



#17-051

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, February 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, February 03, 2017.

Current rates as of:

Thursday, February 02, 2017.

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
COAL - Outright Rates								
COAL API5 FOB NEWCASTLE ARG/MC FUT (ACM)								
ACM	Spec	Mnths 13+	Increase	USD	4,818	4,380	5,500	5,000
ACM	Hedge/Member	Mnths 13+	Increase	USD	4,380	4,380	5,000	5,000
ILLINOIS BASIN COAL FUTURES (ILB)								
ILB	Spec	Month 1	Increase	USD	3,850	3,500	6,600	6,000
ILB	Hedge/Member	Month 1	Increase	USD	3,500	3,500	6,000	6,000
ILB	Spec	Mth 2-6	Increase	USD	3,300	3,000	4,400	4,000
ILB	Hedge/Member	Mth 2-6	Increase	USD	3,000	3,000	4,000	4,000
ILB	Spec	Mth 7+	Increase	USD	2,200	2,000	4,400	4,000
ILB	Hedge/Member	Mth 7+	Increase	USD	2,000	2,000	4,000	4,000
INDONESIAN COAL MCCLOSKEY SUBBIT. (MCC)								
MCC	Spec	Mths 7+	Increase	USD	4,400	4,000	5,940	5,400
MCC	Hedge/Member	Mths 7+	Increase	USD	4,000	4,000	5,400	5,400
WESTERN RAIL DELIVERY PRB COAL FUT (QP)								
QP	Spec	Mnths 3-6	Increase	USD	880	800	924	840
QP	Hedge/Member	Mnths 3-6	Increase	USD	800	800	840	840

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

ELECTRICITY - Outright Rates

NEPOOL CONECTIC 5MW D AH PK (P2)

P2	Spec	Mnth 1	New	USD			1,100	1,000
P2	Hedge/Member	Mnth 1	New	USD			1,000	1,000
P2	Spec	Mnth 2	Decrease	USD	1,100	1,000	770	700
P2	Hedge/Member	Mnth 2	Decrease	USD	1,000	1,000	700	700
P2	Spec	Mnths 3-5	Decrease	USD	1,056	960	550	500
P2	Hedge/Member	Mnths 3-5	Decrease	USD	960	960	500	500
P2	Spec	Mnths 6-11	Decrease	USD	550	500	275	250
P2	Hedge/Member	Mnths 6-11	Decrease	USD	500	500	250	250
P2	Spec	Mnths +12	Decrease	USD	523	475	275	250
P2	Hedge/Member	Mnths +12	Decrease	USD	475	475	250	250

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

H2	Spec	Mnth 1	Decrease	USD	55	50	33	30
H2	Hedge/Member	Mnth 1	Decrease	USD	50	50	30	30
H2	Spec	Mnth 2	Decrease	USD	61	55	28	25
H2	Hedge/Member	Mnth 2	Decrease	USD	55	55	25	25
H2	Spec	Mnths 3-4	Decrease	USD	33	30	11	10
H2	Hedge/Member	Mnths 3-4	Decrease	USD	30	30	10	10
H2	Spec	Mnths 5-11	Decrease	USD	22	20	11	10
H2	Hedge/Member	Mnths 5-11	Decrease	USD	20	20	10	10
H2	Spec	Mnths 12+	Decrease	USD	28	25	11	10
H2	Hedge/Member	Mnths 12+	Decrease	USD	25	25	10	10

NEPOOL INTR HUB 5MW D AH PK (U6)

U6	Spec	Month 1	Decrease	USD	1,100	1,000	715	650
U6	Hedge/Member	Month 1	Decrease	USD	1,000	1,000	650	650
U6	Spec	Month 2	Decrease	USD	1,100	1,000	550	500
U6	Hedge/Member	Month 2	Decrease	USD	1,000	1,000	500	500
U6	Spec	Mnths 3-5	Decrease	USD	825	750	330	300
U6	Hedge/Member	Mnths 3-5	Decrease	USD	750	750	300	300
U6	Spec	Mnths 6-11	Decrease	USD	440	400	220	200
U6	Hedge/Member	Mnths 6-11	Decrease	USD	400	400	200	200
U6	Spec	Mnths 12+	Decrease	USD	550	500	220	200
U6	Hedge/Member	Mnths 12+	Decrease	USD	500	500	200	200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

NEPOOL W CNTR M 5MW D AH PK (R6)

R6	Spec	Mnth 2	Decrease	USD	1,100	1,000	770	700
R6	Hedge/Member	Mnth 2	Decrease	USD	1,000	1,000	700	700
R6	Spec	Mnths 3-5	Decrease	USD	1,100	1,000	550	500
R6	Hedge/Member	Mnths 3-5	Decrease	USD	1,000	1,000	500	500
R6	Spec	Mnths 6-11	Decrease	USD	660	600	330	300
R6	Hedge/Member	Mnths 6-11	Decrease	USD	600	600	300	300
R6	Spec	Mnths +12	Decrease	USD	495	450	330	300
R6	Hedge/Member	Mnths +12	Decrease	USD	450	450	300	300

PJM AD HUB 5MW REAL TIME PK (Z9)

Z9	Spec	Mnth 1	Decrease	USD	990	900	440	400
Z9	Hedge/Member	Mnth 1	Decrease	USD	900	900	400	400
Z9	Spec	Mnth 2	Decrease	USD	495	450	330	300
Z9	Hedge/Member	Mnth 2	Decrease	USD	450	450	300	300
Z9	Spec	Mnths 3-4	Decrease	USD	275	250	193	175
Z9	Hedge/Member	Mnths 3-4	Decrease	USD	250	250	175	175
Z9	Spec	Mnths 5-11	Decrease	USD	193	175	165	150
Z9	Hedge/Member	Mnths 5-11	Decrease	USD	175	175	150	150
Z9	Spec	Mnths 12+	Decrease	USD	209	190	165	150
Z9	Hedge/Member	Mnths 12+	Decrease	USD	190	190	150	150

PJM AECO DA PEAK (Y1)

Y1	Spec	Mnth 1	Decrease	USD	1,100	1,000	660	600
Y1	Hedge/Member	Mnth 1	Decrease	USD	1,000	1,000	600	600
Y1	Spec	Mnth 2	Decrease	USD	660	600	550	500
Y1	Hedge/Member	Mnth 2	Decrease	USD	600	600	500	500
Y1	Spec	Mnths 3-5	Decrease	USD	550	500	440	400
Y1	Hedge/Member	Mnths 3-5	Decrease	USD	500	500	400	400
Y1	Spec	Mnths 6-11	Decrease	USD	330	300	220	200
Y1	Hedge/Member	Mnths 6-11	Decrease	USD	300	300	200	200
Y1	Spec	Mnths 12+	Decrease	USD	330	300	220	200
Y1	Hedge/Member	Mnths 12+	Decrease	USD	300	300	200	200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

PJM BGE DA PEAK (E3)

E3	Spec	Mnth 1	Decrease	USD	1,155	1,050	660	600
E3	Hedge/Member	Mnth 1	Decrease	USD	1,050	1,050	600	600
E3	Spec	Mnth 2	Decrease	USD	660	600	495	450
E3	Hedge/Member	Mnth 2	Decrease	USD	600	600	450	450
E3	Spec	Mnths 3-4	Decrease	USD	495	450	440	400
E3	Hedge/Member	Mnths 3-4	Decrease	USD	450	450	400	400
E3	Spec	Mnths 5-11	Decrease	USD	385	350	248	225
E3	Hedge/Member	Mnths 5-11	Decrease	USD	350	350	225	225
E3	Spec	Mnts 12+	Decrease	USD	429	390	248	225
E3	Hedge/Member	Mnts 12+	Decrease	USD	390	390	225	225

PJM COMED 5MW D AH PK (D8)

D8	Spec	Mnth 2	Decrease	USD	440	400	385	350
D8	Hedge/Member	Mnth 2	Decrease	USD	400	400	350	350
D8	Spec	Mnths 3-4	Decrease	USD	440	400	330	300
D8	Hedge/Member	Mnths 3-4	Decrease	USD	400	400	300	300
D8	Spec	Mnths 5-11	Decrease	USD	248	225	193	175
D8	Hedge/Member	Mnths 5-11	Decrease	USD	225	225	175	175
D8	Spec	Mnths 12+	Decrease	USD	275	250	193	175
D8	Hedge/Member	Mnths 12+	Decrease	USD	250	250	175	175

PJM DAYTON DA PEAK (D7)

D7	Spec	Mnth 1	Decrease	USD	605	550	385	350
D7	Hedge/Member	Mnth 1	Decrease	USD	550	550	350	350
D7	Spec	Mnth 2	Decrease	USD	495	450	330	300
D7	Hedge/Member	Mnth 2	Decrease	USD	450	450	300	300
D7	Spec	Mnths 3-4	Decrease	USD	275	250	165	150
D7	Hedge/Member	Mnths 3-4	Decrease	USD	250	250	150	150
D7	Spec	Mnths 5-11	Decrease	USD	220	200	165	150
D7	Hedge/Member	Mnths 5-11	Decrease	USD	200	200	150	150
D7	Spec	Mnths 12+	Decrease	USD	231	210	165	150
D7	Hedge/Member	Mnths 12+	Decrease	USD	210	210	150	150

