



21-364

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Wednesday, October 6, 2021

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

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

and subscribe to the Performance Bond Rates Advisory Notice listserver.

As per the normal review of market volatility to ensure adequate collateral coverage, the Chicago Mercantile Exchange Inc., Clearing House Risk Management staff approved the performance bond requirements for the following products listed below.

The rates will be effective after the close of business on

Thursday, October 7, 2021.

Current rates as of:

Wednesday, October 6, 2021.

In this current advisory there are changes to the Short Option Minimum and/or the Volatility Scan Range. Below are descriptions of what each change affects:

The Short Option Minimum (SOM) is a charge that is applied only to portfolios concentrated in short options that do not generate a minimum margin requirement level when margins are calculated using the normal 16 SPAN scenarios. The SOM charge per short calls or short puts is a percentage of the outright margin on one underlying futures contract.

The volatility scan range is the change in implied volatility that is used in each of SPAN's 16 scenarios.

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
AGRICULTURE - Outright Rates								
MAP CFR BRAZIL FUTURES (MFC)								
MFC	HRP	Mnth 1	Increase	USD	5,000	5,000	5,500	5,500
MFC	NON-HRP	Mnth 1	Increase	USD	5,000	5,000	5,500	5,500
MFC	HRP	Mnth 2+	Increase	USD	5,000	5,000	5,500	5,500
MFC	NON-HRP	Mnth 2+	Increase	USD	5,000	5,000	5,500	5,500
UAN FOB NOLA FUTURES (UNO)								
UNO	HRP		Increase	USD	5,060	4,600	7,150	6,500
UNO	NON-HRP		Increase	USD	4,600	4,600	6,500	6,500
UREA (GRANULAR) CFR BRAZIL FUTURES (UFB)								
UFB	HRP	Months 1-6	Increase	USD	6,050	5,500	7,700	7,000
UFB	NON-HRP	Months 1-6	Increase	USD	5,500	5,500	7,000	7,000
UFB	HRP	Months 7+	Increase	USD	6,050	5,500	7,700	7,000
UFB	NON-HRP	Months 7+	Increase	USD	5,500	5,500	7,000	7,000
UREA (GRANULAR) FOB MIDDLE EAST FUT (UME)								
UME	HRP	Month 1	Increase	USD	6,270	5,700	7,700	7,000
UME	NON-HRP	Month 1	Increase	USD	5,700	5,700	7,000	7,000
UME	HRP	Months 2+	Increase	USD	6,270	5,700	7,700	7,000
UME	NON-HRP	Months 2+	Increase	USD	5,700	5,700	7,000	7,000
UREA (GRANULAR) FOB US GULF FUTURES (UFV)								
UFV	HRP	Months 1-6	Increase	USD	5,720	5,200	7,700	7,000
UFV	NON-HRP	Months 1-6	Increase	USD	5,200	5,200	7,000	7,000
UFV	HRP	Months 7+	Increase	USD	5,720	5,200	7,700	7,000
UFV	NON-HRP	Months 7+	Increase	USD	5,200	5,200	7,000	7,000
USD MALAYSIAN PALM OLEIN CAL SWAP (OPS)								
OPS	HRP		Increase	USD	1,540	1,400	1,870	1,700
OPS	NON-HRP		Increase	USD	1,400	1,400	1,700	1,700

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

ELECTRICITY - Outright Rates

GERMAN POWER BASELOAD CAL MONTH FUT (DEB)

DEB	HRP	Mnth 1	Increase	EUR	28,600	26,000	38,500	35,000
DEB	NON-HRP	Mnth 1	Increase	EUR	26,000	26,000	35,000	35,000
DEB	HRP	Mnth 2	Increase	EUR	28,600	26,000	38,500	35,000
DEB	NON-HRP	Mnth 2	Increase	EUR	26,000	26,000	35,000	35,000
DEB	HRP	Mnth 3	Increase	EUR	28,600	26,000	38,500	35,000
DEB	NON-HRP	Mnth 3	Increase	EUR	26,000	26,000	35,000	35,000
DEB	HRP	Mnths 4-9	Increase	EUR	28,600	26,000	38,500	35,000
DEB	NON-HRP	Mnths 4-9	Increase	EUR	26,000	26,000	35,000	35,000

GERMAN POWER PEAKLOAD CAL MONTH FUT (DEP)

DEP	HRP	Mnth 1	Increase	EUR	9,900	9,000	13,200	12,000
DEP	NON-HRP	Mnth 1	Increase	EUR	9,000	9,000	12,000	12,000
DEP	HRP	Mnth 2	Increase	EUR	8,800	8,000	12,100	11,000
DEP	NON-HRP	Mnth 2	Increase	EUR	8,000	8,000	11,000	11,000
DEP	HRP	Mnth 3	Increase	EUR	8,580	7,800	11,880	10,800
DEP	NON-HRP	Mnth 3	Increase	EUR	7,800	7,800	10,800	10,800
DEP	HRP	Mnths 4-9	Increase	EUR	7,920	7,200	11,000	10,000
DEP	NON-HRP	Mnths 4-9	Increase	EUR	7,200	7,200	10,000	10,000

NEPOOL INTR HUB 5MW D AH O PK (H2)

H2	HRP	Mnth 1	Increase	USD	61	55	72	65
H2	NON-HRP	Mnth 1	Increase	USD	55	55	65	65
H2	HRP	Mnth 2	Increase	USD	55	50	66	60
H2	NON-HRP	Mnth 2	Increase	USD	50	50	60	60
H2	HRP	Mnths 3-4	Increase	USD	50	45	61	55
H2	NON-HRP	Mnths 3-4	Increase	USD	45	45	55	55
H2	HRP	Mnths 5-11	Increase	USD	30	27	39	35
H2	NON-HRP	Mnths 5-11	Increase	USD	27	27	35	35
H2	HRP	Mnths 12+	Increase	USD	28	25	33	30
H2	NON-HRP	Mnths 12+	Increase	USD	25	25	30	30

