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

17-368

FROM: CME Clearing

SUBJECT: Performance Bond Requirements

DATE: Thursday, September 21, 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, September 22, 2017.

Current rates as of:

Thursday, September 21, 2017.

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
				AGRICULTURE - Outright Rates				
FEEDER CATTLE FUTURES (FC)								
FC	Spec	Month 1	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Month 1	Decrease	USD	3,200	3,200	2,800	2,800
FC	Spec	Month 2	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Month 2	Decrease	USD	3,200	3,200	2,800	2,800
FC	Spec	Month 3	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Month 3	Decrease	USD	3,200	3,200	2,800	2,800
FC	Spec	Month 4	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Month 4	Decrease	USD	3,200	3,200	2,800	2,800
FC	Spec	Month 5	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Month 5	Decrease	USD	3,200	3,200	2,800	2,800
FC	Spec	Months 6+	Decrease	USD	3,520	3,200	3,080	2,800
FC	Hedge/Member	Months 6+	Decrease	USD	3,200	3,200	2,800	2,800
FEEDER CATTLE TRADE AT SETTLE (GFT)								
GFT	Spec	Month 1	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Month 1	Decrease	USD	3,200	3,200	2,800	2,800
GFT	Spec	Month 2	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Month 2	Decrease	USD	3,200	3,200	2,800	2,800
GFT	Spec	Month 3	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Month 3	Decrease	USD	3,200	3,200	2,800	2,800
GFT	Spec	Month 4	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Month 4	Decrease	USD	3,200	3,200	2,800	2,800
GFT	Spec	Month 5	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Month 5	Decrease	USD	3,200	3,200	2,800	2,800
GFT	Spec	Months 6+	Decrease	USD	3,520	3,200	3,080	2,800
GFT	Hedge/Member	Months 6+	Decrease	USD	3,200	3,200	2,800	2,800
LEAN HOG FUTURES (LN)								
LN	Spec		Decrease	USD	1,320	1,200	1,100	1,000
LN	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
LN	Spec		Decrease	USD	1,320	1,200	1,100	1,000
LN	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
LN	Spec		Decrease	USD	1,320	1,200	1,100	1,000
LN	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
LN	Spec		Decrease	USD	1,320	1,200	990	900
LN	Hedge/Member		Decrease	USD	1,200	1,200	900	900
LN	Spec		Decrease	USD	1,320	1,200	990	900
LN	Hedge/Member		Decrease	USD	1,200	1,200	900	900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
LN	Spec		Decrease	USD	1,320	1,200	990	900
LN	Hedge/Member		Decrease	USD	1,200	1,200	900	900
LEAN HOGS TRADE AT SETTLE (HET)								
HET	Spec		Decrease	USD	1,320	1,200	1,100	1,000
HET	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
HET	Spec		Decrease	USD	1,320	1,200	1,100	1,000
HET	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
HET	Spec		Decrease	USD	1,320	1,200	1,100	1,000
HET	Hedge/Member		Decrease	USD	1,200	1,200	1,000	1,000
HET	Spec		Decrease	USD	1,320	1,200	990	900
HET	Hedge/Member		Decrease	USD	1,200	1,200	900	900
HET	Spec		Decrease	USD	1,320	1,200	990	900
HET	Hedge/Member		Decrease	USD	1,200	1,200	900	900
HET	Spec		Decrease	USD	1,320	1,200	990	900
HET	Hedge/Member		Decrease	USD	1,200	1,200	900	900
LIVE CATTLE FUTURES (LC)								
LC	Spec	Month 2	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Month 2	Decrease	USD	1,750	1,750	1,500	1,500
LC	Spec	Month 1	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Month 1	Decrease	USD	1,750	1,750	1,500	1,500
LC	Spec	Month 3	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Month 3	Decrease	USD	1,750	1,750	1,500	1,500
LC	Spec	Month 4	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Month 4	Decrease	USD	1,750	1,750	1,500	1,500
LC	Spec	Month 5	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Month 5	Decrease	USD	1,750	1,750	1,500	1,500
LC	Spec	Months 6+	Decrease	USD	1,925	1,750	1,650	1,500
LC	Hedge/Member	Months 6+	Decrease	USD	1,750	1,750	1,500	1,500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
LIVE CATTLE TRADE AT SETTLEMENT (LET)								
LET	Spec	Month 2	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Month 2	Decrease	USD	1,750	1,750	1,500	1,500
LET	Spec	Month 1	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Month 1	Decrease	USD	1,750	1,750	1,500	1,500
LET	Spec	Month 3	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Month 3	Decrease	USD	1,750	1,750	1,500	1,500
LET	Spec	Month 4	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Month 4	Decrease	USD	1,750	1,750	1,500	1,500
LET	Spec	Month 5	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Month 5	Decrease	USD	1,750	1,750	1,500	1,500
LET	Spec	Months 6+	Decrease	USD	1,925	1,750	1,650	1,500
LET	Hedge/Member	Months 6+	Decrease	USD	1,750	1,750	1,500	1,500
OATS FUTURES (O)								
O	Spec		Decrease	USD	880	800	798	725
O	Hedge/Member		Decrease	USD	800	800	725	725
UREA (GRANULAR) FOB MIDDLE EAST FUT (UME)								
UME	Spec	Months 2+	Increase	USD	1,650	1,500	1,980	1,800
UME	Hedge/Member	Months 2+	Increase	USD	1,500	1,500	1,800	1,800
UREA (GRANULAR) FOB U.S. GULF SWAP (UFN)								
UFN	Spec	Months 1-6	Increase	USD	1,650	1,500	1,980	1,800
UFN	Hedge/Member	Months 1-6	Increase	USD	1,500	1,500	1,800	1,800
UFN	Spec	Months 7+	Increase	USD	1,815	1,650	2,145	1,950
UFN	Hedge/Member	Months 7+	Increase	USD	1,650	1,650	1,950	1,950

