

Submission No. 22-07 (5 of 7) January 28, 2022

Mr. Christopher J. Kirkpatrick Secretary of the Commission Office of the Secretariat Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, NW Washington, DC 20581

Re: New MSCI Europe (Euro) NTR Index Futures (5 of 7)

Submission Pursuant to Section 5c(c)(1) of the Act and Regulation 40.2

Dear Mr. Kirkpatrick:

Pursuant to Commission Regulation 40.2, ICE Futures U.S., Inc. ("Exchange" or "IFUS") submits, by written certification, the amendments to Chapter 23, Resolution No. 1 to Chapter 6, the No-Cancellation Range ("NCR") and Reasonability Limit tables and the Interval Price Limit table, as set for the in Exhibits B, C and D, which provide for the listing of five new quarterly MSCI equity index futures contracts and two new ICE equity index futures contracts.

New MSCI Index Futures Contracts

The Exchange currently lists a number of futures contracts based on various broad based MSCI equity indexes. IFUS will add to that group by listing the following new quarterly MSCI equity index futures contracts:

Contract Name	Contract Size	Minimum Tick (Index Points)	Accountability Level (Single Month)	Position Limit (All Months)
MSCI World Climate Paris Aligned NTR Index Futures	\$25 x Index	\$0.100 Index points, equal to \$2.50 per contract. Block Trades can be done at .001 Index Points	20,000 Contracts	100,000 Contracts
MSCI USA Climate Paris Aligned GTR Index Futures	\$20 x Index	\$0.100 Index points, equal to \$2.00 per contract. Block Trades can be done at .001 Index Points	20,000 Contracts	100,000 Contracts
MSCI Europe Climate Paris Aligned NTR Index Futures	€25 x Index	€0.100 Index points, equal to €2.50 per contract. Block Trades can be done at .001 Index Points	50,000 Contracts	200,000 Contracts
MSCI EM Climate Paris Aligned NTR Index Futures	\$40 x Index	\$0.050 Index points, equal to \$2.00 per contract. Block Trades can be done at .001 Index Points	50,000 Contracts	200,000 Contracts

MSCI Europe (Euro) NTR		€0.050 Index points, equal to		
Index Futures	€100 x Index	€5.00 per contract. Block Trades can be done at .001	50,000 Contracts	200,000 Contracts
	maca	Index Points		

The MSCI World Climate Paris Aligned (NTR) Index futures contract is based on a subset index¹ of the MSCI World Index. The index includes large and mid-cap securities across 23 Developed Markets (DM) countries, which seek to overweigh companies which are exposed to climate transition opportunities while minimizing the weight of companies which are exposed to climate transition risks. The index aims to support investors who seek reductions in exposure to transition and physical climate risks and who wish to pursue opportunities arising from the transition to a lower carbon economy while aligning with the Paris Agreement requirements. First listed in 2020 the index, currently comprised of 655 different constituents or companies As of December 31, 2021, the total market capitalization of the parent Index is approximately \$62 trillion.

The MSCI USA Climate Paris Aligned (GTR) Index futures contract is based on a subset index² of the MSCI USA Index. The index includes large and mid-cap securities of the U.S. equity markets, which seek to overweigh companies that are exposed to climate transition opportunities while minimizing the weight of companies which are exposed to climate transition risks. The index aims to support investors who seek reductions in exposure to transition and physical climate risks and who wish to pursue opportunities arising from the transition to a lower carbon economy while aligning with the Paris Agreement requirements. First listed in 2020 the index, currently comprised of 308 constituents or companies, As of December 31, 2021, the total market capitalization of the parent Index is approximately \$43 trillion.

The MSCI Europe Climate Paris Aligned (NTR) Index futures contract is based on a subset index³ of the MSCI Europe Index. The index includes large and mid-cap securities across 15 Developed Markets (DM) in Europe, which seek to overweigh companies that are exposed to climate transition opportunities while minimizing the weight of companies which are exposed to climate transition risks. The index aims to support investors who seek reductions in exposure to transition and physical climate risks and who wish to pursue opportunities arising from the transition to a lower carbon economy while aligning with the Paris Agreement requirements. First listed in 2020 the index, currently comprised of 269 constituents or companies, is a subset of the MSCI Europe Index. As of December 31, 2021, the total market capitalization of the parent Index is approximately €998 billion.

The MSCI EM Climate Paris Aligned (NTR) Index futures contract is based on a subset index⁴ of the MSCI EM Index. The index includes large and mid-cap securities across 27 Emerging Markets (EM) countries, which seek to overweigh companies that are exposed to climate transition opportunities while minimizing the weight of companies which are exposed to climate transition risks. The index aims to support investors who seek reductions in exposure to transition and physical climate risks and who wish to pursue opportunities arising from the transition to a lower carbon economy while aligning with the Paris Agreement requirements. First listed in 2020 the index, currently comprised of 502 constituents or companies, is a subset of the MSCI EM Index. As of December 31, 2021, the total market capitalization of the parent Index is approximately \$8 trillion.

¹ https://www.msci.com/documents/10199/505f8123-d418-ed1f-f83d-f58df1181dcd

² https://www.msci.com/documents/10199/346ec2a6-7962-308a-8176-1ba67b7f52e9

³ https://www.msci.com/documents/10199/688d56f7-4ea0-1e44-7b7e-39d0545d65e9

⁴ https://www.msci.com/documents/10199/79e915c9-b287-8de9-6faf-43716b115894

Finally, the MSCI Europe (Euro) NTR Index futures contract is based on the MSCI Europe NTR Index⁵., which captures large and mid-cap representation across 15 Developed Markets (DM) countries in Europe. With 432 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European Developed Markets equity universe. The Exchange currently lists a futures contract based on the same MSCI index which is dollar denominated. The new contract being listed by the Exchange is denominated in euros rather than dollars. The Exchange believes a euro denominated contract will attract more interest from participants in Europe.

Contract specifications for each of the five new futures contracts are similar to those of the existing IFUS MSCI Index futures contracts: each is cash settled at expiration using a final settlement price derived from the underlying MSCI Index; listed contract months, trading hours, daily settlement window, last trading day and last trading day hours and Exchange and Clearing fees match the respective terms of the existing contracts. The index multiplier for each futures contract is set forth in the table above. In addition, the NCR levels and Reasonability Limits, as well as the Interval Price Limits for the new MSCI equity index futures contracts are in-line with the levels for the current equity index futures listed by the Exchange and are set forth on the Exchange's website. The contracts will be block eligible with a 5lot minimum block size. Copies of the relevant tables are attached in Exhibit D.

As provided in Exhibit F⁶, the new contracts are not narrow-based equity indices and are subject to the position limits and position accountability levels, which are set forth in amended Exchange Rule 6.25 and Resolution No. 1 to Chapter 6, attached in Exhibits B and D, respectively. For the purpose of determining positions in all of the new index futures, the Exchange will combine all long and short positions in all related index futures and options contracts (as specified in Resolution No. 1 to Chapter 6). Participants exceeding the accountability level of the new MSCI Contracts: (i) automatically consent not to increase further and automatically consent to decrease those positions when so ordered by the Exchange acting in its own discretion and (ii) shall provide, in a timely manner, information on the nature of that participant's related cash position, Exchange Futures and Options position, trading strategy and/or hedging strategy and such other relevant information as the Exchange may require.

ICE Index Futures Contracts

The Exchange plans to list the following two new quarterly futures contracts based on equity indexes compiled and administered by ICE Data Indices LLC:

Contract Name	Contract Size	Minimum Tick (Index Points)	Accountability Level (Single Month)	Position Limit (All Months)
ICE Biotechnology GTR Index	\$100 x Index	.050 Index points, equal to \$5.00 per contract; (Block Trades can be done at .001 Index points)	20,000 lots	100,000 lots
ICE Semiconductor GTR Index	\$50 x Index	.050 Index points, equal to \$2.50 per contract; (Block Trades can be done at .001 Index points)	20,000 lots	100,000 lots

The ICE Biotechnology GTR Index is based on an ICE Index that was first listed in 2021, which is comprised of 372 different constituents or companies, which tracks the performance of qualifying U.S. listed biotechnology companies. As of January 2022, the total market capitalization of the index is

⁶ In accordance with CFTC Regulation 40.8, the Exchange has filed a request for confidential treatment of Exhibit F.

⁵ https://www.msci.com/documents/10199/f6179af3-b1d1-4df0-8ac9-215451f3ac0a

approximately \$1.1 trillion. The index is reconstituted annually and rebalanced quarterly. Detailed rule and methodology documents are publicly available.⁷

The ICE Semiconductor GTR Index is based on an ICE Index that was first listed in 2021, which is comprised of 30 different constituents or companies, which tracks the performance of the largest U.S. listed semiconductor companies. As of September 2021, the total market capitalization of the index is approximately \$3.1 trillion. The Index is reconstituted annually and rebalanced quarterly. Detailed rule and methodology documents are publicly available. §

Contract specifications for each of the two new ICE Index futures contracts are similar to those of the existing IFUS equity index futures contracts: each is cash settled at expiration using a final settlement price derived from the underlying index; listed contract months, trading hours, daily settlement window, last trading day and last trading day hours and Exchange and Clearing fees match the respective terms of the existing contracts. The index multiplier for each futures contract is set forth in the table above. In addition, the NCR levels and Reasonability Limits, as well as the Interval Price Limits for the new ICE equity index futures contracts are in-line with the levels for the current equity index futures listed by the Exchange and are set forth on the Exchange's website. The contracts will be block eligible with a 5lot minimum block size. Copies of the relevant tables are attached in Exhibit D.