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
NEPOOL INTR HUB 5MW D AH PK (U6)								
U6	HRP	Month 1	Increase	USD	1,100	1,000	1,430	1,300
U6	NON-HRP	Month 1	Increase	USD	1,000	1,000	1,300	1,300
U6	HRP	Month 2	Increase	USD	990	900	1,320	1,200
U6	NON-HRP	Month 2	Increase	USD	900	900	1,200	1,200
U6	HRP	Mnths 3-5	Increase	USD	880	800	1,210	1,100
U6	NON-HRP	Mnths 3-5	Increase	USD	800	800	1,100	1,100
U6	HRP	Mnths 6-11	Increase	USD	440	400	550	500
U6	NON-HRP	Mnths 6-11	Increase	USD	400	400	500	500
U6	HRP	Mnths 12+	Increase	USD	275	250	385	350
U6	NON-HRP	Mnths 12+	Increase	USD	250	250	350	350
NYISO ZONE G 5MW D AH PK (T3)								
T3	HRP	Mnth 1	Increase	USD	990	900	1,210	1,100
T3	NON-HRP	Mnth 1	Increase	USD	900	900	1,100	1,100
T3	HRP	Mnth 2	Increase	USD	880	800	1,100	1,000
T3	NON-HRP	Mnth 2	Increase	USD	800	800	1,000	1,000
T3	HRP	Mnths 3-4	Increase	USD	715	650	990	900
T3	NON-HRP	Mnths 3-4	Increase	USD	650	650	900	900
T3	HRP	Mnths 5-11	Increase	USD	715	650	990	900
T3	NON-HRP	Mnths 5-11	Increase	USD	650	650	900	900
T3	HRP	Mnths 12+	Increase	USD	330	300	440	400
T3	NON-HRP	Mnths 12+	Increase	USD	300	300	400	400
PJM AD HUB 5MW REAL TIME O PK (V3)								
V3	HRP	Mnth 1	Increase	USD	22	20	28	25
V3	NON-HRP	Mnth 1	Increase	USD	20	20	25	25
V3	HRP	Mnth 2	Increase	USD	20	18	25	23
V3	NON-HRP	Mnth 2	Increase	USD	18	18	23	23
V3	HRP	Mnths 3-4	Increase	USD	19	17	23	21
V3	NON-HRP	Mnths 3-4	Increase	USD	17	17	21	21
V3	HRP	Mnths 5-11	Increase	USD	15	14	19	17
V3	NON-HRP	Mnths 5-11	Increase	USD	14	14	17	17
V3	HRP	Mnths 12+	Increase	USD	8	7	10	9
V3	NON-HRP	Mnths 12+	Increase	USD	7	7	9	9

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

PJM AD HUB 5MW REAL TIME PK (Z9)

Z9	HRP	Mnth 1	Increase	USD	550	500	660	600
Z9	NON-HRP	Mnth 1	Increase	USD	500	500	600	600
Z9	HRP	Mnth 2	Increase	USD	440	400	550	500
Z9	NON-HRP	Mnth 2	Increase	USD	400	400	500	500
Z9	HRP	Mnths 3-4	Increase	USD	396	360	495	450
Z9	NON-HRP	Mnths 3-4	Increase	USD	360	360	450	450
Z9	HRP	Mnths 5-11	Increase	USD	374	340	462	420
Z9	NON-HRP	Mnths 5-11	Increase	USD	340	340	420	420
Z9	HRP	Mnths 12+	Increase	USD	154	140	220	200
Z9	NON-HRP	Mnths 12+	Increase	USD	140	140	200	200

PJM DAYTON DA OFF-PEAK (R7)

R7	HRP	Mnth 1	Increase	USD	23	21	29	26
R7	NON-HRP	Mnth 1	Increase	USD	21	21	26	26
R7	HRP	Mnth 2	Increase	USD	21	19	26	24
R7	NON-HRP	Mnth 2	Increase	USD	19	19	24	24
R7	HRP	Mnths 3-11	Increase	USD	20	18	24	22
R7	NON-HRP	Mnths 3-11	Increase	USD	18	18	22	22
R7	HRP	Mnths 12+	Increase	USD	17	15	20	18
R7	NON-HRP	Mnths 12+	Increase	USD	15	15	18	18

PJM DAYTON DA PEAK (D7)

D7	HRP	Mnth 1	Increase	USD	567	515	677	615
D7	NON-HRP	Mnth 1	Increase	USD	515	515	615	615
D7	HRP	Mnth 2	Increase	USD	479	435	589	535
D7	NON-HRP	Mnth 2	Increase	USD	435	435	535	535
D7	HRP	Mnths 3-4	Increase	USD	407	370	506	460
D7	NON-HRP	Mnths 3-4	Increase	USD	370	370	460	460
D7	HRP	Mnths 5-11	Increase	USD	385	350	473	430
D7	NON-HRP	Mnths 5-11	Increase	USD	350	350	430	430
D7	HRP	Mnths 12+	Increase	USD	165	150	231	210
D7	NON-HRP	Mnths 12+	Increase	USD	150	150	210	210

