |             |                 |
| YMT                                                                             | Non-HRP   |             | Decrease | USD | 1,500           | 1,500               | 1,000       | 1,000           |
| YMT                                                                             | HRP       |             | Decrease | USD | 1,650           | 1,500               | 1,100       | 1,000           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 2 (E-MINI DJIA FUTURES MARKER)</b>        |           |             |          |     |                 |                     |             |                 |
| YMI                                                                             | Non-HRP   |             | Decrease | USD | 1,500           | 1,500               | 1,000       | 1,000           |
| YMI                                                                             | HRP       |             | Decrease | USD | 1,650           | 1,500               | 1,100       | 1,000           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 2 (E-MINI DOW JONES IND AVG FUT)</b>      |           |             |          |     |                 |                     |             |                 |
| YM                                                                              | Non-HRP   |             | Decrease | USD | 1,500           | 1,500               | 1,000       | 1,000           |
| YM                                                                              | HRP       |             | Decrease | USD | 1,650           | 1,500               | 1,100       | 1,000           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 2 (MICRO E-MINI DOW JONES AVE FUTURE)</b> |           |             |          |     |                 |                     |             |                 |
| MYM                                                                             | Non-HRP   |             | Decrease | USD | 150             | 150                 | 100         | 100             |
| MYM                                                                             | HRP       |             | Decrease | USD | 165             | 150                 | 110         | 100             |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 3 (BTIC ON E-MINI DJIA FUTURES)</b>       |           |             |          |     |                 |                     |             |                 |
| YMT                                                                             | Non-HRP   |             | Decrease | USD | 1,900           | 1,900               | 1,300       | 1,300           |
| YMT                                                                             | HRP       |             | Decrease | USD | 2,090           | 1,900               | 1,430       | 1,300           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 3 (E-MINI DJIA FUTURES MARKER)</b>        |           |             |          |     |                 |                     |             |                 |
| YMI                                                                             | Non-HRP   |             | Decrease | USD | 1,900           | 1,900               | 1,300       | 1,300           |
| YMI                                                                             | HRP       |             | Decrease | USD | 2,090           | 1,900               | 1,430       | 1,300           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 3 (E-MINI DOW JONES IND AVG FUT)</b>      |           |             |          |     |                 |                     |             |                 |
| YM                                                                              | Non-HRP   |             | Decrease | USD | 1,900           | 1,900               | 1,300       | 1,300           |
| YM                                                                              | HRP       |             | Decrease | USD | 2,090           | 1,900               | 1,430       | 1,300           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 3 (MICRO E-MINI DOW JONES AVE FUTURE)</b> |           |             |          |     |                 |                     |             |                 |
| MYM                                                                             | Non-HRP   |             | Decrease | USD | 190             | 190                 | 130         | 130             |
| MYM                                                                             | HRP       |             | Decrease | USD | 209             | 190                 | 143         | 130             |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 4 (BTIC ON E-MINI DJIA FUTURES)</b>       |           |             |          |     |                 |                     |             |                 |
| YMT                                                                             | Non-HRP   |             | Decrease | USD | 2,275           | 2,275               | 1,600       | 1,600           |
| YMT                                                                             | HRP       |             | Decrease | USD | 2,503           | 2,275               | 1,760       | 1,600           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 4 (E-MINI DJIA FUTURES MARKER)</b>        |           |             |          |     |                 |                     |             |                 |
| YMI                                                                             | Non-HRP   |             | Decrease | USD | 2,275           | 2,275               | 1,600       | 1,600           |
| YMI                                                                             | HRP       |             | Decrease | USD | 2,503           | 2,275               | 1,760       | 1,600           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                     | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|----------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                   |           |             |          |     |                 |                     |             |                 |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 4 (E-MINI DOW JONES IND AVG FUT)</b>             |           |             |          |     |                 |                     |             |                 |
| YM                                                                                     | Non-HRP   |             | Decrease | USD | 2,275           | 2,275               | 1,600       | 1,600           |
| YM                                                                                     | HRP       |             | Decrease | USD | 2,503           | 2,275               | 1,760       | 1,600           |
| <b>Dow Jones (CBOT) (11) - Month 1 vs 4 (MICRO E-MINI DOW JONES AVE FUTURE)</b>        |           |             |          |     |                 |                     |             |                 |
| MYM                                                                                    | Non-HRP   |             | Decrease | USD | 228             | 228                 | 160         | 160             |
| MYM                                                                                    | HRP       |             | Decrease | USD | 250             | 228                 | 176         | 160             |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 2 (BTIC ON EMINI RUSSELL 2000 INDEX FU)</b>  |           |             |          |     |                 |                     |             |                 |
| RLT                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| RLT                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 2 (E-MINI RUSSELL 2000 FUTURES TACO MA)</b>  |           |             |          |     |                 |                     |             |                 |
| TQ1                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| TQ1                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 2 (EMINI RUSSELL 2000 INDEX FUTURES)</b>     |           |             |          |     |                 |                     |             |                 |
| RTY                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| RTY                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 2 (MICRO E-MINI RUSSELL 2000 INDEX FUT)</b>  |           |             |          |     |                 |                     |             |                 |
| M2K                                                                                    | Non-HRP   |             | Decrease | USD | 140             | 140                 | 100         | 100             |
