

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 15-373

Organization: New York Mercantile Exchange, Inc. ("NYMEX")

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 09/25/2015 Filing Description: Listing One (1) New Brent Crude Oil Futures-Style Margin Option Contract

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers:

New Product

Please note only ONE product per Submission.

- | | | |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Official Product Names: See filing.

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

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

Official Name(s) of Product(s) Affected

Rule Numbers:

September 25, 2015

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 the Brent Crude Oil Futures-Style Margin Option Contract. NYMEX Submission No. 15-373

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 listing of the Brent Crude Oil Futures-Style Margin Option contract (the “Contract”) for trading on the NYMEX trading floor and CME Globex, and for submission for clearing via CME ClearPort, effective on Sunday, October 11, 2015 for trade date Monday, October 12, 2015, as set forth in the table below.

The Contract’s specifications are as follows:

Contract Title	Brent Crude Oil Futures-Style Margin Option
Commodity Code	BZO
Rulebook Chapter	504
Trading and Clearing Venues	CME Globex, CME ClearPort & NYMEX Trading Floor
Settlement Method	Physical
Option Type	American
Contract Size	1000 Barrels

Listing Schedule	CME Globex: Monthly contracts listed for 18 consecutive months. CME ClearPort/Open Outcry: Monthly contracts listed for the current year and the next 7 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.
Minimum Price Fluctuation	\$0.01/barrel
Value per Tick	\$10.00
First Listed Contract	December 2015
Block Trade Minimum Threshold	25 contracts
Termination of Trading	Three business days prior to the expiration of the underlying Brent Last Day Financial Futures contract
Margin Type	Futures style
CME Globex Match Algorithm	First in First Out (FIFO) (F)

TRADING AND CLEARING HOURS

CME Globex and CME ClearPort	Sunday - Friday 6:00 p.m. - 5:00 p.m. (5:00 p.m. - 4:00 p.m. Chicago Time/CT) with a 60-minute break each day beginning at 5:00 p.m. (4:00 p.m. CT)
Trading Floor	Monday - Friday 9:00 a.m. - 2:30 p.m. (8:00 a.m. to 1:30 p.m. CT)

FEES

Exchange Fees	Pit	CME Globex	CME ClearPort
Member Day Rate	0.45	0.45	
Member Overnight Rate	0.70	0.70	1.75
Cross Division Rate	0.95	0.95	

Non-Member Rate	1.45	1.45	2.50
International Incentive Program (IIP)		0.77	
Other Processing Surcharges	Member	Non-Member	
Futures from exercise/assignment	0.70	1.45	
Other Processing Surcharges	House Account	Customer Account	
Options from Exercise/Assignment Notice	0.40	0.85	
Other Processing Surcharges	Rate		
EFR Surcharge	0.00		
Block Surcharge	0.00		
Facilitation Fee	0.30		
Give-up Surcharge	0.05		
Position Transfer/Position Adjustment	0.10		

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the new futures 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 contract. 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 contract. Please see Appendix B attached under separate cover.

NYMEX is self-certifying block trading on this contract with a minimum block threshold of twenty five (25) contracts. This block level aligns with the Exchange's currently listed Brent crude oil option contracts.

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

Compliance with Rules: Trading in the Contract will be subject to all CME Rules, including prohibitions against fraudulent, noncompetitive, unfair and abusive practices as outlined in CME Rule Chapter 4, the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the CME Rulebook, and the dispute resolution and arbitration procedures of CME Rule Chapter 6. As with all products listed for trading on one of CME Group's designated contract markets, trading activity in the Contract will be subject to 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.

Contract Not Readily Subject to Manipulation: The Contract is not readily subject to manipulation as a result of the deep liquidity and robustness of the underlying futures market and the settlement index.

Prevention of Market Disruption: Trading in the Contract will be subject to the Rules of CME, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the futures Contract proposed herein will be subject to monitoring and surveillance by CME Group's Market Regulation Department.

Position Limitations or Accountability: The Exchange has a detailed calculation methodology for the position limits in the Contract.

Availability of General Information: The Exchange will publish on its website information in regard to contract specifications, terms, and conditions, as well as daily trading volume, open interest, and price information for the Contract.

Daily Publication of Trading Information: The Exchange will publish contract trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contract.

Execution of Transactions: The Contract will be listed for trading on the CME Globex electronic trading platform and New York Trading Floor, and for clearing through the CME ClearPort platform. The CME Globex trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity. The CME ClearPort platform provides a competitive, open and efficient mechanism for novating transactions that are competitively executed by brokers.