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM NI HUB 5MW REAL TIME PK (B3)								
B3	HRP	Mnth 1	Increase	USD	440	400	550	500
B3	NON-HRP	Mnth 1	Increase	USD	400	400	500	500
B3	HRP	Mnth 2	Increase	USD	385	350	495	450
B3	NON-HRP	Mnth 2	Increase	USD	350	350	450	450
B3	HRP	Mnths 3-4	Increase	USD	330	300	440	400
B3	NON-HRP	Mnths 3-4	Increase	USD	300	300	400	400
B3	HRP	Mnths 5-11	Increase	USD	99	90	143	130
B3	NON-HRP	Mnths 5-11	Increase	USD	90	90	130	130
B3	HRP	Mnths 12+	Increase	USD	99	90	143	130
B3	NON-HRP	Mnths 12+	Increase	USD	90	90	130	130
PJM NILL DA PEAK (N3)								
N3	HRP	Mnth 1	Increase	USD	468	425	578	525
N3	NON-HRP	Mnth 1	Increase	USD	425	425	525	525
N3	HRP	Mnth 2	Increase	USD	402	365	512	465
N3	NON-HRP	Mnth 2	Increase	USD	365	365	465	465
N3	HRP	Mnths 3-4	Increase	USD	341	310	451	410
N3	NON-HRP	Mnths 3-4	Increase	USD	310	310	410	410
N3	HRP	Mnths 5-11	Increase	USD	110	100	154	140
N3	NON-HRP	Mnths 5-11	Increase	USD	100	100	140	140
N3	HRP	Mnths 12+	Increase	USD	110	100	154	140
N3	NON-HRP	Mnths 12+	Increase	USD	100	100	140	140
PJM WES HUB PEAK CAL MON REAL TIME (L1)								
L1	HRP	Mth 1	Increase	USD	770	700	990	900
L1	NON-HRP	Mth 1	Increase	USD	700	700	900	900
L1	HRP	Mnth 2	Increase	USD	715	650	935	850
L1	NON-HRP	Mnth 2	Increase	USD	650	650	850	850
L1	HRP	Mnths 3-5	Increase	USD	660	600	880	800
L1	NON-HRP	Mnths 3-5	Increase	USD	600	600	800	800
L1	HRP	Mnths 6-11	Increase	USD	385	350	440	400
L1	NON-HRP	Mnths 6-11	Increase	USD	350	350	400	400
L1	HRP	Mnths 12	Increase	USD	198	180	275	250
L1	NON-HRP	Mnths 12	Increase	USD	180	180	250	250

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM WES HUB PEAK LMP 50 MW (4S)								
4S	HRP	Mth 1	Increase	USD	7,700	7,000	9,900	9,000
4S	NON-HRP	Mth 1	Increase	USD	7,000	7,000	9,000	9,000
4S	HRP	Mnth 2	Increase	USD	7,150	6,500	9,350	8,500
4S	NON-HRP	Mnth 2	Increase	USD	6,500	6,500	8,500	8,500
4S	HRP	Mnths 3-5	Increase	USD	6,600	6,000	8,800	8,000
4S	NON-HRP	Mnths 3-5	Increase	USD	6,000	6,000	8,000	8,000
4S	HRP	Mnths 6-11	Increase	USD	3,850	3,500	4,400	4,000
4S	NON-HRP	Mnths 6-11	Increase	USD	3,500	3,500	4,000	4,000
4S	HRP	Mnths 12	Increase	USD	1,980	1,800	2,750	2,500
4S	NON-HRP	Mnths 12	Increase	USD	1,800	1,800	2,500	2,500
PJM WESTH DA OFF-PEAK (E4)								
E4	HRP	Mnth 1	Increase	USD	45	41	56	51
E4	NON-HRP	Mnth 1	Increase	USD	41	41	51	51
E4	HRP	Mnth 2	Increase	USD	40	36	51	46
E4	NON-HRP	Mnth 2	Increase	USD	36	36	46	46
E4	HRP	Mnths 3-4	Increase	USD	34	31	45	41
E4	NON-HRP	Mnths 3-4	Increase	USD	31	31	41	41
E4	HRP	Mnths 5-11	Increase	USD	29	26	34	31
E4	NON-HRP	Mnths 5-11	Increase	USD	26	26	31	31
E4	HRP	Mnths12+	Increase	USD	11	10	14	13
E4	NON-HRP	Mnths12+	Increase	USD	10	10	13	13
PJM WESTH RT OFF-PEAK (N9)								
N9	HRP	Mnth 1	Increase	USD	44	40	55	50
N9	NON-HRP	Mnth 1	Increase	USD	40	40	50	50
N9	HRP	Mnth 2	Increase	USD	39	35	50	45
N9	NON-HRP	Mnth 2	Increase	USD	35	35	45	45
N9	HRP	Mnths 3-4	Increase	USD	33	30	44	40
N9	NON-HRP	Mnths 3-4	Increase	USD	30	30	40	40
N9	HRP	Mnths 5-11	Increase	USD	28	25	33	30
N9	NON-HRP	Mnths 5-11	Increase	USD	25	25	30	30
N9	HRP	Mnths 12+	Increase	USD	10	9	13	12
N9	NON-HRP	Mnths 12+	Increase	USD	9	9	12	12

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

PJM WESTHDA PEAK (J4)

J4	HRP	Mnth 1	Increase	USD	803	730	1,023	930
J4	NON-HRP	Mnth 1	Increase	USD	730	730	930	930
J4	HRP	Mnth 2	Increase	USD	732	665	952	865
J4	NON-HRP	Mnth 2	Increase	USD	665	665	865	865
J4	HRP	Mnths 3-5	Increase	USD	671	610	891	810
J4	NON-HRP	Mnths 3-5	Increase	USD	610	610	810	810
J4	HRP	Mnths 6-11	Increase	USD	396	360	451	410
J4	NON-HRP	Mnths 6-11	Increase	USD	360	360	410	410
J4	HRP	Mnths 12+	Increase	USD	209	190	286	260
J4	NON-HRP	Mnths 12+	Increase	USD	190	190	260	260

