SUBMISSION COVER SHEET

***IMPORTANT*: Check box if Confidential Treatment is requested** ☒

Registered Entity Identifier Code (optional): <u>18-085 (2 of 3)</u>

Organization: <u>New York Mercantile Exchange, Inc. ("NYMEX")</u>

Filing as a: ☒ **DCM** ☐ **SEF** ☐ **DCO** ☐ **SDR**

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): <u>03/07/18</u> Filing Description: <u>Initial Listing of Three (3) Canadian Crude Oil Average Price Option Contracts.</u>

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

☐	Certification	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Notification	§ 40.6(d)
☐	Advance Notice of SIDCO Rule Change	§ 40.10(a)
☐	SIDCO Emergency Rule Change	§ 40.10(h)

Rule Numbers:

New Product **Please note only ONE product per Submission.**

☒	Certification	§ 40.2(a)
☐	Certification Security Futures	§ 41.23(a)
☐	Certification Swap Class	§ 40.2(d)
☐	Approval	§ 40.3(a)
☐	Approval Security Futures	§ 41.23(b)
☐	Novel Derivative Product Notification	§ 40.12(a)
☐	Swap Submission	§ 39.5

Official Product Name: <u>See Filing.</u>

Product Terms and Conditions (product related Rules and Rule Amendments)

☐	Certification	§ 40.6(a)
☐	Certification Made Available to Trade Determination	§ 40.6(a)
☐	Certification Security Futures	§ 41.24(a)
☐	Delisting (No Open Interest)	§ 40.6(a)
☐	Approval	§ 40.5(a)
☐	Approval Made Available to Trade Determination	§ 40.5(a)
☐	Approval Security Futures	§ 41.24(c)
☐	Approval Amendments to enumerated agricultural products	§ 40.4(a), § 40.5(a)
☐	"Non-Material Agricultural Rule Change"	§ 40.4(b)(5)
☐	Notification	§ 40.6(d)

Official Name(s) of Product(s) Affected:

Rule Numbers:

CME Group

Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

March 7, 2018

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Three (3) Canadian Crude Oil Average Price Option Contracts.
NYMEX Submission No. 18-085 (2 of 3)

Dear Mr. Kirkpatrick:

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying the initial listing of three (3) Canadian crude oil average price options contracts (the "Contracts") for trading on CME Globex electronic platform and for submission for clearing via CME ClearPort, effective on Sunday, March 25, 2018 for trade date March 26, 2018 as described below.

Contract Title	Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option	Light Sweet Oil (Net Energy) Monthly Index Average Price Option	Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option
Rulebook Chapter	1306	1307	1308
Commodity Code	SSO	SWO	CCO
Listing Schedule	Monthly contracts listed for the current year and the next 4 calendar years. Monthly contracts for a new calendar year will be added following the termination of trading in the December contract of the current year.	Monthly contracts listed for the current year and the next 4 calendar years. Monthly contracts for a new calendar year will be added following the termination of trading in the December contract of the current year.	Monthly contracts listed for the current year and the next 3 calendar years. Monthly contracts for a new calendar year will be added following the termination of trading in the December contract of the current year.
Contract Size	1,000 Barrels	1,000 Barrels	1,000 Barrels
Settlement Method	Financial	Financial	Financial
Minimum Price Fluctuation	0.001	0.001	0.001
Value per Tick	$1.00	$1.00	$1.00
First Listed Contract	May 2018	May 2018	May 2018

CME Globex Match Algorithm	First-In, First-Out (FIFO)	First-In, First-Out (FIFO)	First-In, First-Out (FIFO)
Block Trade Minimum Threshold	10 contracts	5 contracts	5 contracts
Termination of Trading	Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge.	Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge.	Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge.

