

TO: Clearing Member Firms
Chief Financial Officers
Back Office Managers

FROM: CME Clearing

ADVISORY #: 20-171

SUBJECT: Switch to Bachelier Options Pricing Model

DATE: April 21st, 2020

Pursuant to Clearing Advisory 20-152 that was published on April 8th, the clearing house will switch the options pricing and valuation model to Bachelier to accommodate negative prices in the underlying futures and allow for listing of option contracts with negative strikes for the set of products specified below.

The switch will be effective for the margin cycle run at the end of trading tomorrow April 22, 2020 and will remain in place until further notice.

Should you have any questions, please contact CME Clearing Risk Management at Clearing.RiskManagement@cmegroup.com or 312-648-3888 or CME Clearing Pricing & Valuations at OTCPricing&ValuationsFnOTeam@cmegroup.com.

Product	F/O	Clearing Code	Globex Code	Group Code
Brent Crude Oil Last Day Financial Futures	FUT	BZ	BZ	OP
Brent Crude Oil Average Price Option	OPT	BA	BA	OT
Brent Crude Oil BALMO Futures	FUT	J9	AJ9	BB
Brent Crude Oil European Financial Option	OPT	BE	BE	OT
Brent Crude Oil Futures-Style Margin Option	OPT	BZO	BZO	PR
Brent Crude Oil Option	OPT	OS	OSX	OT
Brent Crude Oil Penultimate Financial Futures	FUT	BB	BB	BB
Brent Crude Oil Weekly Option	OPT	BW1-BW5	BW1-BW5	OT
Brent Financial Futures	FUT	CY	CY	CC
Dated Brent (Platts) BALMO Futures	FUT	DBB	DBB	BB
Mini Brent Financial Futures	FUT	MBC	MBC	CC
Light Sweet Crude Oil Futures	FUT	CL	CL	CL
Argus LLS Trade Month Futures	FUT	A4	AA4	CC
Argus Sour Crude Index (ASCI) Trade Month Futures	FUT	29	29	CC
Argus WTI Formula Basis Calendar Month Futures	FUT	39	39	CC
Argus WTI Trade Month Futures	FUT	V7	V7	CC
Crude Oil Bullet Futures	FUT	WS	WS	WS
Crude Oil Last Day Financial Futures	FUT	26	26	CC
Crude Oil Weekly Options	OPT	LO1-LO5	LO1-LO5	LO
Daily Crude Oil Option	OPT	CD	ICD	LO

Daily WTI Financial Futures	FUT	DCL	DCL	CC
Dubai Crude Oil (Platts) BALMO Futures	FUT	BI	ABI	BB
Dubai Crude Oil (Platts) Financial Futures	FUT	DC	DCB	BB
E-mini Crude Oil Futures	FUT	QM	QM	CL
Light Sweet Crude Oil European Financial Option	OPT	LC	LCE	LO
Light Sweet Crude Oil Option	OPT	LO	LO	LO
LLS (Argus) Financial Futures	FUT	XA	AXA	CC
LOOP Gulf Coast Sour Crude Oil Futures	FUT	MB	MB	OP
Mars (Argus) Financial Futures	FUT	MX	MX	CC
Mars (Argus) Trade Month Futures	FUT	MO	MO	CC
WTI Average Price Option	OPT	AO	AAO	LO
WTI BALMO Futures	FUT	42	A42	CC
WTI Financial Futures	FUT	CS	CSX	CC
WTI Houston (Argus) Financial Futures	FUT	HIA	HIA	CC
WTI Houston (Argus) Trade Month Futures	FUT	HTA	HTA	CC
WTI Houston Calendar Month Futures	FUT	HTC	HTC	CC
WTI Houston Crude Oil Option	OPT	HCO	HCO	H3
WTI Houston Trade Month Futures	FUT	HTE	HTE	CC
WTI Midland (Argus) Financial Futures	FUT	XB	AXB	CC
WTI Midland (Argus) Trade Month Futures	FUT	WTI	WTI	CC
WTI Trade Month Futures	FUT	TCS	TCS	CC
WTS (Argus) Financial Futures	FUT	WTS	WTS	CC
WTS (Argus) Trade Month Futures	FUT	AY	AY	CC
WTI Houston Crude Oil Futures	FUT	HCL	HCL	HC
NY Harbor ULSD Futures	FUT	HO	HO	CL
E-mini NY Harbor ULSD Futures	FUT	QH	QH	CL
NY Harbor ULSD Average Price Option	OPT	AT	ATX	EP
NY Harbor ULSD BALMO Futures	FUT	1G	A1G	RF
NY Harbor ULSD Bullet Futures	FUT	BH	ABH	RF
NY Harbor ULSD European Financial Option	OPT	LB	LB	EF
NY Harbor ULSD Financial Futures	FUT	MP	MPX	PT
NY Harbor ULSD Last Day Financial Futures	FUT	23	23	CP
NY Harbor ULSD Option	OPT	OH	OH	OH
RBOB Gasoline Futures	FUT	RB	RB	CL
E-mini RBOB Gasoline Futures	FUT	QU	QU	CL
RBOB Gasoline Average Price Option	OPT	RA	RA	EF
RBOB Gasoline BALMO Futures	FUT	1D	A1D	RF
RBOB Gasoline Bullet Futures	FUT	RT	RT	WS
RBOB Gasoline European Financial Option	OPT	RF	ARF	EF
RBOB Gasoline Financial Futures	FUT	RL	RLX	PT
RBOB Gasoline Last Day Financial Futures	FUT	27	27	CP
RBOB Gasoline Option	OPT	OB	OB	OB
Gulf Coast HSFO (Platts) Futures	FUT	MF	MFB	PT