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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, March 02, 2017

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

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

and subscribe to the Performance Bond Rates Advisory Notice listserver.

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

The rates will be effective after the close of business on

Friday, March 03, 2017.

Current rates as of:

Thursday, March 02, 2017.

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 advisory includes changes to certain products' splitting methodology from None to Modified Split. The specific products can be found on page 2 of the advisory.

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

Splitting Methodology					
CC	Name	Current Splitting	New Splitting	Underlying Leg 1	Underlying Leg 2
1E	RBOB Gasoline Crack Spread BALMO Futures	None	Modified Split	27	26
ESB	European Low Sulphur Gasoil Brent Crack Spread BALMO Futures	None	Modified Split	BG	BB
1L	Gulf Coast ULSD (Platts) Up-Down BALMO Futures	None	Modified Split	LY	23
6X	Jet Fuel Cargoes CIF NWE (Platts) vs. Low Sulphur Gasoil BALMO Futures	None	Modified Split	UJ	BG
GBB	Gulf Coast Unl 87 Gasoline M2 (Platts) vs. RBOB Gasoline BALMO Futures	None	Modified Split	GCM	27
ESS	Low Sulphur Gasoil Crack Spread (1000mt) BALMO Financial Futures	None	Modified Split	BG	BB
7I	Gasoline Euro-bob Oxy NWE Barges (Argus) Crack Spread BALMO Futures	None	Modified Split	S7H	BB
GFC	Gulf Coast HSFO (Platts) Crack Spread BALMO Futures	None	Modified Split	SMF	26
1H	NY Harbor ULSD Crack Spread BALMO Futures	None	Modified Split	23	26

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
METALS - Outright Rates								
ALUMINIUM EURO PREM DUTY-PAID FUT (EDP)								
EDP	Spec	Mth 1	Increase	USD	193	175	248	225
EDP	Hedge/Member	Mth 1	Increase	USD	175	175	225	225
EDP	Spec	Mths 2-9	Increase	USD	193	175	248	225
EDP	Hedge/Member	Mths 2-9	Increase	USD	175	175	225	225
EDP	Spec	Mths 10+	Increase	USD	193	175	248	225
EDP	Hedge/Member	Mths 10+	Increase	USD	175	175	225	225
ALUMINIUM EURO PREM METAL BULLETIN (AEP)								
AEP	Spec	Mth 1	Increase	USD	165	150	220	200
AEP	Hedge/Member	Mth 1	Increase	USD	150	150	200	200
AEP	Spec	Mths 2-9	Increase	USD	165	150	220	200
AEP	Hedge/Member	Mths 2-9	Increase	USD	150	150	200	200
AEP	Spec	Mths 10+	Increase	USD	165	150	220	200
AEP	Hedge/Member	Mths 10+	Increase	USD	150	150	200	200
ALUMINUM MW TRANS PREM PLATTS SWAPS (AUP)								
AUP	Spec	Mth 1	Increase	USD	352	320	385	350
AUP	Hedge/Member	Mth 1	Increase	USD	320	320	350	350
AUP	Spec	Mths 2-9	Increase	USD	319	290	363	330
AUP	Hedge/Member	Mths 2-9	Increase	USD	290	290	330	330
AUP	Spec	Mths 10+	Increase	USD	319	290	363	330
AUP	Hedge/Member	Mths 10+	Increase	USD	290	290	330	330

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
GOLD KILO FUTURES (GCK)								
GCK	Spec	Mnth1	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth1	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth2	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth2	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth3	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth3	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth4	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth4	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth5	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth5	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth6	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth6	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth7	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth7	Decrease	USD	1,736	1,736	1,543	1,543
GCK	Spec	Mnth8+	Decrease	USD	1,910	1,736	1,697	1,543
GCK	Hedge/Member	Mnth8+	Decrease	USD	1,736	1,736	1,543	1,543
LONDON SPOT GOLD FUTURES (GSP)								
GSP	Spec	All Contracts	Decrease	USD	5,940	5,400	5,280	4,800
GSP	Hedge/Member	All Contracts	Decrease	USD	5,400	5,400	4,800	4,800
LONDON SPOT SILVER FUTURES (SSP)								
SSP	Spec	All Contracts	Decrease	USD	7,150	6,500	6,325	5,750
SSP	Hedge/Member	All Contracts	Decrease	USD	6,500	6,500	5,750	5,750