Trading and Clearing Hours

CME Globex and CME ClearPort	Sunday - Friday 6:00 p.m. - 5:00 p.m. Eastern Time/ET (5:00 p.m. - 4:00 p.m. Central Time/CT) with a 60-minute break each day beginning at 5:00 p.m. ET (4:00 p.m. CT)

Exchange Fees

Exchange Fees	Member	Non-Member	International Incentive Programs (IIP/IVIP)
CME Globex	$0.70	$1.45	$0.77
Block	$1.75	$2.50	
EFR/EOO	$1.75	$2.50	

Processing Fees	Member	Non-Member
Cash Settlement	$0.90	$1.15
Other Processing Fees		
Facilitation Fee	$0.60	
Give-Up Surcharge	$0.05	
Position Adjustment/Transfer	$0.10	

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the Contracts into the Position Limit, Position Accountability and Reportable Level Table and Header

Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook in relation to the listing of the new Contracts. These terms and conditions establish the all month/any one month accountability levels, expiration month position limit, reportable level, and aggregation allocation for the new Contracts. Please see Exhibit B, attached under separate cover.

NYMEX is also notifying the CFTC that it is self-certifying block trading on the Contracts with a minimum block threshold level of five (5) contracts for the Light Sweet Oil (Net Energy) Monthly Index Average Price Option, and Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option, and ten (10) contracts for the Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option. These block levels align with the Exchange's other and similar crude oil Contracts.

The Exchange reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA") and staff identified that the Contract may have some bearing on the following Core Principles:

- Compliance with Rules: Trading in the Contracts will be subject to the rules in Rulebook Chapter 4 which includes prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in these Contracts will be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group's designated contract markets, activity in the new products will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

- Contracts Not Readily Subject to Manipulation: The Contracts are not readily subject to manipulation as a result of the deep liquidity and robustness of the underlying cash and futures market and the settlement index. Pursuant to the Exchange's obligations under this core principle, the final settlement indices are published by Net Energy, Inc. and sub-licensed to the Exchange.

- Monitoring of Trading: Trading in the Contracts will be subject to Rulebook Chapters 4 and 7 which include prohibitions on manipulation, price distortion and disruptions of the delivery or cash-settlement process. As with all products listed for trading on one of CME Group's designated contract markets, activity in the new products will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department.

- Position Limitations or Accountability: The speculative position limits for the Contracts as demonstrated in this submission are consistent with the Commission's guidance.

- Availability of General Information: The Exchange will publish on its website information regarding the Contracts' specifications, terms, and conditions, as well as daily trading volume, open interest, and price information.

- Daily Publication of Trading Information: The Exchange will publish information on the Contracts' specifications on its website, together with daily trading volume, open interest and price information.

- Execution of Transactions: The Contracts will be listed for trading on the CME Globex electronic trading platform and for clearing through CME ClearPort. The CME Globex trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.

300 Vesey Street New York, NY 10282 **T** 212 299 2200 **F** 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

- Trade Information: All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.

- Financial Integrity of Contracts: All contracts traded on the Exchange will be cleared by the CME Clearing House, which is a registered Derivatives Clearing Organization (DCO) with the Commission, and is subject to all Commission regulations related thereto.

- Protection of Market Participants: Rulebook Chapters 4 and 5 contain multiple prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading on all of the Exchange's competitive trading venues and will be applicable to transactions in this product.

- Disciplinary Procedures: Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in these contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.

- Dispute Resolution: Disputes with respect to trading in this contract will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. The rules in Chapter 6 allow all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to the rules in Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.2(a), the Exchange hereby certifies that the listing of the Contracts complies with the Act, including regulations under the Act. There were no substantive opposing views to the proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at http://www.cmegroup.com/market-regulation/rule-filings.html.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Exhibit A: NYMEX Rulebook Chapters 1306, 1307, 1308
Exhibit B: Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover)
Exhibit C: NYMEX Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
Exhibit D: Cash Market Overview and Analysis of Deliverable Supply

EXHIBIT A

NYMEX Rulebook

Chapter 1306
Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option

1306100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on Synthetic Sweet Oil (Net Energy) Monthly Index Futures contract. In addition to the rules of this chapter, transactions in options on Synthetic Sweet Oil (Net Energy) Monthly Index Futures shall be subject to the general rules of the Exchange insofar as applicable.

1306101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

1306101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

1306101.B. Trading Unit

A Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option is a cash-settled option. On expiration of a call option, the value will be the difference between the settlement price of the underlying Synthetic Sweet Oil (Net Energy) Monthly Index Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater. On expiration of a put option, the difference between settlement price of the underlying Synthetic Sweet Oil (Net Energy) Monthly Index Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater.