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

Financial Integrity of Contract: The Contract will be cleared by the CME Clearing House, a derivatives clearing organization registered with the Commodity Futures Trading Commission and subject to all CFTC regulations related thereto.

Protection of Market Participants: CME Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.

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 the Contract 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 the Contract will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows 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 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 listing the Contract comply with the Act, including regulations under the Act. There were no substantive opposing views to the listing of the Contract.

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: Appendix A: NYMEX Rulebook Chapters
Appendix B: Position Limit, Position Accountability, and Reportable Level Table in
Chapter 5 of the NYMEX Rulebook (attached under separate cover)

Appendix C: NYMEX Rule 588.H – Non-reviewable Range Table
Appendix D: Cash Market Overview and Analysis of Deliverable Supply

APPENDIX A

NYMEX RULEBOOK

Chapter 504

Brent Crude Oil Futures-Style Margin Option

504100.

SCOPE OF CHAPTER

This chapter is limited in application to put and call options on Brent Crude Oil Last Day Financial Futures (BZ) contract. In addition to the rules of this chapter, transactions in options on Brent Crude Oil Last Day Financial Futures shall be subject to the general rules of the Exchange insofar as applicable.

504101.

OPTION CHARACTERISTICS

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

504101.A. Trading Schedule

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

504101.B. Trading Unit

A Brent Crude Oil Futures-Style Margin put or call option contract traded on the Exchange represents an option to assume a short or long position in the underlying Brent Crude Oil Last Day Financial Futures (BZ) contract traded on the Exchange.

504101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel and prices shall be in multiples of one (1) cent per barrel. A cabinet trade may occur at a price of \$0.001 per barrel, or \$1.00 per contract.

504101.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

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.

504101.E. Termination of Trading

A Brent Crude Oil Futures-Style Margin Option contract on the Exchange shall expire at the close of trading three business days prior to the expiration of the underlying Brent Crude Oil Last Day Financial Futures contract. The expiration date shall be announced prior to the listing of the option contract.

504101.F. Type Option

The option is an American-style option.

504102.

EXERCISE PRICES

Trading shall be conducted for options with strike prices in increments as set forth below:

(A) On the first business day of trading in an option contract month, trading shall be at the following strike prices: (i) the previous day's settlement price for Brent Crude Oil Last Day Financial Futures contract in the corresponding delivery month rounded off to the nearest fifty-cent increment strike price unless such settlement price is precisely midway between two fifty-cent increment strike prices, in which case it shall be rounded off to the lower fifty-cent increment strike price and (ii) the ten fifty-cent increment strike prices which are ten increments higher than the strike price described in (i) of this Rule 376.05(A) and (iii) the ten fifty-cent increment strike prices which are ten increments lower than the strike price described in (i) of this Rule 376.05(A).

(B) Thereafter, on any business day prior to the expiration of the option: (i) new consecutive fifty-cent increment strike prices for both puts and calls will be added such that at all times there will be at least ten fifty-cent increment strike prices above and below the at-the-money strike price available for trading in all options contract months.

(C) Notwithstanding the provisions of subsections (A) and (B) of this Rule, if the Exchange determines that trading in Brent Crude Oil Futures-Style Margin Option will be facilitated thereby, the Exchange may, by resolution, change the increments between strike prices, the number of strike prices which shall be traded on the first day in any new option contract month, the number of new strike prices which will be introduced on each business day or the period preceding the expiration of a Brent Crude Oil Futures-Style Margin Option contract in which no new strike prices may be introduced.

APPENDIX B

Position Limit, Position Accountability, and Reportable Level Table in Chapter 5

of the NYMEX Rulebook

(attached under separate cover)

APPENDIX C

NYMEX Rule 588.H – Globex Non-Reviewable Range Table

Instrument	Bid/Ask Reasonability	Non-Reviewable Range (NRR)
Brent Crude Oil Futures-Style Margin 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 \$0.10	20% of premium up to $\frac{1}{4}$ of the underlying futures non-reviewable range with a minimum of 1 tick.