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								
ALGON CITY GATES NAT GAS INDEX FUT (N7)								
N7	Spec	Mth 1	Decrease	USD	16,500	15,000	8,250	7,500
N7	Hedge/Member	Mth 1	Decrease	USD	15,000	15,000	7,500	7,500
ALGONQUIN CITY-GATES NAT SWING FUT (C8)								
C8	Spec		Decrease	USD	16,500	15,000	8,250	7,500
C8	Hedge/Member		Decrease	USD	15,000	15,000	7,500	7,500
DOMINION TRAN INC - APP INDEX (IH)								
IH	Spec	Mth 1	Decrease	USD	1,320	1,200	880	800
IH	Hedge/Member	Mth 1	Decrease	USD	1,200	1,200	800	800
DOMINION-APPALACHIA SWING FUT (SH)								
SH	Spec		Decrease	USD	1,320	1,200	880	800
SH	Hedge/Member		Decrease	USD	1,200	1,200	800	800
HENRY HUB INDEX FUT (IN)								
IN	Spec	Mnth 1	Decrease	USD	880	800	605	550
IN	Hedge/Member	Mnth 1	Decrease	USD	800	800	550	550
HENRY HUB SWING FUTURE (SN)								
SN	Spec	All Months	Decrease	USD	880	800	605	550
SN	Hedge/Member	All Months	Decrease	USD	800	800	550	550
TENNESSEE ZONE 0 BASIS FUT (NQ)								
NQ	Spec	Mnths 2+	Increase	USD	187	170	242	220
NQ	Hedge/Member	Mnths 2+	Increase	USD	170	170	220	220
TETCO M-3 INDEX (IX)								
IX	Spec	Mnth 1	Decrease	USD	8,800	8,000	4,400	4,000
IX	Hedge/Member	Mnth 1	Decrease	USD	8,000	8,000	4,000	4,000
TRANSCO ZONE 6 GAS INDEX FUT (TZI)								
TZI	Spec	Mnths 1	Decrease	USD	8,800	8,000	4,400	4,000
TZI	Hedge/Member	Mnths 1	Decrease	USD	8,000	8,000	4,000	4,000
TRANSCO ZONE 6 GAS SWING FUT (TZS)								
TZS	Spec	All Months	Decrease	USD	8,800	8,000	4,400	4,000
TZS	Hedge/Member	All Months	Decrease	USD	8,000	8,000	4,000	4,000
TRANSCO ZONE 6 INDEX (IT)								
IT	Spec	Mth 1	Decrease	USD	8,800	8,000	4,400	4,000
IT	Hedge/Member	Mth 1	Decrease	USD	8,000	8,000	4,000	4,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PETROLEUM CRACKS AND SPREADS - Outright Rates								
NY BUCKEYE JET FUEL VS NY HARB ULSD (JET)								
JET	Spec	Mnth 1	Increase	USD	2,200	2,000	2,750	2,500
JET	Hedge/Member	Mnth 1	Increase	USD	2,000	2,000	2,500	2,500
REFINED PRODUCTS - Outright Rates								
GASOIL 0.1 ROTTERDAM BARGES FUT (VL)								
VL	Spec	Month 1	Decrease	USD	33,000	30,000	29,700	27,000
VL	Hedge/Member	Month 1	Decrease	USD	30,000	30,000	27,000	27,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
			EQUITY INDEX - Intra Spreads					
(CONSUMER STAPLES SECTOR TIC)								
XPT	Spec		Decrease	USD	286	260	193	175
XPT	Hedge/Member		Decrease	USD	260	260	175	175
(EMINI SP 500 CONS STAPLES SECTOR IX)								
XAP	Spec		Decrease	USD	286	260	193	175
XAP	Hedge/Member		Decrease	USD	260	260	175	175
(EMINI SP500- HEALTH CARE SECT INDEX)								
XAV	Spec		Decrease	USD	660	600	193	175
XAV	Hedge/Member		Decrease	USD	600	600	175	175
(EMINI SP500 MATERIALS SECTOR INDEX)								
XAB	Spec		Decrease	USD	303	275	193	175
XAB	Hedge/Member		Decrease	USD	275	275	175	175
(SP 500 - CONS STAPLES SYNTHETIC)								
1PT	Spec		Decrease	USD	286	260	193	175
1PT	Hedge/Member		Decrease	USD	260	260	175	175
(SP 500 HEALTH CARE SECTOR SYNTHETIC)								
1VT	Spec		Decrease	USD	660	600	193	175
1VT	Hedge/Member		Decrease	USD	600	600	175	175
(SP 500 HEALTH CARE SECTOR TIC)								
XVT	Spec		Decrease	USD	660	600	193	175
XVT	Hedge/Member		Decrease	USD	600	600	175	175
(SP 500 MATERIALS SEL SECTOR SYNTH)								
1BT	Spec		Decrease	USD	303	275	193	175
1BT	Hedge/Member		Decrease	USD	275	275	175	175
(SP 500 MATERIALS SEL SECTOR TIC)								
XBT	Spec		Decrease	USD	303	275	193	175
XBT	Hedge/Member		Decrease	USD	275	275	175	175
All Months (S&P 500 QUARLY DIVIDEND INDEX FUT)								
SDI	Spec		Increase	USD	110	100	165	150
SDI	Hedge/Member		Increase	USD	100	100	150	150
Dow Jones (CBOT) (11) - All Months ($10DOW JONES FUTURES)								
11	Spec		Decrease	USD	1,100	1,000	715	650
11	Hedge/Member		Decrease	USD	1,000	1,000	650	650

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Dow Jones (CBOT) (11) - All Months ()								
DO	Spec		Decrease	USD	2,750	2,500	1,788	1,625
DO	Hedge/Member		Decrease	USD	2,500	2,500	1,625	1,625
Dow Jones (CBOT) (11) - All Months (BTIC ON E-MINI DJIA FUTURES)								
YMT	Spec		Decrease	USD	550	500	358	325
YMT	Hedge/Member		Decrease	USD	500	500	325	325
Dow Jones (CBOT) (11) - All Months (E-MINI DJIA FUTURES MARKER)								
YMI	Spec		Decrease	USD	550	500	358	325
YMI	Hedge/Member		Decrease	USD	500	500	325	325
Dow Jones (CBOT) (11) - All Months (E-MINI DOW ($5) FUTURES)								
YM	Spec		Decrease	USD	550	500	358	325
YM	Hedge/Member		Decrease	USD	500	500	325	325
E-Mini S&P Midcap 400 (MD) - All Months (BTIC E-MINI S&P MIDCAP 400 FUT)								
EMT	Spec		Decrease	USD	358	325	275	250
EMT	Hedge/Member		Decrease	USD	325	325	250	250
E-Mini S&P Midcap 400 (MD) - All Months (EMINI MIDCAP FUTURES)								
ME	Spec		Decrease	USD	358	325	275	250
ME	Hedge/Member		Decrease	USD	325	325	250	250
E-Mini S&P Midcap 400 (MD) - All Months (E-MINI S&P MIDCAP 400 SYNT MARKER)								
ETT	Spec		Decrease	USD	358	325	275	250
ETT	Hedge/Member		Decrease	USD	325	325	250	250
E-Mini S&P Midcap 400 (MD) - All Months (S&P 400 FUTURES)								
MD	Spec		Decrease	USD	1,788	1,625	1,375	1,250
MD	Hedge/Member		Decrease	USD	1,625	1,625	1,250	1,250
Nasdaq-100 Index (ND) - All Months (BTIC ON E-MINI NASDAQ-100 FUTURES)								
NQT	Spec		Decrease	USD	110	100	83	75
NQT	Hedge/Member		Decrease	USD	100	100	75	75
Nasdaq-100 Index (ND) - All Months (E-MINI NASDAQ 100 FUTURES)								
NQ	Spec		Decrease	USD	110	100	83	75
NQ	Hedge/Member		Decrease	USD	100	100	75	75
Nasdaq-100 Index (ND) - All Months (E-MINI NASDAQ-100 FUTURES MARKER)								
NQI	Spec		Decrease	USD	110	100	83	75
NQI	Hedge/Member		Decrease	USD	100	100	75	75