1306101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel and prices shall be in multiples of $0.001 per barrel. The minimum price increment will be $0.001.

1306101.D. Position Limits and Position Accountability

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

1306101.E. Termination of Trading

Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge Pipeline prior to the start of each year, and will be posted on the Exchange website as part of the termination schedule.

1306101.F. Type Option

The option is a European-style option which can be exercised only on the expiration day. At expiry, automatic exercise occurs for those options that are one or more ticks in the money. Options that are at the money at expiration lapse.

1306102. EXERCISE PRICES AND CHARACTERISTICS

Transactions shall be conducted for option contracts as set forth in Rule 300.20.

1306103. DISCLAIMER

Net Energy licenses the New York Mercantile Exchange, Inc. ("NYMEX") to use various Net Energy price assessments in connection with the trading of the contracts.

NEITHER NYMEX AND ITS AFFILIATES NOR NET ENERGY GUARANTEES THE ACCURACY AND/OR COMPLETENESS OF THE ASSESSMENT OR ANY OF THE DATA INCLUDED THEREIN. NYMEX AND ITS AFFILIATES AND NET ENERGY MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE ASSESSMENT, TRADING BASED ON THE ASSESSMENT, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING OF THE CONTRACT, OR, FOR ANY OTHER USE. NYMEX AND ITS AFFILIATES AND NET ENERGY MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE ASSESSMENT OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL NYMEX AND ITS AFFILIATES OR NET ENERGY HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

Chapter 1307
Light Sweet Oil (Net Energy) Monthly Index Average Price Option

1307100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on Light Sweet Oil (Net Energy) Monthly Index Futures contract. In addition to the rules of this chapter, transactions in options on Light Sweet Oil (Net Energy) Monthly Index Futures shall be subject to the general rules of the Exchange insofar as applicable.

1307101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

1307101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

1307101.B. Trading Unit

A Light Sweet Oil (Net Energy) Monthly Index Average Price Option is a cash-settled option. On expiration of a call option, the value will be the difference between the settlement price of the underlying Light Sweet Oil (Net Energy) Monthly Index Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater. On expiration of a put option, the difference between settlement price of the underlying Light Sweet Oil (Net Energy) Monthly Index Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater.

1307101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel and prices shall be in multiples of $0.001 per barrel. The minimum price increment will be $0.001.

1307101.D. Position Limits and Position Accountability

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

1307101.E. Termination of Trading

Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge Pipeline prior to the start of each year, and will be posted on the Exchange website as part of the termination schedule.

1307101.F. Type Option

The option is a European-style option which can be exercised only on the expiration day. At expiry, automatic exercise occurs for those options that are one or more ticks in the money. Options that are at the money at expiration lapse.

1307102. EXERCISE PRICES AND CHARACTERISTICS

Transactions shall be conducted for option contracts as set forth in Rule 300.20.

1307103. DISCLAIMER

Net Energy licenses the New York Mercantile Exchange, Inc. ("NYMEX") to use various Net Energy price assessments in connection with the trading of the contracts.

Chapter 1308
Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option

1308100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on Canadian C5+ Condensate Monthly Index (Net Energy) Futures contract. In addition to the rules of this chapter, transactions in options on Canadian C5+ Condensate Monthly Index (Net Energy) Futures contract shall be subject to the general rules of the Exchange insofar as applicable.

1308101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

1308101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

1308101.B. Trading Unit

A Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option is a cash-settled option. On expiration of a call option, the value will be the difference between the settlement price of the underlying Canadian C5+ Condensate Monthly Index (Net Energy) Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater. On expiration of a put option, the difference between settlement price of the Canadian C5+ Condensate Monthly Index (Net Energy) Futures and the strike price multiplied by 1,000 barrels, or zero whichever is greater.

1308101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel and prices shall be in multiples of $0.001 per barrel. The minimum price increment will be $0.001.

1308101.D. Position Limits and Position Accountability

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

1308101.E. Termination of Trading

Trading shall cease one Canadian business day prior to the Notice of Shipments (NOS) date on the Enbridge Pipeline. The NOS date occurs on or about the 20th calendar day of the month, subject to confirmation by Enbridge Pipeline. The official schedule for the NOS dates will be made publicly available by Enbridge Pipeline prior to the start of each year, and will be posted on the Exchange website as part of the termination schedule.