As provided in Exhibit F, the new contracts are not narrow-based equity indices and they are subject to the position limits and position accountability levels, which are set forth in amended Exchange Rule 6.25 and Resolution No. 1 to Chapter 6, attached in Exhibits B and D, respectively. Participants exceeding the accountability level of the new ICE equity index contracts: (i) automatically consent not to increase further and automatically consent to decrease those positions when so ordered by the Exchange acting in its own discretion and (ii) shall provide, in a timely manner, information on the nature of that participant's related cash position, Exchange Futures and Options position, trading strategy and/or hedging strategy and such other relevant information as the Exchange may require.

Certifications:

The amendments will become effective with the listing of the new MSCI equity index contracts on or February 14, 2022 or such other date as the Exchange shall determine, which shall be no sooner than the second business day following the day on which this submission is filed. The Exchange is not aware of any substantive opposing views to the new contracts. The Exchange certifies that the rule amendments comply with the requirements of the Act and the rules and regulations promulgated thereunder. The Exchange has reviewed the designated contract market core principles ("Core Principles") as set forth in the Act and has determined that the listing of the contracts complies with the following relevant Core Principles:

COMPLIANCE WITH RULES

The terms and conditions of the seven new equity index contracts will be enforced by the Exchange and are set forth in Chapter 23, Rule 6.25 and Resolution No. 1 to Chapter 6, and the no-cancellation range ("NCR") table posted on the Reasonability Limits and NCR page on the Exchange's website as well as the Interval Price Limits table on the site. In addition, trading of the contracts is subject to all relevant Exchange rules which are enforced by the Market Regulation Department.

CONTRACTS NOT READILY SUBJECT TO MANIPULATION

⁷ https://www.theice.com/publicdocs/data/ICEBIO Index Methodology.pdf

⁸ https://www.theice.com/publicdocs/data/ICESEMI Methodology.pdf

The new contracts are not readily subject to manipulation as they are based on liquid underlying broad-based equity indexes and underlying securities which are widely traded. In addition, trading of the new contracts will be monitored by the Exchange's Market Regulation Department.

POSITION LIMITS OR ACCOUNTABILITY

Positions in the new equity index contracts will be subject to the single month accountability levels and all-months combined position limits set by the Exchange. Such accountability levels and position limits are based upon the deliverable supply in the cash market. Position accountability levels and limits are based upon the deliverable supply in the cash market. A detailed deliverable supply analysis for each of the seven new contracts accompanies this submission as Exhibit E⁹.

FINANCIAL INTEGRITY OF CONTRACTS

The new contracts will be cleared by ICE Clear U.S., a registered derivatives clearing organization subject to Commission regulation, and carried by registered futures commission merchants qualified to handle customer business.

The Exchange further certifies that, concurrent with this filing, a copy of this submission was posted on the Exchange's website and may be accessed at (https://www.theice.com/futures-us/regulation#rule-filings).

If you have any questions or need further information, please contact me at 212-748-4021 or at jason.fusco@theice.com.

Sincerely,

Jason V. Fusco Assistant General Counsel Market Regulation

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⁹ In accordance with CFTC Regulation 40.8, the Exchange has filed a request for confidential treatment of Exhibit E.

EXHIBIT A

MSCI World Climate Paris Aligned NTR Index Futures

Contract Size	\$25 times the MSCI World Climate Paris Aligned NTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
	.100 Index points, equal to \$2.50 per contract;
Tick Size	(Block Trades can be done at .001 Index points)
	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening)
Trading Hours	Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	MVR
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the MSCI World Climate Paris Aligned NTR Index on the Last Trading Day for the contract.
Position	Position Accountability Level, single month – 20,000 lots
Accountability and Limit Levels	Position Limit, All Months Combined – 100,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
	Screen Trades: \$1.20 per side
Ex & Clrg Fee	Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

MSCI USA Climate Paris Aligned GTR Index Futures

Contract Size	\$20 times the MSCI USA Climate Paris Aligned GTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
Tick Size	.100 Index points, equal to \$2.00 per contract; (Block Trades can be done at .001 Index points)
Trading Hours	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening) Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	MVS
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the MSCI USA Climate Paris Aligned GTR Index on the Last Trading Day for the contract.
Position Accountability and Limit Levels	Position Accountability Level, single month – 20,000 lots Position Limit, All Months Combined – 100,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
	Screen Trades: \$1.20 per side
Ex & Clrg Fee	Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

MSCI Europe Climate Paris Aligned NTR Index Futures

Contract Size	€25 times the MSCI Europe Climate Paris Aligned NTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
Tick Size	.100 Index points, equal to €2.50 per contract; (Block Trades can be done at .001 Index points)
Trading Hours	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening) Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	MVT
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the MSCI Europe Climate Paris Aligned NTR Index on the Last Trading Day for the contract.
Position Accountability and Limit Levels	Position Accountability Level, single month – 50,000 lots Position Limit, All Months Combined – 200,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
	Screen Trades: \$1.20 per side
Ex & Clrg Fee	Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

MSCI EM Climate Paris Aligned NTR Index Futures

Contract Size	\$40 times the MSCI EM Climate Paris Aligned NTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
	.050 Index points, equal to \$2.00 per contract;
Tick Size	(Block Trades can be done at .001 Index points)
	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening)
Trading Hours	Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	MVU
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the MSCI EM Climate Paris Aligned NTR Index on the Last Trading Day for the contract.
Position	Position Accountability Level, single month – 50,000 lots
Accountability and Limit Levels	Position Limit, All Months Combined – 200,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
	Screen Trades: \$1.20 per side
Ex & Clrg Fee	Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

MSCI Europe (Euro) NTR Index Futures

Contract Size	€100 times the MSCI Europe (Euro) NTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
	.050 Index points, equal to €5.00 per contract;
Tick Size	(Block Trades can be done at .001 Index points)
	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening)
Trading Hours	Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	MVV
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the MSCI Europe (Euro) NTR Index on the Last Trading Day for the contract.
Position	Position Accountability Level, single month – 50,000 lots
Accountability and Limit Levels	Position Limit, All Months Combined – 200,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
	Screen Trades: \$1.20 per side
Ex & Clrg Fee	Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

ICE Biotechnology GTR Index Futures

	Tel Biotechnology GTR maex Tutares
Contract Size	\$100 times the ICE Biotechnology GTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
Tick Size	.050 Index points, equal to \$5.00 per contract; (Block Trades can be done at .001 Index points)
Trading Hours	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening) Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	IUT
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the ICE Biotechnology GTR Index on the Last Trading Day for the contract.
Position Accountability and Limit Levels	Position Accountability Level, single month – 20,000 lots Position Limit, All Months Combined – 100,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
Ex & Clrg Fee	Screen Trades: \$1.20 per side Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

ICE Semiconductor GTR Index Futures

Contract Size	\$50 times the ICE Semiconductor GTR Index
Contract Months	5 contracts in the March, June, September, and December cycle
Price Quotation	Index points, to three decimal places
Tick Size	.050 Index points, equal to \$2.50 per contract; (Block Trades can be done at .001 Index points)
Trading Hours	8:00 pm to 6:00 pm (6:00 pm open on Sunday evening) Preopen starts 30 minutes prior to the start of trading.
Last Trading Day	Third Friday of the expiration month. Trading in the expiring contract ceases at 4:15 pm NY time on Last Trading Day.
Symbol	IUS
Daily Settlement Window	15:59 to 16:00 NY time
Final Settlement	Cash settlement to the closing value of the ICE Semiconductor GTR Index on the Last Trading Day for the contract.
Position Accountability and Limit Levels	Position Accountability Level, single month – 20,000 lots Position Limit, All Months Combined – 100,000 lots
Daily Price Limit	None.
Block Enabled	Yes, 5 lot Block Minimum Quantity
EFP and EFS Enabled	Yes.
Ex & Clrg Fee	Screen Trades: \$1.20 per side Block and EFRP Trades: \$1.75 per side
MIC	IFUS
Clearing Venue	ICE Clear U.S.

Exhibit B

In the text below, additions are underlined and deletions are struck through.

MSCI INDEX FUTURES AND OPTIONS

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ICE Futures U.S.®, Inc.

CHAPTER 23

MSCI INDEX FUTURES AND OPTIONS

23.1 Scope of Chapter

This chapter is limited in application to trading of MSCI Index Futures Contracts. The procedures for trading, clearing, settlement, and any other matters not specifically covered herein shall be governed by the general Rules of the Exchange.

Each MSCI Index referenced in this chapter is subject to change by MSCI, Inc. as set forth in the MSCI Global Investable Market Indices Methodology: *Index Construction Objectives, Guiding Principles and Methodology for the MSCI Global Investable Market Indices* as that document is amended, updated and replaced from time-to-time. Pursuant to the terms of the license granted by MSCI to the Exchange, under certain circumstances, the Exchanges may become responsible for maintaining, changing or amending the index upon which the Futures specified in this Chapter is valued.

The terms and conditions of the Futures Contracts specified in this Chapter are deemed to include any relevant governmental, regulatory or court decree or order as recognized by the Exchange in a Notice to Members.