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
INTEREST RATES - Outright Rates								
10-YEAR ERIS SWAP FUTURES (LIY)								
LIY	HRP	Month 1	Decrease	USD	330	300	275	250
LIY	NON-HRP	Month 1	Decrease	USD	300	300	250	250
LIY	HRP	Month 2	Decrease	USD	358	325	303	275
LIY	NON-HRP	Month 2	Decrease	USD	325	325	275	275
LIY	HRP	Month 3	Decrease	USD	413	375	358	325
LIY	NON-HRP	Month 3	Decrease	USD	375	375	325	325
LIY	HRP	Month 4	Decrease	USD	440	400	385	350
LIY	NON-HRP	Month 4	Decrease	USD	400	400	350	350
LIY	HRP	Month 5	Decrease	USD	468	425	413	375
LIY	NON-HRP	Month 5	Decrease	USD	425	425	375	375
LIY	HRP	Month 6	Decrease	USD	495	450	440	400
LIY	NON-HRP	Month 6	Decrease	USD	450	450	400	400
LIY	HRP	Month 7	Decrease	USD	523	475	468	425
LIY	NON-HRP	Month 7	Decrease	USD	475	475	425	425
LIY	HRP	Month 8	Decrease	USD	550	500	495	450
LIY	NON-HRP	Month 8	Decrease	USD	500	500	450	450
LIY	HRP	Month 9	Decrease	USD	578	525	523	475
LIY	NON-HRP	Month 9	Decrease	USD	525	525	475	475
LIY	HRP	Month 10	Decrease	USD	633	575	550	500
LIY	NON-HRP	Month 10	Decrease	USD	575	575	500	500
LIY	HRP	Month 11	Decrease	USD	660	600	605	550
LIY	NON-HRP	Month 11	Decrease	USD	600	600	550	550
LIY	HRP	Month 12	Decrease	USD	688	625	660	600
LIY	NON-HRP	Month 12	Decrease	USD	625	625	600	600
7-YEAR ERIS SWAP FUTURES (LIB)								
LIB	HRP	Month 25	Decrease	USD	1,045	950	990	900
LIB	NON-HRP	Month 25	Decrease	USD	950	950	900	900
LIB	HRP	Month 26	New	USD			1,045	950
LIB	NON-HRP	Month 26	New	USD			950	950
LIB	HRP	Month 27	New	USD			1,100	1,000
LIB	NON-HRP	Month 27	New	USD			1,000	1,000
LIB	HRP	Month 28	New	USD			1,155	1,050
LIB	NON-HRP	Month 28	New	USD			1,050	1,050
LIB	HRP	Month 29	New	USD			1,210	1,100
LIB	NON-HRP	Month 29	New	USD			1,100	1,100

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

METALS - Outright Rates

UXC URANIUM U3O8 FUTURES (UX)

UX	HRP		Increase	USD	963	875	1,045	950
UX	NON-HRP		Increase	USD	875	875	950	950

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
NATURAL GAS - Outright Rates								
DUTCH TTF NAT GAS FIN M-1 AVG PRC (TTB)								
TTB	HRP	Mnth 1	Increase	USD	77,000	70,000	97,020	88,200
TTB	NON-HRP	Mnth 1	Increase	USD	70,000	70,000	88,200	88,200
TTB	HRP	Mnths 2	Increase	USD	77,000	70,000	97,020	88,200
TTB	NON-HRP	Mnths 2	Increase	USD	70,000	70,000	88,200	88,200
TTB	HRP	Mnths 3-5	Increase	USD	73,700	67,000	94,490	85,900
TTB	NON-HRP	Mnths 3-5	Increase	USD	67,000	67,000	85,900	85,900
DUTCH TTF NATURAL GAS CAL MONTH FUT (TTF)								
TTF	HRP	Mnth 1	Increase	EUR	16,500	15,000	20,900	19,000
TTF	NON-HRP	Mnth 1	Increase	EUR	15,000	15,000	19,000	19,000
TTF	HRP	Mnth 2	Increase	EUR	16,500	15,000	20,900	19,000
TTF	NON-HRP	Mnth 2	Increase	EUR	15,000	15,000	19,000	19,000
TTF	HRP	Mnth 3-5	Increase	EUR	15,950	14,500	20,350	18,500
TTF	NON-HRP	Mnth 3-5	Increase	EUR	14,500	14,500	18,500	18,500
DUTCH TTF NATURAL GAS FIN CAL M (TTG)								
TTG	HRP	Mnth 1	Increase	EUR	16,500	15,000	20,900	19,000
TTG	NON-HRP	Mnth 1	Increase	EUR	15,000	15,000	19,000	19,000
TTG	HRP	Mnth 2	Increase	EUR	16,500	15,000	20,900	19,000
TTG	NON-HRP	Mnth 2	Increase	EUR	15,000	15,000	19,000	19,000
TTG	HRP	Mnth 3-5	Increase	EUR	15,950	14,500	20,350	18,500
TTG	NON-HRP	Mnth 3-5	Increase	EUR	14,500	14,500	18,500	18,500
DUTCH TTF NATURAL GAS FIN DAY AHEAD (TTI)								
TTI	HRP	Mnth 1	Increase	EUR	16,500	15,000	20,900	19,000
TTI	NON-HRP	Mnth 1	Increase	EUR	15,000	15,000	19,000	19,000
TTI	HRP	Mnth 2	Increase	EUR	16,500	15,000	20,900	19,000
TTI	NON-HRP	Mnth 2	Increase	EUR	15,000	15,000	19,000	19,000
TTI	HRP	Mnth 3-5	Increase	EUR	15,950	14,500	20,350	18,500
TTI	NON-HRP	Mnth 3-5	Increase	EUR	14,500	14,500	18,500	18,500
DUTCH TTF NATURAL GAS FRONT MTH FUT (TTE)								
TTE	HRP	Mnth 1	Increase	USD	77,000	70,000	97,020	88,200
TTE	NON-HRP	Mnth 1	Increase	USD	70,000	70,000	88,200	88,200
TTE	HRP	Mnths 2	Increase	USD	77,000	70,000	97,020	88,200
TTE	NON-HRP	Mnths 2	Increase	USD	70,000	70,000	88,200	88,200
TTE	HRP	Mnths 3-5	Increase	USD	73,700	67,000	94,490	85,900
TTE	NON-HRP	Mnths 3-5	Increase	USD	67,000	67,000	85,900	85,900