| M2K                                                                                    | HRP       |             | Decrease | USD | 154             | 140                 | 110         | 100             |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 2 (TACO ON E-MINI RUSSEL 2000 FUTURES)</b>   |           |             |          |     |                 |                     |             |                 |
| RTQ                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| RTQ                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 3+ (BTIC ON EMINI RUSSELL 2000 INDEX FU)</b> |           |             |          |     |                 |                     |             |                 |
| RLT                                                                                    | Non-HRP   |             | Decrease | USD | 2,300           | 2,300               | 1,500       | 1,500           |
| RLT                                                                                    | HRP       |             | Decrease | USD | 2,530           | 2,300               | 1,650       | 1,500           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 3+ (E-MINI RUSSELL 2000 FUTURES TACO MA)</b> |           |             |          |     |                 |                     |             |                 |
| TQ1                                                                                    | Non-HRP   |             | Decrease | USD | 2,300           | 2,300               | 1,500       | 1,500           |
| TQ1                                                                                    | HRP       |             | Decrease | USD | 2,530           | 2,300               | 1,650       | 1,500           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 3+ (EMINI RUSSELL 2000 INDEX FUTURES)</b>    |           |             |          |     |                 |                     |             |                 |
| RTY                                                                                    | Non-HRP   |             | Decrease | USD | 2,300           | 2,300               | 1,500       | 1,500           |
| RTY                                                                                    | HRP       |             | Decrease | USD | 2,530           | 2,300               | 1,650       | 1,500           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 3+ (MICRO E-MINI RUSSELL 2000 INDEX FUT)</b> |           |             |          |     |                 |                     |             |                 |
| M2K                                                                                    | Non-HRP   |             | Decrease | USD | 230             | 230                 | 150         | 150             |
| M2K                                                                                    | HRP       |             | Decrease | USD | 253             | 230                 | 165         | 150             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                     | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|----------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                   |           |             |          |     |                 |                     |             |                 |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 1 vs 3+ (TACO ON E-MINI RUSSEL 2000 FUTURES)</b>  |           |             |          |     |                 |                     |             |                 |
| RTQ                                                                                    | Non-HRP   |             | Decrease | USD | 2,300           | 2,300               | 1,500       | 1,500           |
| RTQ                                                                                    | HRP       |             | Decrease | USD | 2,530           | 2,300               | 1,650       | 1,500           |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 2 vs 3+ (BTIC ON EMINI RUSSELL 2000 INDEX FU)</b> |           |             |          |     |                 |                     |             |                 |
| RLT                                                                                    | Non-HRP   |             | Decrease | USD | 1,200           | 1,200               | 800         | 800             |
| RLT                                                                                    | HRP       |             | Decrease | USD | 1,320           | 1,200               | 880         | 800             |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 2 vs 3+ (E-MINI RUSSELL 2000 FUTURES TACO MA)</b> |           |             |          |     |                 |                     |             |                 |
| TQ1                                                                                    | Non-HRP   |             | Decrease | USD | 1,200           | 1,200               | 800         | 800             |
| TQ1                                                                                    | HRP       |             | Decrease | USD | 1,320           | 1,200               | 880         | 800             |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 2 vs 3+ (EMINI RUSSELL 2000 INDEX FUTURES)</b>    |           |             |          |     |                 |                     |             |                 |
| RTY                                                                                    | Non-HRP   |             | Decrease | USD | 1,200           | 1,200               | 800         | 800             |
| RTY                                                                                    | HRP       |             | Decrease | USD | 1,320           | 1,200               | 880         | 800             |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 2 vs 3+ (MICRO E-MINI RUSSELL 2000 INDEX FUT)</b> |           |             |          |     |                 |                     |             |                 |
| M2K                                                                                    | Non-HRP   |             | Decrease | USD | 120             | 120                 | 80          | 80              |
| M2K                                                                                    | HRP       |             | Decrease | USD | 132             | 120                 | 88          | 80              |
| <b>E-MINI RUSSELL 2000 (RTY) - Month 2 vs 3+ (TACO ON E-MINI RUSSEL 2000 FUTURES)</b>  |           |             |          |     |                 |                     |             |                 |
| RTQ                                                                                    | Non-HRP   |             | Decrease | USD | 1,200           | 1,200               | 800         | 800             |
| RTQ                                                                                    | HRP       |             | Decrease | USD | 1,320           | 1,200               | 880         | 800             |
| <b>RDA Month(s) 01 vs. RDA Month(s) 02-03 (RUSSELL 2000 ANN DIVIDEND INDEX FUT)</b>    |           |             |          |     |                 |                     |             |                 |
| RDA                                                                                    | Non-HRP   |             | Increase | USD | 440             | 440                 | 600         | 600             |
| RDA                                                                                    | HRP       |             | Increase | USD | 484             | 440                 | 660         | 600             |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (BTIC ON E-MINI S&amp;P 500 FUTURES)</b>     |           |             |          |     |                 |                     |             |                 |
| EST                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| EST                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (E-MINI S&amp;P 500 FUTURES MARKER)</b>      |           |             |          |     |                 |                     |             |                 |
| ESI                                                                                    | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| ESI                                                                                    | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (E-MINI S&amp;P 500 FUTURES)</b>             |           |             |          |     |                 |                     |             |                 |
| ES                                                                                     | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| ES                                                                                     | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (MICRO E-MINI S&amp;P 500 FUTURES)</b>       |           |             |          |     |                 |                     |             |                 |