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Nasdaq-100 Index (ND) - All Months (NASDAQ 100 FUTURES)								
ND	Spec		Decrease	USD	550	500	413	375
ND	Hedge/Member		Decrease	USD	500	500	375	375
METALS - Intra Spreads								
All Months (ALUMINIUM EURO PREM DUTY-PAID FUT)								
EDP	Spec		Increase	USD	297	270	330	300
EDP	Hedge/Member		Increase	USD	270	270	300	300
All Months (ALUMINIUM EURO PREM METAL BULLETIN)								
AEP	Spec		Increase	USD	248	225	330	300
AEP	Hedge/Member		Increase	USD	225	225	300	300

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

ELECTRICITY - Inter-commodity Spread Rates

HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE A 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-K4 - CME)

Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%

HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)

Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%

HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-N9 - CME)

Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%

PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)

Spread Credit Rate	Decrease	+194:-1	70%	70%	60%	60%

PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs PJM AEP DAYTON HUB PEAK CAL DA LMP SWAP FUT (NY-D7- CME)

Spread Credit Rate	Decrease	+1:-1	95%	95%	86%	86%

PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME) vs PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-D7-CME)

Spread Credit Rate	Decrease	+1:-1	95%	95%	90%	90%

PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-N9 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)

Spread Credit Rate	Decrease	+194:-1	70%	70%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ERIS Standards - Inter-commodity Spread Rates						
(BU2 - CME) vs (ZA9102 - CME)						
Spread Credit Rate	Decrease	+1:-10	60%	60%	45%	45%
(BU2 - CME) vs (ZA9202 - CME)						
Spread Credit Rate	Decrease	+1:-10	60%	60%	45%	45%
10 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Decrease	+1:+1	70%	70%	60%	60%
10YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+1:+1	75%	75%	85%	85%
10YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Increase	+1:+2	0%	0%	50%	50%
10YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+2:+3	60%	60%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+2:+5	0%	0%	50%	50%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 21-24						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 25-28						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 29-32						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 33-36						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 37-40						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 41-44						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+2:+5	35%	35%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Increase	+2:+5	50%	50%	70%	70%
2 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Increase	+2:+1	0%	0%	35%	35%
20YR INTEREST RATE SWAP FUTURE ERIS (ZD9120 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+2	50%	50%	65%	65%
20YR INTEREST RATE SWAP FUTURE ERIS (ZD9220 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+2	50%	50%	65%	65%
2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	Decrease	+2:+1	70%	70%	60%	60%
2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME) vs EURODOLLAR (ED - CME)						
Spread Credit Rate	Decrease	+7:+10	60%	60%	55%	55%
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Decrease	+4:+1	50%	50%	40%	40%
2YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Decrease	+2:+1	70%	70%	60%	60%
2YR INTEREST RATE SWAP FUTURE ERIS vs 30YR TREASURY						
Spread Credit Rate	Increase	+3:+1	0%	0%	25%	25%
Spread Credit Rate	Increase	+3:+1	0%	0%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Decrease	+6:+5	60%	60%	40%	40%
2YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	30%	30%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 1 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	30%	30%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 10 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 11 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 2 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	55%	55%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 3 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	45%	45%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 4 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	35%	35%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 5 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 6 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	50%	50%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 7 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 8 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 9 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
3 YR INTEREST RATE SWAP FUTURE ERIS (ZB9203 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+4:-1	50%	50%	60%	60%
3 YR INTEREST RATE SWAP FUTURE ERIS (ZB9203 - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	New	+5:+6			70%	70%
30YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+3:+5	60%	60%	70%	70%
30YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Increase	+1:+3	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs 30YR TREASURY						
Spread Credit Rate	Increase	+1:+1	65%	65%	80%	80%
30YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+1:+3	40%	40%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+1:+4	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Increase	+1:+4	40%	40%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Increase	+1:+4	60%	60%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 21-24						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 25-28						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 29-32						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 33-36						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 37-40						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 41-44						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+1:+4	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Increase	+1:+4	30%	30%	50%	50%
3YR INTEREST RATE SWAP FUTURE ERIS (ZB9103 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+4:-1	50%	50%	60%	60%
4 YR INTEREST RATE SWAP FUTURE ERIS (ZB9104 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+3:-2	60%	60%	70%	70%
4YR INTEREST RATE SWAP FUTURE ERIS (ZB9204 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+3:-2	60%	60%	70%	70%
5 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Increase	+3:+2	50%	50%	70%	70%
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9105 - CME) vs ULTRA LONG TREASURY BOND (UBE - CME)						
Spread Credit Rate	Increase	+5:+1	50%	50%	60%	60%
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME) vs ULTRA LONG TREASURY BOND (UBE - CME)						
Spread Credit Rate	Increase	+5:+1	50%	50%	60%	60%
5YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+3:+2	70%	70%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+3:+5	0%	0%	50%	50%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+3:+5	40%	40%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 2YR INTEREST RATE SWAP FUTURE ERIS (ZA9102 - CME)						
Spread Credit Rate	New	+1:+4			40%	40%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME)						
Spread Credit Rate	New	+1:+4			40%	40%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME)						
Spread Credit Rate	New	+1:+2			65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
FX - Inter-commodity Spread Rates						
EURO FX/JY FUTURE (RY) vs EURO FX/SF FUTURES (RF) vs YEN FUTURE (JY) vs SWISS FUTURES (SF)						
Spread Credit Rate	Increase	+1:-1:+1:-1	95%	95%	98%	98%
AD/CD FUTURES (AC) vs AUSTRALIAN DOLLAR FUTURES (AD) vs CANADIAN DOLLAR FUTURES (CD)						
Spread Credit Rate	Increase	+1:-2:+2	95%	95%	98%	98%
AD/JY FUTURES (AJ) vs EC/AD FUTURES (CA) vs EURO FX/JY FUTURE (RY)						
Spread Credit Rate	Increase	+1:-1:+1	95%	95%	98%	98%
AFRICAN RAND (RA - CME) vs RUSSIAN RUBLE (RU - CME)						
Spread Credit Rate	Increase	+4:-5	0%	0%	30%	30%
AUSTRALIAN DOLLAR (AD - CME) vs AFRICAN RAND (RA - CME)						
Spread Credit Rate	Increase	+2:-3	0%	0%	30%	30%
AUSTRALIAN DOLLAR (AD - CME) vs HUNGARIAN FORINT (FR - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	30%	30%