23.2 Months Traded

In the absence of any other provisions in the respective Sub-Chapter for a particular MSCI Index Futures Contract, trading in the MSCI Index Futures Contracts shall be conducted in March, June, September and December delivery months. The number of months open for trading at a given time shall be determined by the Exchange.

23.3 Last Trading Day

In the absence of any other provisions in the respective Sub-Chapter for a particular MSCI Index Futures Contract, the last day of trading for each MSCI Index Futures Contract shall be the third Friday of the contract month.

23.4 Cash Settlement Procedures

(a) Settlement

MSCI Index Futures Contracts open at the termination of trading shall be cash settled as set forth in paragraph (c) of this Rule using the Final Settlement Value for the respective MSCI Index Futures Contract. Unless provided otherwise in the Sub-Chapter for an MSCI Index Futures Contract, the Final Settlement Value for purposes of the contract's cash settlement shall be the relevant underlying MSCI Index as calculated by MSCI rounded to the nearest 1/100th of an index point. This value shall be based on the closing prices of the stocks at their respective primary exchanges on the third Friday of the contract month. Closing prices shall be converted from local currency to U.S. dollars based on the spot exchange rate provided by Reuters at 4:00 pm London time on the day of the Final Settlement Price_calculation. If a component stock in the index does not trade on the day scheduled for determination of the Final Settlement Price while the primary market for that stock is open for trading, the price of that stock shall be determined, for the purposes of calculating the Final Settlement Price, based on the most recent closing price of that

stock. If one or more primary exchange(s) are not scheduled to be open for trading on the day of the final settlement calculation, the prices of those stocks shall all be based on the most recent closing prices. All closing prices will be converted from local currency to U.S. Dollars based on the spot exchange rate provided by Reuters at 4:00 pm London time on the day of Final Settlement Price calculation.

(b) Unexpected Market Closure Event

In the event of an Unexpected Market Closure Event (as defined in section 2.1 of the Rulebook for MSCI Unexpected Market Closure Indexes¹⁰) on the Last Trading Day of an expiring contract, the Final Settlement Value for the affected delivery month will not be calculated as stated in paragraph (a) above, but shall be calculated by MSCI in accordance with the MSCI Unexpected Market Closure Index Methodology or any subsequent methodology published by MSCI. In such an Unexpected Market Closure Event, the Final Settlement Payment referenced in paragraph (c) below may be delayed to a Business Day later than the second Business Day following the termination of trading.

(c) Final Settlement Payment

Payment in final settlement of an MSCI Index Futures Contract will be made in accordance with the Clearing Organization Rules on the second Business Day following the termination of trading by Clearing Members with open positions at the time of termination of trading of the MSCI Index Futures Contract. The amount of the final settlement payment to be made or received will be calculated based on the final settlement value as a normal variation payment.

23.5 Trading Halts on Underlying Securities Exchanges

- (a) This Rule shall apply to Exchange Index Contracts based on the following MSCI USA Indexes: MSCI USA Index, MSCI USA Value Index, MSCI USA Growth Index, MSCI USA Small Cap Index, MSCI USA Small Cap NTR Index, MSCI USA GTR Index, MSCI USA ESG Leaders GTR Index, MSCI USA Climate Change NTR Index and MSCI USA Minimum Volatility GTR Index.
- (b) On any Business Day when a general trading halt occurs on the New York Stock Exchange, Inc. ("NYSE") pursuant to NYSE Rule 7.12, or similar rule of another relevant national securities exchange which is the primary securities market for the index underlying an Exchange MSCI Index Contract, trading in the relevant Exchange MSCI Index Contract shall be halted. Trading of the Exchange contracts shall resume 10 minutes after the trading halt in the equities market commences, in the case where trading in the primary securities market is scheduled to resume on the same Business Day as the halt occurs. If trading in the applicable primary securities market is not scheduled to resume on the same Business Day as the trading halt in that market occurred, then trading in the relevant Exchange MSCI Index Contract shall resume at the regular opening time for such contract on the next Business Day.

23.6 Notice Regarding MSCI

The MSCI Index Futures are not sponsored, endorsed, sold or promoted by MSCI Inc. ("MSCI"), any affiliate of MSCI or any other party involved in, or related to, making or compiling any Indexes. The MSCI

¹⁰ The MSCI Unexpected Market Closure Index Methodology can be found at <a href="https://www.msci.com/eqb/methodology/met

Index Futures have not been passed on by MSCI, any of its affiliates or any other party involved in, or related to, making or compiling any Indexes as to their legality or suitability with respect to any person or entity. MSCI, its affiliates and any other party involved in, or related to, making or compiling the MSCI Indexes do not guarantee the originality, accuracy and/or completeness of the MSCI Indexes or any data included therein. Neither MSCI, any of its affiliates nor any other party involved in, or related to, making or compiling the MSCI Indexes makes any express or implied warranties, and expressly disclaims all warranties of merchantability and fitness for a particular purpose or use with respect to the related Futures Contract, the MSCI Index or any data included therein. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other party involved in, or related to, making or compiling the MSCI Indexes have any liability for any direct, special, punitive, indirect, or consequential damages, claims, losses or expenses relating to any futures or options contracts or caused by any errors or delays in calculating or disseminating the MSCI Indexes. Neither MSCI, any of its affiliates not any other party involved in, or related to, making or compiling the MSCI Indexes has any obligation to take the needs of the issuers of the Contracts, the owners of the MSCI Index Futures or the Exchange into consideration in determining. composing or calculating any MSCI Indexes. Neither MSCI its affiliates nor any other party involved in, or related to, making or compiling the MSCI Indexes is responsible for or have participated in the determination of the timing of, prices at, or quantities of the MSCI Index Futures to be issued or in the determination or calculation of the equation by which the MSCI Index Futures are redeemable for cash.

Amended by the Board December 17, 2018; effective January 7, 2019 [¶¶ 23.4 (a) through (c)].

Amended by the Board October 20, 2020; effective October 30, 2020 with the addition of Rule 23.5 Trading Halts on Underlying Securities Exchanges

Amended by the Board June 22, 2021; effective September 13, 2021 with the addition of MSCI USA Small Cap NTR Index to Rule 23.5.

23.A.062 MSCI WORLD CLIMATE PARIS ALIGNED NTR INDEX FUTURES

Trading Schedule

The hours of trading in MSCI World Climate Paris Aligned NTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Contract Symbol

MVR

Trading Unit

The unit of trading shall be \$25.00 times the MSCI World Climate Paris Aligned NTR Index.

Price Increments

The minimum price fluctuation for the MSCI World Paris Aligned NTR Index Futures shall be 0.100 Index Points, which is \$2.50 per contract. Contracts shall not be made on any other price basis with the exception of certain Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is \$0.025 per contract.

23.A.063 MSCI USA CLIMATE PARIS ALIGNED GTR INDEX FUTURES

Trading Schedule

The hours of trading in MSCI USA Climate Paris Aligned GTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Contract Symbol

MVS

Trading Unit

The unit of trading shall be \$20.00 times the MSCI USA Climate Paris Aligned GTR Index.

Price Increments

The minimum price fluctuation for the MSCI USA Paris Aligned GTR Index Futures shall be 0.100 Index Points, which is \$2.00 per contract. Contracts shall not be made on any other price basis with the exception of certain Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is \$0.02 per contract.

23.A.064 MSCI EUROPE CLIMATE PARIS ALIGNED NTR INDEX FUTURES

Trading Schedule

The hours of trading in MSCI Europe Climate Paris Aligned NTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Contract Symbol

MVT

Trading Unit

The unit of trading shall be €25.00 times the MSCI Europe Climate Paris Aligned NTR Index.

Price Increments

The minimum price fluctuation for the MSCI Europe Paris Aligned NTR Index Futures shall be 0.100 Index Points, which is 0.100 Index Points.

23.A.065 MSCI EM CLIMATE PARIS ALIGNED NTR INDEX FUTURES

Trading Schedule

The hours of trading in MSCI EM Climate Paris Aligned NTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Contract Symbol

MVU

Trading Unit

The unit of trading shall be \$40.00 times the MSCI EM Climate Paris Aligned NTR Index.

Price Increments

The minimum price fluctuation for the MSCI EM Paris Aligned NTR Index Futures shall be 0.050 Index Points, which is \$2.00 per contract. Contracts shall not be made on any other price basis with the exception of certain Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is \$0.02 per contract.

23.A.066 MSCI EUROPE (EURO) NTR INDEX FUTURES

Trading Schedule

The hours of trading in MSCI Europe (Euro) NTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Contract Symbol

MVV

Trading Unit

The unit of trading shall be €100.00 times the MSCI Europe (Euro) NTR Index.

Price Increments

The minimum price fluctuation for the MSCI Europe (Euro) NTR Index Futures shall be 0.050 Index Points, which is €5.00 per contract. Contracts shall not be made on any other price basis with the exception of certain Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is €0.010 per contract.

ICE Futures U.S.®, Inc.

NYSE AND ICE INDEX FUTURES

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SPECIAL NOTICE RELATING TO RULES

Sub-Chapter B	ICE Index Futures Contracts
25.B.01	ICE Biotechnology GTR Index Futures
25.B.02	ICE Semiconductor GTR Index Futures

ICE Futures U.S.®, Inc.

NYSE <u>AND ICE</u> INDEX FUTURES

25.1 Scope of Chapter

This chapter is limited in application to trading of NYSE Index <u>and ICE Index</u> Futures Contracts. The procedures for trading, clearing, settlement, and any other matters not specifically covered herein shall be governed by the general Rules of the Exchange.

