



INTERVAL PRICE LIMIT FUNCTIONALITY

With IPL levels as of March 2024

IPL functionality acts as a temporary circuit breaker feature on the electronic platform, to diminish the likelihood and extent of short-term price spikes or aberrant market moves. While it is designed to be in force throughout each trading day, it is expected that the protections will be actively triggered only in the case of extreme price moves over very short periods of time. The IPL regime uses three customizable parameters for each futures product:

1. **IPL Recalculation Time:** A pre-set length of time during which the price of a contract month may not move up or down more than the IPL Amount (defined below) from the contract price at the start of the period. This starting price is referred to as the “anchor price”. The IPL Recalculation Time continuously resets for the length of time applicable to the particular futures contract.
2. **IPL Amount:** The maximum number of points that a contract month is permitted to move up or down during each IPL Recalculation Time for the contract. The anchor price plus/minus the IPL amount effectively creates an IPL range for the contract for the IPL Recalculation Time.
3. **IPL Hold Period:** When the platform determines that the next trade in the contract month will be at a price that is outside the active IPL range, the platform triggers a Hold Period, during which the price of the contract is not permitted to trade outside the IPL range that was in place at the start of the IPL Hold Period. The length of the Hold Period is pre-set. When a Hold Period is triggered, the platform will issue an alert notifying users that a Hold Period has begun and specifying the time the Hold Period will end.

IPL parameters can be changed without prior notice, at the sole discretion of the Exchange, based on prevailing market conditions.

Current IPL Recalculation Times, Amounts and Hold Period for all IFUS products are shown below:

Agricultural and Metal contracts:

FUTURES CONTRACT	IPL Amount (in points)	Recalc Time (in secs)	Hold Period (in secs)
Sugar No. 11 (SB)	60	15	30
Cotton No. 2 (CT) and Coffee "C" (KC)	400	15	30
Cocoa (CC)	100	15	30
FCOJ (OJ)	500	15	30
Sugar No. 16 (SF)	750	15	30
Canola (RS)	2400	10	30
Daily Gold (AUD)	1000	15	30
Daily Silver (HIO)	400	15	30

Mortgage and SOFR Index Contracts - all contracts below will be subject to a 3 second Recalculation Time and a 5 second Hold Period:

FUTURES CONTRACT	IPL Amount (in Index Points)
ICE U.S. Conforming 30-year Fixed Mortgage Rate Lock Weighted APR Index (30C)	0.250
ICE U.S. Jumbo 30-year Fixed Mortgage Rate Lock Weighted APR Index (30J)	0.375
ICE One-Month SOFR Index Future (SR1)	0.25000
ICE Three-Month SOFR Index Future (SR3)	0.25000

Stock Index Contracts - all contracts below will be subject to a 5 second Recalculation Time and a 5 second Hold Period:

FUTURES CONTRACTS	IPL Amount (in Index Points)
MSCI World ESG Leaders NTR Index (LFW), MSCI Germany NTR Index (GEA,) MSCI Europe (Euro) NTR Index (MVV), MSCI Malaysia NTR Index (MYY), MSCI EAFE ESG Leaders NTR Index (LFG),and Europe ESG Leaders NTR Index (LFU), MSCI Europe Index (MCE), MSCI Europe Growth Index (MGE) and MSCI Europe Value Index (MPU)	4.000
ACWI Ex-US NTR Index (AWN), MSCI EM NTR Index (MMR), MSCI ACWI NTR Index (MMW), EMEA NTR Index (MMM), MSCI World NTR (EUR) Index (ESI), and MSCI ACWI NTR Index (MTJ)	6.000
MSCI Emerging Markets NTR Index (MMN), MSCI China NTR Index (CHH), MSCI Emerging Markets LatAm NTR Index (MML), MSCI USA ESG Leader GTR Index (LFA), MSCI ex-Japan NTR Index (ASI), EM Asia NTR Index (ASN), and MSCI EM ex China ex Taiwan Price Index (MTQ)	12.000
MSCI Emerging Markets Index (MME), MSCI India NTR Index (MIN) and MSCI EM ex China ex Taiwan NTR Index (MTP)	20.000
MSCI Pan-Euro Index (MPP), MSCI Europe Index (MEU), MSCI USA Small Cap Index (MUS) and USA Small Cap GTR Index (USC), MSCI Thailand NTR Index (THG), MSCI EAFE Climate Paris Aligned NTR Index (ESH) and MSCI EM Low Carbon Target Core Index (MTL)	25.000
MSCI Europe Climate Change Index (EU1), MSCI EM Asia ESG Leaders NTR Index (ESG), MSCI EM Climate Paris Aligned NTR Index (MVU), MSCI World ex USA Low Carbon Target Core Index (MTM) and MSCI EAFE Low Carbon Target Core NTR Index (MTN)	30.000
MSCI EAFE Index (MFS) and MSCI EM ESG Leaders NTR Index (LFM)	40.000
MSCI Canada Index (MCL), MSCI EM Latin America Index (MLE), MSCI World Climate Paris Aligned NTR Index (MVR), MSCI Europe Climate Paris Aligned NTR Index (MVT), MSCI World Index (MWL), MSCI World Climate Change (WOW), MSCI ACWI Low Carbon Target Core NTR Index (MTO) and MSCI USA Value (MCU)	48.000
MSCI USA Index (MUN), MSCI USA Climate Change NTR Index (MUC), MSCI USA Climate Paris Aligned GTR Index (MVS) and MSCI USA Low Carbon Target Core index (MTK)	50.000
MSCI Japan ESG Select Leaders GTR Index (JSL), MSCI Australia NTR Index (AS7), MSCI Kokusai GTR (KKS) and MSCI USA Minimum Volatility GTR Index (MUV)	100.000
MSCI Pacific ex-Japan Index (PAC), MSCI EAFE NTR Index (MFU), MSCI Pacific NTR Index (MPA), MSCI Europe NTR Index (EU9), MSCI Japan NTR Index (JPP), MSCI Emerging Market ex-China NTR Index (MMC) and MSCI World NTR Index (MWS)	120.000
MSCI North America NTR Index (NAA), MSCI USA Growth Index (MRG), MSCI Canada GTR Index (CAD) and MSCI USA GTR Index (USS)	300.000
MICRO NYSE FANG+™ Index (FNG)	50.00
NYSE Biotechnology GTR Index (IUT)	6.500
NYSE Semiconductor GTR Index (IUS)	25.000

MSCI DAILY CONTRACTS - all contracts below will be subject to a 5 second Recalculation Time and a 5 second Hold Period:

Futures Contract	IPL Amount (in Index Points)
MSCI Emerging Markets Index (DMU)	20.000
MSCI EAFE Index (DMQ)	40.000
MSCI World NTR USD Index (DMJ)	120.000
MSCI EM Asia NTR USD Index (DMX)	12.000
MSCI Emerging Markets NTR USD Index (DMY)	12.000
MSCI Emerging Markets Latin America NTR Index (DMW)	12.000
MSCI Emerging Markets EMEA NTR Index (DM6)	6.000
MSCI USA GTR Index (DMO)	300.000
MSCI Pacific NTR Index (DMV)	120.000
MSCI Europe NTR USD Index (DMR)	120.000
MSCI ACWI NTR USD Index (DML)	6.000
MSCI Japan NTR USD Index (DMS)	120.000
MSCI Emerging Markets ESG Leaders Index (DMI)	40.000
MSCI EAFE ESG Leaders Index (DM2)	4.000
MSCI Europe ESG Leaders Index (DM3)	4.000
MSCI USA ESG Leaders Index (DM4)	12.000
MSCI World ESG Leaders Index (DM5)	4.000

MSCI Total Return Futures Contracts - all contracts below will be subject to a 5 second Recalculation Time and a 5 second Hold Period:

Futures Contract	IPL Amount (in TRF Spread points)
MSCI Emerging Markets Total Return Index (MVE), MSCI EAFE Total Return Index (MVH), MSCI World Total Return Index (MWA) and MSCI USA Total Return Index (MVA)	12.000

USD[®] and Currency Pair contracts:

FUTURES CONTRACT	IPL Amount (in points)	Recalc Time (in secs)	Hold Period (in secs)
USD [®] (DX)	500	5	2
Sterling-US dollar (MP)	750	5	5
Yen-US dollar (KSN)	3000	5	5
Zloty-US dollar (PLN), Zloty-euro (PLE), Turkish lira-US dollar (TRM) and Turkish lira-euro (ETR)	1500	5	5
Sterling-Norway (PK), Sterling-SA Rand (PZ), Sterling-Sweden (PS), Euro-Sweden (KRK), Euro-Norway KOL), Euro-SA Rand (YZ), US dollar-SA Rand (ZR), Norway-Yen (KY), Sweden-Yen (KJ) and Mex. peso-US Dollar (KMP)	37500	5	5

All Other Currency Pairs	7500	5	5
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Power and Emissions contracts - all contracts below will be subject to a 3 second Recalculation Time and a 5 second Hold Period:

FUTURES CONTRACT	IPL Amount (in \$)	IPL Exceptions (in \$ terms)
Financial Power	\$30.00	N/A
Capacity Responsive Reserve	\$30.00	N/A
In-City or Rest of State Cap.	\$30.00	N/A
Non-Spinning Reserve	\$30.00	N/A
Regulation	\$30.00	N/A
All Daily Power Contracts	\$120.00	N/A
All Daily Load Forecast	50,000 MW	N/A
All ERCOT Contracts	\$100.00	All ERCOT Daily contracts - \$120.00 ERCOT North 345KV Real-Time Peak Daily Fixed Price (END) and ERCOT North 345KV Real-Time Peak Daily Mini Fixed Price (ERA) - \$500.00
RGGI	\$1.00	N/A
CCA, CCO RECs - NJ Class I & II, TX / M-RETS / NAR Wind, MD Tier I, PA Tier I & II, PJM -TRI SRECs - TX Washington CA	\$2.50	N/A
CCA Trade at Auction Settlement Contracts Washington (WCP)	\$0.75	N/A
REC - CT & MA Class I, NEPOOL SREC - MD, PA	\$10.00	N/A
SREC - MA I & II, NJ LCFS	\$30.00	N/A

Nat Gas contracts - all contracts below will be subject to a 3 second Recalculation Time and a 5 second Hold Period:

FUTURES CONTRACT	IPL Amount (in \$ terms)	IPL Exceptions (in \$ terms)
Henry Hub	\$0.20	<u>N/A</u>
UK Natural Gas	\$0.12	<u>N/A</u>
EIA Financial Weekly Index	75 BCF	<u>N/A</u>

EIA End of Draw/Storage Index	2,500 BCF	<u>N/A</u>
Financial LNG	\$0.60	<u>N/A</u>
Fixed Price (excluding Henry)	\$4.00	<u>IPL Amount: \$10.00</u> Dominion South Swing (DSS) Lebanon Swing (LBN) <u>IPL Amount: \$12.00</u> Algonquin Citygates Swing (ALS) Chicago Swing (CSS) NNG Demarc Swing (DES) Iroquois (Into) Swing (Platts) (IRS) Iroquois-Z2 Swing (Platts) (IZS) NNG Ventura Swing (NNS) PG&E Citygate Swing (PIG) Transco Zone 6 (non-NY) Swing (TPS) TETCO M3 Swing (TSS) Transco Zone 6 (NY) Swing (ZSS)
Basis	\$4.00	<u>IPL Amount: \$10.00</u> Dominion South Basis (DOM) <u>IPL Amount: \$12.00</u> Algonquin Citygates Basis (ALQ) NNG Demarc Basis (DEM) Chicago Basis (DGD) Union Dawn Basis (DWN) Iroquois (Into) Basis (Platts) (IRB) Iroquois-Z2 Basis (Platts) (IZB) PG&E Citygate Basis (PGE) TETCO M3 Basis (TMT) Transco Zone 6 (non NY) Basis (TPB) Transco Zone 6 (NY) Basis (TZS)
Index	\$0.20	<u>IPL Amount: \$2.00</u> AB NIT Index (AIS) Algonquin Citygates Index (ALI) ANR SW (Oklahoma) Index (AOI) ANR SE (Louisiana) Index (API) CG-Mainline Index (CGI) Chicago Index (CIS) CIG Rockies Index (CRC) Enable Gas Index (CTI) NNG Demarc Index (DEI) Dominion South Index (DIS) PG&E Citygate Index (EIS) Florida Gas Zone 3 Index (FTI) Henry Index (HIS) Iroquois (Into) Index (Platts)(IRI) Iroquois-Z2 Index (Platts) (IZI) NGPL Midcont Index (MCI) Malin Index (MIS)