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
CRUDE OIL SPREADS - Outright Rates								
ARGUS LLS VS. WTI (ARG) TRD M (E5)								
E5	Spec	Mnth 1	Increase	USD	275	250	440	400
E5	Hedge/Member	Mnth 1	Increase	USD	250	250	400	400
E5	Spec	Mnths 2-4	Increase	USD	275	250	330	300
E5	Hedge/Member	Mnths 2-4	Increase	USD	250	250	300	300
CANADIAN HEAVYCRUDE(NET ENRGY) FUT (WCC)								
WCC	Spec	Mnth 1	Increase	USD	770	700	990	900
WCC	Hedge/Member	Mnth 1	Increase	USD	700	700	900	900
WCC	Spec	Mnths 2-3	Increase	USD	605	550	935	850
WCC	Hedge/Member	Mnths 2-3	Increase	USD	550	550	850	850
WCC	Spec	Mnths 4+	Increase	USD	550	500	605	550
WCC	Hedge/Member	Mnths 4+	Increase	USD	500	500	550	550
SYNTHETIC SWEET OIL MONTHLY FUT (SSW)								
SSW	Spec	Mth 1-3	Decrease	USD	2,750	2,500	1,925	1,750
SSW	Hedge/Member	Mth 1-3	Decrease	USD	2,500	2,500	1,750	1,750
SSW	Spec	Mth 4-6	Decrease	USD	1,650	1,500	1,375	1,250
SSW	Hedge/Member	Mth 4-6	Decrease	USD	1,500	1,500	1,250	1,250
SSW	Spec	Mnths 7+	Decrease	USD	1,100	1,000	825	750
SSW	Hedge/Member	Mnths 7+	Decrease	USD	1,000	1,000	750	750
WESTERN CANADIAN SELECT OIL MONTHLY (WCW)								
WCW	Spec	Mnth 1	Increase	USD	880	800	1,045	950
WCW	Hedge/Member	Mnth 1	Increase	USD	800	800	950	950
WCW	Spec	Mnths 2-3	Increase	USD	660	600	990	900
WCW	Hedge/Member	Mnths 2-3	Increase	USD	600	600	900	900
WTI HOUSTON ARGUS V.WTI TRADE MONTH (HTT)								
HTT	Spec	Mnth1	Increase	USD	660	600	825	750
HTT	Hedge/Member	Mnth1	Increase	USD	600	600	750	750
HTT	Spec	Mnth 2	Increase	USD	330	300	440	400
HTT	Hedge/Member	Mnth 2	Increase	USD	300	300	400	400
HTT	Spec	Mnths 3+	Increase	USD	330	300	440	400
HTT	Hedge/Member	Mnths 3+	Increase	USD	300	300	400	400
WTI MIDLAND (ARG) VS. WTI TRADE MTH (WTT)								
WTT	Spec	Mnths 2-3	Increase	USD	330	300	385	350
WTT	Hedge/Member	Mnths 2-3	Increase	USD	300	300	350	350