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM DPL DA OFF-PEAK (E8)								
E8	Spec	Mnth 1	Decrease	USD	44	40	33	30
E8	Hedge/Member	Mnth 1	Decrease	USD	40	40	30	30
E8	Spec	Mnth 2	Decrease	USD	44	40	33	30
E8	Hedge/Member	Mnth 2	Decrease	USD	40	40	30	30
E8	Spec	Mnths 3-11	Decrease	USD	39	35	22	20
E8	Hedge/Member	Mnths 3-11	Decrease	USD	35	35	20	20
E8	Spec	Mnths 12+	Decrease	USD	39	35	22	20
E8	Hedge/Member	Mnths 12+	Decrease	USD	35	35	20	20
PJM JCPL DA PEAK (J2)								
J2	Spec	Mnth 1	Decrease	USD	990	900	660	600
J2	Hedge/Member	Mnth 1	Decrease	USD	900	900	600	600
J2	Spec	Mnth 2	Decrease	USD	825	750	550	500
J2	Hedge/Member	Mnth 2	Decrease	USD	750	750	500	500
J2	Spec	Mnths 3-11	Decrease	USD	495	450	440	400
J2	Hedge/Member	Mnths 3-11	Decrease	USD	450	450	400	400
J2	Spec	Mnths 12+	Decrease	USD	429	390	220	200
J2	Hedge/Member	Mnths 12+	Decrease	USD	390	390	200	200
PJM METED ZONE OFFPK CAL MO LMP FUT (46)								
46	Spec	Mnth 2	Decrease	USD	33	30	22	20
46	Hedge/Member	Mnth 2	Decrease	USD	30	30	20	20
46	Spec	Mnths 3-4	Decrease	USD	28	25	22	20
46	Hedge/Member	Mnths 3-4	Decrease	USD	25	25	20	20
46	Spec	Mnths 5-11	Decrease	USD	17	15	11	10
46	Hedge/Member	Mnths 5-11	Decrease	USD	15	15	10	10
46	Spec	Mnths 12+	Decrease	USD	22	20	11	10
46	Hedge/Member	Mnths 12+	Decrease	USD	20	20	10	10
PJM NI HUB 5MW REAL TIME PK (B3)								
B3	Spec	Mnth 1	Decrease	USD	880	800	385	350
B3	Hedge/Member	Mnth 1	Decrease	USD	800	800	350	350
B3	Spec	Mnth 2	Decrease	USD	440	400	330	300
B3	Hedge/Member	Mnth 2	Decrease	USD	400	400	300	300
B3	Spec	Mnths 3-4	Decrease	USD	275	250	165	150
B3	Hedge/Member	Mnths 3-4	Decrease	USD	250	250	150	150
B3	Spec	Mnths 5-11	Decrease	USD	248	225	165	150
B3	Hedge/Member	Mnths 5-11	Decrease	USD	225	225	150	150
B3	Spec	Mnths 12+	Decrease	USD	231	210	165	150
B3	Hedge/Member	Mnths 12+	Decrease	USD	210	210	150	150

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM NILL DA PEAK (N3)								
N3	Spec	Mnth 1	Decrease	USD	743	675	385	350
N3	Hedge/Member	Mnth 1	Decrease	USD	675	675	350	350
N3	Spec	Mnth 2	Decrease	USD	440	400	385	350
N3	Hedge/Member	Mnth 2	Decrease	USD	400	400	350	350
N3	Spec	Mnths 3-4	Increase	USD	330	300	385	350
N3	Hedge/Member	Mnths 3-4	Increase	USD	300	300	350	350
N3	Spec	Mnths 5-11	Decrease	USD	220	200	165	150
N3	Hedge/Member	Mnths 5-11	Decrease	USD	200	200	150	150
N3	Spec	Mnths 12+	Decrease	USD	275	250	165	150
N3	Hedge/Member	Mnths 12+	Decrease	USD	250	250	150	150
PJM PECO Z5 MW PK CLM DA LMP (4N)								
4N	Spec	Mnth 2	Decrease	USD	605	550	550	500
4N	Hedge/Member	Mnth 2	Decrease	USD	550	550	500	500
4N	Spec	Mnths 3-11	Decrease	USD	605	550	440	400
4N	Hedge/Member	Mnths 3-11	Decrease	USD	550	550	400	400
4N	Spec	Mnths 12+	Decrease	USD	605	550	440	400
4N	Hedge/Member	Mnths 12+	Decrease	USD	550	550	400	400
PJM PEPCO DA PEAK (R8)								
R8	Spec	Mnth 1	Decrease	USD	1,100	1,000	660	600
R8	Hedge/Member	Mnth 1	Decrease	USD	1,000	1,000	600	600
R8	Spec	Mnth 2	Decrease	USD	1,100	1,000	550	500
R8	Hedge/Member	Mnth 2	Decrease	USD	1,000	1,000	500	500
R8	Spec	Mnths 3-11	Decrease	USD	1,100	1,000	440	400
R8	Hedge/Member	Mnths 3-11	Decrease	USD	1,000	1,000	400	400
R8	Spec	Mnths 12+	Decrease	USD	1,100	1,000	275	250
R8	Hedge/Member	Mnths 12+	Decrease	USD	1,000	1,000	250	250
PJM PPL DA OFF-PEAK (F5)								
F5	Spec	Mnth 1	Decrease	USD	33	30	28	25
F5	Hedge/Member	Mnth 1	Decrease	USD	30	30	25	25
F5	Spec	Mnth 2	Decrease	USD	33	30	28	25
F5	Hedge/Member	Mnth 2	Decrease	USD	30	30	25	25
F5	Spec	Mnths 3-4	Decrease	USD	33	30	28	25
F5	Hedge/Member	Mnths 3-4	Decrease	USD	30	30	25	25
F5	Spec	Mnths 5-11	Decrease	USD	22	20	17	15
F5	Hedge/Member	Mnths 5-11	Decrease	USD	20	20	15	15
F5	Spec	Mnths 12+	Decrease	USD	22	20	17	15
F5	Hedge/Member	Mnths 12+	Decrease	USD	20	20	15	15

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM PSEG DA OFF-PEAK (W6)								
W6	Spec	Mnths 3-4	Decrease	USD	55	50	39	35
W6	Hedge/Member	Mnths 3-4	Decrease	USD	50	50	35	35
W6	Spec	Mnths 5-11	Decrease	USD	55	50	39	35
W6	Hedge/Member	Mnths 5-11	Decrease	USD	50	50	35	35
PJM PSEG DA PEAK (L6)								
L6	Spec	Mnth 2	Decrease	USD	660	600	550	500
L6	Hedge/Member	Mnth 2	Decrease	USD	600	600	500	500
L6	Spec	Mnths 3-11	Decrease	USD	605	550	440	400
L6	Hedge/Member	Mnths 3-11	Decrease	USD	550	550	400	400
L6	Spec	Mnths 12+	Decrease	USD	605	550	220	200
L6	Hedge/Member	Mnths 12+	Decrease	USD	550	550	200	200
PJM WES HUB PEAK CAL MON REAL TIME (L1)								
L1	Spec	Mth 1	Decrease	USD	770	700	385	350
L1	Hedge/Member	Mth 1	Decrease	USD	700	700	350	350
L1	Spec	Mnth 2	Decrease	USD	660	600	330	300
L1	Hedge/Member	Mnth 2	Decrease	USD	600	600	300	300
L1	Spec	Mnths 3-5	Decrease	USD	385	350	220	200
L1	Hedge/Member	Mnths 3-5	Decrease	USD	350	350	200	200
L1	Spec	Mnths 6-11	Decrease	USD	220	200	110	100
L1	Hedge/Member	Mnths 6-11	Decrease	USD	200	200	100	100
L1	Spec	Mnths 12	Decrease	USD	275	250	110	100
L1	Hedge/Member	Mnths 12	Decrease	USD	250	250	100	100
PJM WES HUB PEAK LMP 50 MW (4S)								
4S	Spec	Mth 1	Decrease	USD	7,700	7,000	3,850	3,500
4S	Hedge/Member	Mth 1	Decrease	USD	7,000	7,000	3,500	3,500
4S	Spec	Mnth 2	Decrease	USD	6,600	6,000	3,300	3,000
4S	Hedge/Member	Mnth 2	Decrease	USD	6,000	6,000	3,000	3,000
4S	Spec	Mnths 3-5	Decrease	USD	3,850	3,500	2,200	2,000
4S	Hedge/Member	Mnths 3-5	Decrease	USD	3,500	3,500	2,000	2,000
4S	Spec	Mnths 6-11	Decrease	USD	2,200	2,000	1,100	1,000
4S	Hedge/Member	Mnths 6-11	Decrease	USD	2,000	2,000	1,000	1,000
4S	Spec	Mnths 12	Decrease	USD	2,750	2,500	1,100	1,000
4S	Hedge/Member	Mnths 12	Decrease	USD	2,500	2,500	1,000	1,000

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

PJM WESTH DA OFF-PEAK (E4)

E4	Spec	Mnth 1	Decrease	USD	39	35	22	20
E4	Hedge/Member	Mnth 1	Decrease	USD	35	35	20	20
E4	Spec	Mnth 2	Decrease	USD	33	30	11	10
E4	Hedge/Member	Mnth 2	Decrease	USD	30	30	10	10
E4	Spec	Mnths 3-4	Decrease	USD	17	15	11	10
E4	Hedge/Member	Mnths 3-4	Decrease	USD	15	15	10	10
E4	Spec	Mnths12+	Decrease	USD	17	15	11	10
E4	Hedge/Member	Mnths12+	Decrease	USD	15	15	10	10

PJM WESTH RT OFF-PEAK (N9)

N9	Spec	Mnth 1	Decrease	USD	44	40	33	30
N9	Hedge/Member	Mnth 1	Decrease	USD	40	40	30	30
N9	Spec	Mnth 2	Decrease	USD	33	30	22	20
N9	Hedge/Member	Mnth 2	Decrease	USD	30	30	20	20
N9	Spec	Mnths 3-4	Decrease	USD	17	15	11	10
N9	Hedge/Member	Mnths 3-4	Decrease	USD	15	15	10	10
N9	Spec	Mnths 12+	Decrease	USD	17	15	11	10
N9	Hedge/Member	Mnths 12+	Decrease	USD	15	15	10	10

PJM WESTHDA PEAK (J4)

