



13-286

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, June 20, 2013

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

Tuesday, June 25, 2013.

Current rates as of:

Thursday, June 20, 2013.

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
COAL - Outright Rates								
EASTERN RAIL DELIVERY CSX COAL FUT (QX)								
QX	Spec		Increase	USD	1,650	1,500	1,925	1,750
QX	Hedge/Member		Increase	USD	1,500	1,500	1,750	1,750
NYMEX COAL FUTURES (QL)								
QL	Spec	Mnth 1	Increase	USD	2,310	2,100	2,750	2,500
QL	Hedge/Member	Mnth 1	Increase	USD	2,100	2,100	2,500	2,500
QL	Spec	Mnths 2+	Increase	USD	2,310	2,100	2,750	2,500
QL	Hedge/Member	Mnths 2+	Increase	USD	2,100	2,100	2,500	2,500
WEATHER - Outright Rates								
DALLAS WEEKLY AVG TEMP F (WH5)								
WH5	Spec	7-9 days to expiration	Increase	USD	810	600	1,080	800
WH5	Hedge/Member	7-9 days to expiration	Increase	USD	600	600	800	800
WH5	Spec	4-6 days to expiration	Increase	USD	675	500	1,080	800
WH5	Hedge/Member	4-6 days to expiration	Increase	USD	500	500	800	800
WH5	Spec	Less than 3 days to expiration	Increase	USD	540	400	1,080	800
WH5	Hedge/Member	Less than 3 days to expiration	Increase	USD	400	400	800	800
PHILADELPHIA WEEKLY AVG TEMP FUTURE (WH6)								
WH6	Spec	Greater than 10 days to expiration	Increase	USD	810	600	1,080	800
WH6	Hedge/Member	Greater than 10 days to expiration	Increase	USD	600	600	800	800
WH6	Spec	7-9 days to expiration	Increase	USD	675	500	1,080	800
WH6	Hedge/Member	7-9 days to expiration	Increase	USD	500	500	800	800
WH6	Spec	4-6 days to expiration	Increase	USD	405	300	1,080	800
WH6	Hedge/Member	4-6 days to expiration	Increase	USD	300	300	800	800

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
WH6	Spec	Less than 3 days to expiration	Increase	USD	270	200	1,080	800
WH6	Hedge/Member	Less than 3 days to expiration	Increase	USD	200	200	800	800

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
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[Intra Spreads](#)

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
ELECTRICITY - Intra Spreads								
AEP-Dayton Hub Peak Monthly Electricity Futures - Peak - All Months (AER-DAYTON HUB MONTHLY)								
VM	Spec		Increase	USD	1,650	1,500	2,750	2,500
VM	Hedge/Member		Increase	USD	1,500	1,500	2,500	2,500
CIN HUB 5MW REAL TIME PEAK - All Months (MISO INDIANA HUB 5MW REAL TIME PK)								
H3	Spec		Increase	USD	83	75	165	150
H3	Hedge/Member		Increase	USD	75	75	150	150
CINERGY HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME SWAP- All Months (MISO INDIANA HUB 5MW REAL TIME O PK)								
H4	Spec		Increase	USD	3	3	11	10
H4	Hedge/Member		Increase	USD	3	3	10	10
Cinergy Hub Off-Peak LMP Swap - All Months (MISO INDIANA HUB OFF-PEAK MO FUT)								
EJ	Spec		Increase	USD	1,100	1,000	1,925	1,750
EJ	Hedge/Member		Increase	USD	1,000	1,000	1,750	1,750
Cinergy Hub Peak - All Months (MISO INDIANA HUB PEAK MONTH FUT)								
EM	Spec		Increase	USD	1,650	1,500	1,925	1,750
EM	Hedge/Member		Increase	USD	1,500	1,500	1,750	1,750
ISO New England Internal Hub Location Marginal Pri - All Months (ISO NEW ENGLAND OFF-PEAK LMP FUT)								
KI	Spec		Increase	USD	2,750	2,500	4,400	4,000
KI	Hedge/Member		Increase	USD	2,500	2,500	4,000	4,000
ISO NEW ENGLAND INTERNAL HUB PEAK LMP SWAP FUTURES - All Months (ISO NEW ENGLAND PEAK LMP FUT)								
NI	Spec		Increase	USD	3,850	3,500	4,950	4,500
NI	Hedge/Member		Increase	USD	3,500	3,500	4,500	4,500
Midwest ISO Illinois Hub 5 MW Off-Peak Calendar-Month Day-Ahead LMP Swap Futures - All Months (MID IND TRAN SO IL HUB5MW OFFP)								
4R	Spec		Decrease	USD	55	50	11	10
4R	Hedge/Member		Decrease	USD	50	50	10	10
NEPOOL INTER HUB 5MW DAY AHEAD OFF PEAK - All Months (NEPOOL INTR HUB 5MW D AH O PK)								
H2	Spec		Increase	USD	11	10	17	15
H2	Hedge/Member		Increase	USD	10	10	15	15
NEPOOL MAINE 5MW DAY AHEAD OFF PEAK - All Months (NEPOOL MAINE 5MW D AH O EAK)								
W2	Spec		Decrease	USD	55	50	39	35
W2	Hedge/Member		Decrease	USD	50	50	35	35
NEPOOL MAINE 5MW DAY AHEAD PEAK - All Months (NEPOOL MAINE 5MW D AH PK)								
P9	Spec		Increase	USD	55	50	165	150
P9	Hedge/Member		Increase	USD	50	50	150	150