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
WTI MIDLAND(ARGUS) VS WTI FINCL FUT (FF)								
FF	Spec	Mnth 2	Increase	USD	330	300	440	400
FF	Hedge/Member	Mnth 2	Increase	USD	300	300	400	400
FF	Spec	Mnths 3+	Increase	USD	275	250	330	300
FF	Hedge/Member	Mnths 3+	Increase	USD	250	250	300	300
WTS (ARGUS) V WTI TRD MTH FUT (FH)								
FH	Spec	Mnth 1	Increase	USD	550	500	605	550
FH	Hedge/Member	Mnth 1	Increase	USD	500	500	550	550
FH	Spec	Mnths 2	Increase	USD	413	375	495	450
FH	Hedge/Member	Mnths 2	Increase	USD	375	375	450	450
FH	Spec	Mnths 3-7	Increase	USD	330	300	385	350
FH	Hedge/Member	Mnths 3-7	Increase	USD	300	300	350	350
FH	Spec	Mnths 8+	Increase	USD	330	300	385	350
FH	Hedge/Member	Mnths 8+	Increase	USD	300	300	350	350
ELECTRICITY - Outright Rates								
GERMAN POWER BASELOAD CAL MONTH FUT (DEB)								
DEB	Spec	Mnth 3	Increase	EUR	1,100	1,000	1,265	1,150
DEB	Hedge/Member	Mnth 3	Increase	EUR	1,000	1,000	1,150	1,150
DEB	Spec	Mnths 4-9	Increase	EUR	1,045	950	1,155	1,050
DEB	Hedge/Member	Mnths 4-9	Increase	EUR	950	950	1,050	1,050
FX - Outright Rates								
NEW ZEALAND FUTURES (NE)								
NE	Spec		Increase	USD	1,430	1,300	1,650	1,500
NE	Hedge/Member		Increase	USD	1,300	1,300	1,500	1,500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Outright Rates

METALS - Outright Rates

ALUMINA FOB AUSTRALIA PLATT FUTURES (ALA)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
ALA	Spec	Mths 1-4	Increase	USD	2,695	2,450	3,135	2,850
ALA	Hedge/Member	Mths 1-4	Increase	USD	2,450	2,450	2,850	2,850
ALA	Spec	Mths 5+	Increase	USD	2,695	2,450	3,135	2,850
ALA	Hedge/Member	Mths 5+	Increase	USD	2,450	2,450	2,850	2,850

GOLD KILO FUTURES (GCK)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
GCK	Spec	Mnth1	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth1	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth2	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth2	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth3	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth3	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth4	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth4	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth5	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth5	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth6	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth6	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth7	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth7	Increase	USD	1,447	1,447	1,575	1,575
GCK	Spec	Mnth8+	Increase	USD	1,591	1,447	1,733	1,575
GCK	Hedge/Member	Mnth8+	Increase	USD	1,447	1,447	1,575	1,575

LONDON SPOT GOLD FUTURES (GSP)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
GSP	Spec	All Contracts	Increase	USD	4,950	4,500	5,390	4,900
GSP	Hedge/Member	All Contracts	Increase	USD	4,500	4,500	4,900	4,900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
NATURAL GAS - Outright Rates								
DUTCH TTF NATURAL GAS CAL MONTH FUT (TTF)								
TTF	Spec	Mnth 1	Increase	EUR	715	650	770	700
TTF	Hedge/Member	Mnth 1	Increase	EUR	650	650	700	700
TTF	Spec	Mnth 2	Increase	EUR	660	600	715	650
TTF	Hedge/Member	Mnth 2	Increase	EUR	600	600	650	650
LNG EAST ASIA INDEX FUT (LAI)								
LAI	Spec		Decrease	USD	6,600	6,000	6,050	5,500
LAI	Hedge/Member		Decrease	USD	6,000	6,000	5,500	5,500
UK NBP NAT GAS CAL MTH FUT (UKG)								
UKG	Spec	Mnth 1	Increase	GBP	770	700	825	750
UKG	Hedge/Member	Mnth 1	Increase	GBP	700	700	750	750
UKG	Spec	Mnth 2	Increase	GBP	715	650	770	700
UKG	Hedge/Member	Mnth 2	Increase	GBP	650	650	700	700
UK NBP NATURAL GAS FRONT MTH FUT (NBP)								
NBP	Spec	Mnths 2	Increase	USD	2,640	2,400	2,970	2,700
NBP	Hedge/Member	Mnths 2	Increase	USD	2,400	2,400	2,700	2,700
NBP	Spec	Mnths 3+	Increase	USD	2,420	2,200	2,750	2,500
NBP	Hedge/Member	Mnths 3+	Increase	USD	2,200	2,200	2,500	2,500
PETROLEUM CRACKS AND SPREADS - Outright Rates								
MINI 380CST VS 3.5% FUEL OIL FUT (MSB)								
MSB	Spec	Mths 16+	Increase	USD	176	160	198	180
MSB	Hedge/Member	Mths 16+	Increase	USD	160	160	180	180
SING 380 FUEL OIL VS FUEL OIL ROTDM (EVC)								
EVC	Spec	Mths 16+	Increase	USD	1,760	1,600	1,980	1,800
EVC	Hedge/Member	Mths 16+	Increase	USD	1,600	1,600	1,800	1,800
SINGAPORE GASOIL VS ICE (GA)								
GA	Spec	Mnth 1	Increase	USD	495	450	578	525
GA	Hedge/Member	Mnth 1	Increase	USD	450	450	525	525
GA	Spec	Mnth 2	Increase	USD	495	450	578	525
GA	Hedge/Member	Mnth 2	Increase	USD	450	450	525	525
GA	Spec	Mnths 3-6	Increase	USD	358	325	440	400
GA	Hedge/Member	Mnths 3-6	Increase	USD	325	325	400	400
GA	Spec	Mnths 6+	Decrease	USD	605	550	495	450
GA	Hedge/Member	Mnths 6+	Decrease	USD	550	550	450	450