J4	Spec	Mnth 1	Decrease	USD	770	700	385	350
J4	Hedge/Member	Mnth 1	Decrease	USD	700	700	350	350
J4	Spec	Mnth 2	Decrease	USD	770	700	330	300
J4	Hedge/Member	Mnth 2	Decrease	USD	700	700	300	300
J4	Spec	Mnths 3-5	Decrease	USD	385	350	220	200
J4	Hedge/Member	Mnths 3-5	Decrease	USD	350	350	200	200
J4	Spec	Mnths 6-11	Decrease	USD	220	200	110	100
J4	Hedge/Member	Mnths 6-11	Decrease	USD	200	200	100	100
J4	Spec	Mnths 12+	Decrease	USD	330	300	110	100
J4	Hedge/Member	Mnths 12+	Decrease	USD	300	300	100	100

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
FREIGHT - Outright Rates								
FREIGHT ROUTE 5TC AVERAGE (BALTIC) (CF2)								
CF2	Spec	Tier 1	Decrease	USD	4,950	4,500	3,850	3,500
CF2	Hedge/Member	Tier 1	Decrease	USD	4,500	4,500	3,500	3,500
CF2	Spec	Tier 2	Decrease	USD	3,300	3,000	2,750	2,500
CF2	Hedge/Member	Tier 2	Decrease	USD	3,000	3,000	2,500	2,500
FREIGHT ROUTE LIQUID PETROLEUM GAS (FLP)								
FLP	Spec	Mth 1	Decrease	USD	11,880	10,800	8,800	8,000
FLP	Hedge/Member	Mth 1	Decrease	USD	10,800	10,800	8,000	8,000
FLP	Spec	Mths 2+	Decrease	USD	8,635	7,850	5,500	5,000
FLP	Hedge/Member	Mths 2+	Decrease	USD	7,850	7,850	5,000	5,000
FREIGHT ROUTE TC14 (BALTIC) FUTURES (FRC)								
FRC	Spec	Mnth 1	Decrease	USD	8,800	8,000	5,500	5,000
FRC	Hedge/Member	Mnth 1	Decrease	USD	8,000	8,000	5,000	5,000
FRC	Spec	Mnths 2+	Decrease	USD	8,800	8,000	5,500	5,000
FRC	Hedge/Member	Mnths 2+	Decrease	USD	8,000	8,000	5,000	5,000
FREIGHT ROUTE TD3 (BALTIC) FUTURES (TL)								
TL	Spec	Mnth 1	Decrease	USD	4,950	4,500	3,850	3,500
TL	Hedge/Member	Mnth 1	Decrease	USD	4,500	4,500	3,500	3,500
TL	Spec	Mnth 2	Decrease	USD	4,400	4,000	3,300	3,000
TL	Hedge/Member	Mnth 2	Decrease	USD	4,000	4,000	3,000	3,000
TL	Spec	Mnths 3+	Decrease	USD	4,400	4,000	3,300	3,000
TL	Hedge/Member	Mnths 3+	Decrease	USD	4,000	4,000	3,000	3,000
PANAMAX TIMECHARTER AVE FUTURES (PFU)								
PFU	Spec	Mths 1	Decrease	USD	5,500	5,000	3,300	3,000
PFU	Hedge/Member	Mths 1	Decrease	USD	5,000	5,000	3,000	3,000
PFU	Spec	Mths 2-5	Decrease	USD	5,500	5,000	3,300	3,000
PFU	Hedge/Member	Mths 2-5	Decrease	USD	5,000	5,000	3,000	3,000
PFU	Spec	Mths 6+	Decrease	USD	5,500	5,000	3,300	3,000
PFU	Hedge/Member	Mths 6+	Decrease	USD	5,000	5,000	3,000	3,000
TC2 ROTTERDAM TO USAC 37K MT (TM)								
TM	Spec	Mnth 1	Decrease	USD	11,000	10,000	7,700	7,000
TM	Hedge/Member	Mnth 1	Decrease	USD	10,000	10,000	7,000	7,000
TD7 NORTH SEA TO CONTINENT 80K MT (TK)								
TK	Spec		Increase	USD	1,540	1,400	2,200	2,000
TK	Hedge/Member		Increase	USD	1,400	1,400	2,000	2,000

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

FX - Outright Rates

CHILEAN PESO/US DOLLAR CLP/USD FUT (CHP)

CHP	Spec		Decrease	USD	6,600	6,000	4,950	4,500
CHP	Hedge/Member		Decrease	USD	6,000	6,000	4,500	4,500

E-MICRO USD/CNH FUTURES (MNH)

MNH	Spec	Months 1-3	Decrease	CNH	2,365	2,150	1,925	1,750
MNH	Hedge/Member	Months 1-3	Decrease	CNH	2,150	2,150	1,750	1,750
MNH	Spec	Months 4+	Decrease	CNH	2,365	2,150	1,925	1,750
MNH	Hedge/Member	Months 4+	Decrease	CNH	2,150	2,150	1,750	1,750

USD/CNH FUTURES (CNH)

CNH	Spec	Months 1-3	Decrease	CNH	23,650	21,500	19,250	17,500
CNH	Hedge/Member	Months 1-3	Decrease	CNH	21,500	21,500	17,500	17,500
CNH	Spec	Months 4+	Decrease	CNH	23,650	21,500	19,250	17,500
CNH	Hedge/Member	Months 4+	Decrease	CNH	21,500	21,500	17,500	17,500

METALS - Outright Rates

ALUMINA FOB AUSTRALIA PLATT FUTURES (ALA)

ALA	Spec	Mths 1-4	Increase	USD	1,540	1,400	1,925	1,750
ALA	Hedge/Member	Mths 1-4	Increase	USD	1,400	1,400	1,750	1,750
ALA	Spec	Mths 5+	Increase	USD	1,540	1,400	1,925	1,750
ALA	Hedge/Member	Mths 5+	Increase	USD	1,400	1,400	1,750	1,750

ALUMINA FOB METAL BULLETIN FUTURES (ALB)

ALB	Spec	Mths 1-4	Increase	USD	1,540	1,400	1,925	1,750
ALB	Hedge/Member	Mths 1-4	Increase	USD	1,400	1,400	1,750	1,750
ALB	Spec	Mths 5+	Increase	USD	1,540	1,400	1,925	1,750
ALB	Hedge/Member	Mths 5+	Increase	USD	1,400	1,400	1,750	1,750

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
NGL/PETROCHEMICALS - Intra Spreads								
Mont Belvieu Isobutane (OPIS) Swap - All Months (MT BELVIEU ISO BUTANE 5 DEC. S)								
8I	Spec		Increase	USD	2,200	2,000	2,750	2,500
8I	Hedge/Member		Increase	USD	2,000	2,000	2,500	2,500
REFINED PRODUCTS - Intra Spreads								
Gasoil 0.1 Barges FOB Rdam (Platts) Futures - Mth 1 vs Mths 2 + (GASOIL 0.1 ROTTERDAM BARGES FUT)								
VL	Spec		Increase	USD	7,700	7,000	8,580	7,800
VL	Hedge/Member		Increase	USD	7,000	7,000	7,800	7,800
WEATHER - Intra Spreads								
Cincinnati HDD Monthly (H3) - All Months (CINCINNATI HDD FUTURE)								
H3	Spec		Increase	USD	220	200	2,200	2,000
H3	Hedge/Member		Increase	USD	200	200	2,000	2,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
COAL - Inter-commodity Spread Rates						
COPPER FUTURES (CX-HG - CME) vs COAL (API 2) CIF ARA (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MTF - CME)						
Spread Credit Rate	Decrease	-1:1	30%	30%	0%	0%
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
CRUDE OIL - Inter-commodity Spread Rates						
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs PLATINUM FUTURES (NY-PL - CME)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
COPPER FUTURES (CX-HG - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	35%	35%	0%	0%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	57%	57%	50%	50%
LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME) vs OMAN CRUDE OIL (NY-OQ - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS)						
Spread Credit Rate	Decrease	+1:-1	59%	59%	50%	50%
PALLADIUM FUTURES (NY-PA - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	20%	20%	0%	0%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Decrease	+1:-1	93%	93%	91%	91%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%