| MES                                                                                    | Non-HRP   |             | Decrease | USD | 140             | 140                 | 100         | 100             |
| MES                                                                                    | HRP       |             | Decrease | USD | 154             | 140                 | 110         | 100             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                 | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                               |           |             |          |     |                 |                     |             |                 |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (S&amp;P 500 FUTURES)</b>                |           |             |          |     |                 |                     |             |                 |
| SP                                                                                 | Non-HRP   |             | Decrease | USD | 7,000           | 7,000               | 5,000       | 5,000           |
| SP                                                                                 | HRP       |             | Decrease | USD | 7,700           | 7,000               | 5,500       | 5,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 2 (TACO ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| ESQ                                                                                | Non-HRP   |             | Decrease | USD | 1,400           | 1,400               | 1,000       | 1,000           |
| ESQ                                                                                | HRP       |             | Decrease | USD | 1,540           | 1,400               | 1,100       | 1,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (BTIC ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| EST                                                                                | Non-HRP   |             | Decrease | USD | 1,650           | 1,650               | 1,200       | 1,200           |
| EST                                                                                | HRP       |             | Decrease | USD | 1,815           | 1,650               | 1,320       | 1,200           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (E-MINI S&amp;P 500 FUTURES MARKER)</b>  |           |             |          |     |                 |                     |             |                 |
| ESI                                                                                | Non-HRP   |             | Decrease | USD | 1,650           | 1,650               | 1,200       | 1,200           |
| ESI                                                                                | HRP       |             | Decrease | USD | 1,815           | 1,650               | 1,320       | 1,200           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (E-MINI S&amp;P 500 FUTURES)</b>         |           |             |          |     |                 |                     |             |                 |
| ES                                                                                 | Non-HRP   |             | Decrease | USD | 1,650           | 1,650               | 1,200       | 1,200           |
| ES                                                                                 | HRP       |             | Decrease | USD | 1,815           | 1,650               | 1,320       | 1,200           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (MICRO E-MINI S&amp;P 500 FUTURES)</b>   |           |             |          |     |                 |                     |             |                 |
| MES                                                                                | Non-HRP   |             | Decrease | USD | 165             | 165                 | 120         | 120             |
| MES                                                                                | HRP       |             | Decrease | USD | 182             | 165                 | 132         | 120             |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (S&amp;P 500 FUTURES)</b>                |           |             |          |     |                 |                     |             |                 |
| SP                                                                                 | Non-HRP   |             | Decrease | USD | 8,250           | 8,250               | 6,000       | 6,000           |
| SP                                                                                 | HRP       |             | Decrease | USD | 9,075           | 8,250               | 6,600       | 6,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 3 (TACO ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| ESQ                                                                                | Non-HRP   |             | Decrease | USD | 1,650           | 1,650               | 1,200       | 1,200           |
| ESQ                                                                                | HRP       |             | Decrease | USD | 1,815           | 1,650               | 1,320       | 1,200           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (BTIC ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| EST                                                                                | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,400       | 1,400           |
| EST                                                                                | HRP       |             | Decrease | USD | 2,420           | 2,200               | 1,540       | 1,400           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (E-MINI S&amp;P 500 FUTURES MARKER)</b>  |           |             |          |     |                 |                     |             |                 |
| ESI                                                                                | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,400       | 1,400           |
| ESI                                                                                | HRP       |             | Decrease | USD | 2,420           | 2,200               | 1,540       | 1,400           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (E-MINI S&amp;P 500 FUTURES)</b>         |           |             |          |     |                 |                     |             |                 |
| ES                                                                                 | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,400       | 1,400           |
| ES                                                                                 | HRP       |             | Decrease | USD | 2,420           | 2,200               | 1,540       | 1,400           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                 | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                               |           |             |          |     |                 |                     |             |                 |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (MICRO E-MINI S&amp;P 500 FUTURES)</b>   |           |             |          |     |                 |                     |             |                 |
| MES                                                                                | Non-HRP   |             | Decrease | USD | 220             | 220                 | 140         | 140             |
| MES                                                                                | HRP       |             | Decrease | USD | 242             | 220                 | 154         | 140             |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (S&amp;P 500 FUTURES)</b>                |           |             |          |     |                 |                     |             |                 |
| SP                                                                                 | Non-HRP   |             | Decrease | USD | 11,000          | 11,000              | 7,000       | 7,000           |
| SP                                                                                 | HRP       |             | Decrease | USD | 12,100          | 11,000              | 7,700       | 7,000           |
| <b>S&amp;P 500 Stock Index - Month 1 vs 4 (TACO ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| ESQ                                                                                | Non-HRP   |             | Decrease | USD | 2,200           | 2,200               | 1,400       | 1,400           |