APPENDIX D

Cash Market Overview and Analysis of Deliverable Supply

Introduction

New York Mercantile Exchange, Inc. (NYMEX or Exchange) is self-certifying the listing of a futures style margin Brent crude oil option contract. The Exchange currently offers an equity-style margined Brent Crude Oil Option (Contract Code: OS). Currently, all options traded and cleared at CME are equity-style options. The new Brent option ("Brent Crude Oil Futures-Style Margin Option", contract code: BZO) is an American-style option based on the underlying Brent Last Day Financial Futures (contract code: BZ). If exercised, the option will result in a corresponding position in the underlying futures contract. The option can be exercised at any time up to and including the expiration day.

Exchange staff conducted a review of the underlying cash market and deliverable supply of Brent crude oil. In estimating deliverable supply for the contracts and relying on the Commodity Futures Trading Commission ("CFTC" or "Commission") long-standing precedent, the key component of estimated deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be reliably available for delivery. Most recently, the Commission stated in its final position limit rulemaking that:

[t]he term "deliverable supply" generally means 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.

The Exchange determined to base its analysis of deliverable supply on primarily crude oil loading data for Brent, Forties, Oseberg and Ekofisk (BFOE). In its analysis of deliverable supply, the Exchange has determined not to adjust the deliverable supply estimate based on the spot availability because spot market liquidity is not restrictive and tends to vary depending on the market fundamentals of supply and demand. The typical term agreement in the cash market allows flexibility for 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.

The Brent market is robust and has an actively traded and transparent cash market. The NYMEX Brent Crude Oil Last Day Financial Futures contract (Rule Chapter 698, Contract Code: BZ) had open interest of over 160,000 as of August 21, 2015.

The Exchange has set conservative speculative limits at 4,000 contracts (equivalent to four million barrels), which is approximately 17.73% of the monthly deliverable supply. The deliverable supply of Brent is estimated at 752,200 b/d, or 22.57 million barrels per month, which is equivalent to 22,566 contracts. For position limit and accountability level purposes, all open positions in the option contract shall aggregate into the corresponding futures contract: Brent Crude Oil Last Day Financial Futures contract (Rule Chapter 698, Contract Code: BZ)

Data Sources

The Exchange based its analysis of the Brent market on data provided by Bloomberg LP, which is a privately-held financial software, data and media company headquartered in New York City. The industry sources that the Exchange has consulted with for business intelligence are well-established and reputable market participants that the Exchange has had a longstanding relationship with.

Brent Cash Market Overview

The North Sea market is comprised of the oil fields in the UK and Norwegian North oil sectors. There is a series of smaller oil fields which connect into larger streams. The most important streams in the North Sea comprise of Brent, Forties, Oseberg and Ekofisk and each stream has a principle operator that is responsible for the day to the day control of the operations including the scheduling of the cargoes based on the production from each of the smaller producing fields. The Brent, Forties, Oseberg and Ekofisk fields are known as BFOE and they underpin the Brent complex and are the key grades of oil that make up the trading of Dated Brent – the international crude oil physical benchmark price. The four BFOE fields lie in the North Sea. Brent and Forties are in the UK sector, whilst Ekofisk and Oseberg are in the Norwegian sector.

The core of the Brent market is the cash market. The Brent forward market consists of the trading of cargoes of any of the Brent, Forties, Oseberg and Ekofisk streams for delivery beyond the 25 days, with no specific dates assigned for loading. The cargoes are 600,000 barrels and, in the forward market, the precise loading dates are not provided, only the delivery month i.e. December BFOE Cargo. However the commercial contracts, which are standardized, underlying the forward market to specify the minimum timing the seller must provide the buyer to notify them as to the specific cargo loading date – currently 25 days in advance. After the seller of a BFOE forward cargo notifies the buyer as to the loading date and which stream is being loaded, the contract is now considered to have moved from the forward market to the Dated Brent market, historically this moment is referred to as the cargo going “wet” i.e. it has loading dates attached to it and can therefore be sold as a Dated Brent cargo.

The Brent cash market is essentially a reseller market where buyers either: resell the oil to someone else; transport the cargo and resell it later; or transport the cargo to consume it. Most of the sales in the Brent market are conducted as spot-market transactions; in fact, Brent cargoes in the physical market are estimated to trade 10 or more times. Typically, there is a chronology of sales and purchases of crude oil in the Brent cash market that starts with a sale from the equity producer in a spot market transaction, and finishes with a purchase by an end-user to consume the crude oil. Equity producers typically utilize the robust spot market to sell their BFOE production at the cargo loading terminal, as a “Free on Board” (FOB) delivery. Traders play an active role in the Brent market as middlemen with the expressed responsibility of reselling the oil. Further, the refiners typically rely on the spot market to purchase Brent crude oil, because there is vibrant liquidity in the spot market, and hence, the refiners have developed a preference for short-term spot market purchases, rather than long-term contracts. This applies to refiners affiliated with equity producers as well as those not affiliated; this is the standard practice, established and institutionalized over the past 34 years.