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						
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
AEP DAYTON HUB PEAK MONTHLY (NYM-VM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
CIN HUB 5MW DAY AHEAD PEAK (NYM-H5 - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD L (NYM-D7 - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
CIN HUB 5MW DAY AHEAD PEAK (NYM-H5 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	83%	83%
CIN HUB 5MW REAL TIME PEAK (NYM-H3 - CME) vs PJM AD HUB 5MW REAL TIME PEAK (NYM-Z9 - CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	78%	78%
CIN HUB 5MW REAL TIME PEAK (NYM-H3 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP (NYM-L1 - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	80%	80%
CINERGY HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP (NYM-H4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	-194:+1	45%	45%	73%	73%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-H2 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	55%	55%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND RHODE ISLAND ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U5 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND WEST CENTRAL MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R6 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	73%	73%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME)						
Spread Credit Rate	Increase	+1:-11	60%	60%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-4Q - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
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	Increase	+1:-194	35%	35%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE E 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-58 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE F 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4M - CME)						
Spread Credit Rate	New	+1:-194			50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE F 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4L - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE G 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D2 - CME)						
Spread Credit Rate	Increase	+1:-194	20%	20%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE J 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D4 - CME)						
Spread Credit Rate	Increase	+1:-194	35%	35%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-X1 - CME)						
Spread Credit Rate	Increase	+1:-194	35%	35%	68%	68%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	53%	53%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)						
Spread Credit Rate	Increase	+1:-11	45%	45%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK LMP SWAP FUTURES (NY-VP - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-VM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	62%	62%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R3 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	62%	62%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D8 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM DPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E8 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM DUQUESNE ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D5 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM EASTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F4 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	64%	64%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E9 - CME)						
Spread Credit Rate	Increase	+1:-11	0%	0%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F2 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	Increase	+1:-11	40%	40%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
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	Increase	+1:-194	45%	45%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B3 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-N3 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	52%	52%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F5 - CME)						
Spread Credit Rate	Increase	+1:-194	25%	25%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME)						
Spread Credit Rate	Increase	+1:-194	60%	60%	70%	70%
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	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	Increase	+1:-11	60%	60%	72%	72%
ISO New England Connecticut Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-P2-CME) vs ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME)						
Spread Credit Rate	New	+1:-16			70%	70%
ISO NEW ENGLAND INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+11:-1	30%	30%	44%	44%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-U6-CME) vs ISO New England Connecticut Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-P3-CME)						
Spread Credit Rate	New	+1:-16			80%	80%
ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-U6-CME) vs ISO New England Connecticut Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-P2-CME)						
Spread Credit Rate	Increase	+1:-1	85%	85%	90%	90%
ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-U6-CME) vs PJM BGE Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-E3-CME)						
Spread Credit Rate	New	+1:-1			40%	40%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs ISO New England Connecticut Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-P3-CME)						
Spread Credit Rate	Increase	+1:-1	80%	80%	85%	85%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs ISO New England Mass Hub 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-U6-CME)						
Spread Credit Rate	New	+16:-1			90%	90%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	New	+16:-1			45%	45%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM BGE Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-E3-CME)						
Spread Credit Rate	New	+16:-1			55%	55%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	New	+16:-1			50%	50%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-4P-CME)						
Spread Credit Rate	New	+1:-1			45%	45%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	New	+16:-1			45%	45%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME)						
Spread Credit Rate	New	+16:-1			40%	40%
ISO New England Mass Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-H2-CME) vs PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1-CME)						
Spread Credit Rate	New	+16:-1			40%	40%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUT (NY-H4- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUT (NY-H4- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	75%	75%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)						
Spread Credit Rate	New	+1:-1			65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-S4 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)						
Spread Credit Rate	New	+16:-1			70%	70%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-Z9-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	75%	75%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R7-CME)						
Spread Credit Rate	New	+1:-1			30%	30%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D7-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	75%	75%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	80%	80%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	75%	75%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	54%	54%
MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	80%	80%
MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME) vs PJM AEP DAYTON HUB PEAK CAL DA LMP SWAP FUT (NY-D7- CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME) vs PJM JCPL ZONE PEAK CAL DA LMP SWAP FUT (NY-J2- CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	78%	78%
MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	80%	80%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-16			65%	65%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME SWAP FUTURES (NY-H3 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	60%	60%	68%	68%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME SWAP FUTURES (NY-H3 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-16			65%	65%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	60%	60%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	70%	70%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CAL DA SWAP FUT (NY-K2- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CAL DA SWAP FUT (NY-K2- CME) vs PJM JCPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F2- CME)						
Spread Credit Rate	Increase	+1:-1	35%	35%	60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CAL DA SWAP FUT (NY-K2- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	75%	75%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D7-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	75%	75%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	64%	64%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)						
Spread Credit Rate	New	+16:-1			70%	70%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)						
Spread Credit Rate	New	+1:-1			65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%
MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	65%	65%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MISO Indiana Hub (formerly Cinergy Hub) Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-H4-CME) vs PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
NEPOOL INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY -AHEAD SWAP (NYM-H2 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	30%	30%	55%	55%
NORTHERN ILLINOIS HUB PEAK MONTHLY SWAP (NYM-UM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
NYISO ZONE J PEAK LBMP SWAP FUTURES (NY-KJ - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+2:-1	25%	25%	45%	45%
PJM AECO ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-X1- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	70%	70%
PJM AECO ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-X1- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	70%	70%
PJM AECO ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-X1- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	New	+16:-1			72%	72%
PJM AECO ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-X1- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			74%	74%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-Y1-CME)						
Spread Credit Rate	Increase	+16:-1	80%	80%	84%	84%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	95%	95%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	65%	65%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	70%	70%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME)						
Spread Credit Rate	New	+16:-1			82%	82%
PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME)						
Spread Credit Rate	New	+16:-1			80%	80%
PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME) vs PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	Increase	+16:-1	80%	80%	85%	85%
PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	74%	74%
PJM AECO ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-Y1-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	70%	70%
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME) vs PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-16	55%	55%	60%	60%
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-194:+1	60%	60%	70%	70%
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	New	+16:-1			64%	64%
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-1			57%	57%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	78%	78%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs PJM APS ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-W4- CME)						
Spread Credit Rate	Increase	+1:-16	60%	60%	70%	70%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	70%	70%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs PJM JCPL ZONE PEAK CAL DA LMP SWAP FUT (NY-J2- CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	78%	78%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	66%	66%
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	60%	60%
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	70%	70%
PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	45%	45%	65%	65%
PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-D7-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	78%	78%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-K2-CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	88%	88%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	85%	85%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME)						
Spread Credit Rate	New	+1:-1			64%	64%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME)						
Spread Credit Rate	New	+1:-1			71%	71%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME)						
Spread Credit Rate	New	+1:-1			61%	61%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	New	+1:-1			66%	66%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	60%	60%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	78%	78%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM AECO ZONE PEAK CAL DA LMP SWAP FUT (NY-Y1- CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME)						
Spread Credit Rate	New	+16:-1			77%	77%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM AEP DAYTON HUB PEAK CAL DA LMP SWAP FUT (NY-D7- CME)						
Spread Credit Rate	New	+16:-1			77%	77%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM APS ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-W4- CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM APS ZONE PEAK CAL DA LMP SWAP FUT (NY-S4- CME)						
Spread Credit Rate	New	+16:-1			35%	35%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM BGE ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-R3- CME)						
Spread Credit Rate	New	+1:-1			62%	62%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	New	+16:-1			64%	64%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM JCPL ZONE PEAK CAL DA LMP SWAP FUT (NY-J2- CME)						
Spread Credit Rate	New	+16:-1			68%	68%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	New	+16:-1			77%	77%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM PPL ZONE PEAK CAL DA LMP SWAP FUT (NY-L5- CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	60%	60%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM WESTERN HUB PEAK CAL DA LMP SWAP FUT (NY-J4- CME)						
Spread Credit Rate	Increase	+16:-1	76%	76%	78%	78%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM WESTERN HUB PEAK CAL REAL-TIME LMP SWAP FUT (NY-L1- CME)						
Spread Credit Rate	New	+16:-1			75%	75%
PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-R7 - CME) vs PJM AD HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP (NYM-V3 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	New	+16:-1			64%	64%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	Increase	+1:-1	57%	57%	60%	60%
PJM AEP DAYTON HUB OFF-PEAK LMP SWAP FUTURES (NY-VP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-D7 - CME) vs PJM AD HUB 5 MW PEAK REAL-TIME LMP SWAP (NYM-Z9 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	75%	75%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-K2-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	75%	75%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-H4-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME)						
Spread Credit Rate	New	+1:-1			64%	64%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-D7-CME)						
Spread Credit Rate	New	+16:-1			77%	77%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	New	+16:-1			30%	30%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME)						
Spread Credit Rate	New	+1:-1			62%	62%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME)						
Spread Credit Rate	New	+1:-1			71%	71%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	New	+16:-1			64%	64%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME)						
Spread Credit Rate	New	+1:-1			61%	61%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	New	+1:-1			66%	66%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM AEP Dayton Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-V3-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM APS ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-W4- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM BGE ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-R3- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			73%	73%
PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	85%	85%
PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	70%	70%
PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	70%	70%
PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	70%	70%
PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME) vs PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME)						
Spread Credit Rate	New	+16:-1			77%	77%
PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME) vs PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME) vs PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME)						
Spread Credit Rate	Increase	+16:-1	81%	81%	86%	86%
PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D8-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	60%	60%
PJM EASTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F4-CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	95%	95%
PJM EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-E9 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J2 - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	85%	85%
PJM EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E9 - CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM JCPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F2- CME) vs PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME)						
Spread Credit Rate	Increase	+16:-1	70%	70%	75%	75%
PJM JCPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F2- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+16:-1	66%	66%	75%	75%
PJM JCPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F2- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	Increase	+16:-1	70%	70%	75%	75%
PJM JCPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F2- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			70%	70%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	50%	50%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	70%	70%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	95%	95%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	87%	87%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+16:-1	77%	77%	80%	80%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D9-CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	80%	80%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	70%	70%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	75%	75%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	75%	75%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME)						
Spread Credit Rate	Increase	+1:-1	68%	68%	73%	73%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME)						
Spread Credit Rate	Increase	+16:-1	75%	75%	85%	85%
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	Increase	+16:-1	80%	80%	84%	84%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME) vs PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-D7-CME)						
Spread Credit Rate	Increase	+16:-1	70%	70%	75%	75%
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	Increase	+16:-1	50%	50%	70%	70%
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	Increase	+16:-1	72%	72%	83%	83%
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	70%	70%
PJM JCPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J2-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	78%	78%	80%	80%
PJM JCPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J2-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	75%	75%
PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	80%	80%
PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	80%	80%
PJM METED ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-46- CME) vs PJM AECO ZONE PEAK CAL DA LMP SWAP FUT (NY-Y1- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	70%	70%
PJM METED ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-46- CME) vs PJM AEP DAYTON HUB PEAK CAL DA LMP SWAP FUT (NY-D7- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	70%	70%
PJM METED ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-46- CME) vs PJM PPL ZONE PEAK CAL DA LMP SWAP FUT (NY-L5- CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	80%	80%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	75%	75%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	74%	74%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	64%	64%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	65%	65%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	64%	64%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	80%	80%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME)						
Spread Credit Rate	New	+16:-1			67%	67%
PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	50%	50%
PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+16:-1	63%	63%	68%	68%
PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME) vs PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	64%	64%
PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D6 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM NI HUB 5 MW REAL TIME OFF-PEAK (NYM-B6 - CME) vs CINERGY HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP (NYM-H4 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%
PJM NI HUB 5 MW REAL TIME OFF-PEAK (NYM-B6 - CME) vs PJM COMED 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-D9 - CME)						
Spread Credit Rate	Increase	+1:-1	69%	69%	74%	74%
PJM NI HUB 5 MW REAL TIME OFF-PEAK (NYM-B6 - CME) vs PJM NORTHERN ILLINOIS OFF-PEAK CALENDAR-MONTH DAY AHEAD SWAP (NYM-L3 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NI HUB 5MW REAL TIME O PK (NY-B6) vs MID IND TRAN SO IL HUB5MW OFFP (NY-4R)						
Spread Credit Rate	New	+1:-1			30%	30%
PJM NI HUB 5MW REAL TIME PEAK (NYM-B3 - CME) vs PJM AD HUB 5MW REAL TIME PEAK (NYM-Z9 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM NI HUB 5MW REAL TIME PEAK (NYM-B3 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP (NYM-L1 - CME)						
Spread Credit Rate	Increase	+1:-1	79%	79%	84%	84%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-B6- CME) vs PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME)						
Spread Credit Rate	Increase	+1:-1	85%	85%	90%	90%
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	Increase	+194:-1	45%	45%	70%	70%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	New	+16:-1			63%	63%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D7 - CME)						
Spread Credit Rate	Increase	+16:-1	69%	69%	74%	74%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-S4 - CME)						
Spread Credit Rate	New	+16:-1			55%	55%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	Increase	+16:-1	59%	59%	64%	64%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	New	+16:-1			62%	62%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-1			57%	57%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)						
Spread Credit Rate	New	+16:-1			78%	78%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	New	+16:-1			76%	76%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME)						
Spread Credit Rate	New	+16:-1			55%	55%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME)						
Spread Credit Rate	New	+16:-1			55%	55%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	66%	66%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	New	+1:-1			62%	62%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D8-CME)						
Spread Credit Rate	Increase	+16:-1	59%	59%	64%	64%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME)						
Spread Credit Rate	New	+1:-1			66%	66%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	62%	62%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	65%	65%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	80%	80%
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	Increase	+1:-1	90%	90%	95%	95%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs PJM APS ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-W4- CME)						
Spread Credit Rate	Increase	+1:-16	55%	55%	77%	77%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs PJM BGE ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-R3- CME)						
Spread Credit Rate	New	+1:-16			70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs PJM PECO ZONE 5 MW OFF-PEAK CAL DA LMP SWAP FUT (NY-4P- CME)						
Spread Credit Rate	Increase	+1:-16	40%	40%	64%	64%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs MISO Illinois Hub 5 MW Peak Calendar-Month Day-Ahead Futures (NY-4Q-CME)						
Spread Credit Rate	New	+1:-1			30%	30%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	Increase	+1:-1	69%	69%	74%	74%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	70%	70%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	New	+1:-1			72%	72%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	New	+1:-1			55%	55%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	67%	67%	70%	70%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	75%	75%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME)						
Spread Credit Rate	Increase	+1:-16	64%	64%	71%	71%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK REAL-TIME CALENDAR-MONTH LMP SWAP (NYM-B3 - CME) vs CINERGY HUB 5 MW PEAK REAL-TIME (NYM-H3 - CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NORTHERN ILLINOIS HUB 5 MW PEAK REAL-TIME CALENDAR-MONTH LMP SWAP (NYM-B3 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+11:-1	50%	50%	65%	65%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK REAL-TIME CALENDAR-MONTH LMP SWAP (NYM-B3 - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY-AHEAD SWAP (NYM-N3 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	New	+1:-1			73%	73%
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	Increase	+1:-1	90%	90%	95%	95%
PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-K2-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	85%	85%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME)						
Spread Credit Rate	New	+1:-1			73%	73%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME)						
Spread Credit Rate	New	+1:-1			65%	65%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME)						
Spread Credit Rate	New	+16:-1			80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	75%	75%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	75%	75%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	65%	65%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	New	+1:-1			64%	64%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D8-CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME)						
Spread Credit Rate	New	+1:-1			68%	68%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	60%	60%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	New	+16:-1			68%	68%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)						
Spread Credit Rate	New	+16:-1			80%	80%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D7 - CME)						
Spread Credit Rate	New	+16:-1			80%	80%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	New	+16:-1			66%	66%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	New	+16:-1			68%	68%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			70%	70%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	New	+16:-1			78%	78%
PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME) vs PJM PECO ZONE 5 MW OFF-PEAK CAL DA LMP SWAP FUT (NY-4P- CME)						
Spread Credit Rate	Increase	+1:-16	50%	50%	65%	65%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	75%	75%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	75%	75%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM APS ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-W4- CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	60%	60%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM JCPL ZONE PEAK CAL DA LMP SWAP FUT (NY-J2- CME)						
Spread Credit Rate	New	+16:-1			68%	68%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM PPL ZONE PEAK CAL DA LMP SWAP FUT (NY-L5- CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM WESTERN HUB PEAK CAL DA LMP SWAP FUT (NY-J4- CME)						
Spread Credit Rate	New	+16:-1			76%	76%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	New	+1:-1			55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	75%	75%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	65%	65%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J2-CME)						
Spread Credit Rate	New	+1:-1			75%	75%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-UM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-K2-CME)						
Spread Credit Rate	New	+1:-1			55%	55%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-X1-CME)						
Spread Credit Rate	New	+1:-1			64%	64%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F2-CME)						
Spread Credit Rate	New	+1:-1			61%	61%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME)						
Spread Credit Rate	Increase	+16:-1	75%	75%	80%	80%
PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6-CME) vs PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME)						
Spread Credit Rate	New	+16:-1			71%	71%
PJM NORTHERN ILLINOIS OFF-PEAK CALENDAR-MONTH DAY AHEAD SWAP (NYM-L3 - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-R7 - CME)						
Spread Credit Rate	New	+1:-1			90%	90%
PJM PECO ZONE 5 MW OFF-PEAK CAL DA LMP SWAP FUT (NY-4P- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	58%	58%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	64%	64%
PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	80%	80%
PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	80%	80%
PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-4P-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	Increase	+16:-1	55%	55%	75%	75%
PJM PECO Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-4P-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	80%	80%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)						
Spread Credit Rate	New	+1:-16			55%	55%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B3 - CME)						
Spread Credit Rate	New	+1:-1			65%	65%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-N3 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
PJM PEPCO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-Q8 - CME) vs PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1 - CME)						
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						
PJM PEPCO Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-Q8-CME) vs PJM PSEG Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-W6-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)						
Spread Credit Rate	New	+1:-1			50%	50%
PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)						
Spread Credit Rate	New	+1:-1			50%	50%
PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B3 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	New	+1:-1			50%	50%
PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-N9 - CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	70%	70%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Northern Illinois Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-B6 - CME)						
Spread Credit Rate	New	+1:-16			50%	50%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM AEP Dayton Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-R7 - CME)						
Spread Credit Rate	New	+1:-16			50%	50%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3 - CME)						
Spread Credit Rate	New	+1:-1			55%	55%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Northern Illinois Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-L3 - CME)						
Spread Credit Rate	New	+1:-16			55%	55%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4 - CME)						
Spread Credit Rate	Increase	+1:-16	50%	50%	80%	80%
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1 - CME)						
Spread Credit Rate	New	+1:-1			60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-R8 - CME) vs PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9 - CME)						
Spread Credit Rate	Increase	+1:-16	50%	50%	68%	68%
PJM PEPCO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-R8 - CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-L6 - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	80%	80%
PJM PPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F5- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	75%	75%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-Y1-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	80%	80%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	78%	78%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	60%	60%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+16:-1	50%	50%	80%	80%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	70%	70%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	70%	70%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F5-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	75%	75%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM AEP Dayton Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-D7-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	80%	80%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM ComEd Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D8-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	80%	80%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	Increase	+16:-1	45%	45%	82%	82%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	75%	75%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME) vs PJM Northern Illinois Hub Day-Ahead LMP Peak Calendar-Month 5 MW Futures (NY-N3-CME)						
Spread Credit Rate	Increase	+16:-1	30%	30%	70%	70%
PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	75%	75%
PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	70%	70%
PJM PPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L5-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	70%	70%
PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	New	+1:-16			68%	68%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	68%	68%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	65%	65%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	70%	70%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-W6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	-194:+1	30%	30%	58%	58%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D6 - CME)						
Spread Credit Rate	New	+1:-1			65%	65%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B3 - CME)						
Spread Credit Rate	New	+16:-1			59%	59%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-N3 - CME)						
Spread Credit Rate	New	+16:-1			62%	62%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)						
Spread Credit Rate	New	+16:-1			60%	60%
PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	70%	70%
PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	New	+1:-16			60%	60%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	New	+16:-1			63%	63%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME)						
Spread Credit Rate	New	+1:-1			66%	66%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM BGE Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-E3-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	68%	68%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM JCPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-J2-CME)						
Spread Credit Rate	New	+16:-1			66%	66%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	New	+1:-1			68%	68%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	85%	85%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME)						
Spread Credit Rate	New	+16:-1			79%	79%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM AECO Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-Y1-CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	85%	85%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM AEP Dayton Hub 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME)						
Spread Credit Rate	New	+1:-1			82%	82%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM APS Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-S4-CME)						
Spread Credit Rate	New	+1:-1			60%	60%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM Duquesne Zone 5 MW Peak Calendar-Month Day-Ahead LMP Futures (NY-D5-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	85%	85%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	60%	60%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	80%	80%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	New	+1:-1			70%	70%
PJM Western Hub Day-Ahead Peak Calendar-Month 5 MW Futures (NY-J4-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	85%	85%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs PJM AEP DAYTON HUB PEAK CAL DA LMP SWAP FUT (NY-D7- CME)						
Spread Credit Rate	Increase	+16:-1	65%	65%	69%	69%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs PJM COMED ZONE 5 MW PEAK CAL DA LMP SWAP FUT (NY-D8- CME)						
Spread Credit Rate	Increase	+16:-1	68%	68%	73%	73%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	New	+16:-1			65%	65%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			64%	64%
PJM WESTERN HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-E4- CME) vs PJM PECO ZONE 5 MW OFF-PEAK CAL DA LMP SWAP FUT (NY-4P- CME)						
Spread Credit Rate	New	+1:-1			70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUT (NY-H4- CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	78%	78%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CAL DA SWAP FUT (NY-K2- CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	80%	80%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME)						
Spread Credit Rate	New	+1:-1			80%	80%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-B6- CME)						
Spread Credit Rate	New	+1:-1			73%	73%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	65%	65%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM NORTHERN ILLINOIS HUB PEAK CAL DA LMP SWAP FUT (NY-N3- CME)						
Spread Credit Rate	New	+16:-1			64%	64%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM PPL ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-F5- CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	68%	68%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH RT SWAP FUT (NY-H4-CME)						
Spread Credit Rate	Increase	+1:-1	35%	35%	80%	80%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DA SWAP FUT (NY-K2-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	80%	80%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-X1-CME)						
Spread Credit Rate	New	+1:-1			68%	68%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	New	+16:-1			40%	40%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D9-CME)						
Spread Credit Rate	Increase	+1:-1	66%	66%	71%	71%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM DPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E8-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	77%	77%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM EASTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F4-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-F2-CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	60%	60%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B6-CME)						
Spread Credit Rate	New	+1:-1			77%	77%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L3-CME)						
Spread Credit Rate	New	+1:-1			83%	83%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-Q8-CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	85%	85%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME)						
Spread Credit Rate	New	+1:-1			58%	58%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	73%	73%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD (NYM-E4 - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH REAL-TIME (NYM-N9 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-E4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	60%	60%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)						
Spread Credit Rate	New	+16:-1			75%	75%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME) vs ISO NEW ENGLAND INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U6 - CME)						
Spread Credit Rate	New	+16:-1			70%	70%
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	Increase	+194:-1	50%	50%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-N9-CME) vs PJM APS ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-S4-CME)						
Spread Credit Rate	New	+16:-1			40%	40%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-N9-CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-47-CME)						
Spread Credit Rate	Increase	+16:-1	40%	40%	65%	65%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-N9-CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W6-CME)						
Spread Credit Rate	New	+1:-1			58%	58%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-N9-CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-L6-CME)						
Spread Credit Rate	Increase	+16:-1	35%	35%	54%	54%
PJM WESTERN HUB PEAK CAL DA LMP SWAP FUT (NY-J4- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL REAL-TIME SWAP FUT (NY-H3- CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	83%	83%
PJM WESTERN HUB PEAK CAL DA LMP SWAP FUT (NY-J4- CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME)						
Spread Credit Rate	Increase	+1:-1	81%	81%	85%	85%
PJM WESTERN HUB PEAK CAL REAL-TIME LMP SWAP FUT (NY-L1- CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CAL DA SWAP FUT (NY-H5- CME)						
Spread Credit Rate	Increase	+1:-1	65%	65%	80%	80%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs ISO NE INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-U6-CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	75%	75%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-16	45%	45%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-R3-CME)						
Spread Credit Rate	Increase	+1:-16	78%	78%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E3-CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	85%	85%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J2-CME)						
Spread Credit Rate	Increase	+1:-1	79%	79%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME)						
Spread Credit Rate	Increase	+1:-16	77%	77%	80%	80%
PJM WESTERN HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J4-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-16	50%	50%	70%	70%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD L (NYM-D7 - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM COM-ED 5MW DAY AHEAD PEAK (NYM-D8 - CME)						
Spread Credit Rate	Increase	+1:-1	81%	81%	90%	90%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM DPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-L8 - CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	70%	70%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-E9 - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY- (NYM-N3 - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM PEPCO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-R8 - CME)						
Spread Credit Rate	Increase	+1:-1	35%	35%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J4 - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP (NYM-L1 - CME)						
Spread Credit Rate	Increase	+1:-1	90%	90%	95%	95%
PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)						
Spread Credit Rate	New	+1:-1			70%	70%
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1-CME) vs PJM METED Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-47-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1-CME) vs PJM PPL Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-F5-CME)						
Spread Credit Rate	Increase	+1:-16	30%	30%	80%	80%
PJM Western Hub Peak Calendar-Month Real-Time LMP Futures (NY-L1-CME) vs PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP 5 MW Futures (NY-L6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	75%	75%
PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	60%	60%	72%	72%
PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W6 - CME)						
Spread Credit Rate	New	+1:-16			72%	72%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs ISO NE INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-U6-CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	75%	75%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-16	45%	45%	80%	80%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs PJM DUQUESNE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-16	0%	0%	85%	85%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-J2-CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	80%	80%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-46-CME)						
Spread Credit Rate	New	+1:-16			75%	75%
PJM WESTERN HUB PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-L1-CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-4P-CME)						
Spread Credit Rate	Increase	+1:-16	50%	50%	65%	65%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME)						
Spread Credit Rate	New	+16:-1			45%	45%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Day-Ahead Peak Calendar-Month 5 MW Futures (NY-H5-CME)						
Spread Credit Rate	New	+16:-1			45%	45%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM APS Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-W4-CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM Duquesne Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D6-CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	70%	70%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM METED Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-46-CME)						
Spread Credit Rate	New	+1:-1			68%	68%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM PPL Zone Peak Calendar-Month Day-Ahead LMP Futures (NY-L5-CME)						
Spread Credit Rate	Increase	+16:-1	60%	60%	65%	65%