| ESQ                                                                                | HRP       |             | Decrease | USD | 2,420           | 2,200               | 1,540       | 1,400           |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (BTIC ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| EST                                                                                | Non-HRP   |             | Decrease | USD | 400             | 400                 | 300         | 300             |
| EST                                                                                | HRP       |             | Decrease | USD | 440             | 400                 | 330         | 300             |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (E-MINI S&amp;P 500 FUTURES MARKER)</b>  |           |             |          |     |                 |                     |             |                 |
| ESI                                                                                | Non-HRP   |             | Decrease | USD | 400             | 400                 | 300         | 300             |
| ESI                                                                                | HRP       |             | Decrease | USD | 440             | 400                 | 330         | 300             |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (E-MINI S&amp;P 500 FUTURES)</b>         |           |             |          |     |                 |                     |             |                 |
| ES                                                                                 | Non-HRP   |             | Decrease | USD | 400             | 400                 | 300         | 300             |
| ES                                                                                 | HRP       |             | Decrease | USD | 440             | 400                 | 330         | 300             |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (MICRO E-MINI S&amp;P 500 FUTURES)</b>   |           |             |          |     |                 |                     |             |                 |
| MES                                                                                | Non-HRP   |             | Decrease | USD | 40              | 40                  | 30          | 30              |
| MES                                                                                | HRP       |             | Decrease | USD | 44              | 40                  | 33          | 30              |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (S&amp;P 500 FUTURES)</b>                |           |             |          |     |                 |                     |             |                 |
| SP                                                                                 | Non-HRP   |             | Decrease | USD | 2,000           | 2,000               | 1,500       | 1,500           |
| SP                                                                                 | HRP       |             | Decrease | USD | 2,200           | 2,000               | 1,650       | 1,500           |
| <b>S&amp;P 500 Stock Index - Month 2 vs 3 (TACO ON E-MINI S&amp;P 500 FUTURES)</b> |           |             |          |     |                 |                     |             |                 |
| ESQ                                                                                | Non-HRP   |             | Decrease | USD | 400             | 400                 | 300         | 300             |
| ESQ                                                                                | HRP       |             | Decrease | USD | 440             | 400                 | 330         | 300             |
| <b>METALS - Intra Spreads</b>                                                      |           |             |          |     |                 |                     |             |                 |
| <b>CX-AUP Mnth(s) 01-21 vs. Mnth(s) 01-21 (ALUMINUM MW TRANS PREM PLATTS FUT)</b>  |           |             |          |     |                 |                     |             |                 |
| AUP                                                                                | Non-HRP   |             | Increase | USD | 1,400           | 1,400               | 1,600       | 1,600           |
| AUP                                                                                | HRP       |             | Increase | USD | 1,540           | 1,400               | 1,760       | 1,600           |
| <b>CX-AUP Mnth(s) 01-21 vs. Mnth(s) 22+ (ALUMINUM MW TRANS PREM PLATTS FUT)</b>    |           |             |          |     |                 |                     |             |                 |
| AUP                                                                                | Non-HRP   |             | Increase | USD | 1,500           | 1,500               | 1,600       | 1,600           |
| AUP                                                                                | HRP       |             | Increase | USD | 1,650           | 1,500               | 1,760       | 1,600           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                         | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|--------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                       |           |             |          |     |                 |                     |             |                 |
| <b>NATURAL GAS - Intra Spreads</b>         |           |             |          |     |                 |                     |             |                 |
| <b>(DUTCH TTF NAT GAS FIN M-1 AVG PRC)</b> |           |             |          |     |                 |                     |             |                 |
| TTB                                        | Non-HRP   |             | Increase | USD | 18,000          | 18,000              | 31,500      | 31,500          |
| TTB                                        | Non-HRP   |             | Increase | USD | 20,000          | 20,000              | 33,500      | 33,500          |
| TTB                                        | HRP       |             | Increase | USD | 19,800          | 18,000              | 34,650      | 31,500          |
| TTB                                        | HRP       |             | Increase | USD | 22,000          | 20,000              | 36,850      | 33,500          |
| <b>(DUTCH TTF NATURAL GAS (USD/MMBTU))</b> |           |             |          |     |                 |                     |             |                 |
| TFU                                        | Non-HRP   |             | Increase | USD | 25,000          | 25,000              | 31,500      | 31,500          |
| TFU                                        | HRP       |             | Increase | USD | 27,500          | 25,000              | 34,650      | 31,500          |
| <b>(DUTCH TTF NATURAL GAS FIN CAL M)</b>   |           |             |          |     |                 |                     |             |                 |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 10,500      | 10,500          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 11,000      | 11,000          |
| TTG                                        | Non-HRP   |             | Decrease | EUR | 12,500          | 12,500              | 11,100      | 11,100          |
| TTG                                        | Non-HRP   |             | Increase | EUR | 12,300          | 12,300              | 14,000      | 14,000          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,000      | 15,000          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,250      | 15,250          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,500      | 15,500          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 16,000      | 16,000          |
| TTG                                        | Non-HRP   |             | New      | EUR |                 |                     | 16,500      | 16,500          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 11,550      | 10,500          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 12,100      | 11,000          |
| TTG                                        | HRP       |             | Decrease | EUR | 13,750          | 12,500              | 12,210      | 11,100          |
| TTG                                        | HRP       |             | Increase | EUR | 13,530          | 12,300              | 15,400      | 14,000          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 16,500      | 15,000          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 16,775      | 15,250          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 17,050      | 15,500          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 17,600      | 16,000          |