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
NEPOOL NE MASS 5 MW DAY AHEAD OFF PEAK - All Months (NEPOOL NE MASS 5MW D AH O PK)								
P8	Spec		Decrease	USD	55	50	39	35
P8	Hedge/Member		Decrease	USD	50	50	35	35
NEPOOL NE MASS 5 MW DAY AHEAD PEAK - All Months (NEPOOL NE MASS 5MW D AH PK)								
P7	Spec		Increase	USD	55	50	165	150
P7	Hedge/Member		Increase	USD	50	50	150	150
NEPOOL NEW HAMPSHIRE 5MW DAY AHEAD OFF PEAK - All Months (NEPOOL NEW HAMP 5MW D AH O PK)								
U3	Spec		Decrease	USD	55	50	39	35
U3	Hedge/Member		Decrease	USD	50	50	35	35
NEPOOL NEW HAMPSHIRE 5MW DAY AHEAD PEAK - All Months (NEPOOL NEW HAMP 5MW D AH PK)								
U2	Spec		Increase	USD	55	50	165	150
U2	Hedge/Member		Increase	USD	50	50	150	150
NEPOOL RHODE ISLAND 5MW DAY AHEAD OFF PEAK - All Months (NEPOOL RHODE IL 5MW D AH O PK)								
U5	Spec		Decrease	USD	55	50	39	35
U5	Hedge/Member		Decrease	USD	50	50	35	35
NEPOOL RHODE ISLAND 5MW DAY AHEAD PEAK - All Months (NEPOOL RHD ISLD 5MW D AH PK)								
U4	Spec		Increase	USD	55	50	165	150
U4	Hedge/Member		Increase	USD	50	50	150	150
NEPOOL SE MASS 5 MW DAY AHEAD OFF PEAK - All Months (NEPOOL SE MASS 5MW D AH O PK)								
P5	Spec		Decrease	USD	55	50	39	35
P5	Hedge/Member		Decrease	USD	50	50	35	35
NEPOOL SE MASS 5 MW DAY AHEAD PEAK - All Months (NEPOOL SE MASS 5MW D AH PK)								
P4	Spec		Increase	USD	55	50	165	150
P4	Hedge/Member		Increase	USD	50	50	150	150
NEPOOL W CENTRAL M 5MW DAY AHEAD PEAK - All Months (NEPOOL W CNTR M 5MW D AH PK)								
R6	Spec		Increase	USD	55	50	165	150
R6	Hedge/Member		Increase	USD	50	50	150	150
NEPOOL W CENTRAL MASS 5 MW DAY AHEAD OFF PEAK - All Months (NEPOOL W CNT MASS 5MW D AH O PK)								
L9	Spec		Decrease	USD	55	50	39	35
L9	Hedge/Member		Decrease	USD	50	50	35	35
Northern Illinois Hub Monthly Electricity Futures - All Months (NORTHERN ILLINOIS HUB MONTHLY)								
UM	Spec		Increase	USD	1,650	1,500	2,750	2,500
UM	Hedge/Member		Increase	USD	1,500	1,500	2,500	2,500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
NYISO ZONE A 5MW DAY AHEAD OFF PEAK - All Months (NYISO ZONE A 5MW D AH O PK)								
K4	Spec		New	USD			22	20
K4	Hedge/Member		New	USD			20	20
NYISO Zone A LBMP Swap - Off-Peak - All Months (NYISO A OFF-PEAK)								
KB	Spec		Increase	USD	1,100	1,000	2,200	2,000
KB	Hedge/Member		Increase	USD	1,000	1,000	2,000	2,000
NYISO ZONE C 5 MW DAY AHEAD OFF PEAK - All Months (NYISO ZONE C 5MW D AH O PK)								
A3	Spec		Decrease	USD	55	50	17	15
A3	Hedge/Member		Decrease	USD	50	50	15	15
NYISO ZONE C 5MW DAY AHEAD PEAK - All Months (NYISO ZONE C 5MW D AH PK)								
Q5	Spec		Increase	USD	55	50	220	200
Q5	Hedge/Member		Increase	USD	50	50	200	200
NYISO ZONE F 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES - All Months (NYISO ZONE F 5MW PK FUT)								
4L	Spec		New	USD			330	300
4L	Hedge/Member		New	USD			300	300
NYISO ZONE G 5MW DAY AHEAD OFF PEAK - All Months (NYISO ZONE G 5MW D AH O PK)								
D2	Spec		New	USD			22	20
D2	Hedge/Member		New	USD			20	20
NYISO ZONE J 5MW DAY AHEAD OFF PEAK - All Months (NYISO ZONE J 5MW D AH O PK)								
D4	Spec		New	USD			22	20
D4	Hedge/Member		New	USD			20	20
PJM AECO Zone Off-Peak Calendar-Month Day-Ahead LMP - All Months (PJM AECO DA OFF-PEAK)								
X1	Spec		Increase	USD	3	3	11	10
X1	Hedge/Member		Increase	USD	3	3	10	10
PJM AECO Zone Peak Calendar-Month Day-Ahead LMP - All Months (PJM AECO DA PEAK)								
Y1	Spec		Increase	USD	83	75	138	125
Y1	Hedge/Member		Increase	USD	75	75	125	125
PJM APS Zone Off-Peak Calendar-Month Day-Ahead LMP - All Months (PJM APS ZONE DA OFF-PEAK)								
W4	Spec		Increase	USD	3	3	11	10
W4	Hedge/Member		Increase	USD	3	3	10	10
PJM COM-ED 5MW DAY AHEAD PEAK - All Months (PJM COMED 5MW D AH PK)								
D8	Spec		Increase	USD	83	75	248	225
D8	Hedge/Member		Increase	USD	75	75	225	225