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						
E-MINI DOW (\$5) FUTURES (YM - CME) vs S&P SELECT SECTOR - MATERIALS (XAB - CME)						
Spread Credit Rate	Increase	-2: +3	45%	45%	60%	60%
E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs E-MINI S&P MIDCAP 400 (ME - CME)						
Spread Credit Rate	Increase	+2: -1	35%	35%	50%	50%
E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs E-MINI USD DENOMINATED FTSE 100 INDEX FUTURES (FTU - CME)						
Spread Credit Rate	Decrease	+1: -1	70%	70%	40%	40%
E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs NASDAQ-100 (ND - CME)						
Spread Credit Rate	Decrease	+1: -1	62%	62%	50%	50%
E-MINI FTSE 100 INDEX (GBP) FUTURES (FT1 - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Decrease	+2: -1	45%	45%	25%	25%
E-MINI NASDAQ BIOTECHNOLOGY (BQ - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Increase	+1: -1	20%	20%	45%	45%
E-MINI NASDAQ-100 FUTURES (NQ - CME) vs S&P 500 GROWTH (SG - CME)						
Spread Credit Rate	Increase	+5: -1	60%	60%	75%	75%
E-MINI RUSSELL 1000 INDEX FUTURES (RS1 - CME) vs NIKKEI 225 DOLLAR-BASED (NK - CME)						
Spread Credit Rate	Increase	+2: -1	45%	45%	55%	55%
EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs E-MINI SP500 CONS DISCRET SECTOR IX (XAY)						
Spread Credit Rate	Increase	+1: -1	50%	50%	65%	65%
EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs EMINI SP500- HEALTH CARE SECT INDEX (XAV)						
Spread Credit Rate	Decrease	+1: -1	50%	50%	35%	35%
EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs EMINI SP500-UTILITIES SECTOR INDEX (XAU)						
Spread Credit Rate	Increase	+1: -1	50%	50%	65%	65%
EMINI SP 500 CONS STAPLES SECTOR IX (XAP) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+2: -1	65%	65%	50%	50%
EMINI SP 500 ENERGY SECTOR INDEX (XAE) vs EMINI SP500-UTILITIES SECTOR INDEX (XAU)						
Spread Credit Rate	Decrease	+1: -2	30%	30%	25%	25%
EMINI SP 500 ENERGY SECTOR INDEX (XAE) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+1: -1	60%	60%	50%	50%
EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs EMINI SP 500 CONS STAPLES SECTOR IX (XAP)						
Spread Credit Rate	Decrease	+1: -1	40%	40%	25%	25%
EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs E-MINI SP500 CONS DISCRET SECTOR IX (XAY)						
Spread Credit Rate	Decrease	+1: -1	65%	65%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK)						
Spread Credit Rate	Decrease	+2:-3	65%	65%	40%	40%
EMINI SP500 - FINANCIAL SECT INDEX (XAF) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+2:-1	60%	60%	30%	30%
E-MINI SP500 CONS DISCRET SECTOR IX (XAY) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Increase	+2:-1	60%	60%	75%	75%
EMINI SP500- HEALTH CARE SECT INDEX (XAV) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+2:-1	65%	65%	45%	45%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs EMINI SP 500 ENERGY SECTOR INDEX (XAE)						
Spread Credit Rate	Decrease	+2:-1	60%	60%	40%	40%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs E-MINI SP500 CONS DISCRET SECTOR IX (XAY)						
Spread Credit Rate	Increase	+1:-1	40%	40%	65%	65%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	55%	55%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs NIKKEI 225 FUTURES (NK)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
EMINI SP500 MATERIALS SECTOR INDEX (XAB) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+2:-1	60%	60%	40%	40%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs EMINI SP 500 CONS STAPLES SECTOR IX (XAP)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	35%	35%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs E-MINI SP500 CONS DISCRET SECTOR IX (XAY)						
Spread Credit Rate	Increase	+1:-1	50%	50%	65%	65%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	50%	50%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs EMINI SP500-UTILITIES SECTOR INDEX (XAU)						
Spread Credit Rate	Increase	+1:-1	0%	0%	25%	25%
EMINI SP500-INDUSTRIAL SECTOR INDEX (XAI) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+2:-1	80%	80%	65%	65%
EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK) vs EMINI SP500- HEALTH CARE SECT INDEX (XAV)						
Spread Credit Rate	Decrease	+3:-2	60%	60%	50%	50%
EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK) vs EMINI SP500-UTILITIES SECTOR INDEX (XAU)						
Spread Credit Rate	Increase	+3:-2	30%	30%	50%	50%
EMINI SP500-TECHNOLOGY SECTOR INDEX (XAK) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Decrease	+3:-1	75%	75%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
EMINI SP500-UTILITIES SECTOR INDEX (XAU) vs S&P 500 FUTURES (SP)						
Spread Credit Rate	Increase	+2:-1	30%	30%	45%	45%
FTSE EMERGING INDEX FUTURES (EI - CME) vs E-MINI FTSE CHINA 50 INDEX FUTURES (FT5 - CME)						
Spread Credit Rate	Increase	+1:-2	45%	45%	60%	60%
FTSE EMERGING INDEX FUTURES (EI - CME) vs NIKKEI 225 DOLLAR-BASED (NK - CME)						
Spread Credit Rate	Increase	+2:-1	35%	35%	45%	45%
FTSE EMERGING INDEX FUTURES (EI - CME) vs S&P 500 (SP - CME)						
Spread Credit Rate	Decrease	+13:-1	65%	65%	50%	50%
FTSE EMERGING INDEX FUTURES (EI - CME) vs USD-DENOMINATED IBOVESPA INDEX (IBV - CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	70%	70%
NIKKEI 225 DOLLAR-BASED (NK - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Increase	+2:-3	50%	50%	65%	65%
S&P 500 (SP - CME) vs INRUSD FUTURES (SIR - CME)						
Spread Credit Rate	Decrease	+1:-4	25%	25%	0%	0%
S&P SELECT SECTOR - CONSUMER DISCRETIONARY (XAY - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Increase	+3:-2	60%	60%	75%	75%
S&P SELECT SECTOR - CONSUMER STAPLES (XAP - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Decrease	+2:-1	65%	65%	60%	60%
S&P SELECT SECTOR - CONSUMER STAPLES (XAP - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Increase	+6:-5	55%	55%	70%	70%
S&P SELECT SECTOR - TECHNOLOGY (XAK - CME) vs E-MINI DOW (\$5) FUTURES (YM - CME)						
Spread Credit Rate	Decrease	+5:-2	70%	70%	60%	60%
S&P SELECT SECTOR - TECHNOLOGY (XAK - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Decrease	+2:-1	80%	80%	60%	60%
S&P SELECT SECTOR - UTILITIES (XAU - CME) vs E-MINI NASDAQ-100 FUTURES (NQ - CME)						
Spread Credit Rate	Increase	+6:-5	30%	30%	45%	45%
S&P SELECT SECTOR - UTILITIES (XAU - CME) vs E-MINI S&P MIDCAP 400 (ME - CME)						
Spread Credit Rate	Increase	+3:-1	25%	25%	45%	45%
S&P SELECT SECTOR - UTILITIES (XAU - CME) vs NIKKEI 225 YEN-BASED (N1 - CME)						
Spread Credit Rate	Decrease	+1:-1	15%	15%	0%	0%