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	HRP	Month 1	Increase	USD	66,000	60,000	88,000	80,000
JKM	NON-HRP	Month 1	Increase	USD	60,000	60,000	80,000	80,000
JKM	HRP	Month 2	Increase	USD	66,000	60,000	88,000	80,000
JKM	NON-HRP	Month 2	Increase	USD	60,000	60,000	80,000	80,000
JKM	HRP	Month 3	Increase	USD	66,000	60,000	88,000	80,000
JKM	NON-HRP	Month 3	Increase	USD	60,000	60,000	80,000	80,000
JKM	HRP	Mnths 4	Increase	USD	66,000	60,000	88,000	80,000
JKM	NON-HRP	Mnths 4	Increase	USD	60,000	60,000	80,000	80,000
JKM	HRP	Mnths 5	Increase	USD	66,000	60,000	88,000	80,000
JKM	NON-HRP	Mnths 5	Increase	USD	60,000	60,000	80,000	80,000
LNG JAPAN KOREA MRK YEN FUT (JKY)								
JKY	HRP	Month 1	Increase	JPY	7,392,000	6,720,000	9,900,000	9,000,000
JKY	NON-HRP	Month 1	Increase	JPY	6,720,000	6,720,000	9,000,000	9,000,000
JKY	HRP	Month 2	Increase	JPY	7,392,000	6,720,000	9,900,000	9,000,000
JKY	NON-HRP	Month 2	Increase	JPY	6,720,000	6,720,000	9,000,000	9,000,000
JKY	HRP	Month 3	Increase	JPY	7,392,000	6,720,000	9,900,000	9,000,000
JKY	NON-HRP	Month 3	Increase	JPY	6,720,000	6,720,000	9,000,000	9,000,000
JKY	HRP	Mnths 4-5	Increase	JPY	7,392,000	6,720,000	9,900,000	9,000,000
JKY	NON-HRP	Mnths 4-5	Increase	JPY	6,720,000	6,720,000	9,000,000	9,000,000
LNG JAPAN/KOREA MARKER (PLATTS) BAC (JKB)								
JKB	HRP	Month 1	Increase	USD	66,000	60,000	88,000	80,000
JKB	NON-HRP	Month 1	Increase	USD	60,000	60,000	80,000	80,000
JKB	HRP	Month 2	Increase	USD	66,000	60,000	88,000	80,000
JKB	NON-HRP	Month 2	Increase	USD	60,000	60,000	80,000	80,000
JKB	HRP	Month 3-4	Increase	USD	66,000	60,000	88,000	80,000
JKB	NON-HRP	Month 3-4	Increase	USD	60,000	60,000	80,000	80,000
JKB	HRP	Mnths 5	Increase	USD	66,000	60,000	88,000	80,000
JKB	NON-HRP	Mnths 5	Increase	USD	60,000	60,000	80,000	80,000
LNG JAPAN/KOREA MARKER (PLATTS) FRO (JKF)								
JKF	HRP	Month 1	Increase	USD	66,000	60,000	88,000	80,000
JKF	NON-HRP	Month 1	Increase	USD	60,000	60,000	80,000	80,000
JKF	HRP	Month 2	Increase	USD	66,000	60,000	88,000	80,000
JKF	NON-HRP	Month 2	Increase	USD	60,000	60,000	80,000	80,000
JKF	HRP	Month 3-4	Increase	USD	66,000	60,000	88,000	80,000
JKF	NON-HRP	Month 3-4	Increase	USD	60,000	60,000	80,000	80,000
JKF	HRP	Mnths 5	Increase	USD	66,000	60,000	88,000	80,000
JKF	NON-HRP	Mnths 5	Increase	USD	60,000	60,000	80,000	80,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

UK NBP NAT GAS CAL MTH FUT (UKG)

UKG	HRP	Mnth 1	Increase	GBP	13,970	12,700	17,600	16,000
UKG	NON-HRP	Mnth 1	Increase	GBP	12,700	12,700	16,000	16,000
UKG	HRP	Mnth 2	Increase	GBP	13,640	12,400	17,270	15,700
UKG	NON-HRP	Mnth 2	Increase	GBP	12,400	12,400	15,700	15,700
UKG	HRP	Mnth 3	Increase	GBP	13,200	12,000	16,830	15,300
UKG	NON-HRP	Mnth 3	Increase	GBP	12,000	12,000	15,300	15,300
UKG	HRP	Mnths 4-9	Increase	GBP	13,090	11,900	16,500	15,000
UKG	NON-HRP	Mnths 4-9	Increase	GBP	11,900	11,900	15,000	15,000

UK NBP NATURAL GAS FRONT MTH FUT (NBP)

NBP	HRP	Mnth 1	Increase	USD	60,390	54,900	77,220	70,200
NBP	NON-HRP	Mnth 1	Increase	USD	54,900	54,900	70,200	70,200
NBP	HRP	Mnths 2	Increase	USD	60,390	54,900	75,790	68,900
NBP	NON-HRP	Mnths 2	Increase	USD	54,900	54,900	68,900	68,900
NBP	HRP	Mnths 3+	Increase	USD	46,200	42,000	72,490	65,900
NBP	NON-HRP	Mnths 3+	Increase	USD	42,000	42,000	65,900	65,900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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Intra Spreads