Production of BFOE has been declining over the past few years due to the cost of drilling and the returns on investment compared to other regions in the world. These four North Sea grades are segregated blends delivered at different locations in the North Sea, and each can be substituted by the seller in the 25-Day BFOE cash market (“the forward market”). Quality adjustments ensure that all four grades can

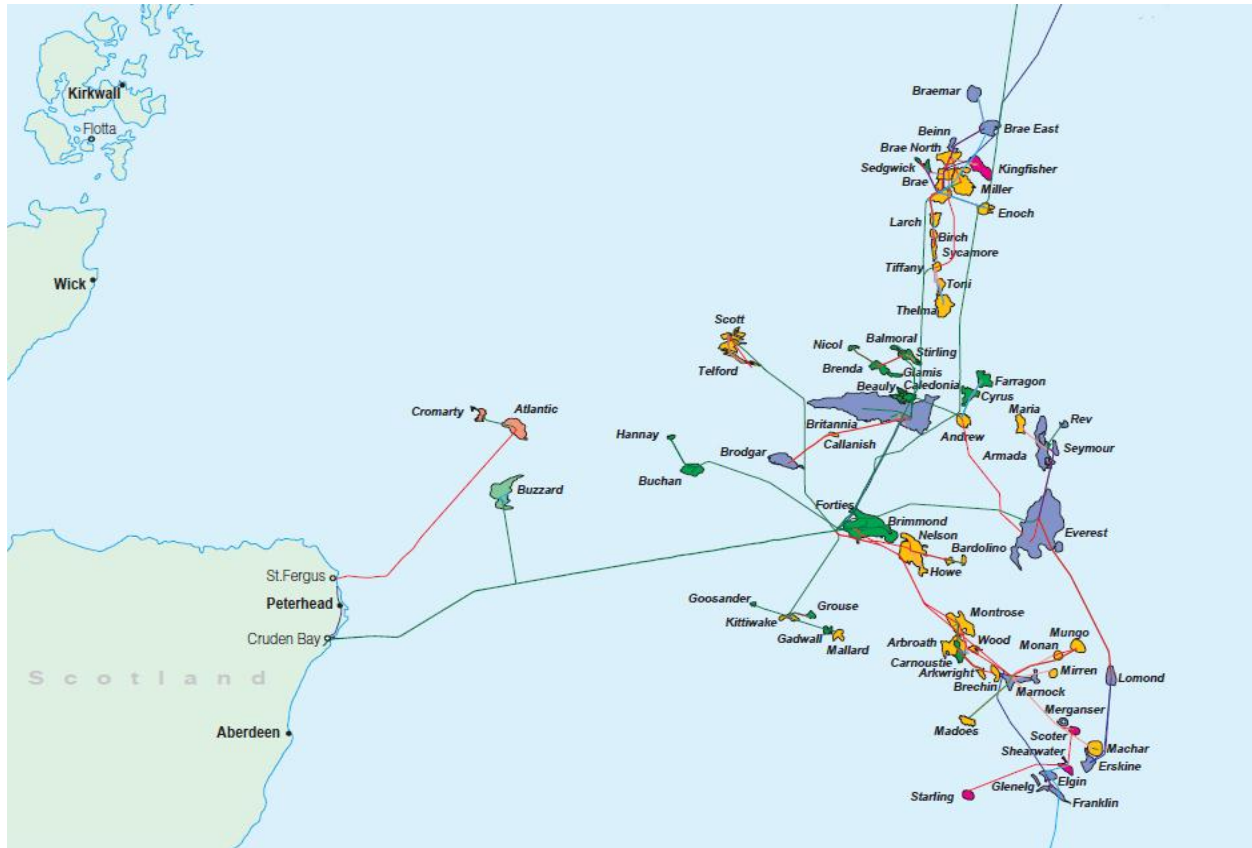
be delivered to a buyer under the standardized forward contract. Platts made an adjustment to the forward market mechanism with effect from March 2015 with the nomination period being extended from 25-days to month ahead. Both ICE and NYMEX have adjusted the expiry calendar of the Futures to align more closely with the forward market with effect from the March 2016 contract month (as an earlier transition would have had a significant impact on the open interest holders).