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Outright Rates								
REFINED PRODUCTS - Outright Rates								
NEW YORK JET FUEL (ARGUS) FUT (4Y)								
4Y	Spec		Increase	USD	3,465	3,150	3,795	3,450
4Y	Hedge/Member		Increase	USD	3,150	3,150	3,450	3,450
NEW YORK JET FUEL (PLATTS) FUT (1Q)								
1Q	Spec		Increase	USD	3,465	3,150	3,795	3,450
1Q	Hedge/Member		Increase	USD	3,150	3,150	3,450	3,450

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Intra Spreads

AGRICULTURE - Intra Spreads

Butter (DB) - Months 2-4 vs Months 2-4 (CASH BUTTER FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
CB	Spec		Decrease	USD	2,475	2,250	2,200	2,000
CB	Hedge/Member		Decrease	USD	2,250	2,250	2,000	2,000

Butter (DB) - Months 2-4 vs Months 5+ (CASH BUTTER FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
CB	Spec		Decrease	USD	2,244	2,040	2,035	1,850
CB	Hedge/Member		Decrease	USD	2,040	2,040	1,850	1,850

Butter (DB) - Months 5+ vs Months 5+ (CASH BUTTER FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
CB	Spec		Decrease	USD	2,475	2,250	2,200	2,000
CB	Hedge/Member		Decrease	USD	2,250	2,250	2,000	2,000

Butter (DB) - Months 5+ vs Months 5+ (CASH BUTTER FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
CB	Spec		Decrease	USD	2,519	2,290	2,310	2,100
CB	Hedge/Member		Decrease	USD	2,290	2,290	2,100	2,100

Month 1 vs Month 2-5 (CLASS III MILK FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
DA	Spec		Decrease	USD	605	550	550	500
DA	Hedge/Member		Decrease	USD	550	550	500	500

Month 1 vs Month 2-5 (MLK MID FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
JQ	Spec		Decrease	USD	303	275	275	250
JQ	Hedge/Member		Decrease	USD	275	275	250	250

Month 1 vs Month 3 (LEAN HOG FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
LN	Spec		Decrease	USD	825	750	605	550
LN	Hedge/Member		Decrease	USD	750	750	550	550

Month 1 vs Month 3 (LEAN HOGS TRADE AT SETTLE)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
HET	Spec		Decrease	USD	825	750	605	550
HET	Hedge/Member		Decrease	USD	750	750	550	550

Month 1 vs Month 4 (LEAN HOG FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
LN	Spec		Decrease	USD	880	800	605	550
LN	Hedge/Member		Decrease	USD	800	800	550	550

Month 1 vs Month 4 (LEAN HOGS TRADE AT SETTLE)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
HET	Spec		Decrease	USD	880	800	605	550
HET	Hedge/Member		Decrease	USD	800	800	550	550

Month 1 vs Month 5 (LEAN HOG FUTURES)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
LN	Spec		Decrease	USD	880	800	605	550
LN	Hedge/Member		Decrease	USD	800	800	550	550