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
PJM DUQUESNE 5MW DAY AHEAD PEAK - All Months (PJM DUQUESNE 5MW D AH PK)								
D5	Spec		Increase	USD	22	20	55	50
D5	Hedge/Member		Increase	USD	20	20	50	50
PJM Financially Settled Monthly Electricity Futures - All Months (PJM OFF-PEAK LMP FUT)								
JP	Spec		Increase	USD	1,100	1,000	1,375	1,250
JP	Hedge/Member		Increase	USD	1,000	1,000	1,250	1,250
PJM JCPL Zone Off-Peak Calendar-Month Day-Ahead LMP - All Months (PJM JCPL DA OFF-PEAK)								
F2	Spec		Increase	USD	7	6	17	15
F2	Hedge/Member		Increase	USD	6	6	15	15
PJM NI HUB 5MW REAL TIME OFF PEAK - All Months (PJM NI HUB 5MW REAL TIME O PK)								
B6	Spec		Increase	USD	3	3	6	5
B6	Hedge/Member		Increase	USD	3	3	5	5
PJM NI HUB 5MW REAL TIME PEAK - All Months (PJM NI HUB 5MW REAL TIME PK)								
B3	Spec		Increase	USD	83	75	193	175
B3	Hedge/Member		Increase	USD	75	75	175	175
PJM Northern Illinois Off-Peak Calendar-Month Day-Ahead LMP - All Months (PJM NILL DA OFF-PEAK)								
L3	Spec		Increase	USD	11	10	17	15
L3	Hedge/Member		Increase	USD	10	10	15	15
PJM PECO Zone 5 MW Peak Calendar-Month Day-Ahead LMP Swap Futures - All Months (PJM PECO Z5 MW PK CLM DA LMP)								
4N	Spec		Increase	USD	83	75	193	175
4N	Hedge/Member		Increase	USD	75	75	175	175
PJM PEPCO Zone Peak Calendar-Month Day-Ahead LMP - All Months (PJM PEPCO DA PEAK)								
R8	Spec		Increase	USD	165	150	220	200
R8	Hedge/Member		Increase	USD	150	150	200	200
PJM PSEG Zone Peak Calendar-Month Day-Ahead LMP - All Months (PJM PSEG DA PEAK)								
L6	Spec		Increase	USD	165	150	220	200
L6	Hedge/Member		Increase	USD	150	150	200	200
PPL Zone Peak Calendar-Month Day-Ahead LMP - All Months (PJM PPL DA PEAK)								
L5	Spec		Increase	USD	83	75	138	125
L5	Hedge/Member		Increase	USD	75	75	125	125