The process of moving from a forward to the physical market where a forward Brent cargo becomes a physical North Sea Dated Brent cargo happens as follows:

1. Refiners, producers and traders enter into a forward agreement for a particular month.
2. The Operator of each field being Shell for Brent; BP for Forties; ConocoPhillips for Oseberg and Statoil for Ekofisk will announce the loading programs at least 25 days prior before the month starts to be wet (i.e. cargoes in the delivery month start to load). This nomination process is being extended to month ahead from March 2015 i.e. the March cash cargo will expire on the 31st of January 2015.
3. The equity producers will begin the chain of nominating cargoes to buyers (or they can decide to keep the cargo). A buyer benefiting from a nomination can keep the cargo or pass it to another player with whom it has another forward contract. Buyers trade the cash BFOE on the basis that they will accept any cargo as nominated provided that it is done so within the agreed notice period (currently 25 days) by 4pm London time. Any cargo not nominated by this time will remain with the participant last notified. After 4pm London time, the cargo becomes wet physical with precise loading dates attached.
4. Cargoes that are wet physical will be sold as a Dated Brent cargo with cargo loading dates between 10 and 25 days forward.

Figure 1 shows the makeup of the fields in the Forties pipeline system (FPS) which is operated by BP. There are over 50 offshore fields that flow through within the FPS. The delivery point for Forties crude oil is Hound Point, which is on the East coast of Scotland a short distance from the UK oil capital Aberdeen. Forties is a blended crude oil from all of the fields that feed into it.

Figure 1: Forties Pipeline System



The blend changed at the beginning of 2007 when crude oil from the Buzzard field began to flow into it. Crucially Buzzard is now the largest field within the FPS. Buzzard crude oil is a medium gravity, sour crude oil with an API of 32.6 and a sulphur content of 1.44% therefore the yield is very similar to that of Urals crude oil (from Russia). The FPS produces a forward forecast of the anticipated percentage of Buzzard crude in Forties Blend¹. The overall quality of Forties crude oil varies depending on the percentage of Buzzard as a proportion of the overall blend.

Table 1: Percentage of Crude from Buzzard Field Estimates²

	Buzzard %	Forties Blend Production (thousand b/d)
Aug-15	44%	408.60
Sep-15	38%	507.40
Oct-15	31%	495.60
Nov-15	34%	553.60

The startup of the Buzzard field feeding into the Forties pipeline system (see the map in Chart 1) has resulted in Forties being almost always the cheapest of the four grades to deliver as a dated Brent cargo

¹ http://www.bp.com/en/global/forties-pipeline/about_fps/forties_blend_quality.html

² http://www.bp.com/en/global/forties-pipeline/about_fps/forties_blend_quality.html

due to the higher sulphur content of Buzzard compared to Forties and the fact that Buzzard makes up around 40% of the Forties blend.

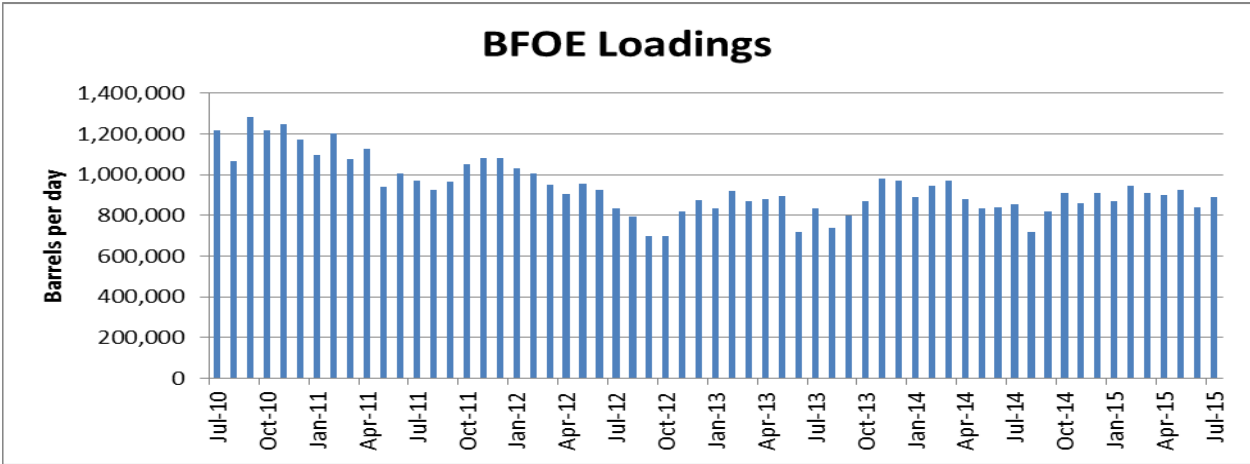
Bloomberg LP (“Bloomberg”) provides details of the BFOE loading programs for the four grades that comprise the Brent market. Based on the most recent 3-year averages of the Bloomberg data on BFOE loadings (from July 2012 through 2015), loadings of Brent (BFOE) crude oil was approximately 857,200 barrels per day.