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Month 1 vs Month 5 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	880	800	605	550
HET	Hedge/Member		Decrease	USD	800	800	550	550
Month 1 vs Month 6 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	880	800	605	550
LN	Hedge/Member		Decrease	USD	800	800	550	550
Month 1 vs Month 6 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	880	800	605	550
HET	Hedge/Member		Decrease	USD	800	800	550	550
Month 1 vs Month 7 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	990	900	660	600
LN	Hedge/Member		Decrease	USD	900	900	600	600
Month 1 vs Month 7 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	990	900	660	600
HET	Hedge/Member		Decrease	USD	900	900	600	600
Month 1 vs Months 2-5 (CASH CHEESE FUTURES)								
CSC	Spec		Decrease	USD	924	840	770	700
CSC	Hedge/Member		Decrease	USD	840	840	700	700
Month 1 vs Months 6+ (CASH CHEESE FUTURES)								
CSC	Spec		Decrease	USD	1,232	1,120	1,045	950
CSC	Hedge/Member		Decrease	USD	1,120	1,120	950	950
Month 1 vs Months 6+ (CLASS III MILK FUTURES)								
DA	Spec		Decrease	USD	660	600	605	550
DA	Hedge/Member		Decrease	USD	600	600	550	550
Month 1 vs Months 6+ (MLK MID FUTURES)								
JQ	Spec		Decrease	USD	330	300	303	275
JQ	Hedge/Member		Decrease	USD	300	300	275	275
Month 1 vs Months 8+ (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,210	1,100	660	600
LN	Hedge/Member		Decrease	USD	1,100	1,100	600	600
Month 1 vs Months 8+ (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,210	1,100	660	600
HET	Hedge/Member		Decrease	USD	1,100	1,100	600	600

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Month 2 vs Month 3 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	605	550	385	350
LN	Hedge/Member		Decrease	USD	550	550	350	350
Month 2 vs Month 3 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	605	550	385	350
HET	Hedge/Member		Decrease	USD	550	550	350	350
Month 2 vs Month 4 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	770	700	550	500
LN	Hedge/Member		Decrease	USD	700	700	500	500
Month 2 vs Month 4 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	770	700	550	500
HET	Hedge/Member		Decrease	USD	700	700	500	500
Month 2 vs Month 5 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,210	1,100	880	800
LN	Hedge/Member		Decrease	USD	1,100	1,100	800	800
Month 2 vs Month 5 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,210	1,100	880	800
HET	Hedge/Member		Decrease	USD	1,100	1,100	800	800
Month 2 vs Month 6 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,210	1,100	880	800
LN	Hedge/Member		Decrease	USD	1,100	1,100	800	800
Month 2 vs Month 6 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,210	1,100	880	800
HET	Hedge/Member		Decrease	USD	1,100	1,100	800	800
Month 2 vs Month 7 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,210	1,100	770	700
LN	Hedge/Member		Decrease	USD	1,100	1,100	700	700
Month 2 vs Month 7 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,210	1,100	770	700
HET	Hedge/Member		Decrease	USD	1,100	1,100	700	700
Month 2 vs Months 8+ (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,210	1,100	770	700
LN	Hedge/Member		Decrease	USD	1,100	1,100	700	700

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Month 2 vs Months 8+ (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,210	1,100	770	700
HET	Hedge/Member		Decrease	USD	1,100	1,100	700	700
Month 3 vs Month 5 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	770	700	660	600
LN	Hedge/Member		Decrease	USD	700	700	600	600
Month 3 vs Month 5 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	770	700	660	600
HET	Hedge/Member		Decrease	USD	700	700	600	600
Month 3 vs Month 6 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	880	800	770	700
LN	Hedge/Member		Decrease	USD	800	800	700	700
Month 3 vs Month 6 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	880	800	770	700
HET	Hedge/Member		Decrease	USD	800	800	700	700
Month 3 vs Month 7 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,045	950	825	750
LN	Hedge/Member		Decrease	USD	950	950	750	750
Month 3 vs Month 7 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,045	950	825	750
HET	Hedge/Member		Decrease	USD	950	950	750	750
Month 3 vs Months 8+ (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	1,100	1,000	880	800
LN	Hedge/Member		Decrease	USD	1,000	1,000	800	800
Month 3 vs Months 8+ (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	1,100	1,000	880	800
HET	Hedge/Member		Decrease	USD	1,000	1,000	800	800
Month 4 vs Month 6 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	550	500	440	400
LN	Hedge/Member		Decrease	USD	500	500	400	400
Month 4 vs Month 6 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	550	500	440	400
HET	Hedge/Member		Decrease	USD	500	500	400	400