| TTG                                        | HRP       |             | New      | EUR |                 |                     | 18,150      | 16,500          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                                         | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                                       |           |             |          |     |                 |                     |             |                 |
| <b>(DUTCH TTF NATURAL GAS FIN DAY AHEAD)</b>                                                               |           |             |          |     |                 |                     |             |                 |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 10,500      | 10,500          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 11,000      | 11,000          |
| TTI                                                                                                        | Non-HRP   |             | Decrease | EUR | 12,300          | 12,300              | 11,100      | 11,100          |
| TTI                                                                                                        | Non-HRP   |             | Increase | EUR | 13,000          | 13,000              | 14,000      | 14,000          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,000      | 15,000          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,250      | 15,250          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 15,500      | 15,500          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 16,000      | 16,000          |
| TTI                                                                                                        | Non-HRP   |             | New      | EUR |                 |                     | 16,500      | 16,500          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 11,550      | 10,500          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 12,100      | 11,000          |
| TTI                                                                                                        | HRP       |             | Decrease | EUR | 13,530          | 12,300              | 12,210      | 11,100          |
| TTI                                                                                                        | HRP       |             | Increase | EUR | 14,300          | 13,000              | 15,400      | 14,000          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 16,500      | 15,000          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 16,775      | 15,250          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 17,050      | 15,500          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 17,600      | 16,000          |
| TTI                                                                                                        | HRP       |             | New      | EUR |                 |                     | 18,150      | 16,500          |
| <b>Consec Month 2-12 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)</b>                                        |           |             |          |     |                 |                     |             |                 |
| JKM                                                                                                        | Non-HRP   |             | Decrease | USD | 100,000         | 100,000             | 70,000      | 70,000          |
| JKM                                                                                                        | HRP       |             | Decrease | USD | 110,000         | 100,000             | 77,000      | 70,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                        | Non-HRP   |             | Increase | EUR | 12,300          | 12,300              | 16,000      | 16,000          |
| TTF                                                                                                        | HRP       |             | Increase | EUR | 13,530          | 12,300              | 17,600      | 16,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 2 (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                        | Non-HRP   |             | Increase | EUR | 12,300          | 12,300              | 14,000      | 14,000          |
| TTF                                                                                                        | HRP       |             | Increase | EUR | 13,530          | 12,300              | 15,400      | 14,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 2 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                        | Non-HRP   |             | Increase | EUR | 11,800          | 11,800              | 15,500      | 15,500          |
| TTF                                                                                                        | HRP       |             | Increase | EUR | 12,980          | 11,800              | 17,050      | 15,500          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 2 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                        | Non-HRP   |             | Increase | EUR | 12,300          | 12,300              | 16,000      | 16,000          |
| TTF                                                                                                        | HRP       |             | Increase | EUR | 13,530          | 12,300              | 17,600      | 16,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 3 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                        | Non-HRP   |             | Increase | EUR | 11,700          | 11,700              | 16,500      | 16,500          |
| TTF                                                                                                        | HRP       |             | Increase | EUR | 12,870          | 11,700              | 18,150      | 16,500          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                                            | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                                          |           |             |          |     |                 |                     |             |                 |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Month 3 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b>    |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                           | Non-HRP   |             | Increase | EUR | 11,700          | 11,700              | 15,000      | 15,000          |
| TTF                                                                                                           | HRP       |             | Increase | EUR | 12,870          | 11,700              | 16,500      | 15,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Months 10+ vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                           | Non-HRP   |             | Increase | EUR | 11,700          | 11,700              | 14,000      | 14,000          |
| TTF                                                                                                           | HRP       |             | Increase | EUR | 12,870          | 11,700              | 15,400      | 14,000          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Months 4-9 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                           | Non-HRP   |             | Increase | EUR | 11,700          | 11,700              | 15,250      | 15,250          |
| TTF                                                                                                           | HRP       |             | Increase | EUR | 12,870          | 11,700              | 16,775      | 15,250          |
| <b>Dutch TTF Natural Gas Calendar Month Futures - Months 4-9 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| TTF                                                                                                           | Non-HRP   |             | Decrease | EUR | 11,700          | 11,700              | 11,000      | 11,000          |
| TTF                                                                                                           | HRP       |             | Decrease | EUR | 12,870          | 11,700              | 12,100      | 11,000          |
| <b>Mnth 1 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)</b>                                                      |           |             |          |     |                 |                     |             |                 |
| JKM                                                                                                           | Non-HRP   |             | Decrease | USD | 70,000          | 70,000              | 49,000      | 49,000          |
| JKM                                                                                                           | HRP       |             | Decrease | USD | 77,000          | 70,000              | 53,900      | 49,000          |
