



17-516

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

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Friday, December 29, 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

Tuesday, January 02, 2018.

Current rates as of:

Friday, December 29, 2017.

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

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

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

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

ELECTRICITY - Outright Rates

ISO NEW ENGLAND PEAK LMP FUT (NI)

NI	Spec	Mnth 1	Increase	USD	4,950	4,500	6,435	5,850
NI	Hedge/Member	Mnth 1	Increase	USD	4,500	4,500	5,850	5,850
NI	Spec	Mnth 2	Increase	USD	4,950	4,500	5,693	5,175
NI	Hedge/Member	Mnth 2	Increase	USD	4,500	4,500	5,175	5,175

MIDWEST ISO MICHIGAN HUB 5MW PEAK C (HMW)

HMW	Spec	Mnth 1	Increase	USD	330	300	429	390
HMW	Hedge/Member	Mnth 1	Increase	USD	300	300	390	390
HMW	Spec	Mnth 2	Increase	USD	198	180	275	250
HMW	Hedge/Member	Mnth 2	Increase	USD	180	180	250	250

MISO INDIANA HUB 5MW D AH O PK (K2)

K2	Spec	Mnth 1	Increase	USD	11	10	15	14
K2	Hedge/Member	Mnth 1	Increase	USD	10	10	14	14
K2	Spec	Mnth 2	Increase	USD	9	8	12	11
K2	Hedge/Member	Mnth 2	Increase	USD	8	8	11	11
K2	Spec	Mnths 3-4	Increase	USD	8	7	11	10
K2	Hedge/Member	Mnths 3-4	Increase	USD	7	7	10	10
K2	Spec	Mnths 5-11	Increase	USD	8	7	11	10
K2	Hedge/Member	Mnths 5-11	Increase	USD	7	7	10	10
K2	Spec	Mnths 12+	Increase	USD	8	7	11	10
K2	Hedge/Member	Mnths 12+	Increase	USD	7	7	10	10

MISO INDIANA HUB 5MW D AH PK (H5)

H5	Spec	Mnth 1	Increase	USD	226	205	270	245
H5	Hedge/Member	Mnth 1	Increase	USD	205	205	245	245
H5	Spec	Mnth 2	Increase	USD	171	155	204	185
H5	Hedge/Member	Mnth 2	Increase	USD	155	155	185	185
H5	Spec	Mnths 3-4	Increase	USD	110	100	121	110
H5	Hedge/Member	Mnths 3-4	Increase	USD	100	100	110	110
H5	Spec	Mnth 5-11	Increase	USD	110	100	121	110
H5	Hedge/Member	Mnth 5-11	Increase	USD	100	100	110	110
H5	Spec	Mnths 12+	Increase	USD	110	100	121	110
H5	Hedge/Member	Mnths 12+	Increase	USD	100	100	110	110

MISO INDIANA HUB 5MW REAL TIME OFPK (H4)

H4	Spec	Mnth 1	Increase	USD	10	9	14	13
H4	Hedge/Member	Mnth 1	Increase	USD	9	9	13	13
H4	Spec	Mnth 2	Increase	USD	8	7	11	10

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
H4	Hedge/Member	Mnth 2	Increase	USD	7	7	10	10
H4	Spec	Mnths 3-4	Increase	USD	7	6	10	9
H4	Hedge/Member	Mnths 3-4	Increase	USD	6	6	9	9
H4	Spec	Mnths 5-11	Increase	USD	7	6	10	9
H4	Hedge/Member	Mnths 5-11	Increase	USD	6	6	9	9
H4	Spec	Mnths 12+	Increase	USD	7	6	10	9
H4	Hedge/Member	Mnths 12+	Increase	USD	6	6	9	9
MISO INDIANA HUB 5MW REAL TIME PK (H3)								
H3	Spec	Mnth 1	Increase	USD	209	190	253	230
H3	Hedge/Member	Mnth 1	Increase	USD	190	190	230	230
H3	Spec	Mnth 2	Increase	USD	154	140	187	170
H3	Hedge/Member	Mnth 2	Increase	USD	140	140	170	170
H3	Spec	Mnths 3-11	Increase	USD	99	90	110	100
H3	Hedge/Member	Mnths 3-11	Increase	USD	90	90	100	100
H3	Spec	Mnth 12+	Increase	USD	99	90	110	100
H3	Hedge/Member	Mnth 12+	Increase	USD	90	90	100	100
MISO INDIANA HUB OFF-PEAK MO FUT (EJ)								
EJ	Spec	Mnth 1	Increase	USD	1,925	1,750	2,695	2,450
EJ	Hedge/Member	Mnth 1	Increase	USD	1,750	1,750	2,450	2,450
EJ	Spec	Mnth 2	Increase	USD	1,650	1,500	2,310	2,100
EJ	Hedge/Member	Mnth 2	Increase	USD	1,500	1,500	2,100	2,100
EJ	Spec	Mnths 3-5	Increase	USD	1,100	1,000	1,540	1,400
EJ	Hedge/Member	Mnths 3-5	Increase	USD	1,000	1,000	1,400	1,400
EJ	Spec	Mnth 6-11	Increase	USD	1,100	1,000	1,540	1,400
EJ	Hedge/Member	Mnth 6-11	Increase	USD	1,000	1,000	1,400	1,400
EJ	Spec	Mnths 12+	Increase	USD	1,100	1,000	1,540	1,400
EJ	Hedge/Member	Mnths 12+	Increase	USD	1,000	1,000	1,400	1,400
MISO INDIANA HUB PEAK MONTH FUT (EM)								
EM	Spec	Mnth 1	Increase	USD	2,420	2,200	3,300	3,000
EM	Hedge/Member	Mnth 1	Increase	USD	2,200	2,200	3,000	3,000
EM	Spec	Mnth 2	Increase	USD	2,200	2,000	2,750	2,500
EM	Hedge/Member	Mnth 2	Increase	USD	2,000	2,000	2,500	2,500
EM	Spec	Mnths 3-11	Increase	USD	1,100	1,000	1,540	1,400
EM	Hedge/Member	Mnths 3-11	Increase	USD	1,000	1,000	1,400	1,400
EM	Spec	Mnth 12+	Increase	USD	1,100	1,000	1,540	1,400
EM	Hedge/Member	Mnth 12+	Increase	USD	1,000	1,000	1,400	1,400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Outright Rates