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Month 4 vs Month 7 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	660	600	495	450
LN	Hedge/Member		Decrease	USD	600	600	450	450
Month 4 vs Month 7 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	660	600	495	450
HET	Hedge/Member		Decrease	USD	600	600	450	450
Month 4 vs Months 8+ (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	825	750	495	450
LN	Hedge/Member		Decrease	USD	750	750	450	450
Month 4 vs Months 8+ (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	825	750	495	450
HET	Hedge/Member		Decrease	USD	750	750	450	450
Month 5 vs Month 6 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	550	500	440	400
LN	Hedge/Member		Decrease	USD	500	500	400	400
Month 5 vs Month 6 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	550	500	440	400
HET	Hedge/Member		Decrease	USD	500	500	400	400
Month 5 vs Month 7 (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	660	600	550	500
LN	Hedge/Member		Decrease	USD	600	600	500	500
Month 5 vs Month 7 (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	660	600	550	500
HET	Hedge/Member		Decrease	USD	600	600	500	500
Month 5 vs Months 8+ (LEAN HOG FUTURES)								
LN	Spec		Decrease	USD	770	700	660	600
LN	Hedge/Member		Decrease	USD	700	700	600	600
Month 5 vs Months 8+ (LEAN HOGS TRADE AT SETTLE)								
HET	Spec		Decrease	USD	770	700	660	600
HET	Hedge/Member		Decrease	USD	700	700	600	600
Months 2-5 vs Months 2-5 (CASH CHEESE FUTURES)								
CSC	Spec		Decrease	USD	1,100	1,000	990	900
CSC	Hedge/Member		Decrease	USD	1,000	1,000	900	900

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
Months 2-5 vs Months 2-5 (CLASS III MILK FUTURES)								
DA	Spec		Decrease	USD	880	800	770	700
DA	Hedge/Member		Decrease	USD	800	800	700	700
Months 2-5 vs Months 2-5 (MLK MID FUTURES)								
JQ	Spec		Decrease	USD	440	400	385	350
JQ	Hedge/Member		Decrease	USD	400	400	350	350
Months 2-5 vs Months 6+ (CASH CHEESE FUTURES)								
CSC	Spec		Decrease	USD	1,232	1,120	1,045	950
CSC	Hedge/Member		Decrease	USD	1,120	1,120	950	950
Months 2-5 vs Months 6+ (CLASS III MILK FUTURES)								
DA	Spec		Decrease	USD	770	700	633	575
DA	Hedge/Member		Decrease	USD	700	700	575	575
Months 2-5 vs Months 6+ (MLK MID FUTURES)								
JQ	Spec		Decrease	USD	385	350	316	288
JQ	Hedge/Member		Decrease	USD	350	350	288	288
Months 6+ vs Months 6+ (CASH CHEESE FUTURES)								
CSC	Spec		Decrease	USD	968	880	798	725
CSC	Hedge/Member		Decrease	USD	880	880	725	725
Months 6+ vs Months 6+ (CLASS III MILK FUTURES)								
DA	Spec		Decrease	USD	880	800	770	700
DA	Hedge/Member		Decrease	USD	800	800	700	700
Months 6+ vs Months 6+ (MLK MID FUTURES)								
JQ	Spec		Decrease	USD	440	400	385	350
JQ	Hedge/Member		Decrease	USD	400	400	350	350
Oats (CBOT) (O) - All Months (OATS FUTURES)								
O	Spec		Decrease	USD	715	650	550	500
O	Hedge/Member		Decrease	USD	650	650	500	500

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

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

Intra Spreads

CRUDE OIL SPREADS - Intra Spreads

CANADIAN HEAVYCRUDE(NET ENRGY) FUT - All Months (CANADIAN HEAVYCRUDE(NET ENRGY) FUT)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
WCC	Spec		Increase	USD	660	600	770	700
WCC	Hedge/Member		Increase	USD	600	600	700	700

Mars (Argus) vs. WTI Spread Calendar Swap - All Months (MARS (ARGUS) V WTI FUT)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
YX	Spec		Increase	USD	220	200	275	250
YX	Hedge/Member		Increase	USD	200	200	250	250

Mars (Argus) vs. WTI Spread Trade Month Swap - All Months (MARS (ARGUS) V WTI TRD MTH FUT)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
YV	Spec		Increase	USD	220	200	275	250
YV	Hedge/Member		Increase	USD	200	200	250	250

WTI Midland (Argus) vs. WTI Trade Month Futures (WTI MIDLAND (ARG) VS. WTI TRADE MTH)

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
WTT	Spec		Increase	USD	275	250	330	300
WTT	Hedge/Member		Increase	USD	250	250	300	300