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
ELECTRICITY - Intra Spreads								
German Power Baseload Calendar month futures - Months 1 vs 10+ (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	18,260	16,600	25,630	23,300
DEB	NON-HRP		Increase	EUR	16,600	16,600	23,300	23,300
German Power Baseload Calendar month futures - Months 1 vs 2 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	21,560	19,600	30,250	27,500
DEB	NON-HRP		Increase	EUR	19,600	19,600	27,500	27,500
German Power Baseload Calendar month futures - Months 1 vs 3 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	20,790	18,900	29,150	26,500
DEB	NON-HRP		Increase	EUR	18,900	18,900	26,500	26,500
German Power Baseload Calendar month futures - Months 1 vs 4-9 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	20,790	18,900	29,150	26,500
DEB	NON-HRP		Increase	EUR	18,900	18,900	26,500	26,500
German Power Baseload Calendar month futures - Months 10+ vs 10+ (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 2 vs 10+ (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 2 vs 3 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 2 vs 4-9 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 3 vs 10+ (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 3 vs 4-9 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
German Power Baseload Calendar month futures - Months 4-9 vs 10+ (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Baseload Calendar month futures - Months 4-9 vs 4-9 (GERMAN POWER BASELOAD CAL MONTH FUT)								
DEB	HRP		Increase	EUR	19,140	17,400	26,840	24,400
DEB	NON-HRP		Increase	EUR	17,400	17,400	24,400	24,400
German Power Peakload Calendar month futures – Months 1 vs 10+ (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	5,280	4,800	7,480	6,800
DEP	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
German Power Peakload Calendar month futures – Months 1 vs 2 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	6,490	5,900	9,130	8,300
DEP	NON-HRP		Increase	EUR	5,900	5,900	8,300	8,300
German Power Peakload Calendar month futures – Months 1 vs 3 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	5,280	4,800	7,480	6,800
DEP	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
German Power Peakload Calendar month futures – Months 1 vs 4-9 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	5,280	4,800	7,480	6,800
DEP	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
German Power Peakload Calendar month futures – Months 10+ vs 10+ (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	2,640	2,400	3,740	3,400
DEP	NON-HRP		Increase	EUR	2,400	2,400	3,400	3,400
German Power Peakload Calendar month futures – Months 2 vs 10+ (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	5,720	5,200	8,030	7,300
DEP	NON-HRP		Increase	EUR	5,200	5,200	7,300	7,300
German Power Peakload Calendar month futures – Months 2 vs 3 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	4,400	4,000	6,160	5,600
DEP	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600
German Power Peakload Calendar month futures – Months 2 vs 4-9 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	4,840	4,400	6,820	6,200
DEP	NON-HRP		Increase	EUR	4,400	4,400	6,200	6,200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
German Power Peakload Calendar month futures – Months 3 vs 10+ (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	5,280	4,800	7,480	6,800
DEP	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
German Power Peakload Calendar month futures – Months 3 vs 4-9 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	4,840	4,400	6,820	6,200
DEP	NON-HRP		Increase	EUR	4,400	4,400	6,200	6,200
German Power Peakload Calendar month futures – Months 4-9 vs 10+ (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	4,070	3,700	5,720	5,200
DEP	NON-HRP		Increase	EUR	3,700	3,700	5,200	5,200
German Power Peakload Calendar month futures – Months 4-9 vs 4-9 (GERMAN POWER PEAKLOAD CAL MONTH FUT)								
DEP	HRP		Increase	EUR	4,400	4,000	6,160	5,600
DEP	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600
INTEREST RATES - Intra Spreads								
MEXICAN Monthly F-TIE Future Calendar Spreads (MEXICAN FUNDING TIE (MTH CTRT) FUT)								
TIE	HRP		Increase	MXN	4,125	3,750	5,170	4,700
TIE	NON-HRP		Increase	MXN	3,750	3,750	4,700	4,700