MISO MICHIGAN HUB OF-PK DA MONTHLY (HMO)

HMO	Spec	Mnth 1	Increase	USD	13	12	17	15
HMO	Hedge/Member	Mnth 1	Increase	USD	12	12	15	15
HMO	Spec	Mnths 2	Increase	USD	8	7	11	10
HMO	Hedge/Member	Mnths 2	Increase	USD	7	7	10	10
HMO	Spec	Mnths 3-4	Increase	USD	7	6	9	8
HMO	Hedge/Member	Mnths 3-4	Increase	USD	6	6	8	8
HMO	Spec	Mnths 5-11	Increase	USD	7	6	9	8
HMO	Hedge/Member	Mnths 5-11	Increase	USD	6	6	8	8
HMO	Spec	Mnths 12+	Increase	USD	7	6	9	8
HMO	Hedge/Member	Mnths 12+	Increase	USD	6	6	8	8

NYISO ZONE A 5MW D AH PK (K3)

K3	Spec	Mnth 1	Increase	USD	495	450	660	600
K3	Hedge/Member	Mnth 1	Increase	USD	450	450	600	600
K3	Spec	Mnth 2	Increase	USD	358	325	440	400
K3	Hedge/Member	Mnth 2	Increase	USD	325	325	400	400
K3	Spec	Mnths 3-5	Increase	USD	303	275	385	350
K3	Hedge/Member	Mnths 3-5	Increase	USD	275	275	350	350
K3	Spec	Mnths 6-11	Increase	USD	220	200	275	250
K3	Hedge/Member	Mnths 6-11	Increase	USD	200	200	250	250
K3	Spec	Mnths 12+	Increase	USD	220	200	275	250
K3	Hedge/Member	Mnths 12+	Increase	USD	200	200	250	250

NYISO ZONE E 5MW PK CAL MO FUT (55)

55	Spec	Mnth 1	Increase	USD	385	350	495	450
55	Hedge/Member	Mnth 1	Increase	USD	350	350	450	450
55	Spec	Mnth 2	Increase	USD	330	300	440	400
55	Hedge/Member	Mnth 2	Increase	USD	300	300	400	400
55	Spec	Mnths 3-4	Increase	USD	248	225	303	275
55	Hedge/Member	Mnths 3-4	Increase	USD	225	225	275	275
55	Spec	Mnths 5+	Increase	USD	248	225	303	275
55	Hedge/Member	Mnths 5+	Increase	USD	225	225	275	275

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
NYISO ZONE F 5MW O PK FUT (4M)								
4M	Spec	Mnth 1	Increase	USD	39	35	50	45
4M	Hedge/Member	Mnth 1	Increase	USD	35	35	45	45
4M	Spec	Mnth 2	Increase	USD	28	25	39	35
4M	Hedge/Member	Mnth 2	Increase	USD	25	25	35	35
4M	Spec	Mnths 3-4	Increase	USD	14	13	20	18
4M	Hedge/Member	Mnths 3-4	Increase	USD	13	13	18	18
4M	Spec	Mnths 5-11	Increase	USD	14	13	20	18
4M	Hedge/Member	Mnths 5-11	Increase	USD	13	13	18	18
4M	Spec	Mnths 12+	Increase	USD	14	13	20	18
4M	Hedge/Member	Mnths 12+	Increase	USD	13	13	18	18
NYISO ZONE F 5MW PK FUT (4L)								
4L	Spec	Mnth 1	Increase	USD	550	500	770	700
4L	Hedge/Member	Mnth 1	Increase	USD	500	500	700	700
4L	Spec	Mnth 2	Increase	USD	550	500	770	700
4L	Hedge/Member	Mnth 2	Increase	USD	500	500	700	700
4L	Spec	Mnths 3-4	Increase	USD	385	350	495	450
4L	Hedge/Member	Mnths 3-4	Increase	USD	350	350	450	450
4L	Spec	Mnths 5+	Increase	USD	275	250	358	325
4L	Hedge/Member	Mnths 5+	Increase	USD	250	250	325	325
NYISO ZONE G 5MW D AH O PK (D2)								
D2	Spec	Mnth 1	Increase	USD	28	25	39	35
D2	Hedge/Member	Mnth 1	Increase	USD	25	25	35	35
D2	Spec	Mnth 2	Increase	USD	18	16	26	24
D2	Hedge/Member	Mnth 2	Increase	USD	16	16	24	24
D2	Spec	Mnths 3-4	Increase	USD	11	10	15	14
D2	Hedge/Member	Mnths 3-4	Increase	USD	10	10	14	14
D2	Spec	Mnths 5-11	Increase	USD	9	8	12	11
D2	Hedge/Member	Mnths 5-11	Increase	USD	8	8	11	11
D2	Spec	Mnths 12+	Increase	USD	9	8	12	11
D2	Hedge/Member	Mnths 12+	Increase	USD	8	8	11	11