1308101.F. Type Option

The option is a European-style option which can be exercised only on the expiration day. At expiry, automatic exercise occurs for those options that are one or more ticks in the money. Options that are at the money at expiration lapse.

1308102. EXERCISE PRICES AND CHARACTERISTICS

Transactions shall be conducted for option contracts as set forth in Rule 300.20.

1308103. DISCLAIMER

Net Energy licenses the New York Mercantile Exchange, Inc. ("NYMEX") to use various Net Energy price assessments in connection with the trading of the contracts.

NEITHER NYMEX AND ITS AFFILIATES NOR NET ENERGY GUARANTEES THE ACCURACY AND/OR COMPLETENESS OF THE ASSESSMENT OR ANY OF THE DATA INCLUDED THEREIN. NYMEX AND ITS AFFILIATES AND NET ENERGY MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE ASSESSMENT, TRADING BASED ON THE ASSESSMENT, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING OF THE CONTRACT, OR, FOR ANY OTHER USE. NYMEX AND ITS AFFILIATES AND NET ENERGY MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE ASSESSMENT OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL NYMEX AND ITS AFFILIATES OR NET ENERGY HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

EXHIBIT B

Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook

(attached under separate cover)

EXHIBIT C

Amendments to NYMEX Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table

(additions are underscored)

Instrument	Bid/Ask Reasonability	Non-Reviewable Range (NRR)
Light Sweet Oil (Net Energy) Monthly Index Average Price Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of $0.25	The greater of delta times the underlying futures non-reviewable range or 20% of premium up to 1/4 of the underlying futures' non-reviewable range with a minimum of 1 tick
Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of $0.25	The greater of delta times the underlying futures non-reviewable range or 20% of premium up to 1/4 of the underlying futures' non-reviewable range with a minimum of 1 tick
Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option	The greater of the delta times the underlying futures' non-reviewable range or 20% of the fair value premium up to the underlying futures' non-reviewable range with a minimum reasonability of $0.25	The greater of delta times the underlying futures non-reviewable range or 20% of premium up to 1/4 of the underlying futures' non-reviewable range with a minimum of 1 tick

EXHIBIT D

Cash Market Overview and Analysis of Deliverable Supply

Introduction

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is self-certifying the listing of three (3) average price option contracts based on the Exchange's Synthetic Sweet Oil (Net Energy) Monthly Index Futures, Light Sweet Oil (Net Energy) Monthly Index Futures, and the Canadian C5+ Condensate Monthly Index (Net Energy) Futures contracts. The Exchange conducted a review of the underlying cash market and deliverable supply of Canadian condensate, light sweet, and synthetic sweet crude oil streams.

Contract Title	Commodity Code	Rulebook Chapter
Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option	SSO	1306
Light Sweet Oil (Net Energy) Monthly Index Average Price Option	SWO	1307
Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option	CCO	1308

The Exchange has determined to base its estimate of deliverable supply on pipeline flow data provided by the Crude Oil Logistics Committee (COLC) for the hub in Edmonton, Alberta for the Light Sweet Oil (Net Energy) Monthly Index Average Price Option and Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option contracts. For the Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option contract, the Exchange has determined to base its estimate of deliverable supply on production and imports of condensate in the Alberta province from data provided by the Canadian Association of Petroleum Producers (CAPP).

Data Sources

CAPP is a trade association whose members, representing 130 upstream oil and gas companies, produce more than 90 percent of Canada's crude oil and natural gas. CAPP maintains a variety of publications and statistics on the oil and natural gas industry given its extensive membership list. CAPP's publication, the Statistical Handbook for Canada's Upstream Petroleum Industry, October 2017[1] constitutes the main source of data the Exchange utilized for its deliverable supply analysis on Canadian condensate.

The COLC is an organization created as a decision-making body for effective and efficient management of western Canadian crude oil and segregated condensate logistical systems. The main objective of the COLC is to collect and analyze crude oil and condensate receipt and disposition statistics to identify potential problems and recommend solutions. It is comprised of producers, shippers, pipelines, terminals, industry associations, government regulators and departments. The COLC website provides detailed information on actual pipeline flows and capacity listed by pipeline in Canada.