		TETCO M3 Index (MTI) NWP Sumas Index (NIS) Michcon Index (NMI) NNG Ventura Index (NNI) Transco Zone 6 (NY) Index (NSI) NGPL TXOK Index (NTI) NGPL STX Index (NXI) ONEOK Gas Transportation Index (ONI) Southern Star TX OK KS Index (OUI) EP Permian Index (PEI) Panhandle Index (PIS) NWP Rockies Index (RSI) Socal Citygate Index (SCI) HSC Index (SHS) Transco Station 65 (Zone 3) Index (SIA) Socal Border Index (SIS) EP San Juan Index (SNI) Sonat Index (SOI) TETCO STX Index (SXI) TETCO ELA Index (TEI) Tennessee 500L Index (TFI) TGT Zone 1 Index (TGI) TCO Index (TIS) Transco Zone 5 South Index (T5I) Transco Zone 6 (non-NY) Index (TPI) Transco Station 85 (Zone 4) Index (TRI) TETCO WLA Index (TWI) Tennessee Zone 0 Index (TZI) Waha Index (WAI)
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Oil and NGL contracts - all contracts below will be subject to a 3 second Recalculation Time and a 5 second Hold Period:

Specific Oil and NGL Products	Commodity Code	Unit	IPL Amount (in \$ Terms)
Crude Diff – Argus LLS vs WTI 1st Line Future	ARK	bbl	\$6.00
Argus Mars vs WTI Trade Month Future	ARW	bbl	\$6.00
Crude Diff – Argus WTS vs WTI Trade Month Future	AVT	bbl	\$6.00
Crude Diff – WTI 1st Line vs Brent 1st Line Future	BTD	bbl	\$6.00
Fuel Oil Diff – New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future	FOD	bbl	\$4.00
Fuel Oil Outright – New York 1% Fuel Oil Future	FOW	bbl	\$4.00
Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future	GCS	bbl	\$1.50
Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future	GDL	gal	\$0.10
Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	GDM	gal	\$0.10
Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future	GDO	MT	\$10.00

Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future	GDQ	MT	\$10.00
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)	GOE	bbl	\$1.00
Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future	GOH	gal	\$0.04
Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future	GUF	bbl	\$1.50
Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)	HBT	bbl	\$1.50
Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future	JHO	gal	\$0.04
Crude Outright – WTI 1st Line Future	R	bbl	\$1.50
Fuel Oil Outright – USGC HSFO (Platts) Future	RBO	bbl	\$4.00
Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)	RBR	bbl	\$1.50
Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)	ULM	bbl	\$0.04
Gasoline Diff – Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	UM1	bbl	\$0.10
Natural Gasoline, OPIS Mt. Belvieu Non-TET vs WTI 1st Line Future	NGW	bbl	\$4.00
Propane, Argus CIF ARA vs Brent 1st Line Future (in bbls)	PRQ	bbl	\$6.25
Propane, Argus CIF ARA vs Brent 1st Line Future (in MTs)	PRR	MT	\$6.25

Oil Products	IPL Amount (in \$ Terms)
All Oil (Barrels or lbs) Contracts	\$6.25
All Oil (MT) Contracts	\$18.75
All Oil (Gallons) Contracts	\$0.25
All Oil (RIN) Contracts	\$0.20
NGL (North American) (Gallons)	\$0.125
Olefins	\$0.125
Olefins (MT)	\$125.00
Aromatics	\$0.250
LPG (International) (MT)	\$125.00