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Outright Rates

NYISO ZONE G 5MW D AH PK (T3)

T3	Spec	Mnth 1	Increase	USD	523	475	743	675
T3	Hedge/Member	Mnth 1	Increase	USD	475	475	675	675
T3	Spec	Mnth 2	Increase	USD	385	350	550	500
T3	Hedge/Member	Mnth 2	Increase	USD	350	350	500	500
T3	Spec	Mnths 3-4	Increase	USD	198	180	242	220
T3	Hedge/Member	Mnths 3-4	Increase	USD	180	180	220	220
T3	Spec	Mnths 5-11	Increase	USD	176	160	220	200
T3	Hedge/Member	Mnths 5-11	Increase	USD	160	160	200	200
T3	Spec	Mnths 12+	Increase	USD	176	160	220	200
T3	Hedge/Member	Mnths 12+	Increase	USD	160	160	200	200

NYISO ZONE J 5MW D AH O PK (D4)

D4	Spec	Mnth 1	Increase	USD	22	20	31	28
D4	Hedge/Member	Mnth 1	Increase	USD	20	20	28	28
D4	Spec	Mnth 2	Increase	USD	14	13	19	17
D4	Hedge/Member	Mnth 2	Increase	USD	13	13	17	17
D4	Spec	Mnths 3-4	Increase	USD	14	13	19	17
D4	Hedge/Member	Mnths 3-4	Increase	USD	13	13	17	17
D4	Spec	Mnths 5-11	Increase	USD	10	9	14	13
D4	Hedge/Member	Mnths 5-11	Increase	USD	9	9	13	13
D4	Spec	Mnths 12+	Increase	USD	10	9	14	13
D4	Hedge/Member	Mnths 12+	Increase	USD	9	9	13	13

NYISO ZONE J 5MW D AH PK (D3)

D3	Spec	Mnth 1	Increase	USD	550	500	715	650
D3	Hedge/Member	Mnth 1	Increase	USD	500	500	650	650
D3	Spec	Mnth 2	Increase	USD	468	425	550	500
D3	Hedge/Member	Mnth 2	Increase	USD	425	425	500	500
D3	Spec	Mnths 3-6	Increase	USD	220	200	275	250
D3	Hedge/Member	Mnths 3-6	Increase	USD	200	200	250	250
D3	Spec	Mnths 7-11	Increase	USD	193	175	248	225
D3	Hedge/Member	Mnths 7-11	Increase	USD	175	175	225	225
D3	Spec	Mnths 12+	Increase	USD	193	175	248	225
D3	Hedge/Member	Mnths 12+	Increase	USD	175	175	225	225

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Outright Rates

PJM AD HUB 5MW REAL TIME O PK (V3)

V3	Spec	Mnth 1	Increase	USD	11	10	14	13
V3	Hedge/Member	Mnth 1	Increase	USD	10	10	13	13
V3	Spec	Mnth 2	Increase	USD	9	8	11	10
V3	Hedge/Member	Mnth 2	Increase	USD	8	8	10	10
V3	Spec	Mnths 3-4	Increase	USD	8	7	9	8
V3	Hedge/Member	Mnths 3-4	Increase	USD	7	7	8	8
V3	Spec	Mnths 5-11	Increase	USD	8	7	9	8
V3	Hedge/Member	Mnths 5-11	Increase	USD	7	7	8	8
V3	Spec	Mnths 12+	Increase	USD	8	7	9	8
V3	Hedge/Member	Mnths 12+	Increase	USD	7	7	8	8

PJM AD HUB 5MW REAL TIME PK (Z9)

Z9	Spec	Mnth 1	Increase	USD	220	200	275	250
Z9	Hedge/Member	Mnth 1	Increase	USD	200	200	250	250
Z9	Spec	Mnth 2	Increase	USD	154	140	209	190
Z9	Hedge/Member	Mnth 2	Increase	USD	140	140	190	190
Z9	Spec	Mnths 3-4	Increase	USD	99	90	110	100
Z9	Hedge/Member	Mnths 3-4	Increase	USD	90	90	100	100
Z9	Spec	Mnths 5-11	Increase	USD	99	90	110	100
Z9	Hedge/Member	Mnths 5-11	Increase	USD	90	90	100	100
Z9	Spec	Mnths 12+	Increase	USD	99	90	110	100
Z9	Hedge/Member	Mnths 12+	Increase	USD	90	90	100	100

PJM ASTI ZONE PEAK DA MO (MOD)

MOD	Spec	Mnth 1	Increase	USD	17	15	22	20
MOD	Hedge/Member	Mnth 1	Increase	USD	15	15	20	20
MOD	Spec	Mnths 2-3	Increase	USD	9	8	11	10
MOD	Hedge/Member	Mnths 2-3	Increase	USD	8	8	10	10
MOD	Spec	Mnths 4-12	Increase	USD	9	8	11	10
MOD	Hedge/Member	Mnths 4-12	Increase	USD	8	8	10	10
MOD	Spec	Mnth 13+	Increase	USD	9	8	11	10
MOD	Hedge/Member	Mnth 13+	Increase	USD	8	8	10	10

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

PJM ATSI ZONE MONTHLY DAILY (MPD)