AUSTRALIAN DOLLAR (AD - CME) vs JAPANESE YEN (JY - CME)						
Spread Credit Rate	Increase	+3:-2	30%	30%	37%	37%
AUSTRALIAN DOLLAR (AD - CME) vs KOREAN WON (KRW - CME)						
Spread Credit Rate	Increase	+4:-5	20%	20%	30%	30%
AUSTRALIAN DOLLAR (AD - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Increase	+4:-1	0%	0%	43%	43%
AUSTRALIAN DOLLAR (AD - CME) vs POLISH ZLOTY (PZ - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	30%	30%
AUSTRALIAN DOLLAR (AD - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+4:-1	0%	0%	40%	40%
AUSTRALIAN DOLLAR (AD - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+4:-3	0%	0%	44%	44%
Australian Dollar (AD) vs. British Pound (BP)						
Spread Credit Rate	Increase	+1:-1	20%	20%	58%	58%
Australian Dollar (AD) vs. Canadian Dollar (CD)						
Spread Credit Rate	Increase	+1:-1	50%	50%	69%	69%
Australian Dollar (AD) vs. Euro FX (EC)						
Spread Credit Rate	Increase	+2:-1	30%	30%	40%	40%
Australian Dollar (AD) vs. New Zealand Dollar (NE)						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
BP/JY FUTURE (BY) vs EURO FX/BP FUTURE (RP) vs YEN FUTURES (JY) vs EURO FUTURES (EC)						
Spread Credit Rate	Increase	+1:-1:+1:-1	95%	95%	98%	98%
BP/JY FUTURE (BY) vs EURO FX/JY FUTURE (RY) vs EURO FUTURES (EC) vs BRITISH POUND FUTURES (BP)						
Spread Credit Rate	Increase	+1:-1:+1:-2	95%	95%	98%	98%
BP/JY FUTURE (BY) vs EURO FX/JY FUTURE (RY) vs EURO FX/BP FUTURE (RP)						
Spread Credit Rate	Increase	+1:-1:+1	95%	95%	98%	98%
BRAZILIAN REAL FUTURES (BR) vs MEXICAN PESO FUTURES (MP)						
Spread Credit Rate	Increase	+3:-2	0%	0%	30%	30%
BRITISH POUND (BP - CME) vs EURO FX (EC - CME)						
Spread Credit Rate	Increase	+2:-1	30%	30%	62%	62%
BRITISH POUND (BP - CME) vs KOREAN WON (KRW - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
BRITISH POUND (BP - CME) vs NEW ZEALAND DOLLAR (NE - CME)						
Spread Credit Rate	Increase	+3:-2	30%	30%	59%	59%
BRITISH POUND (BP - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Increase	+4:-1	30%	30%	61%	61%
British Pound (BP) vs. Canadian Dollar (CD)						
Spread Credit Rate	Increase	+1:-1	30%	30%	62%	62%
British Pound (BP) vs. Euro FX (EC) vs. Cross Rate EuroFX/British Pound (RP)						
Spread Credit Rate	Increase	+2:-1:+1	95%	95%	98%	98%
British Pound (BP) vs. Japanese Yen (JY)						
Spread Credit Rate	Increase	+3:-2	0%	0%	46%	46%
British Pound (BP) vs. Swiss Franc (SF)						
Spread Credit Rate	Increase	+4:-5	30%	30%	55%	55%
CANADIAN DOLLAR (CD - CME) vs CZECH KORUNA (CZ - CME)						
Spread Credit Rate	Increase	+5:-2	0%	0%	30%	30%
CANADIAN DOLLAR (CD - CME) vs HUNGARIAN FORINT (FR - CME)						
Spread Credit Rate	Increase	+3:-5	0%	0%	30%	30%
CANADIAN DOLLAR (CD - CME) vs KOREAN WON (KRW - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
CANADIAN DOLLAR (CD - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	New	+3:-1			33%	33%
CANADIAN DOLLAR (CD - CME) vs POLISH ZLOTY (PZ - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	30%	30%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
CANADIAN DOLLAR (CD - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+3:-1	30%	30%	57%	57%
Canadian Dollar (CD) vs. Euro FX (EC)						
Spread Credit Rate	Increase	+2:-1	30%	30%	69%	69%
Canadian Dollar (CD) vs. New Zealand Dollar (NE)						
Spread Credit Rate	Increase	+1:-1	30%	30%	56%	56%
Canadian Dollar (CD) vs. Swiss Franc (SF)						
Spread Credit Rate	Increase	+5:-6	30%	30%	50%	50%
CANADIAN DOLLAR (CD-CME) vs JAPANESE YEN (JY-CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	43%	43%
CME BLOOMBERG DOLLAR SPOT INDEX FUTURE (BDI - CME) vs EURO FX (EC - CME)						
Spread Credit Rate	Increase	+1:+1	20%	20%	30%	30%
CROSS RATE AUSTRALIAN DOLLAR/JAPANESE YEN (AJ - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Decrease	+3:-5	65%	65%	40%	40%
EC/CD CROSS RATE FUTURE (CC) vs EURO FUTURE (EC) vs CANADIAN DOLLAR FUTURES(CD)						
Spread Credit Rate	Increase	+1:-1:+1	95%	95%	98%	98%
EURO FX (EC - CME) vs KOREAN WON (KRW - CME)						
Spread Credit Rate	Increase	+2:-3	0%	0%	30%	30%
EURO FX (EC - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	59%	59%
EURO FX (EC - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+3:-5	40%	40%	63%	63%
EURO FX (EC - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+2:-3	50%	50%	70%	70%
Euro FX (EC) vs. Cross Rate Euro FX/Swiss Franc (RF) vs. Swiss Franc (SF)						
Spread Credit Rate	Increase	+2:+3:-2	95%	95%	98%	98%
Euro FX (EC) vs. Japanese Yen (JY)						
Spread Credit Rate	Increase	+2:-2	30%	30%	69%	69%
Euro FX (EC) vs. New Zealand Dollar (NE)						
Spread Credit Rate	Increase	+1:-2	25%	25%	66%	66%
EURO FX/BP FUTURE (RP) vs EURO FUTURE (EC) vs BRITISH POUND FUTURES (BP)						
Spread Credit Rate	Increase	+2:-2:+3	95%	95%	98%	98%
EURO FX/BP FUTURE (RP) vs EURO FX/JY FUTURE (RY) vs YEN FUTURE (JY) vs BRITISH POUND FUTURES (BP)						
Spread Credit Rate	Increase	+1:-1:-1:+2	95%	95%	98%	98%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EURO FX/BP FUTURE (RP) vs EURO FX/SF FUTURES (RF) vs BP/SF FUTURE (BF)						
Spread Credit Rate	Increase	+1:-1:+1	95%	95%	98%	98%
EURO FX/BP FUTURE (RP) vs EURO FX/SF FUTURES (RF) vs BRITISH POUND FUTURES (BP) vs SWISS FUTURES (SF)						
Spread Credit Rate	Increase	+1:-1:+2:-1	95%	95%	98%	98%
EURO FX/JY FUTURE (RY) vs AD/JY FUTURES (AJ) vs EURO FUTURES (EC) vs AUSTRALIAN DOLLAR FUTURES (AD)						
Spread Credit Rate	Increase	+1:-1:-1:+2	95%	95%	98%	98%
EURO FX/JY FUTURE (RY) vs AD/JY FUTURES (AJ) vs EURO FUTURES (EC) vs YEN FUTURES (JY) vs AUSTRALIAN DOLLAR FUTURES (AD)						
Spread Credit Rate	Increase	+2:-1:-2:+1:+	95%	95%	98%	98%
EURO FX/JY FUTURE (RY) vs EURO FUTURE (EC) vs YEN FUTURE (JY)						
Spread Credit Rate	Increase	+1:-1:+1	80%	80%	98%	98%
EURO FX/SF FUTURES (RF) vs EURO FUTURE (EC) vs SWISS FRANC FUTURE (SF)						
Spread Credit Rate	Increase	+1:-1:+1	95%	95%	98%	98%
HUNGARIAN FORINT (FR - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	30%	30%
JAPANESE YEN (JY - CME) vs NEW ZEALAND DOLLAR (NE - CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	51%	51%
JAPANESE YEN (JY - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	New	+1:-1			30%	30%
JAPANESE YEN (JY - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+2:-5	0%	0%	44%	44%
Japanese Yen (JY) vs. Swiss Franc (SF)						
Spread Credit Rate	Increase	+1:-1	30%	30%	47%	47%
MEXICAN PESO (MP - CME) vs AFRICAN RAND (RA - CME)						
Spread Credit Rate	Decrease	+1:-1	40%	40%	0%	0%
NEW ZEALAND DOLLAR (NE - CME) vs AFRICAN RAND (RA - CME)						
Spread Credit Rate	Increase	+1:-1	25%	25%	30%	30%
NEW ZEALAND DOLLAR (NE - CME) vs CHINESE RENMINBI (RMB - CME)						
Spread Credit Rate	Increase	+2:-5	0%	0%	30%	30%
NEW ZEALAND DOLLAR (NE - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Decrease	+1:-5	30%	30%	26%	26%
NEW ZEALAND DOLLAR (NE - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Decrease	+1:-4	30%	30%	26%	26%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Swedish Krona (SE) vs. Norwegian Krone (UN)						
Spread Credit Rate	Increase	+1:-1	30%	30%	58%	58%
SWISS FRANC (SF - CME) vs KOREAN WON (KRW - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
SWISS FRANC (SF - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Increase	+1:-3	0%	0%	30%	30%
SWISS FRANC (SF - CME) vs SWEDISH KRONA (SE - CME)						
Spread Credit Rate	Increase	+2:-5	30%	30%	50%	50%
Swiss Franc (SF) vs New Zealand Dollar (NE)						
Spread Credit Rate	Increase	+3:-5	0%	0%	39%	39%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
INTEREST RATES - Inter-commodity Spread Rates						
(BU2 - CME) vs (ZA9102 - CME)						
Spread Credit Rate	Decrease	+1:-10	60%	60%	45%	45%
(BU2 - CME) vs (ZA9202 - CME)						
Spread Credit Rate	Decrease	+1:-10	60%	60%	45%	45%
10 YEAR EUR INTEREST RATE DSF (N1E - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	40%	40%
10 YEAR EUR INTEREST RATE DSF (N1E - CME) vs 30 YEAR USD INTEREST RATE DSF (B1U - CME)						
Spread Credit Rate	Increase	+5:-3	0%	0%	55%	55%
10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	85%	85%
10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	Increase	+1:-2	0%	0%	50%	50%
10 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Decrease	+1:+1	70%	70%	60%	60%
10YR DELIVERABLE SWAP FUTURE vs 30YR DELIVERABLE SWAP FUTURE						
Spread Credit Rate	Increase	+5:-3	65%	65%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+1:+1	75%	75%	85%	85%
10YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Increase	+1:+2	0%	0%	50%	50%
10YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+2:+3	60%	60%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+2:+5	0%	0%	50%	50%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 21-24						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 25-28						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 29-32						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 33-36						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 37-40						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 41-44						
Spread Credit Rate	Decrease	+2:+5	80%	80%	75%	75%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+2:+5	35%	35%	60%	60%
10YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Increase	+2:+5	50%	50%	70%	70%
2 YEAR EUR INTEREST RATE DSF (T1E - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+4:-1	0%	0%	35%	35%
2 YEAR EUR INTEREST RATE DSF (T1E - CME) vs 30-YEAR T-BOND (17 - CME)						
Spread Credit Rate	Increase	+7:-1	0%	0%	25%	25%
2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Decrease	+4:-1	50%	50%	40%	40%
2 YR EURODOLLAR BUNDLE FUTURE (BU2 - CME) vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Decrease	+1:-10	60%	60%	45%	45%
2 YR TREASURY vs 5YR DELIVERABLE SWAP CME						
Spread Credit Rate	Decrease	+5:-6	80%	80%	70%	70%
2 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Increase	+2:+1	0%	0%	35%	35%
20YR INTEREST RATE SWAP FUTURE ERIS (ZD9120 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+2	50%	50%	65%	65%
20YR INTEREST RATE SWAP FUTURE ERIS (ZD9220 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+2	50%	50%	65%	65%
2-YEAR T-NOTE (26 - CME) vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+3:-1	0%	0%	50%	50%
2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	Decrease	+2:+1	70%	70%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME) vs EURODOLLAR (ED - CME)						
Spread Credit Rate	Decrease	+7:+10	60%	60%	55%	55%
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Decrease	+4:+1	50%	50%	40%	40%
2YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Decrease	+2:+1	70%	70%	60%	60%
2YR INTEREST RATE SWAP FUTURE ERIS vs 30YR TREASURY						
Spread Credit Rate	Increase	+3:+1	0%	0%	25%	25%
Spread Credit Rate	Increase	+3:+10	0%	0%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Decrease	+6:+5	60%	60%	40%	40%
2YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	30%	30%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 1 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	30%	30%	25%	25%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 10 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 11 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 2 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	55%	55%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 3 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	45%	45%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 4 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	35%	35%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 5 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	60%	60%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 6 EURODOLLARS						
Spread Credit Rate	Decrease	+7:+10	50%	50%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 7 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 8 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
2YR INTEREST RATE SWAP FUTURE ERIS vs TIER 9 EURODOLLARS						
Spread Credit Rate	Increase	+7:+10	0%	0%	30%	30%
3 YR INTEREST RATE SWAP FUTURE ERIS (ZB9203 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+4:-1	50%	50%	60%	60%
3 YR INTEREST RATE SWAP FUTURE ERIS (ZB9203 - CME) vs 2-YEAR T-NOTE (26 - CME)						
Spread Credit Rate	New	+5:+6			70%	70%
30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+3:-5	60%	60%	70%	70%
30YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+3:+5	60%	60%	70%	70%
30YR INTEREST RATE SWAP FUTURE ERIS vs 2YR TREASURY						
Spread Credit Rate	Increase	+1:+3	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs 30YR TREASURY						
Spread Credit Rate	Increase	+1:+1	65%	65%	80%	80%
30YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+1:+3	40%	40%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+1:+4	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Increase	+1:+4	40%	40%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Increase	+1:+4	60%	60%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 21-24						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 25-28						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 29-32						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 33-36						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 37-40						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 41-44						
Spread Credit Rate	Decrease	+1:+4	75%	75%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+1:+4	0%	0%	50%	50%
30YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Increase	+1:+4	30%	30%	50%	50%
30YR TREASURY vs 30YR DELIVERABLE SWAP FUTURE						
Spread Credit Rate	Increase	+1:-1	70%	70%	80%	80%
3YR INTEREST RATE SWAP FUTURE ERIS (ZB9103 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+4:-1	50%	50%	60%	60%
4 YR INTEREST RATE SWAP FUTURE ERIS (ZB9104 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+3:-2	60%	60%	70%	70%
4YR INTEREST RATE SWAP FUTURE ERIS (ZB9204 - CME) vs 10-YEAR T-NOTE (21 - CME)						
Spread Credit Rate	Increase	+3:-2	60%	60%	70%	70%
5 YR TREASURY VS 7 YEAR SWAP ERIS						
Spread Credit Rate	Increase	+3:+2	50%	50%	70%	70%
5YR DELIVERABLE SWAP FUTURE vs 10YR DELIVERABLE SWAP FUTURE						
Spread Credit Rate	Increase	+3:-2	75%	75%	85%	85%
5YR DELIVERABLE SWAP FUTURE vs 30YR DELIVERABLE SWAP FUTURE						
Spread Credit Rate	Increase	+4:-1	60%	60%	75%	75%
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9105 - CME) vs ULTRA LONG TREASURY BOND (UBE - CME)						
Spread Credit Rate	Increase	+5:+1	50%	50%	60%	60%
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME) vs ULTRA LONG TREASURY BOND (UBE - CME)						
Spread Credit Rate	Increase	+5:+1	50%	50%	60%	60%
5YR INTEREST RATE SWAP FUTURE ERIS vs 10YR TREASURY						
Spread Credit Rate	Increase	+3:+2	70%	70%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 1-3						
Spread Credit Rate	Increase	+3:+5	0%	0%	50%	50%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 13-16						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 17-20						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 4-8						
Spread Credit Rate	Increase	+3:+5	40%	40%	60%	60%
5YR INTEREST RATE SWAP FUTURE ERIS vs EURODOLLARS Contracts 9-12						
Spread Credit Rate	Decrease	+3:+5	85%	85%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
5YR TREASURY vs 10YR DELIVERABLE SWAP FUTURE						
Spread Credit Rate	Increase	+2:-3	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 1-3 vs 10 YEAR EUR INTEREST RATE DSF (N1E - CME)						
Spread Credit Rate	Increase	+2:-5	0%	0%	35%	35%
EURODOLLAR (ED - CME) Contracts 1-3 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 1-3 vs 5 YEAR EUR INTEREST RATE DSF (F1E - CME)						
Spread Credit Rate	Increase	+3:-5	0%	0%	40%	40%
EURODOLLAR (ED - CME) Contracts 13-16 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 13-16 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 13-16 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 1-4 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	0%	0%	50%	50%
EURODOLLAR (ED - CME) Contracts 1-4 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	0%	0%	50%	50%
EURODOLLAR (ED - CME) Contracts 1-4 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	0%	0%	50%	50%
EURODOLLAR (ED - CME) Contracts 17-20 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 17-20 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 17-20 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Decrease	+10:-7	35%	35%	30%	30%
EURODOLLAR (ED - CME) Contracts 17-20 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 21-24 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Decrease	+10:-7	35%	35%	30%	30%