[1] http://www.capp.ca/~/media/capp/customer-portal/documents/301363.pdf

Cash Market

Canadian crude oil is priced in U.S. dollars and cents per barrel, and typically traded at a differential to the Monthly average of the NYMEX Light Sweet Crude Oil Futures (CL) contract. Prices are primarily dependent on the U.S. Midwest market, adjusted for quality and transportation costs from the Edmonton hub. Net Energy is one of the Canadian price reporting agencies used in the over-the-counter market for pricing contracts. In April of 2016, Net Energy was granted approval from the Alberta Securities Commission for recognition as an exchange.

Net Energy price assessments

The Net Energy price assessment for Canadian synthetic sweet oil at Edmonton is quoted in U.S. dollars and cents per barrel. The index is assessed based on the synthetic sweet premium stream, a light synthetic crude, produced by Syncrude Canada Ltd. The Syncrude Canada Project which includes mines and upgrader operations is located north of Fort McMurray, Alberta. Synthetic sweet premium has an API gravity specification of 31-38 and density of 835-868 kg/m3.

The Net Energy price assessment for light sweet crude oil is quoted in U.S. dollars and cents per barrel. The index is assessed based on light sweet crude oil streams delivered on the following pipelines into Edmonton:[2]

1) Plains Rainbow
2) Pembina Peace
3) Pembina Drayton
4) Pembina Swan Hills
5) Plains Rangeland at Edmonton, Alberta

Pipelines delivering light sweet crude oil into Edmonton are all fungible streams for quality purposes. Net Energy also provides crude oil assessments for other fungible, light sweet crude oil markets at different trading locations (i.e. Kerrobert and Cromer).

The Net Energy price assessment for Canadian condensate is quoted in U.S. dollars and cents per barrel. The index is assessed based on the following five condensate streams which are part of the Enbridge pipeline specifications delivered into Edmonton:[3]

Product Identifier	Crude Type	Density (kg/m3)	Total Sulphur (% by wt)
CFT	Fort Saskatchewan Condensate	686.0	0.06
CPM	Pembina Condensate	764.8	0.07
CPR	Peace Pipe Condensate	755.3	0.09
SLD	Southern Light Diluent	665.7	0.01
CRW	Condensate Blend	724.7	0.07

CME Group (parent company of New York Mercantile Exchange, Inc.) is a party to license agreements with Net Energy to utilize their pricing data.

[2] Light Sweet Crude Oil Streams, http://www.crudemonitor.ca/home.php
[3] http://www.enbridge.com/~/media/Enb/Documents/Shippers/Crude_Characteristics_Booklet_2016.pdf?la=en

Canadian Light Sweet Crude Oil

Crude oil is generally categorized by reference to its density (i.e. 'light', 'heavy'), and sulfur content (i.e. 'sweet', 'sour'). Approximately 30 percent of all oil production in Canada is light crude oil.[4] Canadian crude oil is sourced via conventional and unconventional methods from Western Canada, Northwest Territories and Atlantic Canada. Western Canada accounts for more than 96 percent of the country's total oil reserves.

Alberta, a province in Western Canada, has the largest proven oil sands reserves in North America. Oil sands production requires surface mining and other unconventional extraction methods to separate bitumen and heavy oil from sand deposits. Saskatchewan, and Alberta also have most of the country's conventional resources. Additional conventional oil production takes place in northeast British Columbia, parts of Manitoba and the Northwest Territories.

The logistics network required to supply petroleum products from refineries, ports and terminals to end-users is a complex system of pipelines, ships, railways and trucks. Light sweet crude oil is shipped by underground pipelines to refineries to be further processed into petroleum products across North America. The United States is the primary market for Western Canadian crude oil.

Edmonton, Alberta, is an active trading center and major hub for refining, storage and pipelines with direct connectivity to upstream and downstream operations in the U.S. and Canada. The Edmonton hub is connected to inland North American markets via the Enbridge Pipeline, and to the West Coast of Canada and offshore markets via the Trans Mountain Pipeline. Kinder Morgan Canada is the operator of both Trans Mountain Pipeline and the Edmonton terminals. There are three refineries that can take delivery of light sweet crude oil by pipeline from Edmonton: 1) Imperial; 2) Shell; 3) Suncor. The combined crude oil capacity of these refiners is approximately 422,000[5] barrels per day. The proportion of sweet crude oil to sour crude oil that is typically run in these refineries is not publicly disclosed.