Each NYSE Index referenced in this chapter is subject to change by ICE Data Indices, LLC ("ICE Data") as set forth in the Methodology document for the relevant NYSE index as that document is amended, updated and replaced from time-to-time, and each ICE Index referenced in this chapter is subject to change by ICE Data Services as set forth in the Methodology document for the relevant ICE index as that document is amended, updated and replaced from time-to-time.

The terms and conditions of the Futures Contracts specified in this Chapter are deemed to include any relevant governmental, regulatory or court decree or order as recognized by the Exchange in a Notice to Members.

25.2 Trading Specifications

In the absence of any other provisions in the respective Sub-Chapter for a particular NYSE Index <u>or ICE Index</u> Futures Contract, trading in the [NYSE Index] Futures Contracts shall be conducted in March, June, September and December delivery months. The number of months open for trading at a given time shall be determined by the Exchange.

25.3 Termination of Trading

In the absence of any other provisions in the respective Sub-Chapter for a particular NYSE Index or ICE Index Futures Contract, the last day of trading for each [NYSE Index] Futures Contract shall be the third Friday of the contract month or, if the relevant underlying [NYSE] Index is not scheduled to be published for that day, on the first (1st) preceding day for which such Index is scheduled to be published.

25.4 Cash Settlement Procedures

(b) Settlement

NYSE Index <u>and ICE Index</u> Futures Contracts open at the termination of trading shall be cash settled as set forth in paragraph (b) of this Rule using the Final Settlement Value as provided in the Sub-Chapter for the respective [NYSE Index] Futures Contract.

(c) Final Settlement Payment

Payment in final settlement of an NYSE Index <u>or ICE Index</u> Futures Contract will be made in accordance with the Clearing Organization Rules on the Business Day following the termination of trading by Clearing Members with open positions at the time of termination of trading of the

[NYSE Index] Futures Contract. The amount of the final settlement payment to be made or received will be calculated based on the final settlement value as a normal variation payment.

25.5 Trading Halts on Underlying Securities Exchange

On any Business Day when a general trading halt occurs on the New York Stock Exchange, Inc. ("NYSE") pursuant to NYSE Rule 7.12, or any other relevant national securities exchange that is the primary securities market for the index underlying a NYSE Index or ICE Index Contract, trading in the relevant NYSE Index or ICE Index Contract shall be halted. If trading in the primary securities market is scheduled to resume after a trading halt pursuant to NYSE Rule 7.12 or similar rule of another relevant national securities exchange on the same Business Day as the trading halt in that market occurred, trading in the relevant [NYSE Index] Contract shall resume ten minutes after the trading halt in the primary securities market commences. If trading in the primary securities market is not scheduled to resume on the same Business Day as the trading halt in that market occurred, then trading in the relevant [NYSE Index] Contracts shall resume at the regular open time for the Index Contracts on the next Business Day.

25.B.01 ICE Biotechnology GTR Index Futures

Trading Schedule

The hours of trading in ICE Biotechnology GTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Trading Unit

The unit of trading shall be \$100.00 times the ICE Biotechnology GTR Index.

Final Settlement Value

The final settlement value for purposes of the contract's cash settlement shall be the closing value of the ICE Biotechnology GTR Index as calculated by ICE Data on the Last Trading Day of the expiring futures contract month.

Price Increments

The minimum price fluctuation for the ICE Biotechnology Index Futures shall be 0.050 Index Points, which is \$5.00 per contract. Contracts shall not be made on any other price basis with the exception of Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is \$0.10 per contract.

25.B.02 ICE Semiconductor GTR Index Futures

Trading Schedule

The hours of trading in ICE Semiconductor GTR Index Futures Contracts shall be determined by the Exchange. On the last day of trading in an expiring future, the closing time for such future shall be 4:15 p.m. New York time.

Trading Unit

The unit of trading shall be \$50.00 times the ICE Semiconductor GTR Index.

Final Settlement Value

The final settlement value for purposes of the contract's cash settlement shall be the closing value of the ICE Semiconductor GTR Index as calculated by ICE Data on the Last Trading Day of the expiring futures contract month.

Price Increments

The minimum price fluctuation for the ICE Semiconductor Index Futures shall be 0.050 Index Points, which is \$2.50 per contract. Contracts shall not be made on any other price basis with the exception of Block Trades as may be specified by the Exchange, in which case the minimum price fluctuation shall be 0.001 Index Points, which is \$0.05 per contract.

SPECIAL NOTICE RELATING TO RULES

ICE Biotechnology Index SM and ICE Semiconductor Index SM (individually an "Index" and collectively the "Indexes") are service marks of ICE Data Indices, LLC or its affiliates ("ICE Data") and have been licensed for use by ICE Futures U.S in connection with the listing and trading of futures contracts specified in subchapter B of this chapter 25 of the Exchange Rules. The futures contracts are not sponsored, endorsed, sold or promoted by ICE Data. ICE Data makes no representations or warranties regarding the advisability of investing in securities or futures contracts, and any such investment based upon the performance of an Index particularly, or the ability of an Index to track general stock market performance.

ICE DATA MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INDEXES OR ANY DATA INCLUDED THEREIN. IN NO EVENT SHALL ICE DATA HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES."

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Rule 6.25. Position Limits for Index Contracts

(a) Position limit and position accountability levels for Index Contracts are specified in the Table contained in Resolution 1 contained in this Chapter (the "Position Limit Table"). A Person holding or controlling Exchange Futures Contracts and Futures Equivalent Contracts, net long or net short (calculated as specified in the Position Limit Table), in an amount equal to or greater than the accountability levels specified in such Table, (i) automatically consents not to increase further and automatically consents to decrease those positions when so ordered by the Exchange acting in its own discretion and (ii) shall provide, in a timely manner, information on the nature of that Person's related cash position, Exchange Futures and Options position, trading strategy and/or hedging strategy and such other relevant information as the Exchange may require. Nothing in this Rule shall limit the authority of the Exchange to take action under Rules 6.11, 6.12 and 6.13 or to request and collect information regarding such Person's related cash and Exchange Futures and Options positions.

[RESOLUTION NO. 1 IS ATTACHED AS EXHIBIT D]

EXHIBIT C



ICE Futures U.S., Inc. Reasonability Limits and No Cancellation Ranges - As of [December 2021] FEBRUARY 2022

The ICE Futures U.S. Error Policy includes Reasonability Limit ("RL"), No Cancellation Range ("NCR") and Calendar Spread Stop Limit Order ("CSLOR") levels for futures and options contracts. The levels shown below are subject to change without prior notification.

ICE Futures U.S. – Energy Division No
Cancellation Ranges
(Maximum Number of Ticks from Market
Value expressed as Price Difference)

Financial Gas Products	Day	Spread	Month	Spread	Season	Spread	Calendar	Spread
Henry Hub	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Non-Henry Fixed Price	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
UK Natural Gas	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Index			0.02	0.02	0.02	0.02	0.02	0.02
Index Bidweek (Prompt Month only)			0.04	0.04				
EIA Financial Weekly Index	10 BCF	10 BCF	10 BCF	10 BCF	10 BCF	10 BCF	10 BCF	10 BCF
EIA End of Draw / Storage Index	250 BCF	250 BCF	250 BCF	250 BCF	250 BCF	250 BCF	250 BCF	250 BCF
Financial LNG	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Basis	20% (of Basis/Spre	ad FMV up to	0.05	1	Min/Max Ra	nge = 0.02/0.	05
Fin Natural Gas Combos	209	%of Combo I	MV up to 0.0)5*	N	/lin/Max Rar	nge = 0.01/0.0)5*
*	Single	full month H	lenry Hub GD	D/LD1 sprea	d will refere	nce the Com	nbo NCR liste	d above
Options	20%	6 of Premiun	n FMV up to 0).05	Min/Max Range = 0.005/0.05			
Financial Power Products	BalDay/ NextDay/ BalWeek	Spread	Weekly & Balmo	Spread	Month & Season	Spread	Quarter & Calendar	Spread
PJM WHRT, Indiana RT, Nepool DA	5.00	5.00	2.00	2.00	0.60	0.60	0.40	0.40
All other contracts	5.00	5.00	2.00	2.00	1.00	1.00	0.60	0.60
Post Daily LMP Publish	0.05	0.05						
Capacity Resp. Reserve					1.00	1.00	0.60	0.60
In-City or Rest of State Cap.					1.00	1.00	0.60	0.60
Non-Spinning Reserve					1.00	1.00	1.60	0.60
Regulation					1.00	1.00	0.60	0.60
Heat Rate					0.30		0.30	
DART					0.60		0.40	
Daily Load Forecast	5,00				MW			
Options	20% of Premium FMV up to 5.00					Min/Max R	ange = 0.50/5	5.00

US Environmental Products	Month	Option	Min/Max Range
RGGI	0.10	20% of Premium FMV up to 0.10	0.05/0.10
RECs - NJ, TX, MD, M-RETS & NAR TX SREC, PA AEC, PJM-TRI QEC, CCO	0.25	20% of Premium FMV up to 0.25	0.05/0.25
CCA	0.25	20% of Premium FMV up to 0.25	0.01/0.25
CCA Trade at Auction Settlement Contracts	0.05	N/A	N/A
CT & MA REC, NEPOOL REC	1.00	20% of Premium FMV up to 1.00	0.05/1.00
RIN			
	0.05	20% of Premium FMV up to 0.05	0.01/0.05
SRECs - MA I & II, MD & NJ PA SAEC, LCFS	5.00	20% of Premium FMV up to 5.00	0.50/5.00