MPD	Spec	Mnth 1	Increase	USD	303	275	396	360
MPD	Hedge/Member	Mnth 1	Increase	USD	275	275	360	360
MPD	Spec	Mnths 2-3	Increase	USD	303	275	396	360
MPD	Hedge/Member	Mnths 2-3	Increase	USD	275	275	360	360
MPD	Spec	Mnths 4-12	Increase	USD	220	200	286	260
MPD	Hedge/Member	Mnths 4-12	Increase	USD	200	200	260	260
MPD	Spec	Mnths 13+	Increase	USD	176	160	231	210
MPD	Hedge/Member	Mnths 13+	Increase	USD	160	160	210	210

PJM BGE DA OFF-PEAK (R3)

R3	Spec	Mnth 1	Increase	USD	24	22	31	28
R3	Hedge/Member	Mnth 1	Increase	USD	22	22	28	28
R3	Spec	Mnth 2	Increase	USD	11	10	13	12
R3	Hedge/Member	Mnth 2	Increase	USD	10	10	12	12
R3	Spec	Mnths 3-4	Increase	USD	9	8	11	10
R3	Hedge/Member	Mnths 3-4	Increase	USD	8	8	10	10
R3	Spec	Mnths 5-11	Increase	USD	9	8	11	10
R3	Hedge/Member	Mnths 5-11	Increase	USD	8	8	10	10
R3	Spec	Mnths 12+	Increase	USD	9	8	11	10
R3	Hedge/Member	Mnths 12+	Increase	USD	8	8	10	10

PJM BGE DA PEAK (E3)

E3	Spec	Mnth 1	Increase	USD	385	350	539	490
E3	Hedge/Member	Mnth 1	Increase	USD	350	350	490	490
E3	Spec	Mnth 2	Increase	USD	330	300	462	420
E3	Hedge/Member	Mnth 2	Increase	USD	300	300	420	420
E3	Spec	Mnths 3-4	Increase	USD	303	275	385	350
E3	Hedge/Member	Mnths 3-4	Increase	USD	275	275	350	350
E3	Spec	Mnths 5-11	Increase	USD	160	145	198	180
E3	Hedge/Member	Mnths 5-11	Increase	USD	145	145	180	180
E3	Spec	Mnts 12+	Increase	USD	160	145	198	180
E3	Hedge/Member	Mnts 12+	Increase	USD	145	145	180	180

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

PJM DAYTON DA OFF-PEAK (R7)

R7	Spec	Mnth 1	Increase	USD	12	11	15	14
R7	Hedge/Member	Mnth 1	Increase	USD	11	11	14	14
R7	Spec	Mnth 2	Increase	USD	10	9	12	11
R7	Hedge/Member	Mnth 2	Increase	USD	9	9	11	11
R7	Spec	Mnths 3-11	Increase	USD	9	8	10	9
R7	Hedge/Member	Mnths 3-11	Increase	USD	8	8	9	9
R7	Spec	Mnths 12+	Increase	USD	9	8	10	9
R7	Hedge/Member	Mnths 12+	Increase	USD	8	8	9	9

PJM DAYTON DA PEAK (D7)

D7	Spec	Mnth 1	Increase	USD	237	215	292	265
D7	Hedge/Member	Mnth 1	Increase	USD	215	215	265	265
D7	Spec	Mnth 2	Increase	USD	171	155	226	205
D7	Hedge/Member	Mnth 2	Increase	USD	155	155	205	205
D7	Spec	Mnths 3-4	Increase	USD	110	100	121	110
D7	Hedge/Member	Mnths 3-4	Increase	USD	100	100	110	110
D7	Spec	Mnths 5-11	Increase	USD	110	100	121	110
D7	Hedge/Member	Mnths 5-11	Increase	USD	100	100	110	110
D7	Spec	Mnths 12+	Increase	USD	110	100	121	110
D7	Hedge/Member	Mnths 12+	Increase	USD	100	100	110	110

PJM METED ZONE PK CAL LMP FUTURES (47)

47	Spec	Mnth 1	Increase	USD	495	450	605	550
47	Hedge/Member	Mnth 1	Increase	USD	450	450	550	550
47	Spec	Mnths 7-11	Increase	USD	165	150	220	200
47	Hedge/Member	Mnths 7-11	Increase	USD	150	150	200	200
47	Spec	Mnths 12+	Increase	USD	165	150	220	200
47	Hedge/Member	Mnths 12+	Increase	USD	150	150	200	200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM MONTHLY (JM)								
JM	Spec	Mnth 1	Increase	USD	6,820	6,200	8,525	7,750
JM	Hedge/Member	Mnth 1	Increase	USD	6,200	6,200	7,750	7,750
JM	Spec	Mnth 2	Increase	USD	3,300	3,000	4,125	3,750
JM	Hedge/Member	Mnth 2	Increase	USD	3,000	3,000	3,750	3,750
JM	Spec	Mnth 3	Increase	USD	2,090	1,900	2,310	2,100
JM	Hedge/Member	Mnth 3	Increase	USD	1,900	1,900	2,100	2,100
JM	Spec	Mnths 4-5	Increase	USD	1,540	1,400	1,760	1,600
JM	Hedge/Member	Mnths 4-5	Increase	USD	1,400	1,400	1,600	1,600
JM	Spec	Mnths 6-11	Increase	USD	880	800	1,100	1,000
JM	Hedge/Member	Mnths 6-11	Increase	USD	800	800	1,000	1,000
JM	Spec	Mnths 12-23	Increase	USD	880	800	1,100	1,000
JM	Hedge/Member	Mnths 12-23	Increase	USD	800	800	1,000	1,000
JM	Spec	Mnths 24+	Increase	USD	880	800	1,100	1,000
JM	Hedge/Member	Mnths 24+	Increase	USD	800	800	1,000	1,000
PJM NI HUB 5MW REAL TIME O PK (B6)								
B6	Spec	Mnth 1	Increase	USD	9	8	13	12
B6	Hedge/Member	Mnth 1	Increase	USD	8	8	12	12
B6	Spec	Mnth 2	Increase	USD	6	5	8	7
B6	Hedge/Member	Mnth 2	Increase	USD	5	5	7	7
B6	Spec	Mnths 3-4	Increase	USD	6	5	8	7
B6	Hedge/Member	Mnths 3-4	Increase	USD	5	5	7	7
B6	Spec	Mnths 5-11	Increase	USD	6	5	8	7
B6	Hedge/Member	Mnths 5-11	Increase	USD	5	5	7	7
B6	Spec	Mnths 12+	Increase	USD	6	5	8	7
B6	Hedge/Member	Mnths 12+	Increase	USD	5	5	7	7
PJM NI HUB 5MW REAL TIME PK (B3)								
B3	Spec	Mnth 1	Increase	USD	275	250	358	325
B3	Hedge/Member	Mnth 1	Increase	USD	250	250	325	325
B3	Spec	Mnth 2	Increase	USD	187	170	242	220
B3	Hedge/Member	Mnth 2	Increase	USD	170	170	220	220
B3	Spec	Mnths 3-4	Increase	USD	110	100	132	120
B3	Hedge/Member	Mnths 3-4	Increase	USD	100	100	120	120
B3	Spec	Mnths 5-11	Increase	USD	110	100	132	120
B3	Hedge/Member	Mnths 5-11	Increase	USD	100	100	120	120
B3	Spec	Mnths 12+	Increase	USD	110	100	132	120
B3	Hedge/Member	Mnths 12+	Increase	USD	100	100	120	120