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						
AUSTRALIAN DOLLAR (AD - CME) vs GOLD FUTURES (CX-GC - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
CROSS RATE EURO FX/JAPANESE YEN (RY - CME) vs NORWEGIAN KRONE (UN - CME)						
Spread Credit Rate	Decrease	+2:-5	65%	65%	45%	45%
EURO FX (EC - CME) vs GOLD FUTURES (CX-GC - CME)						
Spread Credit Rate	Increase	+1:-1	25%	25%	30%	30%
GOLD FUTURES (CX-GC - CME) vs JAPANESE YEN (JY - CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	50%	50%
GOLD FUTURES (CX-GC - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	20%	20%
KILO GOLD FUTURES (CX-GCK - CME) vs JAPANESE YEN (JY - CME)						
Spread Credit Rate	Increase	+3:-1	35%	35%	50%	50%
KILO GOLD FUTURES (CX-GCK - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+3:-1	0%	0%	20%	20%
S&P 500 (SP - CME) vs INRUSD FUTURES (SIR - CME)						
Spread Credit Rate	Decrease	+1:-4	25%	25%	0%	0%
SILVER FUTURES (CX-SI - CME) vs AUSTRALIAN DOLLAR (AD - CME)						
Spread Credit Rate	New	+1:-1			20%	20%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
METALS - Inter-commodity Spread Rates						
ALUMINIUM EUROPEAN PREMIUM METAL BULLETIN (25MT-DUTY UNPAID) FUTURES (CX-AEP - CME) vs ALUMINIUM EUROPEAN PREMIUM DUTY-PAID (METAL BULLETIN) FUTURES (CX-EDP - CME)						
Spread Credit Rate	Increase	+1:-1	50%	50%	55%	55%
ALUMINIUM EUROPEAN PREMIUM METAL BULLETIN (25MT-DUTY UNPAID) FUTURES (CX-AEP - CME) vs COPPER FUTURES (CX-HG - CME)						
Spread Credit Rate	Decrease	+9:-1	20%	20%	0%	0%
ALUMINUM FUTURES (CX-ALI - CME) vs COPPER FUTURES (CX-HG - CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	50%	50%
ALUMINUM FUTURES (CX-ALI - CME) vs IRON ORE FUTURES (NY-TIO - CME)						
Spread Credit Rate	Decrease	+1:-1	35%	35%	25%	25%
ALUMINUM FUTURES (CX-ALI - CME) vs PALLADIUM FUTURES (NY-PA - CME)						
Spread Credit Rate	Decrease	+1:-1	25%	25%	20%	20%
ALUMINUM JAPAN PREMIUM (PLATTS) FUTURES (CX-MJP - CME) vs ALUMINUM FUTURES (CX-ALI - CME)						
Spread Credit Rate	Decrease	+20:-1	30%	30%	0%	0%
ALUMINUM JAPAN PREMIUM (PLATTS) FUTURES (CX-MJP - CME) vs ALUMINUM MW US TRANSACTION PREMIUM PLATTS (25MT) SWAP FUTURES (CX-AUP - CME)						
Spread Credit Rate	Increase	+2:-1	45%	45%	50%	50%
AUSTRALIAN DOLLAR (AD - CME) vs GOLD FUTURES (CX-GC - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	30%	30%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs PLATINUM FUTURES (NY-PL - CME)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
COMEX COPPER (CMX-HG - CME) vs COMEX SILVER (CMX-SI - CME)						
Spread Credit Rate	Decrease	+2:-1	55%	55%	50%	50%
COMEX COPPER FUTURES (CX-HG) vs COMEX 100 GOLD FUTURES (CX-GC)						
Spread Credit Rate	Decrease	+1:-2	25%	25%	0%	0%
COMEX SILVER (CMX-SI - CME) vs PALLADIUM (NYM-PA - CME)						
Spread Credit Rate	Decrease	+1:-2	50%	50%	45%	45%
COPPER FUTURES (CX-HG - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	35%	35%	0%	0%
COPPER FUTURES (CX-HG - CME) vs COAL (API 2) CIF ARA (ARGUS/MCCLOSKEY) SWAP FUTURES (NY-MTF - CME)						
Spread Credit Rate	Decrease	-1:+1	30%	30%	0%	0%
Spread Credit Rate	Decrease	+1:-1	30%	30%	0%	0%
EURO FX (EC - CME) vs GOLD FUTURES (CX-GC - CME)						
Spread Credit Rate	Increase	+1:-1	25%	25%	30%	30%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
GOLD FUTURES (CX-GC - CME) vs JAPANESE YEN (JY - CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	50%	50%
GOLD FUTURES (CX-GC - CME) vs PALLADIUM FUTURES (NY-PA - CME)						
Spread Credit Rate	Decrease	+1:-2	30%	30%	25%	25%
GOLD FUTURES (CX-GC - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+1:-1	0%	0%	20%	20%
IRON ORE FUTURES (NY-TIO - CME) vs IRON ORE(PLATTS) SWAP FUTURE (NY-PIO - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	75%	75%
KILO GOLD FUTURES (CX-GCK - CME) vs JAPANESE YEN (JY - CME)						
Spread Credit Rate	Increase	+3:-1	35%	35%	50%	50%
KILO GOLD FUTURES (CX-GCK - CME) vs PALLADIUM FUTURES (NY-PA - CME)						
Spread Credit Rate	Decrease	+3:-2	30%	30%	20%	20%
KILO GOLD FUTURES (CX-GCK - CME) vs PLATINUM FUTURES (NY-PL - CME)						
Spread Credit Rate	Decrease	+3:-2	65%	65%	60%	60%
KILO GOLD FUTURES (CX-GCK - CME) vs SWISS FRANC (SF - CME)						
Spread Credit Rate	Increase	+3:-1	0%	0%	20%	20%
LEAD FUTURES (CX-LED - CME) vs COPPER FUTURES (CX-HG - CME)						
Spread Credit Rate	Decrease	+7:-5	50%	50%	25%	25%
LEAD FUTURES (CX-LED - CME) vs GOLD FUTURES (CX-GC - CME)						
Spread Credit Rate	Decrease	+5:-2	20%	20%	0%	0%
LEAD FUTURES (CX-LED - CME) vs ZINC FUTURES (CX-ZNC - CME)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	35%	35%
PALLADIUM FUTURES (NY-PA - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Decrease	+1:-1	20%	20%	0%	0%
PLATINUM FUTURES (NYM-PL - CME) vs PALLADIUM (NYM-PA - CME)						
Spread Credit Rate	Increase	+2:-1	45%	45%	53%	53%
SILVER FUTURES (CX-SI - CME) vs AUSTRALIAN DOLLAR (AD - CME)						
Spread Credit Rate	New	+1:-1			20%	20%
SILVER FUTURES (CX-SI - CME) vs IRON ORE FUTURES (NY-TIO - CME)						
Spread Credit Rate	Decrease	+1:-1	25%	25%	0%	0%
U.S. MIDWEST DOMESTIC HOT-ROLLED COIL STEEL INDEX FUTURES (NY-HR - CME) vs ALUMINUM MW US TRANSACTION PREMIUM PLATTS (25MT) SWAP FUTURES (CX-AUP - CME)						
Spread Credit Rate	Decrease	+2:-3	30%	30%	0%	0%
ZINC FUTURES (CX-ZNC - CME) vs ALUMINUM FUTURES (CX-ALI - CME)						
Spread Credit Rate	Decrease	+1:-1	20%	20%	0%	0%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ZINC FUTURES (CX-ZNC - CME) vs COPPER FUTURES (CX-HG - CME)						
Spread Credit Rate	Increase	+1:-1	40%	40%	50%	50%