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
ENVIRONMENTAL - Intra Spreads								
California Carbon Allowance Futures [All Months] (CALIFORNIA CARBON ALLOWANCES)								
CCA	Spec		Increase	USD	440	400	660	600
CCA	Hedge/Member		Increase	USD	400	400	600	600
Daily European Union Allowance (EUA) Futures - All Months (DAILY EUROPEAN UNION ALLOWANCE(EUA) FU)								
EUL	Spec		Increase	EUR	330	300	550	500
EUL	Hedge/Member		Increase	EUR	300	300	500	500
European Union Allowance (EUA) Futures - All Months (CARBON EUA EMISSIONS FUTURE)								
RC	Spec		Increase	EUR	330	300	550	500
RC	Hedge/Member		Increase	EUR	300	300	500	500
In Delivery Month European Union Allowance (EUA) Futures - All Months (IN DELIVERY MONTH EUA FUTURES)								
6T	Spec		Increase	EUR	715	650	990	900
6T	Hedge/Member		Increase	EUR	650	650	900	900
Regional Greenhouse Gas Initiative (RGGI) Futures - All Months (CARBON RGGI EMISSION)								
RJ	Spec		Increase	USD	110	100	220	200
RJ	Hedge/Member		Increase	USD	100	100	200	200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
ETHANOL - Intra Spreads								
Chicago Ethanol (Platts) Swap - All Consecutive Months (CHICAGO ETHANOL FUT)								
CU	Spec		Increase	USD	715	650	990	900
CU	Hedge/Member		Increase	USD	650	650	900	900
Chicago Ethanol (Platts) Swap, Tier 1 vs. Tier 2 (CHICAGO ETHANOL FUT)								
CU	Spec		New	USD			1,980	1,800
CU	Hedge/Member		New	USD			1,800	1,800
Chicago Ethanol (Platts) Swap, Tier 1 vs. Tier 3 (CHICAGO ETHANOL FUT)								
CU	Spec		New	USD			2,750	2,500
CU	Hedge/Member		New	USD			2,500	2,500
Chicago Ethanol (Platts) Swap, Tier 2 vs. Tier 2 (CHICAGO ETHANOL FUT)								
CU	Spec		New	USD			1,980	1,800
CU	Hedge/Member		New	USD			1,800	1,800
Chicago Ethanol (Platts) Swap, Tier 2 vs. Tier 3 (CHICAGO ETHANOL FUT)								
CU	Spec		New	USD			2,475	2,250
CU	Hedge/Member		New	USD			2,250	2,250
Chicago Ethanol (Platts) Swap, Tier 3 vs. Tier 3 (CHICAGO ETHANOL FUT)								
CU	Spec		New	USD			2,475	2,250
CU	Hedge/Member		New	USD			2,250	2,250
New York Ethanol (Platts) Swap - All Consecutive Months (NEW YORK ETHANOL FUT)								
EZ	Spec		Increase	USD	715	650	990	900
EZ	Hedge/Member		Increase	USD	650	650	900	900
New York Ethanol (Platts) Swap, Tier 1 vs. Tier 2 (NEW YORK ETHANOL FUT)								
EZ	Spec		New	USD			1,980	1,800
EZ	Hedge/Member		New	USD			1,800	1,800
New York Ethanol (Platts) Swap, Tier 1 vs. Tier 3 (NEW YORK ETHANOL FUT)								
EZ	Spec		New	USD			2,750	2,500
EZ	Hedge/Member		New	USD			2,500	2,500
New York Ethanol (Platts) Swap, Tier 2 vs. Tier 2 (NEW YORK ETHANOL FUT)								
EZ	Spec		New	USD			1,980	1,800
EZ	Hedge/Member		New	USD			1,800	1,800
New York Ethanol (Platts) Swap, Tier 2 vs. Tier 3 (NEW YORK ETHANOL FUT)								
EZ	Spec		New	USD			2,475	2,250
EZ	Hedge/Member		New	USD			2,250	2,250