Oil and NGL Futures
Crude Diff – Argus LLS vs WTI 1st Line Future
Argus Mars vs WTI Trade Month Future
Crude Diff – Argus WTS vs WTI Trade Month Future
Crude Diff – WTI 1st Line vs Brent 1st Line Future
Fuel Oil Diff – New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future
Fuel Oil Outright – New York 1% Fuel Oil Future
Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future
Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Futu
Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st l
Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Fu
Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Min
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future
Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future
Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future
Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)
Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future
Crude Diff – Argus WTI Midland vs WTI 1st Line Future
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future
Crude Outright – WTI 1st Line Future
Fuel Oil Outright – USGC HSFO (Platts) Future

Heating Oil Arb - Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbl

Gasoline Diff - Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Li

For any Oil or NGL future not listed above the following NCR's are applied:

Contract		NCR 1-6M		Spread		NCR 7M+	Spread
Oil (Barrels or lbs)		0.2500		0.2000		0.2000	0.2000
Oil (MT)		0.7500		0.500	00	1.5000	1.0000
Oil (Gallons)		0.0080		0.0080		0.0080	0.0080
Oil (RIN)		0.0200		0.0200		0.0200	0.0200
Contract	Pricing Month	Month	Spread	Quarters	Spread	Calendar	Spread
NGL (North American) (Gallons) **	0.0025	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Olefins	N/A	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Olefins (MT)	N/A	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Aromatics	N/A	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
LPG (International) (MT)**	1 00	1.00 5.00 5.00		5.00	5.00	5.00	5.00

^{**}For all trades executed after five US business days into the current pricing month, the pricing month NCR shall be applied.

Oil and NGL Options	No Cancellation Range	Minimum Value NCR - Conversions and Reversals	Maximum Value
Natural Gas Liquids	25% of premium	0.0050	0.0250
LPG (International) (MT)	25% of premium	0.0625	0.3125
All Other Oil Options	25% of premium	0.1000	1.00
WTI Options	25% of premium	0.1000	1.00
Gasoil Options	25% of premium	0.1000	10.00
Heating Oil Options	25% of premium	0.0010	0.0200

The preferred resolution for option trades, excluding Conversions and Reversals, executed greater than 3 * NCR from fair market value is Trade Cancellation.

User Defined Strategies (UDS) will be evaluated on the basis of the strategy unless there are implied deals in which case each leg of the UDS will be evaluated independently.

ICE Futures U.S. – Energy Division Reasonability Limit Levels

Gas Products	RL	Reasonability Limit Exceptions
Henry Hub	\$0.15	
UK Natural Gas	\$0.08	
EIA Financial Weekly Index	50 BCF	N/A
EIA End of Draw/Storage Index	1,000 BCF	
Financial LNG	\$0.30	

		Reasonability Limit: \$5.00
		Dominion South Swing (DSS)
		Lebanon Swing (LBN)
		Reasonability Limit: \$10.00
		Algonquin Citygates Swing (ALS)
		Chicago Swing (CSS)
		NNG Demarc Swing (DES)
Eirad Dries (not including Honey)	\$2.00	
Fixed Price (not including Henry)	\$2.00	Iroquois (Into) Swing (Platts) (IRS)
		Iroquois-Z2 Swing (Platts) (IZS)
		NNG Ventura Swing (NNS)
		NWP Sumas Basis (NSS)
		PG&E Citygate Swing (PIG)
		Transco Zone 6 (non NY) Swing (TPS)
		TETCO M3 Swing (TSS)
		Transco Zone 6 (NY) Swing (ZSS)
		Reasonability Limit: \$5.00
		Dominion South Basis (DOM)
		Reasonability Limit: \$10.00
		Algonquin Citygates Basis (ALQ)
		NNG Demarc Basis (DEM)
	** **	Chicago Basis (DGD)
Basis	\$2.00	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)
		Reasonability Limit: \$10.00
		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)
Index	\$0.10	TETCO M3 Index (MTI)
maca	ψ0.10	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 Transpiration 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 6 (non NY) Index (TPI)
Transco Station 85 (Zone 4) Index (TRI)
TETCO WLA Index (TWI)
Tennessee Zone 0 Index (TZI)
Waha Index (WAI)

Power Products	RL	Reasonability Limit Exceptions
Financial Power	\$20.00	N/A
Capacity Responsive Reserve	\$10.00	N/A
In-City or Rest of State Capacity	\$10.00	N/A
Non-Spinning Reserve	\$10.00	N/A
Regulation	\$10.00	N/A
All Daily Power Contracts	\$100.00	ERCOT North 345KV Real-Time Peak Daily Fixed Price (END) and ERCOT North 345KV Hub Real-Time Peak Daily Mini Fixed Price (ERA) - \$200.00
All Daily Load Forecast	20,000 MW	N/A

U.S. Environmental Products	RL	Reasonability Limit Exceptions
RGGI	\$0.50	
CCA, CCO, TX SREC, PJM TRI - QEC, RECs - NJ, TX, MD, M-RETS & NAR	\$1.25	
CCA Trade at Auction Settlement Contracts	ETS - \$0.25/Block - \$0.50	N/A
CT & MA REC, MD SREC, PA SAEC & NEPOOL REC	\$5.00	IV/A
RIN	\$0.25	
MA SREC 1 & II, & NJ SREC, LCFS	\$15.00	

Contract	Code	Unit	RL
Crude Diff – Argus ANS vs Brent 1st Line Future	ABL	bbl	\$3.00
Crude Diff – Argus WTI Houston vs WTI Trade Month Future	ACM	bbl	\$3.00
Crude Outright – Argus WTI Cushing Trade Month Future	ACT	bbl	\$3.00
Crude Diff – Argus WTS vs WTI 1st Line Average Price Option	AFH	bbl	\$3.00
Crude Diff – Argus WTI Houston vs WTI 1st Line Average Price Option	AIL	bbl	\$3.00
Crude Outright – Argus LLS Future	ARH	bbl	\$3.00
Crude Diff – Argus LLS vs Brent 1st Line Future	ARI	bbl	\$3.00
Crude Diff – Argus LLS vs Dated Brent (Platts) Future	ARJ	bbl	\$3.00
Crude Diff – Argus LLS vs WTI 1st Line Future	ARK	bbl	\$3.00
Crude Diff – Argus LLS vs WTI Trade Month Average Price Option	ARL	bbl	\$3.00
Crude Outright – Argus Mars Future	ARM	bbl	\$3.00
Crude Diff – Argus Mars vs Brent 1st Line Future	ARN	bbl	\$3.00
Crude Diff – Argus Mars vs WTI 1st Line Average Price Option	ARO	bbl	\$3.00
Crude Diff - Argus WCS (Houston) Crude Oil Trade Month Future	ARV	bbl	\$3.00
Argus Mars vs WTI Trade Month Future	ARW	bbl	\$3.00
Crude Diff – Argus WTS vs WTI Trade Month Future	AVT	bbl	\$3.00
Crude Diff – Argus Bakken (Clearbrook) Crude Oil Future	BAK	bbl	\$3.00
Crude Diff – WTI 1st Line vs Brent 1st Line Future	BTD	bbl	\$3.00
Crude Diff – Argus WCS (Cushing) Crude Oil Trade Month Future	CSH	bbl	\$3.00
Fuel Oil Diff - New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future	FOD	bbl	\$2.00
Fuel Oil Outright – New York 1% Fuel Oil Future	FOW	bbl	\$2.00
Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future	GCS	bbl	\$0.75
Gasoline Diff - Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future	GDL	gal	\$0.05

Gasoline Diff - Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	GDM	gal	\$0.05
Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future	GDO	MT	\$5.00
Gasoline Diff - RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future	GDQ	MT	\$5.00
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)	GOE	bbl	\$0.50
Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future	GOH	gal	\$0.02
Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future	GUF	bbl	\$0.75
Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)	HBT	bbl	\$0.75
Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future	ЈНО	gal	\$0.02
Crude Diff - Argus WTI Midland vs WTI 1st Line Future	MLT	bbl	\$3.50
Crude Diff - Argus WTI Houston vs Argus WTI Midland Trade Month Future	MSN	bbl	\$3.00
Crude Diff - Argus WTI Midland vs Argus WTS Trade Month Future	MST	bbl	\$3.00
Crude Diff - Argus WTI Midland vs WTI Trade Month Future	MSV	bbl	\$3.50
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in MTs)	NVV	MT	\$1.00
Crude Outright – WTI 1st Line Future	R	bbl	\$0.75
Fuel Oil Outright – USGC HSFO (Platts) Future	RBO	bbl	\$2.00
Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)	RBR	bbl	\$0.75
Crude Diff - ICE WCS 1b Index Future	TDX	bbl	\$3.00
Crude Diff - ICE LSB 1a Index Future	TML	bbl	\$3.00
ICE WCS Cushing 1a Index Trade Month Future	TMQ	bbl	\$3.00
Crude Diff - ICE SW 1a Index Future	TMR	bbl	\$3.00
Crude Diff - ICE UHC 1a Index Future	TMU	bbl	\$3.00
Crude Diff - ICE WCS 1a Index Future	TMW	bbl	\$3.00
Crude Diff - ICE UHC 1b Index Future	UHB	bbl	\$3.00
Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)	ULM	bbl	\$0.02
Gasoline Diff – Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	UM1	bbl	\$0.05
Natural Gasoline, OPIS Mt. Belvieu Non-TET vs. WTI 1st Line Future	NGW	Bbl	\$2.10