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						
AEP DAYTON HUB PEAK MONTHLY (NYM-VM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
CINERGY HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP (NYM-H4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	-194:+1	45%	45%	73%	73%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ALGONQUIN CITY-GATES NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-B4 - CME)						
Spread Credit Rate	Decrease	+1:-4	40%	40%	30%	30%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ARGUS PROPANE FAR EAST INDEX SWAP FUTURES (NY-7E - CME)						
Spread Credit Rate	Decrease	+1:-1	25%	25%	20%	20%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P2 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-H2 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	55%	55%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND RHODE ISLAND ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U5 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND WEST CENTRAL MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R6 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5 MW OFF-PEAK CALENDAR MONTH REAL-TIME SWAP FUTURES (NY-H4 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	73%	73%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME)						
Spread Credit Rate	Increase	+1:-11	60%	60%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO CINERGY HUB 5MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-K2 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs MIDWEST ISO ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-4Q - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	40%	40%
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	Increase	+1:-194	35%	35%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE E 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-58 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE F 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4M - CME)						
Spread Credit Rate	New	+1:-194			50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE F 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4L - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE G 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D2 - CME)						
Spread Credit Rate	Increase	+1:-194	20%	20%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE J 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D4 - CME)						
Spread Credit Rate	Increase	+1:-194	35%	35%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-X1 - CME)						
Spread Credit Rate	Increase	+1:-194	35%	35%	68%	68%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AECO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Y1 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	53%	53%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME)						
Spread Credit Rate	Increase	+1:-11	45%	45%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB OFF-PEAK LMP SWAP FUTURES (NY-VP - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-VM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM APS ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W4 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	62%	62%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R3 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	62%	62%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D9 - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM COMED ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D8 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM DPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E8 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM DUQUESNE ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D5 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM EASTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F4 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	64%	64%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E9 - CME)						
Spread Credit Rate	Increase	+1:-11	0%	0%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F2 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J2 - CME)						
Spread Credit Rate	Increase	+1:-11	40%	40%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-46 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM METED ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-47 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	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	Increase	+1:-194	45%	45%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B3 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L3 - CME)						
Spread Credit Rate	Increase	+1:-194	45%	45%	70%	70%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-N3 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4N - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEPCO ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-Q8 - CME)						
Spread Credit Rate	Increase	+1:-194	30%	30%	52%	52%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-F5 - CME)						
Spread Credit Rate	Increase	+1:-194	25%	25%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E4 - CME)						
Spread Credit Rate	Increase	+1:-194	60%	60%	70%	70%
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	Increase	+1:-194	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME)						
Spread Credit Rate	Increase	+1:-11	60%	60%	72%	72%
HENRY HUB NATURAL GAS PENULTIMATE FINANCIAL FUTURES (NY-HP - CME) vs ALGONQUIN CITY-GATES NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-B4 - CME)						
Spread Credit Rate	Decrease	+1:-4	40%	40%	30%	30%
ISO NEW ENGLAND INTERNAL HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+11:-1	30%	30%	44%	44%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH REAL-TIME SWAP FUTURES (NY-H3 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	60%	60%	68%	68%
NATIONAL BALANCING POINT (NBP) HENRY HUB NATURAL GAS BASIS SWAP (NYM-E2 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Decrease	+4:+1	45%	45%	25%	25%
NEPOOL INTERNAL HUB 5 MW OFF-PEAK CALENDAR-MONTH DAY -AHEAD SWAP (NYM-H2 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	30%	30%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
NORTHERN ILLINOIS HUB PEAK MONTHLY SWAP (NYM-UM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
NYISO ZONE J PEAK LBMP SWAP FUTURES (NY-KJ - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+2:-1	25%	25%	45%	45%
NYMEX NATURAL GAS (H.HUB LTD) FUT (NY-HH - CME) vs ALGONQUIN CITY-GATES NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-B4 - CME)						
Spread Credit Rate	Decrease	+1:-4	40%	40%	30%	30%
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-194:+1	60%	60%	70%	70%
PJM AEP DAYTON HUB 5MW PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-Z9 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	45%	45%	65%	65%
PJM AEP DAYTON HUB OFF-PEAK LMP SWAP FUTURES (NY-VP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
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	Increase	+194:-1	45%	45%	70%	70%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK REAL-TIME CALENDAR-MONTH LMP SWAP (NYM-B3 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+11:-1	50%	50%	65%	65%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-UM - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	+1:-1	45%	45%	70%	70%
PJM PSEG ZONE OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-W6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	-194:+1	30%	30%	58%	58%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-E4 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	60%	60%	70%	70%
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	Increase	+194:-1	50%	50%	70%	70%
PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Increase	-11:+1	60%	60%	72%	72%

