

28 February 2014

Ms. Melissa Jurgens Secretary Commodity Futures Trading Commission Three Lafayette Center 1155 21st St., N.W. Washington, DC 20581 United States of America

VIA EMAIL

Dear Ms. Jurgens,

Submission of Swaps Contracts for the Commission's Mandatory Clearing Determination

1 Introduction

1.1 Singapore Exchange Derivatives Clearing Limited ("**SGX-DC**"), a derivatives clearing organisation ("**DCO**") registered with the Commodity Futures Trading Commission (the "**Commission**"), hereby submits the following contracts (the "**Contracts**") for the Commission's mandatory clearing determination under Commission regulation 39.5(b):

Contract name	Clearingidate
Oil swaps	
Brent-Dubai Crude Oil Swaps Spread	31 May 2010
Benzene FOB Korea Swap	5 May 2008
Balance-of-Month Benzene FOB Korea Swap	5 May 2008
Dubai Crude Oil Swap	5 May 2006
Balance-of-Month Dubai Crude Oil Swap	2 Aug 2007
Singapore Gasoline 92 RON Swap	18 June 2012
Balance-of-Month Gasoline 92 Singapore	2 July 2012
Singapore Gasoline 95 RON Swap	18 June 2012
Balance-of-Month Gasoline 95 Singapore	2 July 2012
Singapore Gasoil Swap	5 May 2006

Singapore Exchange Derivatives Clearing Limited

Company Reg No. 200005878M (A wholly-owned subsidiary of Singapore Exchange Limited)

2 Shenton Way, #19-00 SGX Centre 1, Singapore 068804 Main: (65) 6236 8888 Fax: (65) 6535 0775



Balance-of-Month Gasoil Swap	2 March 2007
Singapore Kerosene Swap	5 May 2006
Balance-of-Month Kerosene Swap	2 August 2007
Singapore Naphtha Swap	5 May 2006
Singapore Fuel Oil 180CST Swap	5 May 2006
Mini Singapore Fuel Oil 180CST Swap	1 June 2009
Balance-of-Month Mini Fuel Oil 180CST Swap	1 August 2011
Balance-of-Month Fuel Oil 180CST	4 September 2006
Singapore Fuel Oil 380CST Swap	5 May 2006
Mini Singapore Fuel Oil 380CST Swap	1 June 2009
Balance-of-Month Fuel Oil 380CST Swap	1 August 2011
Balance-of-Month Mini Fuel Oil 380CST Swap	4 September 2006
Fuel Oil 180CST Swap vs Fuel Oil 380 Swap Differential	31 May 2010
Kerosene vs Gasoil Swaps Differential	31 May 2010
CFR Japan Naphtha Swap	5 December 2011
Balance-of-Month CFR Japan Naphtha Swap	1 February 2012
Freight and container swaps	
Dry FFA Capesize Time Charter	5 May 2006
Dry FFA Panamax Time Charter	5 May 2006
Dry FFA Supramax Time Charter	5 May 2006
Dry FFA Handysize Time Charter	1 June 2009
Half-day Dry FFA Capesize Time Charter	28 November 2007
Half-day Dry FFA Panamax Charter	28 November 2007
Half-day Dry FFA Supramax Time Charter	28 November 2007
Half-day Dry FFA Handysize Time Charter	1 June 2009
Dry FFA Capesize Route C5	5 May 2006
Dry FFA Panamax P2A	5 May 2006
Dry FFA Panamax P3A	5 May 2006
Container Swap Shanghai-Europe	2 August 2010
Container Swap Shanghai-Mediterranean	2 August 2010
Container Swap Shanghai-US West Coast	2 August 2010



Container Swap Shanghai-US East Coast	2 August 2010
Iron ore swaps	
Iron Ore Swap	27 April 2009
Coal swaps	
CFR South China Coal Swap	29 April 2013
Sub-bituminous Coal FOB Indonesia	3 November 2010
Over-the-counter financial derivatives	
Singapore Dollar ("SGD") Interest Rate Swap	15 November 2010
U.S. Dollar (" USD ") Interest Rate Swap	15 November 2010
CNY/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
IDR/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
INR/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
KRW/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
MYR/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
TWD/USD Non-Deliverable Foreign Exchange Forward	24 October 2011
PHP/USD Non-Deliverable Foreign Exchange Forward	24 October 2011

- 1.2 For ease of reference, the following terms will have the corresponding meanings in this letter:
 - (a) "Oil Swaps" refer to the Contracts listed in paragraph 1.1 under the category "Oil swaps";
 - (b) **"Freight and Container Swaps**" refer to the Contracts listed in paragraph 1.1 under the category "Freight and container swaps";
 - (c) **"Iron Ore Swaps**" refer to the Contracts listed in paragraph 1.1 under the category "Iron ore swaps";
 - (d) "**Coal Swaps**" refer to the Contracts listed in paragraph 1.1 under the category "Coal swaps";
 - (e) "**OTC Commodity Swaps**" refer, collectively, to the Oil Swaps, Freight and Container Swaps, Iron Ore Swaps and Coal Swaps; and
 - (f) **"OTCF Swaps**" refer to the Contracts listed in paragraph 1.1 under the category "Over-the-counter financial derivatives".