 $For any \ Oil \ or \ NGL \ Futures \ contracts \ not \ listed \ in \ the \ above \ table \ the \ following \ Reasonability \ Levels \ are \ applied:$

Oil Products	RL
All Oil (Barrels or lbs) Contracts	\$1.25
All Oil (MT) Contracts	\$3.75
All Oil (Gallons) Contracts	\$0.050
All Oil (RIN) Contracts	\$0.0400 / Block - \$0.1500
NGL (North American) (Gallons)	ETS \$0.05 / Block - \$0.12
Olefins	\$0.025
Olefins (MT)	\$25.00
Aromatics	\$0.050
LPG (International) (MT)	\$25.00

ICE Futures U.S. Agricultural, Metal, Index and Currency Contracts NCR, RL and CSLOR Levels $\,$

AG AND METAL FUTURES	RL	NCR	CSLOR
Cocoa (CC)	\$50.00 per ton	\$25.00 per ton	\$10.00 per ton
Coffee "C"® (KC)	\$.0375 per lb.	\$.0080 per lb.	\$.0040 per lb.
Cotton No. 2 [®] (CT)	\$.0200 per lb.	\$.0075 per lb.	\$.0030 per lb.
FCOJ (OJ)	\$.0225 per lb.	\$.0100 per lb.	\$.0075 per lb.
Sugar No. 11 [®] (SB)	\$.0050 per lb.	\$.0020 per lb.	\$.0010 per lb.
Sugar No. 16 (SF)	\$.0300 per lb.	\$.0050 per lb.	\$.0050 per lb.
Canola (RS)	\$18.00 per tonne	\$6.00 per tonne	\$600 per tonne
Daily (AUD), 100 oz. (ZG) and mini Gold YG)	\$8.00 per oz.	\$4.00 per oz.	\$2.00 per oz.
Daily (HIO), 5000 oz. (ZI) & mini Silver (YI)	\$0.300 per oz.	\$0.200 per oz.	\$0.100 per oz.

INDEX FUTURES (in Index Points)	RL	NCR	CSLOR
U.S. Dollar Index (DX)	0.500	0.200	0.100
MICRO NYSE FANG+TM Index (FNG)	15.00	6.00	4.00
MSCI World Low Carbon Leaders NTR Index (WLC), MSCI World Low Carbon Target NTR Index (WLT) MSCI EAFE Index (MFS), MSCI Emerging Markets Index (MME) and MSCI World Index (MWL)	24.000	3.000	2.000
MSCI EAFE NTR Index (MFU)	72.000	9.000	6.000
MSCI Emerging Markets NTR Index (MMN)	8.000	1.000	0.500
MSCI Emerging Markets Latin America Index (MLE), MSCI Emerging Market Ex China NTR Index (MMC) and MSCI Kokusai GTR Index (KKS)	30.000	5.000	2.500
MSCI EM Asia NTR Index (ASN)	10.000	1.500	1.000
MSCI ACWI NTR Index (MMW) and ACWI Ex-US NTR Index (AWN)	5.000	0.750	0.500
MSCI Canada Index (MCL) and USA Index (MUN)	18.000	9.000	6.000
MSCI Pan-Euro Index (MPP)	11.000	6.000	4.000
MSCI Euro Index (MEU)	10.000	4.500	3.000
MSCI USA Value Index (MCU)	20.000	10.500	7.000
MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU)	1.250	0.500	0.250
MSCI USA Growth Index (MRG)	30.000	15.000	10.000
MSCI USA Small Cap Index (MUS)	22.500	3.000	2.000
MSCI EM EMEA NTR Index (MMM) and EM NTR (EUR) Index (MMR)	5.000	1.000	0.750
MSCI EM LatAm NTR Index (MML) and Mexico NTR Index (MXM)	12.000	1.000	0.750
MSCI China Free NTR Index (\$50) (MCX)	9.000	1.300	1.000
MSCI India NTR Index (MIN)	8.000	1.250	1.000
MSCI Pacific NTR Index (MPA), Pacific ex-Japan Index (PAC), and Europe NTR Index (EU9)	120.000	15.000	10.000
MSCI USA GTR Index (USS)	200.000	30.000	20.000
MSCI North America NTR Index (NAA) and Canada GTR Index (CAD)	150.000	18.000	12.000
MSCI World NTR Index (MWS)	100.000	12.000	8.000
MSCI AC Asia-ex-Japan Index (ASI)	12.000	1.500	1.000

MSCI Japan ESG Select Leaders Index (JSL)	30.000	4.000	2.500
MSCI Japan NTR Index (JPP)	75.000	10.000	7.000
MSCI USA Minimum Volatility Index (MUV)	85.000	12.000	8.000
MSCI World ESG Leaders NTR Index (LFW), EAFE ESG Leaders NTR (LFG) and Europe ESG Leaders NTR Index (LFU)	3.200	0.400	0.300
MSCI EM ESG Leaders NTR Index (LFM) and MSCI USA Climate Change NTR Index (MUC)	32.000	4.000	3.000
MSCI USA ESG Leader GTR Index (LFA)	6.500		
MSCI Australia NTR Index (AS7)		0.800	0.600
MSCI Malaysia NTR Index (MYY)	55.000 3.000	8.000 0.400	0.300
MSCI Thailand NTR Index (THG) and MSCI China Technology DR and P-Chip Index (CHT)	18.000	2.500	1.800
MSCI Hong Kong NTR Index (HKX)	550.000	70.000	45.000
MSCI Europe Climate Change NTR Index (EU1) and MSCI World Climate Change NTR Index (WOW)	18.000	2.000	1.500
MSCI China NTR Index (CHH)	40.000	8.000	4.000
MSCI USA Small Cap GTR Index (USC)	20.000	4.000	2.000
MSCI Germany NTR Index (GEA)	100.000	20.000	10.000
MSCI Italy NTR Index (ITH)	5.000	1.000	0.500
MSCI World Climate Paris Aligned NTR Index (MVR)	15.000	3.000	1.500
MSCI USA Climate Paris Aligned GTR Index (MVS)	20.000	4.000	2.000
MSCI Europe Climate Paris Aligned NTR Index (MVT)	12.500	2.500	1.250
MSCI EM Climate Paris Aligned NTR Index (MVU)	10.000	2.000	1.000
MSCI Europe (Euro) NTR Index (MVV)	2.500	.0500	3.250
ICE Biotechnology GTR Index (IUT)	5.000	1.000	0.500
ICE Semiconductor GTR Index (IUS)	20.000	4.000	2.000
ERIS CDX HY (HY5)	7500	2500	2500
ERIS CDX IG (IG5)	3000	1500	1500

TIC+ Futures Contract	RL	NCR	CSLOR
MSCI Emerging Markets Index (TPM & SPM)	12.000	3.000	n/a
MSCI EAFE Index (TPF & SPF)	12.000	3.000	n/a
MSCI World NTR USD Index (TPW & SPW)	50.000	12.000	n/a
MSCI EM Asia NTR USD Index (TPS & SPS)	4.600	1.600	n/a
MSCI Emerging Markets NTR USD Index (TPN & SPN)	4.000	1.000	n/a
MSCI Emerging Markets Latin America NTR Index (TPT & SPT)	15.000	5.000	n/a
MSCI Emerging Markets EMEA NTR Index (TPR & SPR)	2.500	1.000	n/a
MSCI USA GTR Index (TPU & SPU)	100.000	30.000	n/a
MSCI Pacific NTR Index (TPP & SPP)	60.000	15.000	n/a
MSCI Europe NTR USD Index (TPE & SPE)	60.000	15.000	n/a
MSCI ACWI NTR USD Index (TPA & SPA)	2.500	0.750	n/a
MSCI Japan NTR USD Index (TPJ & SPJ)	35.000	10.000	n/a
MSCI Emerging Markets ESG Leaders Index (TPG & SPG)	16.000	4.000	n/a

MSCI EAFE ESG Leaders Index (TPH & SPH)	1.600	0.400	n/a
MSCI Europe ESG Leaders Index (TPX & SPX)	1.600	0.400	n/a
MSCI USA ESG Leaders Index (TPY & SPY)	3.000	0.800	n/a
MSCI World ESG Leaders Index (TPZ & SPZ)	1.600	0.400	n/a

CURRENCY FUTURES	RL	NCR	CSLOR
Sterling-US dollar (MP)	100 ticks/100 points	50 ticks/50 points	25 points
Zloty-US dollar (PLN)	"	- "	-"
Zloty-Euro (PLE)	"	44	"
Turkish lira-US dollar (TRM)	"	44	"
Turkish lira-Euro (ETR)	44	44	"
Yen-US dollar (KSN)	1200 ticks/1200 points	600 ticks/600 points	300 points
Sterling-Norway (PK)	200 ticks/5000 points	60 ticks/1500 points	750 points
Sterling-SA Rand (PZ)	"		"
Sterling-Sweden (PS)	"	44	"
Euro-Sweden (RK) Euro-Norway (OL)	"	"	"
Euro-SA Rand (YZ)	"	44	"
US\$-SA Rand (ZR)	"	"	"
Norway-Yen (KY)	44	44	"
Sweden-Yen(KJ)	"	44	"
Mexican peso-US dollar (KMP)	44	"	"
All Other Currency Pairs	200 ticks/1000 points	60 ticks/300 pts.	150 points
Bakkt TM Bitcoin (USD) Monthly	750.00	300.00	200.00

	No-Cancellation Ranges for Ag and USDX Option Contracts (based on Theoretical Values shown)					
Theoretical Value*	Cotton	FCOJ	Cocoa	Coffee	Sugar	USDX
.0120	.20 pts	.20 pts	10 pts	.15 pts	.10 pts	.100 pts
.21 - 2.00	.40 pts	.75 pts	20 pts	.50 pts	.15 pts	.150 pts
2.01 - 5.00	.50 pts	1.00 pts	25 pts	.75 pts	.20 pts	.200 pts
5.01 - 10.00	.60 pts	1.50 pts	25 pts	1.50 pts	.25 pts	.250 pts
10.01 - above	.80 pts	2.00 pts	25 pts	2.00 pts	.25 pts	.250 pts
RL	3 x NCR	3 x NCR	3 x NCR	3 x NCR	3 x NCR	3 x NCR

*Note that for Cocoa options (which do not trade in decimal points) the respective Theoretical Value Ranges are "1 to 20 points, 21 to 200 points, 201 to 500 points, 501 to 1000 points, and 1001 points and above.