Table 2: Monthly Loadings of Brent, Forties, Oseberg, Ekofisk

BFOE Loading	
Date	Quantity (b/d)
Jul-12	832,258
Aug-12	793,548
Sep-12	700,000
Oct-12	696,774
Nov-12	819,667
Dec-12	872,581
Jan-13	832,258
Feb-13	921,429
Mar-13	870,968
Apr-13	880,000
May-13	893,548
Jun-13	720,000
Jul-13	832,258
Aug-13	735,484
Sep-13	800,000
Oct-13	870,968
Nov-13	980,000
Dec-13	967,742
Jan-14	890,323
Feb-14	942,857
Mar-14	967,742
Apr-14	880,000
May-14	832,258
Jun-14	840,000
Jul-14	851,613
Aug-14	716,129
Sep-14	820,000
Oct-14	909,677
Nov-14	860,000

Dec-14	909,677
Jan-15	870,968
Feb-15	942,857
Mar-15	909,677
Apr-15	900,000
May-15	922,581
Jun-15	840,000
Jul-15	890,323
3 Year Average	857,194
<i>Source: Bloomberg</i>	

Figure 2: Monthly Loadings of Brent, Forties, Oseberg, Ekofisk



The Brent market is priced in USD and cents per barrel. There are two significant Futures contracts based on trading activity in the forward BFOE market. NYMEX and ICE Futures Europe offer trading of Brent Futures on their respective Exchanges. The cash market is traded in partials of 100,000 barrels or larger full size cargo transactions of 600,000 barrels. Physical convergence can occur through the partials market mechanism upon the trading of six parcels with the same counterparty in a single delivery month. If physical convergence does not occur then trades are booked out at the prevailing cash value on the last day of trading day of the cash market for the specific delivery month (i.e. this is currently 25 days prior to the 1st loading date of the delivery month). Full sized physical cargo BFOE trades will be used by ICE in the establishment of the Brent Index which is the mechanism by which the futures open on expiry are cash settled³.

The Dated Brent or Dated BFOE, as it is sometimes referred, reflects the value of the cheapest of Brent, Forties, Oseberg and Ekofisk, of 600,000 barrels, loading in the next 10-25 days and then month ahead from March 2015. Dated Brent is estimated to price around 50% of the global crude oil supply⁴. Within the North Sea and beyond grades are traded as a differential to Dated Brent or as a differential to cash Brent (BFOE). Each of the crude oil grades within BFOE are not the same quality, several adjustments

³ http://www.theice.com/publicdocs/futures/ICE_Futures_Europe_Brent_Index.pdf

⁴ <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/03/Brent-Prices-Impact-of-PRA-methodology-on-price-formation.pdf>

have been made. In 2007 Platts included a sulphur de-escalator for Forties crude oil within its Dated Brent and Brent related instruments. The change was made in response to inclusion of sour crude Buzzard into the Forties pipeline system (see chart 1). The de-escalator of price is applied to deliveries above a minimum sulphur level of 0.6%. Every month, Platts establishes a USD value de-escalator for every 0.1% of sulphur above 0.6%. The value of de-escalator is established by reviewing evidence of significant and sustained changes in the crude market, as affected by refined products (crack spread values of both heavy fuel oils and light ends) and other relevant factors that affect the economics of Forties crude.

CME Group Overview of Margins

This section gives an overview of the differences between the margining of equity-style and futures-style option contracts. Currently, all options traded and cleared at CME are equity-style options.

In options trading, margin refers to the good faith deposit, or collateral, required to be deposited by an option writer. Margining is the entire process of measuring, calculating and administering the collateral that must be put up for coverage of open positions.