EURODOLLAR (ED - CME) Contracts 21-24 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 21-24 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EURODOLLAR (ED - CME) Contracts 21-24 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 25-28 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 25-28 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 25-28 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Increase	+10:-7	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 25-28 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 29-32 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 29-32 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 29-32 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Increase	+10:-7	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 29-32 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 29-32 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	65%	65%	75%	75%
EURODOLLAR (ED - CME) Contracts 33-36 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 33-36 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 33-36 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Increase	+10:-7	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 33-36 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 33-36 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	65%	65%	75%	75%
EURODOLLAR (ED - CME) Contracts 37-40 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 37-40 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EURODOLLAR (ED - CME) Contracts 37-40 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Increase	+10:-7	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 37-40 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 37-40 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	65%	65%	75%	75%
EURODOLLAR (ED - CME) Contracts 41-44 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	55%	55%	75%	75%
EURODOLLAR (ED - CME) Contracts 41-44 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 41-44 vs 2 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (T1U - CME)						
Spread Credit Rate	Increase	+10:-7	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 41-44 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	45%	45%	65%	65%
EURODOLLAR (ED - CME) Contracts 41-44 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	65%	65%	75%	75%
EURODOLLAR (ED - CME) Contracts 4-8 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 5-8 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	40%	40%	60%	60%
EURODOLLAR (ED - CME) Contracts 5-8 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	0%	0%	50%	50%
EURODOLLAR (ED - CME) Contracts 5-8 vs 5 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (F1U - CME)						
Spread Credit Rate	Increase	+5:-3	45%	45%	60%	60%
EURODOLLAR (ED - CME) Contracts 9-12 vs 10 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (N1U - CME)						
Spread Credit Rate	Increase	+5:-2	50%	50%	70%	70%
EURODOLLAR (ED - CME) Contracts 9-12 vs 2 YEAR EUR INTEREST RATE DSF (T1E - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
EURODOLLAR (ED - CME) Contracts 9-12 vs 30 YEAR INTEREST RATE SWAP DELIVERABLE FUTURE (B1U - CME)						
Spread Credit Rate	Increase	+4:-1	30%	30%	50%	50%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 2YR INTEREST RATE SWAP FUTURE ERIS (ZA9102 - CME)						
Spread Credit Rate	New	+1:+4			40%	40%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 2YR INTEREST RATE SWAP FUTURE ERIS (ZA9202 - CME)						
Spread Credit Rate	New	+1:+4			40%	40%
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN - CME) vs 5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME)						
Spread Credit Rate	New	+1:+2			65%	65%
NATURAL GAS - Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE A 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-K4 - CME)						
Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)						
Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-N9 - CME)						
Spread Credit Rate	Decrease	+1:-194	70%	70%	60%	60%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Decrease	+194:-1	70%	70%	60%	60%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-N9 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Decrease	+194:-1	70%	70%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
NGL/PETROCHEMICALS - Inter-commodity Spread Rates						
1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME)						
Spread Credit Rate	Decrease	+2:-15	40%	40%	25%	25%
ARGUS PROPANE (SAUDI ARAMCO) SWAP FUTURES (NY-9N - CME) vs MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME)						
Spread Credit Rate	Decrease	+2:-15	55%	55%	40%	40%
CONWAY NATURAL GASOLINE (OPIS) SWAP FUTURES (NY-8L - CME) vs MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME)						
Spread Credit Rate	Decrease	+1:-1	40%	40%	30%	30%
EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	65%	65%
EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs JAPAN C&F NAPHTHA (PLATTS) SWAP FUTURES (NY-JA - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	65%	65%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	45%	45%
MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME) vs ARGUS PROPANE FAR EAST INDEX SWAP FUTURES (NY-7E - CME)						
Spread Credit Rate	Decrease	+12:-1	60%	60%	50%	50%
PROPANE NON-LDH MONT BELVIEU (OPIS) SWAP FUTURES (NY-1R - CME) vs MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	20%	20%
SINGAPORE MOGAS 92 UNLEADED (PLATTS) SWAP FUTURES (NY-1N - CME) vs MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
REFINED PRODUCTS - Inter-commodity Spread Rates						
1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME)						
Spread Credit Rate	Decrease	+2:-15	40%	40%	25%	25%
EUROPEAN GASOIL BULLET SWAP FUTURES (NY-BG - CME) vs EUROPEAN JET KEROSENE (PLATTS) CARGOES CIF NWE CALENDAR SWAP FUTURES (NY-UJ - CME)						
Spread Credit Rate	New	+1:-1			67%	67%
Spread Credit Rate	New	+1:-1			95%	95%
EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs EUROPEAN NAPHTHA (PLATTS) CALENDAR SWAP FUTURES (NY-UN - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	65%	65%
EUROPEAN PROPANE CIF ARA (ARGUS) SWAP FUTURES (NY-PS - CME) vs JAPAN C&F NAPHTHA (PLATTS) SWAP FUTURES (NY-JA - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	65%	65%
SINGAPORE MOGAS 92 UNLEADED (PLATTS) SWAP FUTURES (NY-1N - CME) vs MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
COAL - Volatility Scan (volScan) Rate						
COAL (API 2) CIF ARA (ARGUS/MCCLOSKEY) SWAP FUTURESS (MTF, MTO) - volScan						
Clearing Member Rate	Month 1	Decrease		0.080		0.075
Clearing Member Rate	Month 2	Decrease		0.040		0.035
COAL (API 4) FOB RICHARDS BAY (ARGUS/MCCLOSKEY) SWAP FUTURES (MFF, MFO) - volScan						
Clearing Member Rate	Mnth 1	Decrease		0.080		0.075
Clearing Member Rate	Mnths 2	Decrease		0.040		0.035
Clearing Member Rate	Mnths 5-7	Increase		0.015		0.020
Clearing Member Rate	Mnths 8-11	Increase		0.015		0.020
Clearing Member Rate	Mnths 12+	Increase		0.015		0.020
FX - Volatility Scan (volScan) Rate						
AFRICAN RAND (RA, RA) - volScan						
Clearing Member Rate		Decrease		0.070		0.040
AUSTRALIAN DOLLAR (AD, AD, ADU, M6A, V6A, VXA, XA) - volScan						
Clearing Member Rate		Decrease		0.025		0.015
BRAZILIAN REAL (BR, BR) - volScan						
Clearing Member Rate	Jan 17 - Dec 17	Decrease		0.070		0.040
Clearing Member Rate	Jan18 - Dec18	Decrease		0.070		0.040
Clearing Member Rate	Jan19 - Dec19	Decrease		0.070		0.040
Clearing Member Rate	Jan 20+	Decrease		0.070		0.040
BRITISH POUND (BP, BP, GBU, M6B, V6B, VXB, YB) - volScan						
Clearing Member Rate		Decrease		0.040		0.025
CANADIAN DOLLAR (CAU, CD, CD, MCD, V6C, VXC, YD) - volScan						
Clearing Member Rate		Decrease		0.025		0.015
CHINESE RENMINBI (RMB, RMB) - volScan						
Clearing Member Rate	Mnth 1	Decrease		0.070		0.040
Clearing Member Rate	Mnths 2+	Decrease		0.070		0.040
CROSS RATE CHINESE RENMINBI/EURO (RME, RME) - volScan						
Clearing Member Rate		Decrease		0.060		0.030
CROSS RATE CZECH KORUNA/EURO FX (K, K) - volScan						
Clearing Member Rate		Decrease		0.060		0.030
CROSS RATE EURO FX/BRITISH POUND (RP, RP) - volScan						
Clearing Member Rate		Decrease		0.050		0.030
CROSS RATE EURO FX/JAPANESE YEN (RY, RY) - volScan						
Clearing Member Rate		Decrease		0.050		0.030
CROSS RATE EURO FX/SWISS FRANC (RF, RF) - volScan						
Clearing Member Rate		Decrease		0.080		0.030
CROSS RATE HUNGARIAN FORINT/ EURO FX (R, R) - volScan						