NCR and Reasonability Limits are for both outright options and User Defined Spread trades, including hedged trades; for purposes of NCR and RL levels, UDS and hedged UDS are treated as a package and not by the individual legs of the UDS.

In the case of price adjustment, Market Supervision will adjust to fair value minus/plus the NCR.

NOTE: Market Supervision staff has the authority to expand the No Cancellation Range and Reasonability Limit for a product to two (2) times the levels shown above in volatile market conditions and without prior notice.

No Cancellation Range and Reasonability Level for Canola Options

	No Cancellation Range	Reasonability Limit
Outright	30% from fair value as determined by the	40% from fair value as
Options	Exchange, with a minimum of \$1.00 and a	determined by the
_	maximum of \$4.00. Options with a value of	Exchange, with a minimum
	less than \$1.00 are \$0.00.	of \$2.00.

Calendar	30% from fair value as determined by the	None.
Spread	Exchange and with a minimum of \$1.00 and	
Options	a maximum of \$4.00. Options with a value	
	of less than \$1.00 are \$0.00.	

No Cancellation Ranges and Reasonability Levels for Bakkt Bitcoin (USD) Monthly Futures Options:

The NCR shall be 30% of the option premium, subject to a minimum of \$25 and a maximum of \$200. The RL shall be 40% of fair value as determined by the Exchange.

No Cancellation Range for Option Conversions and Option Boxes:

Option Conversions and Option Boxes will be subject to the lowest NCR stated for the market in which they are traded.

A long Option Conversion shall be defined as combining long calls, short puts and short futures. A short Option Conversion shall be defined as combining long puts, long futures and short calls. The Option conversion must contain the same expiry, strikes prices and quantity.

An Option Box shall be defined as combining a position that is long a call and short a put in strike 1 and long a put and short a call in strike 2. The Option Box must contain the same expiry and quantity in both strike 1 and strike 2 for both calls and puts.

The Exchange reserves the right to consider all alleged error trade situations on their individual merits and may therefore amend these policies in light of the circumstances of each case. The full Error Policy can be found in IFUS Electronic Trading Rules, on the web at: https://www.theice.com/publicdocs/rulebooks/futures_us/--Appendix_1_Error_Trade_Policy.pdf.

The descriptions of Anchor Price, No Cancellation Range, Reasonability Limits and Calendar Spread Limit Order Range below are taken from the IFUS Error Policy.

Anchor Price

The Anchor Price is set by the Exchange and is based on the front contract month, however, when the front month nears expiration, the Anchor Price will be based on the delivery month with the most open interest. The determination as to when to shift the Anchor Price based on open interest will be made by the Exchange. The Anchor Price may be the previous night's settlement price, the opening call price or the last traded price. The Anchor Price of the second contract month and successive months onward is achieved by applying spread differentials against the front month Anchor Price.

No Cancellation Range

The Exchange determines parameters above or below an Exchange set anchor price for each Contract within which a trade alleged as an error trade may not be cancelled. Such parameters are known as a no cancellation range.

Trades within the no cancellation range will not, under most circumstances, be cancelled by the Exchange, whether as a result of error or otherwise, in order that market users can have confidence that traded levels will stand.

Reasonability Limits

The ETS maintains Reasonability Limits to prevent 'fat finger' type errors. These are hard limits above or below an Exchange set anchor price. Orders with bids above the Reasonability Limit or offers below the Reasonability Limit will not be accepted.

Each option order submitted to the electronic trading platform will be evaluated against a reasonability limit for the specific call or put option strike price. A reasonability limit range will be established around the theoretical premium value for each option call or put. The theoretical premium value will be calculated using the Black - Scholes model and will dynamically update throughout the day. The reasonability limit range will allow for entry of bids or offers within a calculated distance from the option's current theoretical premium value. This Option Reasonability Range is the distance above/below the calculated option theoretical premium used to establish the reasonability limits. This range is determined by the Exchange and is subject to change without notice. For Options with little theoretical value (deep out-of-the money), a minimum premium price established by the Exchange will be used. If the theoretical price of the Option plus the Option Reasonability Range is less than the minimum premium, the minimum premium will be used as the Reasonability Limit. The Reasonability Limits for each Exchange Commodity Contract are flexible, to take into account prevailing market conditions, and may be changed at the discretion of the Exchange on an intraday basis, without advance notice, to take account of such conditions.

Reasonability Limits are applicable during the pre-open period for all IFUS futures contracts (except for Natural Gas, Power and Emissions contracts), at levels up to three times the levels shown in this document. Entry of new and revisions to existing option orders are not permitted during the pre-open period, and therefore Reasonability Limits are not applicable to IFUS option contracts during the pre-open.

Calendar Spread Limit Order Range

The CSLOR is used to set the maximum difference between the stop and limit prices on a calendar spread Stop Limit order, and the limit price on a calendar spread Stop With Protection order.



INTERVAL PRICE LIMIT FUNCTIONALITY

With IPL levels as of [December 2021]February 2022

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 over time based on market conditions.

.

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

Agricultural and Metal contracts:

		Recalc	Hold
	IPL Amount	Time	Period
FUTURES CONTRACT	(in points)	(in secs)	(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 (AUD), Mini (YG) and 100 oz. Gold (ZG)	1000	15	30
Daily (HIO), Mini (YI) and 5000 oz. Silver (ZI)	400	15	30

Stock and Financial Index Contracts:

	IPL Amount (in	Recalc Time	Hold Period
FUTURES CONTRACT	Index Points)	(in secs)	(in secs)
MSCI World Low Carbon Leaders NTR Index			
(WLC), MSCI World Low Carbon Target NCR			
(WLT) MSCI EAFE Index (MFS) and World Index			
(MWL)	48.000	5	5
MSCI EAFE NTR Index (MFU)	144.000	5	5
MSCI Emerging Markets Index (MME)	30.000	5	5
MSCI Emerging Markets NTR Index (MMN) and			
EM Asia NTR Index (ASN	12.000	5	5
MSCI EM Latin America Index (MLE), MSCI			
Kokusai GTR (KKS), MSCI Emerging Market ex			
China NTR Index (MMC), and USA Growth Index			
(MRG)	60.000	5	5
MSCI ACWI NTR Index (MMW), EM NTR			
(MMR) Index, ACWI Ex-US NTR Index (AWN),			
MSCI Malaysia NTR (MYY) and EMEA NTR			
Index (MMM), MSCI Italy NTR Index (ITH)	6.000	5	5
MSCI Thailand NTR (THG), MSCI Europe			
Climate Change Index (EU1), MSCI World			
Climate Change (WOW), MSCI China Technology			
DR and P-Chip Index (CHT), MSCI Canada Index			
(MCL) and USA Index (MUN)	36.000	5	5
MSCI Pan-Euro Index (MPP)	22.000	5	5
MSCI Europe Index (MEU) and MSCI World			
Climate Paris Aligned NTR Index (MVR)	20.000	5	5
MSCI China Free NTR Index (\$50) (MCX) and			
India NTR Index (MIN)	10.000	5	5