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
		EQUITY INDEX - Intra Spreads						
(EMINI SP500 - FINANCIAL SECT INDEX)								
XAF	Spec		Increase	USD	363	330	396	360
XAF	Hedge/Member		Increase	USD	330	330	360	360
(EMINI SP500- HEALTH CARE SECT INDEX)								
XAV	Spec		Increase	USD	248	225	385	350
XAV	Hedge/Member		Increase	USD	225	225	350	350
(EMINI SP500-INDUSTRIAL SECTOR INDEX)								
XAI	Spec		Increase	USD	138	125	220	200
XAI	Hedge/Member		Increase	USD	125	125	200	200
(EMINI SP500-TECHNOLOGY SECTOR INDEX)								
XAK	Spec		Increase	USD	248	225	303	275
XAK	Hedge/Member		Increase	USD	225	225	275	275
(SP 500 - INDUSTRIAL SEL SECTOR SYNT)								
1IT	Spec		Increase	USD	138	125	220	200
1IT	Hedge/Member		Increase	USD	125	125	200	200
(SP 500 FINANCIAL SECTOR TIC)								
XFT	Spec		Increase	USD	363	330	396	360
XFT	Hedge/Member		Increase	USD	330	330	360	360
(SP 500 FINANCIAL SLCT SEC SYNT)								
1FT	Spec		Increase	USD	363	330	396	360
1FT	Hedge/Member		Increase	USD	330	330	360	360
(SP 500 HEALTH CARE SECTOR SYNTHETIC)								
1VT	Spec		Increase	USD	248	225	385	350
1VT	Hedge/Member		Increase	USD	225	225	350	350
(SP 500 HEALTH CARE SECTOR TIC)								
XVT	Spec		Increase	USD	248	225	385	350
XVT	Hedge/Member		Increase	USD	225	225	350	350
(SP 500 INDUSTTRIAL SECTOR TIC)								
XIT	Spec		Increase	USD	138	125	220	200
XIT	Hedge/Member		Increase	USD	125	125	200	200
(SP 500 TECHNOLOGY SECTOR SYNTH)								
1KT	Spec		Increase	USD	248	225	303	275
1KT	Hedge/Member		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
Intra Spreads								
(SP 500 TECHNOLOGY SECTOR TIC)								
XKT	Spec		Increase	USD	248	225	303	275
XKT	Hedge/Member		Increase	USD	225	225	275	275
E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (BTIC E-MINI NASDAQ BIOTECHNOLOGY)								
BIT	Spec		Increase	USD	550	500	825	750
BIT	Hedge/Member		Increase	USD	500	500	750	750
E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (E-MINI NASDAQ BIOTECH SYNT MARKER)								
BTT	Spec		Increase	USD	550	500	825	750
BTT	Hedge/Member		Increase	USD	500	500	750	750
E-Mini Nasdaq Biotechnology Index Futures (BQ) - All Months (E-MINI NASDAQ BIOTECHNOLOGY FUTURES)								
BQ	Spec		Increase	USD	550	500	825	750
BQ	Hedge/Member		Increase	USD	500	500	750	750

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

CC	Rate Type	Description	Change	ISO	Current Initial	Current Maintenance	New Initial	New Maintenance
Intra Spreads								
REFINED PRODUCTS - Intra Spreads								
Gasoil 0.1 Cargoes CIF MED (Platts) Futures - Mth 1 vs Mths 2+ (GASOIL 0.1 CIF MED FUT)								
Z4	Spec		Increase	USD	4,180	3,800	5,500	5,000
Z4	Hedge/Member		Increase	USD	3,800	3,800	5,000	5,000
Gasoil 0.1 Cargoes CIF MED (Platts) Futures - Mths 2+ (GASOIL 0.1 CIF MED FUT)								
Z4	Spec		Increase	USD	3,740	3,400	5,060	4,600
Z4	Hedge/Member		Increase	USD	3,400	3,400	4,600	4,600
Gulf Coast Heating Oil (Argus) vs. Heating Oil Spread Swap Futures - (7U) - All Months (NEW YORK JET FUEL (ARGUS) FUT)								
4Y	Spec		Increase	USD	1,760	1,600	2,200	2,000
4Y	Hedge/Member		Increase	USD	1,600	1,600	2,000	2,000
Gulf Coast Jet (Argus) Calendar Swaps - All Months (GC JET (ARGUS) CAL FUT)								
AF	Spec		Increase	USD	880	800	1,100	1,000
AF	Hedge/Member		Increase	USD	800	800	1,000	1,000
Gulf Coast Unl 87 Gasoline M2 (Platts) Swap Futures - Tier 1 vs. 2 (GULF COAST UNL 87 GAS M2 PLATS FUT)								
GCM	Spec		Increase	USD	825	750	1,100	1,000
GCM	Hedge/Member		Increase	USD	750	750	1,000	1,000
Gulf Coast Unl 87 Gasoline M2 (Platts) Swap Futures - Tier 1 vs. 3 (GULF COAST UNL 87 GAS M2 PLATS FUT)								
GCM	Spec		Increase	USD	825	750	1,100	1,000
GCM	Hedge/Member		Increase	USD	750	750	1,000	1,000
Gulf Coast Unl 87 Gasoline M2 (Platts) Swap Futures - Tier 2 vs. 3 (GULF COAST UNL 87 GAS M2 PLATS FUT)								
GCM	Spec		Increase	USD	825	750	1,100	1,000
GCM	Hedge/Member		Increase	USD	750	750	1,000	1,000
Gulf Coast Unl 87 Gasoline M2 (Platts) Swap Futures - Tier 3 vs. 3 (GULF COAST UNL 87 GAS M2 PLATS FUT)								
GCM	Spec		Increase	USD	825	750	1,100	1,000
GCM	Hedge/Member		Increase	USD	750	750	1,000	1,000