| <b>Mnth 1 vs 2-12 (LNG JAPAN KOREA MARKER PLATTS FUT)</b>                                                     |           |             |          |     |                 |                     |             |                 |
| JKM                                                                                                           | Non-HRP   |             | Decrease | USD | 112,500         | 112,500             | 79,000      | 79,000          |
| JKM                                                                                                           | HRP       |             | Decrease | USD | 123,750         | 112,500             | 86,900      | 79,000          |
| <b>Mnths 1 vs 13+ (LNG JAPAN KOREA MRK YEN FUT)</b>                                                           |           |             |          |     |                 |                     |             |                 |
| JKY                                                                                                           | Non-HRP   |             | Increase | JPY | 1,600,000       | 1,600,000           | 2,000,000   | 2,000,000       |
| JKY                                                                                                           | HRP       |             | Increase | JPY | 1,760,000       | 1,600,000           | 2,200,000   | 2,000,000       |
| <b>Mnths 13+ vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)</b>                                                   |           |             |          |     |                 |                     |             |                 |
| JKM                                                                                                           | Non-HRP   |             | Decrease | USD | 115,000         | 115,000             | 50,000      | 50,000          |
| JKM                                                                                                           | HRP       |             | Decrease | USD | 126,500         | 115,000             | 55,000      | 50,000          |
| <b>Mnths 13+ vs 13+ (LNG JAPAN KOREA MRK YEN FUT)</b>                                                         |           |             |          |     |                 |                     |             |                 |
| JKY                                                                                                           | Non-HRP   |             | Decrease | JPY | 7,500,000       | 7,500,000           | 6,500,000   | 6,500,000       |
| JKY                                                                                                           | HRP       |             | Decrease | JPY | 8,250,000       | 7,500,000           | 7,150,000   | 6,500,000       |
| <b>Mnths 2-12 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)</b>                                                  |           |             |          |     |                 |                     |             |                 |
| JKM                                                                                                           | Non-HRP   |             | Decrease | USD | 70,000          | 70,000              | 56,000      | 56,000          |
| JKM                                                                                                           | HRP       |             | Decrease | USD | 77,000          | 70,000              | 61,600      | 56,000          |
| <b>Mnths 2-12 vs 13+ (LNG JAPAN KOREA MRK YEN FUT)</b>                                                        |           |             |          |     |                 |                     |             |                 |
| JKY                                                                                                           | Non-HRP   |             | Decrease | JPY |                 | 10,000,000          | 7,300,000   | 7,300,000       |
| JKY                                                                                                           | HRP       |             | Decrease | JPY |                 | 10,000,000          | 8,030,000   | 7,300,000       |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                  | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                |           |             |          |     |                 |                     |             |                 |
| <b>Mnth 2-12 vs 2-12 (LNG JAPAN KOREA MARKER PLATTS FUT)</b>        |           |             |          |     |                 |                     |             |                 |
| JKM                                                                 | Non-HRP   |             | Decrease | USD | 100,000         | 100,000             | 80,000      | 80,000          |
| JKM                                                                 | HRP       |             | Decrease | USD | 110,000         | 100,000             | 88,000      | 80,000          |
| <b>Month 1 vs Month 2 (LNG NW EUROPE MARKER (PLATTS) FUT)</b>       |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | Decrease | USD | 112,500         | 112,500             | 56,000      | 56,000          |
| NWM                                                                 | HRP       |             | Decrease | USD | 123,750         | 112,500             | 61,600      | 56,000          |
| <b>Month 2 vs Month 20+ (LNG NW EUROPE MARKER (PLATTS) FUT)</b>     |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | New      | USD |                 |                     | 70,000      | 70,000          |
| NWM                                                                 | HRP       |             | New      | USD |                 |                     | 77,000      | 70,000          |
| <b>Month 20+ vs Month 20+ (LNG NW EUROPE MARKER (PLATTS) FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | New      | USD |                 |                     | 100,000     | 100,000         |
| NWM                                                                 | HRP       |             | New      | USD |                 |                     | 110,000     | 100,000         |
| <b>Month 8-19 vs Month 8-19 (LNG NW EUROPE MARKER (PLATTS) FUT)</b> |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | New      | USD |                 |                     | 90,000      | 90,000          |
| NWM                                                                 | HRP       |             | New      | USD |                 |                     | 99,000      | 90,000          |
| <b>Month1 vs Month 20+ (LNG NW EUROPE MARKER (PLATTS) FUT)</b>      |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | Decrease | USD | 60,000          | 60,000              | 57,000      | 57,000          |
| NWM                                                                 | HRP       |             | Decrease | USD | 66,000          | 60,000              | 62,700      | 57,000          |
| <b>NBP Intras 1 vs 2+ (UK NBP NATURAL GAS FRONT MTH FUT)</b>        |           |             |          |     |                 |                     |             |                 |
| NBP                                                                 | Non-HRP   |             | Increase | USD | 17,000          | 17,000              | 22,500      | 22,500          |
| NBP                                                                 | HRP       |             | Increase | USD | 18,700          | 17,000              | 24,750      | 22,500          |
| <b>NBP Intras 2+ vs 2+ (UK NBP NATURAL GAS FRONT MTH FUT)</b>       |           |             |          |     |                 |                     |             |                 |
| NBP                                                                 | Non-HRP   |             | Increase | USD | 19,000          | 19,000              | 25,000      | 25,000          |
| NBP                                                                 | HRP       |             | Increase | USD | 20,900          | 19,000              | 27,500      | 25,000          |
| <b>RealPeriod 2 vs 2 (LNG JAPAN KOREA MRK YEN FUT)</b>              |           |             |          |     |                 |                     |             |                 |
| JKY                                                                 | Non-HRP   |             | Increase | JPY | 7,500,000       | 7,500,000           | 8,500,000   | 8,500,000       |
| JKY                                                                 | HRP       |             | Increase | JPY | 8,250,000       | 7,500,000           | 9,350,000   | 8,500,000       |
| <b>RelPeriod (LNG NW EUROPE MARKER (PLATTS) FUT)</b>                |           |             |          |     |                 |                     |             |                 |