According to CAPP, total combined Canadian light and medium oil supply averaged 696,000 barrels per day, or 254 million barrels per year (or 20.8 million barrels per month), for the three-year period from January 2014 to December 2016. This is the latest data available on the CAPP website. According to a CAPP analyst, light oil supply accounts for approximately 65 percent of the combined Canadian light and medium oil supply. Therefore, the Exchange estimates light oil supply averaged 453,000 barrels per day, or 165.3 million barrels per year (or 13.5 million barrels per month) over the same period. Supply data for Western Canada is illustrated in Table 1 below. Please note that supply data represent oil that has been injected into the pipeline.

Table 1 - Blended Supply to Trunk Pipelines and Markets, Western Canadian Light/Medium Oil (Source: CAPP)[6]

(thousand barrels per day)	**2014**	**2015**	**2016**	**3-year Average 2014-2016**
Supply, Western Canadian Light/Medium Oil	765	703	621	696
Supply, Western Canadian Light Oil	497	457	404	453

[4] Excluding synthetic crude oil which is also a light grade.
[5] CME Group estimated based on published capacity at the following: (1. https://www.shell.ca/en_ca/about-us/projects-and-sites/scotford.html , 2. http://www.suncor.com/about-us/refining , 3. http://www.bantrel.com/strathcona-refinery)
[6] Supply, Western Canadian Light/Medium Oil**,** http://www.capp.ca/publications-and-statistics/publications/302698

According to the COLC, there are five pipelines with inbound capacity of light sweet crude oil to the Edmonton hub:

1) Plains Rainbow
2) Pembina Peace
3) Pembina Drayton
4) Pembina Swan Hills
5) Plains Rangeland

In addition, the Gibson Edmonton terminal provides light sweet crude oil from local gathering pipelines. Based on the COLC data, the pipeline flows of light sweet crude oil averaged 315,000 barrels per day for the three-year period from 2014 through 2016. Table 2 below provides the annualized averages for the past three years. The Exchange will utilize the COLC's pipeline flow data as the basis of its estimate of deliverable supply.

Table 2 - Pipeline Flow Data, Canadian Light Sweet Oil (Source: COLC)[7]

(thousand barrels per day)	**2014**	**2015**	**2016**	**Average**
Pipeline Flows, Light Sweet Oil	332	332	282	315

Canadian Synthetic Sweet Oil

Synthetic oil is a type of commercial oil produced by upgrading bitumen extracted from oil sands. Oil sands are a natural mixture of sand, water, clay and bitumen found in large quantities in Alberta, the country's largest oil producing region. Crude bitumen is a low gravity, extra heavy oil that does not flow to the surface in the same manner as conventional crude oil, and therefore must be mined or heated underground for extraction from oil sands. Surface or open-pit mining can be utilized to recover bitumen that is located near the surface, and the remainder of bitumen is extracted using "in-situ" methods, or assisted drilling that sends steam underground to pump bitumen to the surface. Mined or steamed bitumen often contains undesirable quantities of nitrogen, sulfur and heavy metals, and is treated, or "upgraded". The quality of upgraded synthetic oil obtained from bitumen varies with the upgrading process used, but tends to be classified as medium to light sweet oil with an API gravity grade of 31-38 and a density level of 835-868 kg/m3.[8] On average, about 1.12 barrels of bitumen is required to produce one barrel of synthetic oil.

Following the upgrading process, synthetic oil is shipped via underground pipelines to refineries to be further processed into petroleum products. Canadian producers market a wide range of crude oils, ranging from heavy sour bitumen blends from oil sands to condensates.

According to CAPP, total supply, from upgraded light synthetic oil delivered to pipelines in Canada averaged 707,000 barrels per day, or 258.1 million barrels per year (or 21.2 million barrels per month), for the three-year period from January 2014 to December 2016. Supply data is illustrated in Table 3 below.