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 ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
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	50%	50%	40%	40%
EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	60%	60%	50%	50%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ARGUS PROPANE FAR EAST INDEX SWAP FUTURES (NY-7E - CME)						
Spread Credit Rate	Decrease	+1:-1	25%	25%	20%	20%
LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	57%	57%	50%	50%
MONT BELVIEU ETHANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-C0 - CME) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	20%	20%
MONT BELVIEU ETHANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-C0 - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+1:-1	30%	30%	20%	20%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME) vs OMAN CRUDE OIL (NY-OQ - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA)						
Spread Credit Rate	Decrease	+15:-2	50%	50%	40%	40%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME) vs CONWAY PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8K - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
MONT BELVIEU NATURAL GASOLINE 5 DECIMALS (OPIS) SWAP FUTURES (NY-7Q - CME) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL, CS, WS)						
Spread Credit Rate	Decrease	+1:-1	59%	59%	50%	50%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs MONT BELVIEU LDH PROPANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-B0 - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0) vs. SINGAPORE JET KEROSENE (PLATTS) SWAP FUTURES (NY-KS)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB) vs. SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA)						
Spread Credit Rate	Decrease	+15:-2	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB) vs. SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO, MP, BH) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%

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 ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
1% FUEL OIL (PLATTS) CARGOES CIF MED SWAP FUTURES (NY-1W - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
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	50%	50%	40%	40%
BRENT (ICE) CALENDAR SWAP FUTURES (NY-CY - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
BRENT CRUDE OIL BULLET SWAP FINANCIAL (NYM-BB, BZ, CY) vs HEATING OIL (NYM-HO, BH, MP)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL FINANCIAL FUTURES (NY-BH - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME)						
Spread Credit Rate	Increase	+1:-1	77%	77%	83%	83%
Spread Credit Rate	Increase	+1:-1	82%	82%	86%	86%
BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
CRUDE OIL FINANCIAL FUTURES (NY-WS - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	60%	60%	50%	50%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL FINANCIAL FUTURES (NY-WS - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-26 - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs LIGHT SWEET CRUDE OIL FUTURES (NY-CL - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE FINANCIAL FUTURES (NY-RT - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE FUTURES (NY-RB - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
HEATING OIL LAST DAY FINANCIAL FUTURES (NY-23 - CME) vs RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
LIGHT, SWEET CRUDE OIL FUTURES (NYM-CL, CS, WS) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA)						
Spread Credit Rate	Decrease	+15:-2	50%	50%	40%	40%
MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I) vs. SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0) vs. SINGAPORE JET KEROSENE (PLATTS) SWAP FUTURES (NY-KS)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs EUROPEAN 1% FUEL OIL (PLATTS) CARGOES FOB NWE CALENDAR SWAP FUTURES (NY-UF - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs EUROPEAN 3.5% FUEL OIL (PLATTS) BARGES FOB RDAM CALENDAR SWAP FUTURES (NY-UV - CME)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs GULF COAST NO. 6 FUEL OIL 3.0% (PLATTS) SWAP FUTURES (NY-MF - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB - CME) vs NEW YORK HARBOR RESIDUAL FUEL 1.0% (PLATTS) SWAP FUTURES (NY-MM - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB) vs. SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA)						
Spread Credit Rate	Decrease	+15:-2	50%	50%	40%	40%
MONT BELVIEU NORMAL BUTANE LDH (OPIS) SWAP FUTURES (NY-MNB) vs. SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE)						
Spread Credit Rate	Decrease	+15:-2	55%	55%	45%	45%
NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO, MP, BH) vs MONT BELVIEU ISO-BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-8I - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
NY HARBOR RBOB GASOLINE (NYM-RB, RL, RT) vs HEATING OIL FINANCIAL FUTURES (NYM-HO, BH, MP)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	70%	70%	72%	72%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
RBOB GASOLINE CALENDAR SWAP FUTURES (NY-RL - CME) vs NEW YORK HARBOR NO. 2 HEATING OIL FUTURES (NY-HO - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	80%	80%
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
RBOB GASOLINE FUTURES (NY-RB - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	80%	80%	82%	82%
RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL LAST DAY FINANCIAL FUTURES (NY-BZ - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
RBOB GASOLINE LAST DAY FINANCIAL FUTURES (NY-27 - CME) vs BRENT CRUDE OIL PENULTIMATE FINANCIAL FUTURES (NY-BB - CME)						
Spread Credit Rate	Increase	+1:-1	74%	74%	79%	79%
SINGAPORE FUEL OIL 180 CST (PLATTS) CALENDAR SWAP FUTURES (NY-UA - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
SINGAPORE FUEL OIL 380 CST (PLATTS) SWAP FUTURES (NY-SE - CME) vs MONT BELVIEU NORMAL BUTANE 5 DECIMALS (OPIS) SWAP FUTURES (NY-D0 - CME)						
Spread Credit Rate	Decrease	+2:-15	50%	50%	40%	40%
WTI CALENDAR SWAP FUTURES (NY-CS - CME) vs HEATING OIL CALENDAR SWAP FUTURES (NY-MP - CME)						
Spread Credit Rate	Increase	+1:-1	75%	75%	82%	82%

Erosion Methodology			
CC	Name	Current Methodology	New Methodology
C0	Mont Belvieu Ethane (OPIS) Futures	Linear	None

Splitting Methodology				
CC	Name	Current Splitting	New Splitting	Underlying Leg 1
7H	Gasoline Euro-bob Oxy NWE Barges (Argus) Futures	None	Modified Split	S7H