| NWM                                                                 | Non-HRP   |             | Decrease | USD | 100,000         | 100,000             | 5,000       | 5,000           |
| NWM                                                                 | HRP       |             | Decrease | USD | 110,000         | 100,000             | 5,500       | 5,000           |
| <b>TTE Intras 1vs 2+ (DUTCH TTF NATURAL GAS FRONT MTH FUT)</b>      |           |             |          |     |                 |                     |             |                 |
| TTE                                                                 | Non-HRP   |             | Increase | USD | 25,000          | 25,000              | 31,500      | 31,500          |
| TTE                                                                 | HRP       |             | Increase | USD | 27,500          | 25,000              | 34,650      | 31,500          |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                                | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                              |           |             |          |     |                 |                     |             |                 |
| <b>TTE Intras 2+ vs 2+ (DUTCH TTF NATURAL GAS FRONT MTH FUT)</b>                                  |           |             |          |     |                 |                     |             |                 |
| TTE                                                                                               | Non-HRP   |             | Increase | USD | 27,000          | 27,000              | 33,500      | 33,500          |
| TTE                                                                                               | HRP       |             | Increase | USD | 29,700          | 27,000              | 36,850      | 33,500          |
| <b>UK NBP Natural Gas Calendar month futures - Months 1 vs 10+ (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 9,000       | 9,000           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 9,900       | 9,000           |
| <b>UK NBP Natural Gas Calendar month futures - Months 1 vs 2 (UK NBP NAT GAS CAL MTH FUT)</b>     |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,000           | 5,000               | 7,500       | 7,500           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 5,500           | 5,000               | 8,250       | 7,500           |
| <b>UK NBP Natural Gas Calendar month futures - Months 1 vs 3 (UK NBP NAT GAS CAL MTH FUT)</b>     |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 7,000       | 7,000           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 7,700       | 7,000           |
| <b>UK NBP Natural Gas Calendar month futures - Months 1 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 8,750       | 8,750           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 9,625       | 8,750           |
| <b>UK NBP Natural Gas Calendar month futures - Months 2 vs 10+ (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 9,000       | 9,000           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 9,900       | 9,000           |
| <b>UK NBP Natural Gas Calendar month futures - Months 2 vs 3 (UK NBP NAT GAS CAL MTH FUT)</b>     |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Decrease | GBP | 5,000           | 5,000               | 4,000       | 4,000           |
| UKG                                                                                               | HRP       |             | Decrease | GBP | 5,500           | 5,000               | 4,400       | 4,000           |
| <b>UK NBP Natural Gas Calendar month futures - Months 2 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 7,500       | 7,500           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 8,250       | 7,500           |
| <b>UK NBP Natural Gas Calendar month futures - Months 3 vs 10+ (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,000           | 5,000               | 6,800       | 6,800           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 5,500           | 5,000               | 7,480       | 6,800           |
| <b>UK NBP Natural Gas Calendar month futures - Months 3 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)</b>   |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,000           | 5,000               | 6,000       | 6,000           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 5,500           | 5,000               | 6,600       | 6,000           |
| <b>UK NBP Natural Gas Calendar month futures - Months 4-9 vs 10+ (UK NBP NAT GAS CAL MTH FUT)</b> |           |             |          |     |                 |                     |             |                 |
| UKG                                                                                               | Non-HRP   |             | Increase | GBP | 5,500           | 5,500               | 6,500       | 6,500           |
| UKG                                                                                               | HRP       |             | Increase | GBP | 6,050           | 5,500               | 7,150       | 6,500           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| CC                                                                                        | Rate Type | Description | Change   | ISO | Current Initial | Current Maintenance | New Initial | New Maintenance |
|-------------------------------------------------------------------------------------------|-----------|-------------|----------|-----|-----------------|---------------------|-------------|-----------------|
| <b>Intra Spreads</b>                                                                      |           |             |          |     |                 |                     |             |                 |
| <b>PETROLEUM CRACKS AND SPREADS - Intra Spreads</b>                                       |           |             |          |     |                 |                     |             |                 |
| <b>Consecutives 3+ (NY ULSD VS. NY HRBR ULSD FUT)</b>                                     |           |             |          |     |                 |                     |             |                 |
| 7Y                                                                                        | Non-HRP   |             | Increase | USD | 1,800           | 1,800               | 2,000       | 2,000           |
| 7Y                                                                                        | HRP       |             | Increase | USD | 1,980           | 1,800               | 2,200       | 2,000           |
| <b>Singapore Fuel Oil Spread Swap - Consecutives 2/3+ (SINGAPORE FUEL OIL SPREAD FUT)</b> |           |             |          |     |                 |                     |             |                 |
| SD                                                                                        | Non-HRP   |             | New      | USD |                 |                     | 2,500       | 2,500           |
| SD                                                                                        | HRP       |             | New      | USD |                 |                     | 2,750       | 2,500           |
| <b>Singapore Fuel Oil Spread Swap - Months 1-2 vs 1-2 (SINGAPORE FUEL OIL SPREAD FUT)</b> |           |             |          |     |                 |                     |             |                 |
| SD                                                                                        | Non-HRP   |             | Increase | USD | 2,800           | 2,800               | 3,100       | 3,100           |
| SD                                                                                        | HRP       |             | Increase | USD | 3,080           | 2,800               | 3,410       | 3,100           |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type                                                                                                                                | Change   | Ratio | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b>                                                                                                      |          |       |                 |                     |             |                 |
| <b>AGRICULTURE - Inter-commodity Spread Rates</b>                                                                                        |          |       |                 |                     |             |                 |
| <b>07-1 vs EZ-1</b>                                                                                                                      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | New      | -8:+1 |                 |                     | 25%         | 25%             |