SPAN MINIMUM PERFORMANCE BOND REQUIREMENTS

Rate Type	Change	Ratio	Current Initial	Current Maintenance	New Initial	New Maintenance
Inter-commodity Spread Rates						
AGRICULTURE - Inter-commodity Spread Rates						
WHEAT (W - CME) vs ETHANOL (EH - CME)						
Spread Credit Rate	Increase	+2:-1	0%	0%	25%	25%
Wheat (W - CME) vs NY ETHANOL (EZ-NYM)						
Spread Credit Rate	New	+3:-1			25%	25%
WHEAT (W-CME) vs Chicago Ethanol (CU - NYM)						
Spread Credit Rate	New	+3:-1			25%	25%
ERIS Standards - Inter-commodity Spread Rates						
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+1	80%	80%	90%	90%
5YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+1:+1	80%	80%	90%	90%
ETHANOL - Inter-commodity Spread Rates						
WHEAT (W - CME) vs ETHANOL (EH - CME)						
Spread Credit Rate	Increase	+2:-1	0%	0%	25%	25%
Wheat (W - CME) vs NY ETHANOL (EZ-NYM)						
Spread Credit Rate	New	+3:-1			25%	25%
WHEAT (W-CME) vs Chicago Ethanol (CU - NYM)						
Spread Credit Rate	New	+3:-1			25%	25%
FX - Inter-commodity Spread Rates						
INDIAN RUPEE/USD FUTURES (SIR - CME) vs BRAZILIAN REAL/USD FUTURES (BR - CME)						
Spread Credit Rate	New	+1:-2			25%	25%
INDIAN RUPEE/USD FUTURES (SIR - CME) vs SOUTH AFRICIAN RAND/USD FUTURES (RA - CME)						
Spread Credit Rate	New	+1:-2			25%	25%
INTEREST RATES - Inter-commodity Spread Rates						
5YR INTEREST RATE SWAP FUTURE ERIS (ZB9205 - CME) vs 5-YEAR T-NOTE (25 - CME)						
Spread Credit Rate	Increase	+1:+1	80%	80%	90%	90%
5YR INTEREST RATE SWAP FUTURE ERIS vs 5YR TREASURY						
Spread Credit Rate	Increase	+1:+1	80%	80%	90%	90%

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 NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME)						
Spread Credit Rate	Decrease	+1:-1	61%	61%	45%	45%
CIG ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-CI - CME) vs SAN JUAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-NJ - CME)						
Spread Credit Rate	Decrease	+1:-1	68%	68%	55%	55%
CIG ROCKY MOUNTAIN BASIS SWAP (PLATTS IFERC) (NYM-CI - CME) vs NORTHWEST PIPELINE, ROCKIES BASIS SWAP (PLATTS IFE (NYM-NR - CME)						
Spread Credit Rate	Decrease	+1:-1	72%	72%	65%	65%
NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs PERMIAN BASIS SWAP (PLATTS IFERC) FUTURES (NY-PM - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	45%	45%
NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs ROCKIES BASIS SWAP (PLATTS IFERC) FUTURES (NY-NR - CME)						
Spread Credit Rate	Decrease	+1:-1	65%	65%	50%	50%
NGPL MID-CON BASIS SWAP (PLATTS IFERC) FUTURES (NY-NL - CME) vs WAHA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NW - CME)						
Spread Credit Rate	Decrease	+1:-1	55%	55%	50%	50%
PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs CIG ROCKY MOUNTAIN BASIS SWAP (PLATTS IFERC) (NYM-CI - CME)						
Spread Credit Rate	Decrease	+1:-1	50%	50%	40%	40%
PANHANDLE BASIS SWAP (PLATTS IFERC) (NYM-PH - CME) vs WAHA BASIS SWAP (PLATTS IFERC) (NYM-NW - CME)						
Spread Credit Rate	Decrease	+1:-1	69%	69%	60%	60%
WAHA BASIS SWAP (PLATTS IFERC) FUTURES (NY-NW - CME) vs CENTERPOINT NATURAL GAS BASIS SWAP (PLATTS IFERC) FUTURES (NY-PW - CME)						
Spread Credit Rate	Decrease	+1:-1	45%	45%	40%	40%