Initial margin, also known as performance bond, is the margin that market participants must pay when they initiate a position whereas maintenance or variation margin is the minimum level at which market participants must maintain in their account over time. Variation margin varies as a result of the mark-to-market procedure used for futures and options on futures.

The margin rates used for calculating initial margin requirements for CME Group's futures and options products are available online⁵. The requirement amounts for specific portfolios are calculated using SPAN⁶ ("Standard Portfolio Analysis of Risk"), which is a market simulation-based Value at Risk system that allows for effective margin coverage.

In equity-style margining, also known as "traditional" or "premium-paid-upfront" margining, the premium is paid in full at the time of the option purchase. The premium is calculated at the original trade price and is recognized on the day the trade clears. Thereafter, as long as the trade remains open, the current market value of the option is taken into account in determining the total initial margin requirement. The purchaser of an equity-style margin option does not need to deposit any variation margin.

In traditional equity-style margining, the writer of the option can gain interest income with the reinvestment of the initial premium. Therefore, the seller generally demands a lower option premium for an equity-style margin option compared to a futures-style margin option, which will be discussed later.

The concept of Net Liquidation Value (NLV) comes into play when equity-style options are discussed. NLV allows the buyer to offset any other obligations and enables the Exchange to close out a position in case of default. More specifically:

$$\text{Net Liquidation Value} = \text{Option Price} \times \text{Contract Size} \times \text{Position Quantity}$$

⁵ <http://www.cmegroup.com/clearing/margins/#e=all&a=all&p=all>

⁶ <http://www.cmegroup.com/clearing/risk-management/>

When a buyer purchases an option, they receive an NLV credit, which can be used as collateral against other obligations such as initial margin requirements and debit NLV on other option positions. When a seller sells an option, they pay debit NLV, which must be covered by cash or collateral in the same manner as the original margin.

➤ **Traditional (Equity-style) Margining Example**

Day 1: Trade Date

- Buyer buys an option and pays option premium to the seller through CME



Buyer pays initial margin to CME

Buyer receives NLV credit

- Seller sells an option and receives option premium from the buyer through CME

Seller pays initial margin to CME

Seller pays NLV to CME

Day 2: Option Price Changes

- Initial margin and NLV will be re-calculated to account for change in the price of the option. Increases in initial margin requirements will need to be paid by the buyer or the seller (depending on the price change direction of the option) and decreases in margin will be credited to the buyer or seller's account
- If the option price has risen, the buyer's NLV credit will rise in tandem, which will in turn decrease the initial margin requirement. The buyer's account will be credited. As a result of the option price increase, the seller's NLV debit will increase and additional funds or collateral will need to be sent to the Exchange
- If the option price has decreased, the buyer's NLV credit will decrease in tandem, which will in turn increase the initial margin requirement. Additional funds or collateral will need to be sent to the Exchange. As a result of the option price decrease, the seller's NLV debit will decrease and the account will be debited

Expiration and/or Exercise Day

- The buyer may choose to exercise the option if it is in-the-money and receive a position in the underlying futures contract at the strike price
- Both the buyer and the seller will pay initial margin on the resulting futures position

- The NLV in both the buyer and the seller's accounts will become the variation margin on the underlying futures position. Credit NLV in the buyer's account and debit NLV in the seller's account will be zero as the option has expired

Futures-style margin options behave in a manner somewhat analogous to that of a deliverable futures contract. The trade of the option itself does not result in any cash flow. Rather, every open position is marked to market and the resulting variation margin amounts are netted together with other such amounts in determining the net pay/collect amount. The current market value of the option does not directly affect the initial margin requirement. And the premium amount is recognized on the day the option position is removed, whether by exercise, assignment, or expiration without exercise or assignment.

In futures-style margin options, the total option premium is paid upon exercise or expiration of the option, there is not NLV. When exercise or expiration of the option contract occurs, the buyer makes a premium settlement payment. Further, the writer of the option does not receive interest income from the reinvestment of the options premium that would occur with an equity-style margin option.

Unlike equity-style margin options, futures-style options have daily realized variation margins calculated. In other words, margins are paid daily according to the changing value of the option. The total premium of a futures-style option is calculated and paid only when the position is closed and open contracts are marked to market daily. The buyer never pays more margin than the cost of the premium.

Due to the fact that interest rates do not factor into futures-style margin options, their price differs from equity-style margin options. This is most apparent in long-dated options where interest rates have more time to change option values.