| <b>07-2 vs EZ-2</b>                                                                                                                      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | New      | +8:-1 |                 |                     | 25%         | 25%             |
| <b>DME Products - Inter-commodity Spread Rates</b>                                                                                       |          |       |                 |                     |             |                 |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs OMAN CRUDE OIL (NY-OQ - CME)</b>                                               |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs OMAN CRUDE OIL (NY-OQ - CME)</b>                                                    |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>ETHANOL - Inter-commodity Spread Rates</b>                                                                                            |          |       |                 |                     |             |                 |
| <b>07-1 vs EZ-1</b>                                                                                                                      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | New      | -8:+1 |                 |                     | 25%         | 25%             |
| <b>07-2 vs EZ-2</b>                                                                                                                      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | New      | +8:-1 |                 |                     | 25%         | 25%             |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>         |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME)</b>      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 25%             | 25%                 | 35%         | 35%             |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b>     |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs OMAN CRUDE OIL (NY-OQ - CME)</b>                                               |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>CONWAY PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8K - CME) vs NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME)</b>                     |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 0%              | 0%                  | 25%         | 25%             |
| <b>MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 25%             | 25%                 | 35%         | 35%             |
| <b>MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b> |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type                                                                                                                             | Change   | Ratio  | Current Initial | Current Maintenance | New Initial | New Maintenance |
|---------------------------------------------------------------------------------------------------------------------------------------|----------|--------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b>                                                                                                   |          |        |                 |                     |             |                 |
| <b>MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | +1:-1  | 20%             | 20%                 | 30%         | 30%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs CONWAY PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8K - CME)</b>                  |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | -1:+1  | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>           |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | +1:-1  | 20%             | 20%                 | 30%         | 30%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs OMAN CRUDE OIL (NY-OQ - CME)</b>                                                 |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs PROPANE NON-LDH MONT BELVIEU (OPIS) SWAP FUTURES (NY-1R - CME)</b>               |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b>      |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Decrease | +15:-2 | 30%             | 30%                 | 0%          | 0%              |
| <b>PROPANE NON-LDH MONT BELVIEU (OPIS) SWAP FUTURES (NY-1R - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>          |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | -1:+1  | 20%             | 20%                 | 30%         | 30%             |
| <b>SINGAPORE GASOIL (PLATTS) SWAP FUTURES (NY-SG - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>                    |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                    | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |

## SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

| Rate Type                                                                                                                                | Change   | Ratio | Current Initial | Current Maintenance | New Initial | New Maintenance |
|------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------------|---------------------|-------------|-----------------|
| <b>Inter-commodity Spread Rates</b>                                                                                                      |          |       |                 |                     |             |                 |
| <b>NGL/PETROCHEMICALS - Inter-commodity Spread Rates</b>                                                                                 |          |       |                 |                     |             |                 |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME)</b>      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 25%             | 25%                 | 35%         | 35%             |
| <b>CONWAY PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8K - CME) vs NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME)</b>                     |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 0%              | 0%                  | 25%         | 25%             |
| <b>MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>      |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 25%             | 25%                 | 35%         | 35%             |
| <b>MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b> |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>    |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 20%             | 20%                 | 30%         | 30%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs CONWAY PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8K - CME)</b>                     |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs PROPANE NON-LDH MONT BELVIEU (OPIS) SWAP FUTURES (NY-1R - CME)</b>                  |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | +1:-1 | 0%              | 0%                  | 25%         | 25%             |
| <b>PROPANE NON-LDH MONT BELVIEU (OPIS) SWAP FUTURES (NY-1R - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>             |          |       |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                       | Increase | -1:+1 | 20%             | 20%                 | 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>REFINED PRODUCTS - Inter-commodity Spread Rates</b>                                                                               |          |        |                 |                     |             |                 |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>     |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                   | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |
| <b>CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)</b> |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                   | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)</b>          |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                   | Increase | +1:-1  | 20%             | 20%                 | 30%         | 30%             |
| <b>NY ETHANOL (PLATTS) SWAP FUTURES (NY-EZ - CME) vs SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME)</b>     |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                   | Decrease | +15:-2 | 30%             | 30%                 | 0%          | 0%              |
| <b>SINGAPORE GASOIL (PLATTS) SWAP FUTURES (NY-SG - CME) vs CHICAGO ETHANOL (PLATTS) SWAP FUTURES (NY-CU - CME)</b>                   |          |        |                 |                     |             |                 |
| Spread Credit Rate                                                                                                                   | Increase | +1:-1  | 0%              | 0%                  | 25%         | 25%             |