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM NILL DA OFF-PEAK (L3)								
L3	Spec	Mnth 1	Increase	USD	10	9	14	13
L3	Hedge/Member	Mnth 1	Increase	USD	9	9	13	13
L3	Spec	Mnth 2	Increase	USD	7	6	9	8
L3	Hedge/Member	Mnth 2	Increase	USD	6	6	8	8
L3	Spec	Mnths 3-5	Increase	USD	7	6	9	8
L3	Hedge/Member	Mnths 3-5	Increase	USD	6	6	8	8
L3	Spec	Mnths 6-11	Increase	USD	7	6	9	8
L3	Hedge/Member	Mnths 6-11	Increase	USD	6	6	8	8
L3	Spec	Mnths 12+	Increase	USD	7	6	9	8
L3	Hedge/Member	Mnths 12+	Increase	USD	6	6	8	8
PJM NILL DA PEAK (N3)								
N3	Spec	Mnth 1	Increase	USD	292	265	385	350
N3	Hedge/Member	Mnth 1	Increase	USD	265	265	350	350
N3	Spec	Mnth 2	Increase	USD	204	185	259	235
N3	Hedge/Member	Mnth 2	Increase	USD	185	185	235	235
N3	Spec	Mnths 3-4	Increase	USD	121	110	143	130
N3	Hedge/Member	Mnths 3-4	Increase	USD	110	110	130	130
N3	Spec	Mnths 5-11	Increase	USD	121	110	143	130
N3	Hedge/Member	Mnths 5-11	Increase	USD	110	110	130	130
N3	Spec	Mnths 12+	Increase	USD	121	110	143	130
N3	Hedge/Member	Mnths 12+	Increase	USD	110	110	130	130
PJM OFF-PEAK LMP FUT (JP)								
JP	Spec	Mnth 1	Increase	USD	2,310	2,100	3,190	2,900
JP	Hedge/Member	Mnth 1	Increase	USD	2,100	2,100	2,900	2,900
JP	Spec	Mnth 2	Increase	USD	1,980	1,800	2,750	2,500
JP	Hedge/Member	Mnth 2	Increase	USD	1,800	1,800	2,500	2,500
JP	Spec	Mnths 3-4	Increase	USD	1,430	1,300	1,980	1,800
JP	Hedge/Member	Mnths 3-4	Increase	USD	1,300	1,300	1,800	1,800
JP	Spec	Mnths 5-11	Increase	USD	770	700	1,045	950
JP	Hedge/Member	Mnths 5-11	Increase	USD	700	700	950	950
JP	Spec	Mnths 12+	Increase	USD	770	700	1,045	950
JP	Hedge/Member	Mnths 12+	Increase	USD	700	700	950	950