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

New York Ethanol (Platts) Swap, Tier 3 vs. Tier 3 (NEW YORK ETHANOL FUT)

EZ	Spec		New	USD			2,475	2,250
EZ	Hedge/Member		New	USD			2,250	2,250

FREIGHT - Intra Spreads

Tanker Route TC5 Ras Tanura to Yokohama - All Months (TC5 RAS TANURA TO YOKOHAMA 55K MT)

TH	Spec		Increase	USD	1,100	1,000	1,650	1,500
TH	Hedge/Member		Increase	USD	1,000	1,000	1,500	1,500

Tanker Route TD3 Middle Eastern Gulf to Japan - All Months (TD3 MEG TO JAPAN 250K MT)

TL	Spec		Increase	USD	275	250	550	500
TL	Hedge/Member		Increase	USD	250	250	500	500

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						
AEP DAYTON HUB PEAK MONTHLY (NYM-VM - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	45%	45%
AEP-DAYTON HUB MONTHLY ELECTRICITY FUTURES - PEAK (NYM-VM - CME) vs PJM FINANCIALLY SETTLED MONTHLY FUTURES - PEAK (NYM-JM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
AEP-DAYTON HUB OFF-PEAK MONTHLY SWAP (NYM-VP - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	30%	30%	45%	45%
CIN HUB 5MW REAL TIME PEAK (NYM-H3 - CME) vs CIN HUB 5MW DAY AHEAD PEAK (NYM-H5 - CME)						
Spread Credit Rate	Decrease	+1:-1	95%	95%	65%	65%
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	60%	60%	70%	70%
CINERGY HUB OFF-PEAK CALENDAR-MONTH LMP SWAP (NYM-EJ - CME) vs PJM OFF-PEAK LMP SWAP (NYM-JP - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	35%	35%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	25%	25%
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	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND MAINE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W2 - CME)						
Spread Credit Rate	Decrease	+1:-194	55%	55%	25%	25%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	25%	25%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U2 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P8 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P7 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
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)						