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
METALS - Intra Spreads								
Months 01 vs Months 02-04 (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	8,250	7,500	11,550	10,500
TIO	NON-HRP		Increase	USD	7,500	7,500	10,500	10,500
Months 01 vs Months 05-09 (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	6,875	6,250	9,350	8,500
TIO	NON-HRP		Increase	USD	6,250	6,250	8,500	8,500
Months 01 vs Months 10+ (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	5,775	5,250	8,250	7,500
TIO	NON-HRP		Increase	USD	5,250	5,250	7,500	7,500
Months 02-04 vs Months 02-04 (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	4,125	3,750	5,500	5,000
TIO	NON-HRP		Increase	USD	3,750	3,750	5,000	5,000
Months 02-04 vs Months 05-09 (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	3,575	3,250	4,950	4,500
TIO	NON-HRP		Increase	USD	3,250	3,250	4,500	4,500
Months 02-04 vs Months 10+ (IRON ORE 62% FE- CFR CHINA FUTURES)								
TIO	HRP		Increase	USD	3,575	3,250	4,950	4,500
TIO	NON-HRP		Increase	USD	3,250	3,250	4,500	4,500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
NATURAL GAS - Intra Spreads								
(DUTCH TTF NAT GAS FIN M-1 AVG PRC)								
TTB	HRP		Increase	USD	7,150	6,500	10,010	9,100
TTB	HRP		Increase	USD	7,700	7,000	10,780	9,800
TTB	NON-HRP		Increase	USD	6,500	6,500	9,100	9,100
TTB	NON-HRP		Increase	USD	7,000	7,000	9,800	9,800
(DUTCH TTF NATURAL GAS FIN CAL M)								
TTG	HRP		Increase	EUR	2,530	2,300	3,630	3,300
TTG	HRP		Increase	EUR	2,640	2,400	3,740	3,400
TTG	HRP		Increase	EUR	3,080	2,800	4,400	4,000
TTG	HRP		Increase	EUR	3,630	3,300	5,170	4,700
TTG	HRP		Increase	EUR	3,740	3,400	5,280	4,800
TTG	NON-HRP		Increase	EUR	2,300	2,300	3,300	3,300
TTG	NON-HRP		Increase	EUR	2,400	2,400	3,400	3,400
TTG	NON-HRP		Increase	EUR	2,800	2,800	4,000	4,000
TTG	NON-HRP		Increase	EUR	3,300	3,300	4,700	4,700
TTG	NON-HRP		Increase	EUR	3,400	3,400	4,800	4,800
(DUTCH TTF NATURAL GAS FIN DAY AHEAD)								
TTI	HRP		Increase	EUR	2,530	2,300	3,630	3,300
TTI	HRP		Increase	EUR	3,080	2,800	4,400	4,000
TTI	HRP		Increase	EUR	3,630	3,300	5,170	4,700
TTI	HRP		Increase	EUR	3,740	3,400	5,280	4,800
TTI	NON-HRP		Increase	EUR	2,300	2,300	3,300	3,300
TTI	NON-HRP		Increase	EUR	2,800	2,800	4,000	4,000
TTI	NON-HRP		Increase	EUR	3,300	3,300	4,700	4,700
TTI	NON-HRP		Increase	EUR	3,400	3,400	4,800	4,800
Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	5,280	4,800	7,480	6,800
TTF	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 2 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	5,280	4,800	7,480	6,800
TTF	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 3 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	6,160	5,600
TTF	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Dutch TTF Natural Gas Calendar Month Futures - Month 1 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	6,160	5,600
TTF	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600
Dutch TTF Natural Gas Calendar Month Futures - Month 2 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	5,170	4,700	7,260	6,600
TTF	NON-HRP		Increase	EUR	4,700	4,700	6,600	6,600
Dutch TTF Natural Gas Calendar Month Futures - Month 2 vs 3 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	3,740	3,400	5,280	4,800
TTF	NON-HRP		Increase	EUR	3,400	3,400	4,800	4,800
Dutch TTF Natural Gas Calendar Month Futures - Month 2 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	5,280	4,800	7,480	6,800
TTF	NON-HRP		Increase	EUR	4,800	4,800	6,800	6,800
Dutch TTF Natural Gas Calendar Month Futures - Month 3 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	61,600	56,000
TTF	NON-HRP		Increase	EUR	4,000	4,000	56,000	56,000
Dutch TTF Natural Gas Calendar Month Futures - Month 3 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	6,160	5,600
TTF	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600
Dutch TTF Natural Gas Calendar Month Futures - Months 10+ vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	61,600	56,000
TTF	NON-HRP		Increase	EUR	4,000	4,000	56,000	56,000
Dutch TTF Natural Gas Calendar Month Futures - Months 4-9 vs 10+ (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	61,600	56,000
TTF	NON-HRP		Increase	EUR	4,000	4,000	56,000	56,000
Dutch TTF Natural Gas Calendar Month Futures - Months 4-9 vs 4-9 (DUTCH TTF NATURAL GAS CAL MONTH FUT)								
TTF	HRP		Increase	EUR	4,400	4,000	6,160	5,600
TTF	NON-HRP		Increase	EUR	4,000	4,000	5,600	5,600
JKM - Consec Month 2-12 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	24,200	22,000	33,880	30,800
JKM	NON-HRP		Increase	USD	22,000	22,000	30,800	30,800
JKM - Mnth 1 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	39,930	36,300	55,990	50,900
JKM	NON-HRP		Increase	USD	36,300	36,300	50,900	50,900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
JKM - Mnths 13+ vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	30,250	27,500	42,350	38,500
JKM	NON-HRP		Increase	USD	27,500	27,500	38,500	38,500
JKM - Mnths 2-12 vs 13+ (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	36,410	33,100	51,040	46,400
JKM	NON-HRP		Increase	USD	33,100	33,100	46,400	46,400
JKM - Mnths 2-12 vs 2-12 (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	36,410	33,100	51,040	46,400
JKM	NON-HRP		Increase	USD	33,100	33,100	46,400	46,400
LNG Japan/Korea Marker (Platts) Swap Futures - Mnth 1 vs 2-12 (LNG JAPAN KOREA MARKER PLATTS FUT)								
JKM	HRP		Increase	USD	43,890	39,900	61,490	55,900
JKM	NON-HRP		Increase	USD	39,900	39,900	55,900	55,900
Mnths 1 vs 13+ (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	429,000	390,000	605,000	550,000
JKY	NON-HRP		Increase	JPY	390,000	390,000	550,000	550,000
Mnths 1 vs 2-12 (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	4,840,000	4,400,000	6,776,000	6,160,000
JKY	NON-HRP		Increase	JPY	4,400,000	4,400,000	6,160,000	6,160,000
Mnths 13+ vs 13+ (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	2,145,000	1,950,000	3,003,000	2,730,000
JKY	NON-HRP		Increase	JPY	1,950,000	1,950,000	2,730,000	2,730,000
Mnths 2-12 vs 13+ (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	3,520,000	3,200,000	4,928,000	4,480,000
JKY	NON-HRP		Increase	JPY	3,200,000	3,200,000	4,480,000	4,480,000
Mnths 2-12 vs 2-12 (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	3,520,000	3,200,000	4,928,000	4,480,000
JKY	NON-HRP		Increase	JPY	3,200,000	3,200,000	4,480,000	4,480,000
NBP Intras 1 vs 2+ (UK NBP NATURAL GAS FRONT MTH FUT)								
NBP	HRP		Increase	USD	10,780	9,800	15,180	13,800
NBP	NON-HRP		Increase	USD	9,800	9,800	13,800	13,800
NBP Intras 2+ vs 2+ (UK NBP NATURAL GAS FRONT MTH FUT)								
NBP	HRP		Increase	USD	12,100	11,000	16,940	15,400
NBP	NON-HRP		Increase	USD	11,000	11,000	15,400	15,400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
RealPeriod 2 vs 2 (LNG JAPAN KOREA MRK YEN FUT)								
JKY	HRP		Increase	JPY	2,145,000	1,950,000	2,970,000	2,700,000
JKY	NON-HRP		Increase	JPY	1,950,000	1,950,000	2,700,000	2,700,000
TTE Intras 1vs 2+ (DUTCH TTF NATURAL GAS FRONT MTH FUT)								
TTE	HRP		Increase	USD	11,110	10,100	15,400	14,000
TTE	NON-HRP		Increase	USD	10,100	10,100	14,000	14,000
TTE Intras 2+ vs 2+ (DUTCH TTF NATURAL GAS FRONT MTH FUT)								
TTE	HRP		Increase	USD	12,210	11,100	16,500	15,000
TTE	NON-HRP		Increase	USD	11,100	11,100	15,000	15,000
UK NBP Natural Gas Calendar month futures - Months 1 vs 10+ (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000
UK NBP Natural Gas Calendar month futures - Months 1 vs 2 (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	2,970	2,700	4,180	3,800
UKG	NON-HRP		Increase	GBP	2,700	2,700	3,800	3,800
UK NBP Natural Gas Calendar month futures - Months 1 vs 3 (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000
UK NBP Natural Gas Calendar month futures - Months 1 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000
UK NBP Natural Gas Calendar month futures - Months 10+ vs 10+ (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	2,970	2,700	4,180	3,800
UKG	NON-HRP		Increase	GBP	2,700	2,700	3,800	3,800
UK NBP Natural Gas Calendar month futures - Months 2 vs 10+ (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000
UK NBP Natural Gas Calendar month futures - Months 2 vs 3 (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	2,970	2,700	4,180	3,800
UKG	NON-HRP		Increase	GBP	2,700	2,700	3,800	3,800
UK NBP Natural Gas Calendar month futures - Months 2 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)								
UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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Intra Spreads