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
PJM WES HUB PEAK CAL MON REAL TIME (L1)								
L1	Spec	Mth 1	Increase	USD	330	300	440	400
L1	Hedge/Member	Mth 1	Increase	USD	300	300	400	400
L1	Spec	Mnth 2	Increase	USD	209	190	275	250
L1	Hedge/Member	Mnth 2	Increase	USD	190	190	250	250
L1	Spec	Mnths 3-5	Increase	USD	110	100	132	120
L1	Hedge/Member	Mnths 3-5	Increase	USD	100	100	120	120
L1	Spec	Mnths 6-11	Increase	USD	110	100	132	120
L1	Hedge/Member	Mnths 6-11	Increase	USD	100	100	120	120
L1	Spec	Mnths 12	Increase	USD	110	100	132	120
L1	Hedge/Member	Mnths 12	Increase	USD	100	100	120	120
PJM WES HUB PEAK LMP 50 MW (4S)								
4S	Spec	Mth 1	Increase	USD	3,300	3,000	4,400	4,000
4S	Hedge/Member	Mth 1	Increase	USD	3,000	3,000	4,000	4,000
4S	Spec	Mnth 2	Increase	USD	2,090	1,900	2,750	2,500
4S	Hedge/Member	Mnth 2	Increase	USD	1,900	1,900	2,500	2,500
4S	Spec	Mnths 3-5	Increase	USD	1,100	1,000	1,320	1,200
4S	Hedge/Member	Mnths 3-5	Increase	USD	1,000	1,000	1,200	1,200
4S	Spec	Mnths 6-11	Increase	USD	1,100	1,000	1,320	1,200
4S	Hedge/Member	Mnths 6-11	Increase	USD	1,000	1,000	1,200	1,200
4S	Spec	Mnths 12	Increase	USD	1,100	1,000	1,320	1,200
4S	Hedge/Member	Mnths 12	Increase	USD	1,000	1,000	1,200	1,200
PJM WESTHDA PEAK (J4)								
J4	Spec	Mnth 1	Increase	USD	347	315	457	415
J4	Hedge/Member	Mnth 1	Increase	USD	315	315	415	415
J4	Spec	Mnth 2	Increase	USD	226	205	292	265
J4	Hedge/Member	Mnth 2	Increase	USD	205	205	265	265
J4	Spec	Mnths 3-5	Increase	USD	121	110	143	130
J4	Hedge/Member	Mnths 3-5	Increase	USD	110	110	130	130
J4	Spec	Mnths 6-11	Increase	USD	121	110	143	130
J4	Hedge/Member	Mnths 6-11	Increase	USD	110	110	130	130
J4	Spec	Mnths 12+	Increase	USD	121	110	143	130
J4	Hedge/Member	Mnths 12+	Increase	USD	110	110	130	130

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 LIQUID PETROLEUM GAS (FLP)

FLP	Spec	Months 6+	Decrease	USD	2,530	2,300	1,925	1,750
FLP	Hedge/Member	Months 6+	Decrease	USD	2,300	2,300	1,750	1,750

FREIGHT ROUTE TD3 (BALTIC) FUTURES (TL)

TL	Spec	Mnth 1	Decrease	USD	3,300	3,000	1,760	1,600
TL	Hedge/Member	Mnth 1	Decrease	USD	3,000	3,000	1,600	1,600
TL	Spec	Mnth 2	Decrease	USD	2,750	2,500	1,210	1,100
TL	Hedge/Member	Mnth 2	Decrease	USD	2,500	2,500	1,100	1,100
TL	Spec	Mnths 3+	Decrease	USD	2,750	2,500	1,210	1,100
TL	Hedge/Member	Mnths 3+	Decrease	USD	2,500	2,500	1,100	1,100

TC2 ROTTERDAM TO USAC 37K MT (TM)

TM	Spec	Mnth 1	Decrease	USD	5,500	5,000	3,740	3,400
TM	Hedge/Member	Mnth 1	Decrease	USD	5,000	5,000	3,400	3,400
TM	Spec	Mnths 3+	Decrease	USD	3,300	3,000	1,870	1,700
TM	Hedge/Member	Mnths 3+	Decrease	USD	3,000	3,000	1,700	1,700

TC5 RAS TANURA TO YOKOHAMA 55K MT (TH)

TH	Spec	Mth 1	Decrease	USD	4,400	4,000	3,190	2,900
TH	Hedge/Member	Mth 1	Decrease	USD	4,000	4,000	2,900	2,900
TH	Spec	Mths 2+	Decrease	USD	2,860	2,600	1,760	1,600
TH	Hedge/Member	Mths 2+	Decrease	USD	2,600	2,600	1,600	1,600