1.3 The Submission Cover Sheet is attached as <u>Appendix 1</u>.

2 Commencement of Clearing

2.1 The Contracts were cleared by SGX-DC prior to its registration as a DCO with the Commission on 31 December 2013. The commencement dates for clearing of the Contracts are indicated in paragraph 1.1.

3 Eligibility to Clear

3.1 Pursuant to Commission regulation 39.5(a)(1), SGX-DC is eligible to clear the Contracts as SGX-DC was clearing the swaps at the time of its registration as a DCO.

4 Required Information under Commission regulation 39.5(b)(3)

Existence of significant outstanding notional exposures, trading liquidity and adequate pricing data

<u>Oil Swaps</u>

- 4.1 Refined oil products are derived from crude oil through processes such as catalytic cracking and fractional distillation. They can be broadly classified into three categories: heavy distillates, middle distillates and light distillates.
- 4.2 Heavy distillates are products such as fuel oil and lubricants. Fuel oil is primarily used as a fuel for power stations, industrial and utility boilers. It is also widely used as bunker fuel the fuel consumed by vessels. The different fuel oil grades are classified according to their viscosity and sulphur content.
- 4.3 Middle distillates comprise a range of products from the middle fraction of the crude oil barrel. These products include primarily Gasoil, kerosene and Jet fuel. Gasoil is used as automotive fuel for buses, lorries and taxis. Jet fuel is used as an aviation fuel designed for use in aircraft powered by gas-turbine engines. Kerosene is used for heating purposes especially in Europe and the United States.



- 4.4 Light distillates are products such as gasoline and naphtha. Naphtha can be used as paint solvent, cleaning fluid and feedstock for both gasoline manufacturing and petrochemicals depending on its quality. Gasoline is primarily used as fuel in internal combustion engines.
- 4.5 Energy markets are the most volatile commodity markets in the world due to dramatic changes in the physical market which are in turn influenced by unpredictable weather patterns, political events and dramatic swings in supply-demand balances. With about half of world oil growth projected to continue to be in the Asia Pacific region, rising product demand and tightening fuel quality standards driven by rising environmental awareness, the need for managing energy price risk has been essential for many firms.
- 4.6 By entering into Oil Swaps transactions, hedgers have the ability to fix a price or a differential for a future date or period. An Oil Swap enables oil end users to fix the purchase price of future oil consumption and thus minimises their risk exposure to rising prices. By locking in prices, hedgers can exercise greater control over future cash flow and better manage costs inherent in their business.

Freight and Container Swaps

4.7 Exposure to volatile freight rates is an inherent risk element in the bulk commodity and shipping businesses. Freight rates have witnessed significant fluctuations in the recent years resulting from excess supply of tonnages, reduction in cargoes and uncertainties in economic growth of major economies. Such a market situation creates the need for tools to better manage price risk, optimise business performance and to improve the forecasting of financial performance. The use of freight derivatives is one approach used by market participants for the hedging and trading of freight rates. SGX-DC offers a suite of Freight and Container Swaps to fulfil this purpose.

Iron Ore Swaps

- 4.8 Iron ore is widely used in the world and it is one of the major bulk commodities transported by dry-bulk vessels from Australia, Brazil and India to China and Europe. Global demand for iron ore is expected to increase because of China's growing demand, which has virtually accounted for all the growth in the seaborne iron ore market.
- 4.9 In response to increasing industry participants interest and demand to trade and clear iron ore derivatives for price and credit risk mitigation, SGX-DC developed and launched the world's first OTC iron ore swaps in 2009. SGX-DC is the clearing venue of choice for Iron Ore Swaps, clearing over 90% of the global TSI iron ore swaps volume.



Coal Swaps

4.10 Coal, together with oil and natural gas, is one of the fuel sources used for electricity generation. It is one of the major bulk commodities transported by dry-bulk vessels from coal exporting countries, such as Australia, to Asia. SGX-DC clears Coal Swaps that are aimed to meet the coal industry's demand for an effective tool for hedging and counterparty credit risk mitigation.

OTCF Swaps

- 4.11 According to the Bank of International Settlements' Triennial Central Bank Survey in December 2013, the daily average volume of the Singapore dollar interest rate swap is USD 3.3 billion and that of the U.S. dollar interest rate swap is USD 373.7 billion.
- 4.12 Singapore is the third largest foreign exchange center with USD 383 billion daily average volumes according to the Bank of International Settlements' Triennial Central Bank Survey as at April 2013.