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
Clearing Member Rate		Decrease		0.060		0.030
CZECH KORUNA (CZ, CZ) - volScan						
Clearing Member Rate		Decrease		0.060		0.040
EURO FX (E7, EC, EC, EUU, M6E, V6E, VXT, YT) - volScan						
Clearing Member Rate	Month 1	Decrease		0.040		0.030
Clearing Member Rate	Months 2+	New				0.025
HUNGARIAN FORINT (FR, FR) - volScan						
Clearing Member Rate		Decrease		0.060		0.040
ISRAELI SHEKEL (IS, IS) - volScan						
Clearing Member Rate		Decrease		0.060		0.040
JAPANESE YEN (J7, JPU, JY, JY, MJY, V6J, VXJ, YJ) - volScan						
Clearing Member Rate	Month 1	Decrease		0.040		0.030
Clearing Member Rate	Months 2+	New				0.020
KOREAN WON (KRW, KRW) - volScan						
Clearing Member Rate		Decrease		0.060		0.040
MEXICAN PESO (MP, MP) - volScan						
Clearing Member Rate	Months 6+	New				0.040
NEW ZEALAND DOLLAR (NE, NE) - volScan						
Clearing Member Rate		Decrease		0.040		0.030
POLISH ZLOTY (PZ, PZ) - volScan						
Clearing Member Rate		Decrease		0.060		0.040
POLISH ZLOTY/EURO FX (Z, Z) - volScan						
Clearing Member Rate		Decrease		0.050		0.030
RUSSIAN RUBLE (RU, RU) - volScan						
Clearing Member Rate	Jan 17 - Dec 17	Decrease		0.070		0.060
Clearing Member Rate	Jan 18 - Dec 18	Decrease		0.070		0.060
Clearing Member Rate	Jan 19 - Dec 19	Decrease		0.070		0.060
Clearing Member Rate	Jan 20+	Decrease		0.070		0.060
SWISS FRANC (CHU, MSF, SF, SF, V6S, VXS, YS) - volScan						
Clearing Member Rate	Month 1	Decrease		0.035		0.025
Clearing Member Rate	Months 2+	New				0.020