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
NATURAL GAS - Outright Rates								
MICHIGAN BASIS (NF)								
NF	Spec	Mnth 2	Increase	USD	132	120	160	145
NF	Hedge/Member	Mnth 2	Increase	USD	120	120	145	145
NF	Spec	Mnths 3-4	Increase	USD	132	120	160	145
NF	Hedge/Member	Mnths 3-4	Increase	USD	120	120	145	145
NF	Spec	Mnths 5-12	Increase	USD	94	85	110	100
NF	Hedge/Member	Mnths 5-12	Increase	USD	85	85	100	100
NGPL MIDCONTINENT BASIS FUT (NL)								
NL	Spec	Mnth 1	Increase	USD	160	145	165	150
NL	Hedge/Member	Mnth 1	Increase	USD	145	145	150	150
NL	Spec	Mnth 2	Increase	USD	121	110	165	150
NL	Hedge/Member	Mnth 2	Increase	USD	110	110	150	150
NL	Spec	Mnths 3-6	Increase	USD	121	110	165	150
NL	Hedge/Member	Mnths 3-6	Increase	USD	110	110	150	150
NL	Spec	Mnths 7-12	Increase	USD	121	110	165	150
NL	Hedge/Member	Mnths 7-12	Increase	USD	110	110	150	150
PERMIAN BASIS FUT (PM)								
PM	Spec	Mths 2	Increase	USD	160	145	193	175
PM	Hedge/Member	Mths 2	Increase	USD	145	145	175	175
PM	Spec	Mths 3-6	Increase	USD	160	145	193	175
PM	Hedge/Member	Mths 3-6	Increase	USD	145	145	175	175
PM	Spec	Mths 7-12	Increase	USD	160	145	193	175
PM	Hedge/Member	Mths 7-12	Increase	USD	145	145	175	175
PM	Spec	Mths 13+	Increase	USD	160	145	193	175
PM	Hedge/Member	Mths 13+	Increase	USD	145	145	175	175
TRANSCO ZONE 6 BASIS FUT (NZ)								
NZ	Spec	Mnth 1	Increase	USD	1,870	1,700	2,035	1,850
NZ	Hedge/Member	Mnth 1	Increase	USD	1,700	1,700	1,850	1,850
NZ	Spec	Mnth 2	Increase	USD	1,430	1,300	1,595	1,450
NZ	Hedge/Member	Mnth 2	Increase	USD	1,300	1,300	1,450	1,450
VENTURA BASIS FUT (PF)								
PF	Spec	Mnth 1	Increase	USD	319	290	440	400
PF	Hedge/Member	Mnth 1	Increase	USD	290	290	400	400
PF	Spec	Mnths 2-5	Increase	USD	154	140	220	200
PF	Hedge/Member	Mnths 2-5	Increase	USD	140	140	200	200
PF	Spec	Mnths 6+	Increase	USD	154	140	220	200
PF	Hedge/Member	Mnths 6+	Increase	USD	140	140	200	200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
WAHA TEXAS BASIS FUT (NW)								
NW	Spec	Mnth 2	Increase	USD	165	150	220	200
NW	Hedge/Member	Mnth 2	Increase	USD	150	150	200	200
NW	Spec	Mnths 3-6	Increase	USD	165	150	220	200
NW	Hedge/Member	Mnths 3-6	Increase	USD	150	150	200	200
NW	Spec	Mnths 7-12	Increase	USD	165	150	220	200
NW	Hedge/Member	Mnths 7-12	Increase	USD	150	150	200	200
NW	Spec	Mnths 13-33	Increase	USD	165	150	220	200
NW	Hedge/Member	Mnths 13-33	Increase	USD	150	150	200	200
NW	Spec	Mnths 34+	Increase	USD	165	150	220	200
NW	Hedge/Member	Mnths 34+	Increase	USD	150	150	200	200
PETROLEUM CRACKS AND SPREADS - Outright Rates								
EURO 3.5% FUEL OIL SPREAD (FK)								
FK	Spec	Mnth 1	Increase	USD	4,950	4,500	5,720	5,200
FK	Hedge/Member	Mnth 1	Increase	USD	4,500	4,500	5,200	5,200

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
ELECTRICITY - Inter-commodity Spread Rates						
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs NYISO ZONE F 5 MW OFF-PEAK CALENDAR-MONTH DAY-AHEAD LBMP SWAP FUTURES (NY-4M - CME)						
Spread Credit Rate	Decrease	+1:-194	50%	50%	45%	45%
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	70%	70%	45%	45%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
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	Decrease	+16:-1	60%	60%	50%	50%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME) vs PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JP-CME)						
Spread Credit Rate	Decrease	+12:-1	45%	45%	40%	40%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH DA SWAP FUT (NY-H5-CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JM-CME)						
Spread Credit Rate	Decrease	+12:-1	55%	55%	30%	30%
MIDWEST ISO CINERGY HUB 5 MW PEAK CALENDAR-MONTH RT SWAP FUT (NY-H3-CME) vs PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JP-CME)						
Spread Credit Rate	Decrease	+12:-1	50%	50%	40%	40%
MISO Indiana Hub (formerly Cinergy Hub) 5 Month Peak Calendar-Month Real-Time Futures (NY-H3-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+10:-1	70%	70%	50%	50%
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	Decrease	+1:-1	70%	70%	65%	65%
MISO Michigan Hub 5 MW Off-Peak Calendar-Month Day-Ahead Futures (NY-HMO-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+168:-1	45%	45%	35%	35%
NYISO Zone A Peak LBMP Futures (NY-KA-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+11:-1	40%	40%	30%	30%
PJM AEP DAYTON HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-V3 - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+168:-1	62%	62%	30%	30%
PJM AEP DAYTON HUB 5MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-Z9- CME) vs MIDWEST ISO CINERGY HUB PEAK CAL LMP SWAP FUT (NY-EM- CME)						
Spread Credit Rate	Decrease	+11:-1	55%	55%	30%	30%

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 5MW Peak Calendar-Month Real-Time LMP Futures (NY-Z9-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+10:-1	60%	60%	45%	45%
PJM AEP DAYTON HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-R7- CME) vs PJM OFF-PEAK CAL LMP SWAP FUT (NY-JP- CME)						
Spread Credit Rate	Decrease	+202:-1	60%	60%	40%	40%
PJM AEP DAYTON HUB OFF-PEAK CALENDAR-MONTH DAY-AHEAD LMP SWAP FUTURES (NY-R7 - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+168:-1	62%	62%	30%	30%
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	Decrease	+1:-1	85%	85%	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	Decrease	+1:-1	85%	85%	70%	70%
PJM BGE ZONE OFF-PEAK CAL DA LMP SWAP FUT (NY-R3- CME) vs PJM OFF-PEAK CAL LMP SWAP FUT (NY-JP- CME)						
Spread Credit Rate	Decrease	+202:-1	55%	55%	40%	40%
PJM BGE Zone Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-R3-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+168:-1	65%	65%	50%	50%
PJM ComEd Zone 5 MW Off-Peak Calendar-Month Day-Ahead LMP Futures (NY-D9-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+168:-1	65%	65%	55%	55%
PJM NORTHERN ILLINOIS HUB 5 MW OFF-PEAK CALENDAR-MONTH REAL-TIME LMP SWAP FUTURES (NY-B6 - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+168:-1	62%	62%	30%	30%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CAL REAL-TIME LMP SWAP FUT (NY-B3- CME) vs MIDWEST ISO MICHIGAN HUB 5 MW PEAK CAL DA SWAP FUT (NY-HMW- CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%
PJM Northern Illinois Hub 5 MW Peak Calendar-Month Real-Time LMP Futures (NY-B3-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Off-Peak LMP Futures (NY-EJ-CME)						
Spread Credit Rate	Decrease	+12:-1	50%	50%	45%	45%
PJM NORTHERN ILLINOIS HUB 5 MW PEAK CALENDAR-MONTH RT LMP SWAP FUT (NY-B3-CME) vs MIDWEST ISO CINERGY HUB PEAK CALENDAR-MONTH LMP SWAP FUT (NY-EM-CME)						
Spread Credit Rate	Decrease	+12:-1	60%	60%	40%	40%
PJM NORTHERN ILLINOIS HUB OFF-PEAK CAL DA LMP SWAP FUT (NY-L3- CME) vs PJM OFF-PEAK CAL LMP SWAP FUT (NY-JP- CME)						
Spread Credit Rate	Decrease	+202:-1	55%	55%	50%	50%