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
Spread Credit Rate	Decrease	+1:-194	60%	60%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P5 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P4 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND WEST CENTRAL MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY AHEAD LMP SWAP FUTURES (NY-L9 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%
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	Decrease	+1:-11	50%	50%	0%	0%
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	35%	35%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE C 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-A3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	45%	45%
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	Decrease	+1:-194	55%	55%	0%	0%
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	Decrease	+1:-11	55%	55%	35%	35%
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	50%	50%	70%	70%
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	60%	60%	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%	65%	65%
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%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	Increase	+1:-11	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						
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	65%	65%	75%	75%
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	50%	50%	70%	70%
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	40%	40%	55%	55%
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	45%	45%	65%	65%
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	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4P - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	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	50%	50%	60%	60%
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	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEPCO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R8 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
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	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG, NN, HP) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	60%	60%
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	Decrease	+11:-1	50%	50%	0%	0%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ISO NEW ENGLAND OFF-PEAK LMP MONTHLY SWAP (NYM-KI - CME) vs NYISO ZONE G OFF-PEAK MONTHLY SWAP (NYM-KH - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	40%	40%
MIDWEST ISO CINERGY HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-EM - CME) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME)						
Spread Credit Rate	Decrease	+1:-11	90%	90%	65%	65%
NEEPOOL INTER HUB 5MW DAY AHEAD OFF PEAK (NYM-H2 - CME) vs NYISO ZONE A 5MW DAY AHEAD OFF PEAK (NYM-K4 - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	40%	40%
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	Decrease	+194:-1	65%	65%	30%	30%
NORTHERN ILLINOIS HUB MONTHLY ELECTRICITY FUTURES (NYM-UM - CME) vs PJM FINANCIALLY SETTLED MONTHLY FUTURES - PEAK (NYM-JM - CME)						
Spread Credit Rate	Increase	+1:-1	55%	55%	70%	70%
NORTHERN ILLINOIS OFF-PEAK MONTHLY SWAP (NYM-UO - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
NYISO ZONE A 5MW DAY AHEAD OFF PEAK (NYM-K4 - CME) vs NYISO ZONE J 5MW DAY AHEAD OFF PEAK (NYM-D4 - CME)						
Spread Credit Rate	Decrease	+1:-1	80%	80%	45%	45%
NYISO ZONE A OFF-PEAK MONTHLY (NYM-KB - CME) vs ISO NEW ENGLAND OFF-PEAK LMP MONTHLY SWAP (NYM-KI - CME)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	25%	25%
NYISO ZONE A PEAK MONTHLY SWAP (NYM-KA - CME) vs NYISO ZONE C 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP (NYM-Q5 - CME)						
Spread Credit Rate	Increase	+1:-5	30%	30%	80%	80%
NYISO ZONE A PEAK MONTHLY SWAP (NYM-KA - CME) vs NYISO ZONE G PEAK MONTHLY SWAP (NYM-KG - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	50%	50%
NYISO ZONE A PEAK MONTHLY SWAP (NYM-KA - CME) vs NYISO ZONE J PEAK MONTHLY SWAP (NYM-KJ - CME)						
Spread Credit Rate	Increase	+1:-1	30%	30%	45%	45%
NYISO ZONE A PEAK MONTHLY SWAP (NYM-KA - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-L1 - CME)						
Spread Credit Rate	Increase	+1:-5	30%	30%	60%	60%
NYISO ZONE F 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4M - CME) vs NYISO ZONE G 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-D2 - CME)						
Spread Credit Rate	Decrease	+1:-1	80%	80%	0%	0%
NYISO ZONE F 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4L - CME) vs NYISO ZONE G PEAK LBMP SWAP FUTURES (NY-KG - CME)						
Spread Credit Rate	Decrease	+1:-5	70%	70%	20%	20%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
NYISO ZONE G 5MW DAY AHEAD OFF PEAK (NYM-D2 - CME) vs NEEPOOL INTER HUB 5MW DAY AHEAD OFF PEAK (NYM-H2 - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	50%	50%
NYISO ZONE G 5MW DAY AHEAD OFF PEAK (NYM-D2 - CME) vs NYISO ZONE A 5MW DAY AHEAD OFF PEAK (NYM-K4 - CME)						
Spread Credit Rate	Decrease	+1:-1	80%	80%	50%	50%