MSCI Pacific NTR Index (MPA), Pacific ex-Japan Index (PAC), and Europe NTR Index (EU9)	MSCI ex-Japan NTR Index (ASI)	15.000	5	5
MSCI USA GTR Index (USS) 300.000 5 5 MSCI North America NTR Index (NAA) and Canada GTR Index (CAD) 180.000 5 5 MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU) 2.500 5 5 MSCU USA Small Cap Index (MUS), USA Small Cap GTR Index (USC) and MSCI USA Climate Paris Aligned GTR Index (MVS) 25.000 5 5 MSCI World NTR Index (MWS) 120.000 5 5 MSCI World ESG Leaders NTR Index (LFW), EAFE ESG Leaders NTR (LFG) and Europe ESG Leaders NTR Index (LFU) 4.000 5 5 MSCI EM ESG Leaders NTR Index (LFM), MSCI USA Value (MCU) and MSCI USA Climate Change NTR Index (MUC) 40.000 5 5 MSCI USA ESG Leader GTR Index (LFA) 8.000 5 5 MSCI Japan NTR Index (MUC) 40.000 5 5 MSCI USA Minimum Volatility GTR Index (MUV) 120.000 5 5 MSCI Hong Kong NTR Index (HKX) 750.000 5 5 MSCI Australia NTR Index (GEA) 110.00 5 5 MSCI Germany NTR Index (GEA) 125.000 5 5 MSCI Germany NTR Index (FNG) and	MSCI Pacific NTR Index (MPA), Pacific ex-Japan			
MSCI North America NTR Index (NAA) and Canada GTR Index (CAD)	Index (PAC), and Europe NTR Index (EU9)	150.000	5	5
Canada GTR Index (CAD) 180.000 5 5 MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU) 2.500 5 5 MSCU USA Small Cap Index (MUS), USA Small Cap GTR Index (USC) and MSCI USA Climate 25.000 5 5 Paris Aligned GTR Index (MVS) 25.000 5 5 MSCI World NTR Index (MWS) 120.000 5 5 MSCI World ESG Leaders NTR Index (LFW), EAFE ESG Leaders NTR (Index (LFW), MSCI USA Climate Change NTR Index (LFU) 4.000 5 5 MSCI EM ESG Leaders NTR Index (LFA) 8.000 5 5 MSCI USA Value (MCU) and MSCI USA Climate 40.000 5 5 Change NTR Index (MUC) 40.000 5 5 MSCI USA ESG Leader GTR Index (LFA) 8.000 5 5 MSCI Japan ESG Select Leaders GTR Index (JSL) 35.000 5 5 MSCI USA Minimum Volatility GTR Index (MUV) 120.000 5 5 MSCI Hong Kong NTR Index (HKX) 750.000 5 5 MSCI Germany NTR Index (CHH) 50.000 5 5 MSCI	MSCI USA GTR Index (USS)	300.000	5	5
MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU)	MSCI North America NTR Index (NAA) and			
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ERIS CDX HY (HY5) 10000 5 5	ICE Biotechnology GTR Index (IUT)	6.500	<u>5</u>	<u>5</u>
ERIS CDX HY (HY5) 10000 5 5	ICE Semiconductor GTR Index (IUS)	25.000	<u>5</u>	<u>5</u>
	ERIS CDX HY (HY5)	10000		5
	ERIS CDX IG (IG5)	5000	5	5

MSCI TIC+ CONTRACTS

TIC+ Futures Contract	IPL Amount (in Index Points)	Recalc Time (in secs)	Hold Time (in secs)
MSCI Emerging Markets Index (TPM & SPM)	15.000	5	5

1			1
MSCI EAFE Index (TPF & SPF)	24.000	5	5
MSCI World NTR USD Index (TPW & SPW)	60.000	5	5
MSCI EM Asia NTR USD Index (TPS & SPS)	6.000	5	5
MSCI Emerging Markets NTR USD Index (TPN &			
SPN)	6.000	5	5
MSCI Emerging Markets Latin America NTR			
Index (TPT & SPT)	30.000	5	5
MSCI Emerging Markets EMEA NTR Index (TPR			
& SPR)	3.000	5	5
MSCI USA GTR Index (TPU & SPU)	150.000	5	5
MSCI Pacific NTR Index (TPP & SPP)	75.000	5	5
MSCI Europe NTR USD Index (TPE & SPE)	75.000	5	5
MSCI ACWI NTR USD Index (TPA & SPA)	3.000	5	5
MSCI Japan NTR USD Index (TPJ & SPJ)	45.000	5	5
MSCI Emerging Markets ESG Leaders Index (TPG			
& SPG)	20.000	5	5
MSCI EAFE ESG Leaders Index (TPH & SPH)	2.000	5	5
MSCI Europe ESG Leaders Index (TPX & SPX)	2.000	5	5
MSCI USA ESG Leaders Index (TPY & SPY)	4.000	5	5
MSCI World ESG Leaders Index (TPZ & SPZ)	2.000	5	5

Digital Currency contracts:

	IPL Amount	Recalc	Hold
FUTURES CONTRACT	(in \$)	Time (in	Period (in
		secs)	secs)
Bakkt TM Bitcoin (USD) Monthly (BTM)	\$1,500	5	5

USDX[®] and Currency Pair contracts:

		Recalc	Hold
	IPL Amount	Time (in	Period
FUTURES CONTRACT	(in points)	secs)	(in secs)
USDX (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:

FUTURES CONTRACT	IPL Amount (in \$ terms)	IPL Exceptions (in \$ terms)	Recalc Time (secs)	Hold Perio d (secs)
Financial Power	\$30.00	N/A	3	5
Capacity Responsive Reserve	\$30.00	N/A	3	5
In-City or Rest of State Cap.	\$30.00	N/A	3	5
Non-Spinning Reserve	\$30.00	N/A	3	5
Regulation	\$30.00	N/A	3	5
All Daily Power Contracts	\$120.00	N/A	3	5
All Daily Load Forecast	50,000 MW	N/A	3	5
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	3	5
RGGI	\$1.00	N/A	3	5
CCA, CCO, TX SREC, PJM TRI - QEC RECs - NJ, TX, MD, M-RETS & NAR	\$2.50	N/A	3	5
CCA Trade at Auction Settlement Contracts	\$0.75	N/A	3	5
CT & MA REC, MD SREC, PA SAEC & NEPOOL REC	\$10.00	N/A	3	5
RIN	\$0.50	N/A	3	5
MA SREC 1 & II, & NJ SREC, LCFS	\$30.00	N/A	3	5

Nat Gas contracts:

FUTURES CONTRACT	IPL Amount (in \$ terms)	IPL Exceptions (in \$ terms)	Recalc Time (secs)	Hold Perio d (secs)
Henry Hub	\$0.20	<u>N/A</u>	3	5
UK Natural Gas	\$0.12	<u>N/A</u>	3	5
EIA Financial Weekly Index	75 BCF	<u>N/A</u>	3	5
EIA End of Draw/Storage Index	2,500 BCF	<u>N/A</u>	3	5
Financial LNG	\$0.60	<u>N/A</u>	3	5

Fixed Price (excluding Henry)	\$4.00	IPL Amount: \$10.00 Dominion South Swing (DSS) Lebanon Swing (LBN) IPL Amount: \$12.00 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)	3	5
Basis	\$4.00	IPL Amount: \$10.00 Dominion South Basis (DOM) IPL Amount: \$12.00 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)	3	5
Index	\$0.20	IPL Amount: \$12.00 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) (IZI) NGPL Midcont Index (MCI)	3	5

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	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 6 (non-NY) Index
	(TPI)
	Transco Station 85 (Zone 4) Index (TRI)
	TETCO WLA Index (TWI)
	Tennessee Zone 0 Index (TZI)
	Waha Index (WAI)

Oil and NGL Products	Commodity Code	Unit	IPL Amount (in \$ Terms)	Recalc Time (seconds)	Hold Period (seconds)
Crude Diff – Argus LLS vs WTI 1st Line Future	ARK	bbl	\$6.00	3	5
Argus Mars vs WTI Trade Month Future	ARW	bbl	\$6.00	3	5
Crude Diff – Argus WTS vs WTI Trade Month Future	AVT	bbl	\$6.00	3	5
Crude Diff – WTI 1st Line vs Brent 1st Line Future	BTD	bbl	\$6.00	3	5
Fuel Oil Diff - New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future	FOD	bbl	\$4.00	3	5
Fuel Oil Outright - New York 1% Fuel Oil Future	FOW	bbl	\$4.00	3	5
Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future	GCS	bbl	\$1.50	3	5
Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future	GDL	gal	\$0.10	3	5
Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	GDM	gal	\$0.10	3	5

Gasoline Diff - RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future	GDO	MT	\$10.00	3	5
Gasoline Diff - RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future	GDQ	MT	\$10.00	3	5
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)	GOE	bbl	\$1.00	3	5
Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future	GOH	gal	\$0.04	3	5
Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future	GUF	bbl	\$1.50	3	5
Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)	HBT	bbl	\$1.50	3	5
Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future	ЈНО	gal	\$0.04	3	5
Crude Diff – Argus WTI Midland vs WTI 1st Line Future	MLT	bbl	\$1.00	3	5
Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in MTs)	NVV	MT	\$2.00	3	5
Crude Outright – WTI 1st Line Future	R	bbl	\$1.50	3	5
Fuel Oil Outright – USGC HSFO (Platts) Future	RBO	bbl	\$4.00	3	5
Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)	RBR	bbl	\$1.50	3	5
Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)	ULM	bbl	\$0.04	3	5
Gasoline Diff - Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future	UM1	bbl	\$0.10	3	5
Natural Gasoline, OPIS Mt. Belvieu Non-TET vs WTI 1st Line Future	NGW	Bbl	\$4.00	3	5

For any Oil Futures contracts not listed in the above table the following IPL Levels are applied:

Oil Products	IPL Amount (in \$ Terms)	Recalc Time (seconds	Hold Period (seconds
All Oil (Barrels or lbs) Contracts	\$6.25	3	5
All Oil (MT) Contracts	\$18.75	3	5
All Oil (Gallons) Contracts	\$0.25	3	5
All Oil (RIN) Contracts	\$0.0600	3	5
NGL (North American) (Gallons)	\$0.125	3	5
Olefins	\$0.125	3	5
Olefins (MT)	\$125.00	3	5
Aromatics	\$0.250	3	5
LPG (International) (MT)	\$125.00	3	5