UK NBP Natural Gas Calendar month futures - Months 3 vs 10+ (UK NBP NAT GAS CAL MTH FUT)

UKG	HRP		Increase	GBP	2,970	2,700	4,180	3,800
UKG	NON-HRP		Increase	GBP	2,700	2,700	3,800	3,800

UK NBP Natural Gas Calendar month futures - Months 3 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)

UKG	HRP		Increase	GBP	2,970	2,700	4,180	3,800
UKG	NON-HRP		Increase	GBP	2,700	2,700	3,800	3,800

UK NBP Natural Gas Calendar month futures - Months 4-9 vs 10+ (UK NBP NAT GAS CAL MTH FUT)

UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000

UK NBP Natural Gas Calendar month futures - Months 4-9 vs 4-9 (UK NBP NAT GAS CAL MTH FUT)

UKG	HRP		Increase	GBP	3,080	2,800	4,400	4,000
UKG	NON-HRP		Increase	GBP	2,800	2,800	4,000	4,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
CRUDE OIL - Inter-commodity Spread Rates						
BZ 1 vs JCY 1						
Spread Credit Rate	New	+1:-1			55%	55%
BZ 1 vs JCY 2-4						
Spread Credit Rate	New	+1:-1			55%	55%
BZ 1 vs JCY 5+						
Spread Credit Rate	New	+1:-1			75%	75%
BZ 2+ vs JCY 2-4						
Spread Credit Rate	New	+1:-1			58%	58%
BZ 2+ vs JCY 5+						
Spread Credit Rate	Increase	+1:-1	62%	62%	85%	85%
BZ Mnth 1 vs JCC Mnth 1						
Spread Credit Rate	New	+1:-1			55%	55%
BZ Mnth 1 vs JCC Mnths 2-4						
Spread Credit Rate	New	+1:-1			55%	55%
BZ Mnth 1 vs JCC Mnths 5+						
Spread Credit Rate	New	+1:-1			75%	75%
BZ Mnth 2+ vs JCC Mnths 2-4						
Spread Credit Rate	New	+1:-1			58%	58%
BZ Mnths 2+ vs JCC Mnths 5+						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
BZ-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
BZ-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
BZ-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
CL 1 vs JCY 1						
Spread Credit Rate	New	+1:-1			55%	55%
CL 1 vs JCY 2-4						
Spread Credit Rate	New	+1:-1			60%	60%
CL 1 vs JCY 5+						
Spread Credit Rate	New	+1:-1			75%	75%
CL 2+ vs JCY 2-4						

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Spread Credit Rate	New	+1:-1			58%	58%
CL 2+ vs JCY 5+						
Spread Credit Rate	Increase	+1:-1	70%	70%	85%	85%
CL Mnth 1 vs JCC Mnths 5+						
Spread Credit Rate	New	+1:-1			70%	70%
CL Mnth1 vs JCC Mnth 1						
Spread Credit Rate	New	+1:-1			55%	55%
CL Mnth1 vs JCC Mnths 3-4						
Spread Credit Rate	New	+1:-1			60%	60%
CL Mnths 2+ vs JCC Mnths 2-4						
Spread Credit Rate	New	+1:-1			58%	58%
CL Mnths 2+ vs JCC Mnths 5+						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
CL-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
CL-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
CL-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
LNG JAPAN/KOREA MARKER (PLATTS) SWAP FUTURES (NY-JKM - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) SWAP FUTURES (NY-JKM - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) YEN DENOMINATED FUTURES (NY-JKY - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) YEN DENOMINATED FUTURES (NY-JKY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EQUITY INDEX - Inter-commodity Spread Rates						
BZ-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
BZ-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
BZ-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
CL-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
CL-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
CL-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
EMINI SP 500 ENERGY SECTOR INDEX (XAE) vs NIKKEI 225 FUTURES (NK)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	40%	40%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs NIKKEI 225 FUTURES (NK)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	55%	55%
HO-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
HO-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
HO-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
RB-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
RB-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
RB-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
NATURAL GAS - Inter-commodity Spread Rates						
LNG JAPAN/KOREA MARKER (PLATTS) SWAP FUTURES (NY-JKM - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) SWAP FUTURES (NY-JKM - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) YEN DENOMINATED FUTURES (NY-JKY - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
LNG JAPAN/KOREA MARKER (PLATTS) YEN DENOMINATED FUTURES (NY-JKY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+3:-5	25%	25%	0%	0%
REFINED PRODUCTS - Inter-commodity Spread Rates						
HO-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
HO-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
HO-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%
RB-2 vs XAB						
Spread Credit Rate	New	+1:-1			60%	60%
RB-2 vs XAF						
Spread Credit Rate	New	+1:-1			45%	45%
RB-2 vs XAI						
Spread Credit Rate	New	+1:-1			65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

INTEREST RATES - Volatility Scan (volScan) Rate

ERIS 7-YR SWAP FUTURE (LIB) - volScan

Clearing Member Rate	Month 26	New				30.000%
Clearing Member Rate	Month 27	New				30.000%
Clearing Member Rate	Month 28	New				30.000%
Clearing Member Rate	Month 29	New				30.000%