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 PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+168:-1	65%	65%	35%	35%
PJM NORTHERN ILLINOIS HUB PEAK CAL LMP SWAP FUT (NY-V3- CME) vs PJM OFF-PEAK CAL LMP SWAP FUT (NY-JP- CME)						
Spread Credit Rate	Decrease	+202:-1	55%	55%	30%	30%
PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME) vs MIDWEST ISO CINERGY HUB PEAK CALENDAR-MONTH LMP SWAP FUT (NY-EM-CME)						
Spread Credit Rate	Decrease	+12:-1	60%	60%	30%	30%
PJM Off-Peak Calendar-Month LMP Futures (NY-JP-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	30%	30%
PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	45%	45%
PJM PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JM-CME) vs PJM NORTHERN ILLINOIS HUB PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-N3-CME)						
Spread Credit Rate	Decrease	+1:-12	56%	56%	50%	50%
PJM Western Hub Day-Ahead Off-Peak Calendar-Month 5 MW Futures (NY-E4-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+168:-1	70%	70%	40%	40%
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	Decrease	+1:-1	78%	78%	65%	65%
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	Decrease	+1:-1	80%	80%	70%	70%
PJM WESTERN HUB OFF-PEAK CAL REAL-TIME LMP SWAP FUT (NY-N9- CME) vs PJM OFF-PEAK CAL LMP SWAP FUT (NY-JP- CME)						
Spread Credit Rate	Decrease	+202:-1	55%	55%	50%	50%
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	Decrease	+1:-1	80%	80%	70%	70%
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	Decrease	+1:-1	80%	80%	70%	70%
PJM WESTERN HUB OFF-PEAK CALENDAR-MONTH DA LMP SWAP FUT (NY-E4-CME) vs PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUT (NY-JP-CME)						
Spread Credit Rate	Decrease	+188:-1	55%	55%	50%	50%

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 CAL DA LMP SWAP FUT (NY-J4- CME) vs MIDWEST ISO CINERGY HUB PEAK CAL LMP SWAP FUT (NY-EM- CME)						
Spread Credit Rate	Decrease	+11:-1	55%	55%	30%	30%
PJM WESTERN HUB PEAK CAL REAL-TIME LMP SWAP FUT (NY-L1- CME) vs MIDWEST ISO CINERGY HUB PEAK CAL LMP SWAP FUT (NY-EM- CME)						
Spread Credit Rate	Decrease	+11:-1	55%	55%	30%	30%
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	Decrease	+1:-16	62%	62%	50%	50%
PJM Western Hub Real-Time Off-Peak Calendar-Month 5 MW Futures (NY-N9-CME) vs PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME)						
Spread Credit Rate	Decrease	+168:-1	65%	65%	35%	35%
PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Off-Peak LMP Futures (NY-EJ-CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	30%	30%
PJM Western Hub Real-Time Peak Calendar-Month 2.5 MW Futures (NY-JM-CME) vs MISO Indiana Hub (formerly Cinergy Hub) Real-Time Peak Calendar-Month 2.5 MW Futures (NY-EM-CME)						
Spread Credit Rate	Decrease	+1:-1	70%	70%	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						
CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs DEMARC BASIS SWAP (PLATTS IFERC) FUTURES (NY-PE - CME)						
Spread Credit Rate	Decrease	+1:-1	59%	59%	50%	50%
CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME)						
Spread Credit Rate	Decrease	+1:-1	53%	53%	20%	20%
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	50%	50%	45%	45%
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	70%	70%	45%	45%
HENRY HUB NATURAL GAS FUTURES (NY-NG - CME) vs PJM PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JM - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	45%	45%
PJM OFF-PEAK CALENDAR-MONTH LMP SWAP FUTURES (NY-JP - CME) vs HENRY HUB NATURAL GAS FUTURES (NY-NG - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	45%	45%
ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-NR - CME) vs VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME)						
Spread Credit Rate	Decrease	+1:-1	52%	52%	20%	20%
SUMAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-NK - CME) vs VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME)						
Spread Credit Rate	Decrease	+1:-1	52%	52%	35%	35%
VENTURA BASIS SWAP (PLATTS IFERC) FUTURES (NY-PF - CME) vs ONEOK, OKLAHOMA BASIS SWAP (PLATTS IFERC) FUTURES (NY-8X - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME) vs EL PASO NATURAL GAS CO. PERMIAN BASIN BASIS SWAP (NYM-PM - CME)						
Spread Credit Rate	Decrease	+1:-1	60%	60%	50%	50%