NYISO ZONE J 5MW DAY AHEAD OFF PEAK (NYM-D4 - CME) vs NEEPOOL INTER HUB 5MW DAY AHEAD OFF PEAK (NYM-H2 - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	45%	45%
NYISO ZONE J PEAK MONTHLY SWAP (NYM-KJ - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP (NYM-L1 - CME)						
Spread Credit Rate	Decrease	+1:-5	70%	70%	45%	45%
ONTARIO OFF-PEAK CALENDAR-MONTH SWAP FUTURES (NY-OFM - CME) vs ISO NEW ENGLAND INTERNAL HUB OFF-PEAK LMP SWAP FUTURES (NY-KI - CME)						
Spread Credit Rate	Decrease	+194:-1	50%	50%	0%	0%
ONTARIO OFF-PEAK CALENDAR-MONTH SWAP FUTURES (NY-OFM - CME) vs NYISO ZONE A OFF-PEAK LBMP SWAP FUTURES (NY-KB - CME)						
Spread Credit Rate	Increase	+194:-1	50%	50%	60%	60%
ONTARIO PEAK CALENDAR-MONTH SWAP FUTURES (NY-OPM - CME) vs ISO NEW ENGLAND INTERNAL HUB PEAK LMP SWAP FUTURES (NY-NI - CME)						
Spread Credit Rate	Decrease	+11:-1	35%	35%	0%	0%
ONTARIO PEAK CALENDAR-MONTH SWAP FUTURES (NY-OPM - CME) vs NYISO ZONE A PEAK LBMP SWAP FUTURES (NY-KA - CME)						
Spread Credit Rate	Decrease	+5:-1	50%	50%	25%	25%
ONTARIO PEAK CALENDAR-MONTH SWAP FUTURES (NY-OPM - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+11:-1	50%	50%	0%	0%
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	Decrease	+1:-1	95%	95%	65%	65%
PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-D7 - CME) vs PJM DUQUESNE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP (NYM-D5 - CME)						
Spread Credit Rate	Decrease	+1:-1	90%	90%	65%	65%
PJM AEP DAYTON HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-D7 - CME) vs PJM AEP DAYTON HUB PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-VM - CME)						
Spread Credit Rate	Decrease	+11:-1	95%	95%	60%	60%
PJM DUQUESNE 5MW DAY AHEAD OFF PEAK (NYM-D6 - CME) vs PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD (NYM-E4 - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	55%	55%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
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	Decrease	+1:-1	85%	85%	65%	65%
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	Decrease	+1:-1	85%	85%	50%	50%
PJM FINANCIALLY SETTLED MONTHLY FUTURES - PEAK (NYM-JM - CME) vs ISO NEW ENGLAND INTERNAL HUB LOCATION MARGINAL PRI (NYM-NI - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	30%	30%
PJM FINANCIALLY SETTLED MONTHLY FUTURES - PEAK (NYM-JM - CME) vs NYISO ZONE A LBMP SWAP - PEAK (NYM-KA - CME)						
Spread Credit Rate	Increase	+1:-2	30%	30%	65%	65%
PJM NI HUB 5 MW REAL TIME OFF-PEAK (NYM-B6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	65%	65%	75%	75%
PJM NI HUB 5MW REAL TIME PEAK (NYM-B3 - CME) vs PJM AD HUB 5MW REAL TIME PEAK (NYM-Z9 - CME)						
Spread Credit Rate	Decrease	+1:-1	80%	80%	40%	40%
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	Decrease	+1:-1	75%	75%	50%	50%
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	Decrease	+1:-1	70%	70%	0%	0%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	45%	45%	65%	65%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs ISO NEW ENGLAND OFF-PEAK LMP MONTHLY SWAP (NYM-KI - CME)						
Spread Credit Rate	Decrease	+1:-1	75%	75%	25%	25%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs NORTHERN ILLINOIS OFF-PEAK MONTHLY SWAP (NYM-UO - CME)						
Spread Credit Rate	Increase	+1:-1	60%	60%	75%	75%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs NYISO ZONE G OFF-PEAK MONTHLY SWAP (NYM-KH - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	45%	45%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs NYISO ZONE J OFF-PEAK MONTHLY SWAP (NYM-KK - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	45%	45%
PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME) vs PJM WESTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-J4 - CME)						
Spread Credit Rate	Decrease	+1:-11	95%	95%	75%	75%
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	Decrease	+1:-1	85%	85%	45%	45%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
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	50%	50%	70%	70%
PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-L6 - CME) vs PJM JCPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-J2 - CME)						
Spread Credit Rate	Decrease	+1:-1	85%	85%	45%	45%
PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Decrease	+11:-1	60%	60%	40%	40%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD (NYM-E4 - CME) vs PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHE (NYM-R7 - CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	0%	0%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD (NYM-E4 - CME) vs PJM EASTERN HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD (NYM-F4 - CME)						
Spread Credit Rate	Decrease	+1:-1	90%	90%	70%	70%
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	50%	50%	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 DAY-AHEAD LMP (NYM-J4 - CME) vs PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP (NYM-L6 - CME)						
Spread Credit Rate	Decrease	+1:-1	85%	85%	45%	45%
PJM WESTERN HUB PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-L1 - CME) vs ISO NEW ENGLAND INTERNAL HUB PEAK LMP SWAP FUTURES (NY-NI - CME)						
Spread Credit Rate	Decrease	+1:-11	70%	70%	25%	25%