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
INTEREST RATES - Volatility Scan (volScan) Rate						
10-YEAR T-NOTE (21, 21, 551) - volScan						
Clearing Member Rate		Decrease		0.023		0.018
2-YEAR T-NOTE (26, 26, 59) - volScan						
Clearing Member Rate	Mnth 1	Decrease		0.006		0.004
Clearing Member Rate	Mnths 2+	Decrease		0.006		0.004
5-YEAR T-NOTE (25, 25, 57) - volScan						
Clearing Member Rate		Decrease		0.017		0.012
EURODOLLAR (E2W, E3W, E5, ED, ED, EED, ET, TF) - volScan						
Clearing Member Rate	Mnth1	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth2	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth3	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth4	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth5	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth6	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth7	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth8	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth9	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth10	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth11	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth12	Decrease		0.001375		0.0011
Clearing Member Rate	Mnth13	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth14	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth15	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth16	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth17	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth18	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth19	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth20	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth21	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth22	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth23	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth24	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth25	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth26	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth27	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth28	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth29	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth30	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth31	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth32	Decrease		0.0016		0.0013

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Tier Description	Change	Current Initial	Current Maintenance	New Initial	New Maintenance
Volatility Scan (volScan) Rate						
Clearing Member Rate	Mnth33	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth34	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth35	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth36	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth37	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth38	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth39	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth40	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth41	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth42	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth43	Decrease		0.0016		0.0013
Clearing Member Rate	Mnth44	Decrease		0.0016		0.0013
FED FUNDS (41, 41) - volScan						
Clearing Member Rate	Month 1	Increase		0.0007		0.0008
U.S. TREASURY BOND (17, 17, 53) - volScan						
Clearing Member Rate	Month 1	Decrease		0.030		0.025
Clearing Member Rate	Month 2+	Decrease		0.030		0.025
ULTRA 10-YEAR U.S. TREASURY NOTE FUTURES (TN, TN, TNW) - volScan						
Clearing Member Rate		Decrease		0.023		0.018
ULTRA LONG TREASURY BOND (UBE, UBE) - volScan						
Clearing Member Rate		Decrease		0.040		0.030