Table 3 - Blended Supply to Trunk Pipelines and Markets, Synthetic Oil (Source: CAPP)[9]

[7] Pipeline Flows, http://colcomm.com/secure/reports.aspx
[8] http://www.crudemonitor.ca/home.php
[9] Synthetic Oil Production, http://www.capp.ca/publications-and-statistics/publications/302698

(thousand barrels per day)	**2014**	**2015**	**2016**	**3-year Average 2014-2016**
Supply, Upgraded Light Synthetic Oil Delivered to Pipelines	756	735	631	707

At the Edmonton hub, synthetic sweet oil is delivered on one inbound pipeline: The Alberta Oil Sands Pipeline (AOSPL). According to the COLC, pipeline flow of synthetic sweet crude oil on the AOSPL averaged 221,000 barrels per day over the three-year period from January 2014 to December 2016. Table 4 provides the annual average pipeline flow data for the period from 2014 through 2016. The Exchange will utilize pipeline flow data from the COLC as the basis of its estimate of deliverable supply for synthetic sweet crude oil.

Table 4 - Pipeline Flow Data, Synthetic Sweet Oil (Source: COLC)[10]

(thousand barrels per day)	**2014**	**2015**	**2016**	**3-year Average 2014-2016**
Pipeline Flows, Synthetic Sweet Oil	236	221	207	221

<u>Canadian Condensate</u>

Condensate is a mixture composed mainly of pentanes and heavier hydrocarbons recovered as a liquid from field separators, scrubbers or other gathering facilities before the gas is processed in a plant.[11] It is primarily utilized as a diluent to blend into heavy crude oil, like bitumen, to ensure transport flow through pipelines. Condensate also serves many industries as refinery and petrochemical feedstocks, a blending component in gasoline or crude, a crude equivalent, and a boiler fuel.

According to CAPP, total condensate production in Alberta averaged 30,800 barrels per day, or 11.2 million barrels per year, for the three-year period from January 2014 to December 2016. See Table 5 below. Annual data has been converted from cubic meters to barrels using a conversion factor of 6.2898 barrels per cubic meter.

Regarding imports into the Alberta market, CAPP currently does not publish data on condensate imports. According to industry sources, from January 2014 to December 2016, condensate imports ranged from 280,000 barrels per day to 310,000 barrels per day. We have averaged the low and high-end estimates to arrive at a total figure of 295,000 barrels per day (or 107.6 million barrels per year or 8.85 million barrels per month). Export levels from the Alberta province were negligible. Consequently, total condensate production and imports is approximately 325,800 barrels per day, or 118.9 million barrels per year.

The Exchange also examined Energy Information Administration (EIA) export data and found that they do not break out condensate specifically, but do report the export category of "pentanes plus (C5+)". Pentanes plus is a type of condensate derived from natural gas that is used as a diluent in Canada. EIA data shows pentanes plus exports from the U.S. to Canada averaged approximately 181,000 barrels per day for the past three years.[12] Therefore, the Exchange believes the CAPP analyst estimate of 280,000 to 310,000 barrels per day of condensate imports is a reasonable estimate.

[10] Pipeline Flows, http://colcomm.com/secure/reports.aspx
[11] Condensate, CAPP, Crude Oil Forecast, Markets & Transportation, June 2015
[12] https://www.eia.gov/dnav/pet/pet_move_expc_a_EPLP_EEX_mbblpd_a.htm

Table 5 – Alberta Condensate Production (Source: CAPP)[13]

(thousand barrels per day)	**2014**	**2015**	**2016**	**Average**
Production	23.9	20.5	48.1	30.8
Imports	295	295	295	295
Total	318.9	315.5	343.1	325.8

Deliverable Supply

The Commission defines deliverable supply as the quantity of the commodity meeting a derivative contract's delivery specifications that can reasonably be expected to be readily available to short traders and saleable by long traders at its market value in normal cash marketing channels at the derivative contract's delivery points during the specified delivery period, barring abnormal movement in interstate commerce.

For Canadian condensate, the Exchange has determined to base its deliverable supply estimate on production and import data of condensate in the Alberta province provided by CAPP. The Exchange believes that CAPP data provides the most accurate estimate of deliverable supply.