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	Decrease	+1:-1	65%	65%	45%	45%
AEP-DAYTON HUB OFF-PEAK MONTHLY SWAP (NYM-VP - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	30%	30%	45%	45%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND CONNECTICUT ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	25%	25%
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	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND MAINE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-W2 - CME)						
Spread Credit Rate	Decrease	+1:-194	55%	55%	25%	25%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	25%	25%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NEW HAMPSHIRE ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-U2 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P8 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND NORTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P7 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
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	Decrease	+1:-194	60%	60%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P5 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND SOUTH EAST MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-P4 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs ISO NEW ENGLAND WEST CENTRAL MASSACHUSETTS ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY AHEAD LMP SWAP FUTURES (NY-L9 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	30%	30%

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 ISO NEW ENGLAND WEST CENTRAL MASSACHUSETTS ZONE 5 MW PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R6 - CME)						
Spread Credit Rate	Decrease	+1:-11	50%	50%	0%	0%
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	35%	35%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE C 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-A3 - CME)						
Spread Credit Rate	Decrease	+1:-194	65%	65%	45%	45%
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	Decrease	+1:-194	55%	55%	0%	0%
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	Decrease	+1:-11	55%	55%	35%	35%
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	50%	50%	70%	70%
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	60%	60%	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%	65%	65%
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%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM BGE ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E3 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	70%	70%
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	65%	65%	75%	75%
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	50%	50%	70%	70%
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	40%	40%	55%	55%

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 EASTERN HUB PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-E9 - CME)						
Spread Credit Rate	Increase	+1:-11	45%	45%	65%	65%
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	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PECO ZONE 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-4P - CME)						
Spread Credit Rate	Increase	+1:-194	50%	50%	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	50%	50%	60%	60%
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	50%	50%	65%	65%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEPCO ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R8 - CME)						
Spread Credit Rate	Increase	+1:-11	50%	50%	65%	65%
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	50%	50%	70%	70%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PPL ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L5 - CME)						
Spread Credit Rate	Increase	+1:-11	30%	30%	60%	60%
HENRY HUB NATURAL GAS FUTURES (NY-NG, NN, HP) vs MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DAY-AHEAD SWAP FUTURES (NY-H5 - CME)						
Spread Credit Rate	Increase	+1:-11	35%	35%	60%	60%
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	Decrease	+11:-1	50%	50%	0%	0%
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	Decrease	+194:-1	65%	65%	30%	30%
NORTHERN ILLINOIS OFF-PEAK MONTHLY SWAP (NYM-UO - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	55%	55%	65%	65%
PJM NI HUB 5 MW REAL TIME OFF-PEAK (NYM-B6 - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+194:-1	65%	65%	75%	75%
PJM OFF-PEAK LMP SWAP (NYM-JP - CME) vs HENRY HUB NATURAL GAS (NYM-NG, NN, HP)						
Spread Credit Rate	Increase	+1:-1	45%	45%	65%	65%

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
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	50%	50%	70%	70%
PJM PSEG ZONE PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-L6 - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Decrease	+11:-1	60%	60%	40%	40%
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	50%	50%	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%