For light sweet crude oil, and synthetic sweet crude oil, the Exchange has determined to base its deliverable supply estimate on the pipeline flow data provided by the COLC. The Exchange believes that the COLC pipeline flow data provides the most accurate estimate of deliverable supply. The data utilized to calculate the deliverable supply was derived from the COLC capability report which can be found under the "Reports" heading. Data from the reports for the following months were captured in each calculation for calendar years 2014-2016.[14]

The data compiled was converted from cubic meters to barrels per day using a conversion factor of 6.2898. A yearly average was computed for calendar years: 2014-2016 from the monthly data, followed by computing a three-year average to calculate the deliverable supply estimate.

2014	June 2014	September 2014	December 2014	March 2015
2015	June 2015	September 2015	December 2015	March 2016
2016	June 2016	September 2016	December 2016	March 2017

In each of these reports, pipeline flows are published going back two previous quarters. For example, Oct. 16', Nov. 16', and Dec. 16' deliveries were published March 2017. See schedule above.

The following reports were utilized:

- *Capabilities (Light)*, for the Light Sweet Oil (Net Energy) Monthly Index Average Price Option. The sum of pipeline flows was computed for light sweet crude oil.
- *Capabilities (Syn),* for the Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option. Pembina Alberta Oil Sands pipeline flows was used for synthetic sweet oil.

The Exchange has excluded stocks data from its analysis of deliverable supply. Stocks data tend to vary and, at least upon launch of products, we do not recommend position limits based on stock data. The level of stocks will also tend to fluctuate based on supply/demand factors that can affect the level of crude oil in storage.

Further, the Exchange has determined not to adjust the deliverable supply estimate based on spot availability because spot market liquidity is not restrictive and tends to vary depending on the market fundamentals of demand and supply. The typical term agreement in the cash market allows flexibility for

[13] http://www.capp.ca/publications-and-statistics/statistics/statistical-handbook (Table 3.7: Canadian Liquid Hydrocarbon Production- Condensate; Alberta)
[14] http://colcomm.com/secure/reports.aspx

re-trading of the contracted quantity in the spot market, so the term agreements do not restrict the potential deliverable supply. Also, the spot trading is not restricted, in that it could increase if the market demand increases. Therefore, we believe that it is not necessary to adjust the deliverable supply estimate on the basis of spot trading activity as it does not restrict the deliverable supply, and spot trading volume can expand to allow for more supply to flow if needed in the spot market.

Position Limits

Positions in the Light Sweet Oil (Net Energy) Monthly Index Average Price Option contract (contract size: 1,000 barrels; commodity code: SWO) will aggregate into the Exchange's Light Sweet oil (Net Energy) Monthly Index Futures (commodity code: LSW).

The proposed spot month position limit for Light Sweet Oil (Net Energy) Monthly Index Average Price Option is 1,000 contracts. The deliverable supply estimate is based on the actual pipeline flows data to the Edmonton, Alberta hub, which is approximately 315,000 barrels per day, or 9.4 million barrels per month, or 9,400 contract equivalents. Therefore, the spot month limit of 1,000 contracts represents 10.6 percent of the monthly deliverable supply.

Positions in the Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option contract (contract size: 1,000 barrels; commodity code: SSO) will aggregate into the Exchange's Synthetic Sweet Oil (Net Energy) Monthly Index Futures (commodity code: SSW). The proposed spot month position limit for the Synthetic Sweet Oil (Net Energy) Monthly Index Average Price Option is 1,000 contracts. The deliverable supply estimate is based on the actual pipeline flows data to the hub at Edmonton, Alberta, which is approximately 221,000 barrels per day, or 6.6 million barrels per month, or 6,600 contract equivalents. Therefore, the spot month limit of 1,000 contracts represents 15.2 percent of the monthly deliverable supply.

Positions in the Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option contract (contract size: 1,000 barrels; commodity code: CCO) will aggregate into the Exchange's Canadian C5+ Condensate Monthly Index (Net Energy) Futures (commodity code: CC5). The proposed spot month position limit of Canadian C5+ Condensate Monthly Index (Net Energy) Average Price Option is 1,000 contracts. In the most recent three-year period, the Alberta province deliverable supply equates to 325,800 barrels per day, or 9.8 million barrels per month, which is equivalent to 9,774 contracts. Therefore, the spot month limit of 1,000 contracts represents 10.2 percent of the monthly deliverable supply.