Availability of rule framework, capacity, operational expertise and resources and credit support infrastructure to clear the contract

- 4.13 The Contracts are cleared under an established rule framework and operational infrastructure already in place and accepted by SGX-DC's Clearing Members.
- 4.14 SGX-DC ensures that it has the appropriate risk management, operations and technology capabilities in place to ensure that it is able to liquidate positions in the Contracts in an orderly manner in a default.
- 4.15 The Contract is subject to margin and clearing fund requirements as set out under SGX-DC's Clearing Rules, which are available at the following link: <u>http://rulebook.sgx.com/en/display/display_main.html?rbid=3271&element_id=1903</u>.

Effect on the mitigation of systemic risk, taking in account the market size and resources of SGX-DC

- 4.16 It is noted that one of the key drivers of the Dodd-Frank Act was to address systemic risk in the OTC derivatives market through central clearing of such products.
- 4.17 The benefits of central clearing are well-documented and include standardisation of key contract terms when settling a contract, ease of position adjustment, reduction of counterparty risk by having the central counterparty interpose itself between the initial buyer



and seller and the provision of efficiencies through the consolidation of collateral management at a central point.

- 4.18 These benefits need to be weighed against the concentration of risk in a select few central counterparties.
- 4.19 SGX-DC has the necessary capability to clear the Contracts from a market size and resources perspective.

Effect on competition, including clearing fees and charges

- 4.20 SGX-DC does not believe that its clearing of the Contracts would have a negative or material impact on competition.
- 4.21 The fee schedules for the Contracts are attached as <u>Appendix 2</u>.

Existence of reasonable legal certainty in the event of SGX-DC's or its clearing members' insolvency with regard to the treatment of customer and counterparty positions and collateral

- 4.22 SGX-DC observes the Principles for Financial Market Infrastructures jointly promulgated by the Committee on Payment and Settlement Systems and International Organisation of Securities Commissions (the "**PFMI**") and its procedures have been assessed to be legally certain in the event of its or its Clearing Members' insolvency with regard to the treatment of customer and counterparty positions and collateral¹.
- 4.23 SGX-DC has also previously provided a legal memorandum to the Commission on the ringfenced treatment of cleared swaps customer collateral pursuant to Part 22 of the Commission's regulations.
- 4.24 SGX-DC's insolvency and the operation of default management mechanisms under its Clearing Rules will be governed by Singapore law, save for certain specific Clearing Rules that relate to cleared swaps customer collateral that are governed by U.S. federal laws.

¹ Please see <u>http://www.imf.org/external/pubs/ft/scr/2013/cr13345.pdf</u> for a detailed assessment of SGX-DC's observance of the PFMI by the International Monetary Fund under the Financial Sector Assessment Programme.



5 **Contract Specifications**

5.1 The contract specifications of the OTC Commodity Swaps and OTCF Swaps are attached as <u>Appendix 3</u> and <u>Appendix 4</u>, respectively.

6 **Participants Eligibility Standards**

- 6.1 The standards for participation in clearing of the Contract are similar to SGX-DC's usual membership standards for Clearing Members clearing OTC commodity contracts and OTC financial derivative contracts as set out in Chapter 2 of its Clearing Rules.
- 6.2 SGX-DC imposes no participation criteria on its Clearing Members' customers, given that it faces its Clearing Members on a principal-to-principal contractual basis.

7 **Pricing Sources, Models and Procedures**

Oil Swaps

- 7.1 The daily settlement prices ("**DSP**") of the Oil Swaps contracts will be determined through the average of daily forward assessments provided by panellists, which include independent price vendors and brokers.
- 7.2 The final settlement prices ("**FSP**") for the contracts are based on the arithmetic average of Platts daily spot assessments in the contract month, rounded to three decimal places.

Freight and Container Swaps

- 7.3 The DSP of the Freight and Container Swaps contracts are determined using the daily forward assessments provided by Baltic.
- 7.4 The FSP for the contracts are based on the arithmetic average of Baltic's daily spot assessments in the contract month for the relevant underlying product, rounded to one decimal place.

Iron Ore Swaps

7.5 The DSP of the Iron Ore Swaps will be determined through the average of daily forward assessments provided by panellists, which include independent price vendors and brokers.



7.6 The FSP for the contracts are based on the arithmetic average of all The Steel Index iron ore reference prices in the expiring month, rounded to two decimal places.

Coal Swaps

- 7.7 The DSP of the Coal Swaps contracts will be determined through the average of daily forward assessments provided by panellists, which include independent price vendors and brokers.
- 7.8 The FSP for the contracts are based on the arithmetic average of all publications of the respective reference prices published by Argus and IHS McCloskey in the expiring contract month, rounded to two decimals places.

OTCF Swaps

7.9 The valuation rates for the OTCF Swaps are obtained from independent price vendors capturing publicly published price data of money-brokers actively involved in the interest rate swaps and foreign exchange forward markets. The rate sources used and manner of determining the mark-to-market prices are in alignment with industry practices.

8 **Risk Management Procedures**

- 8.1 SGX-DC's risk management policies and procedures are well-established through its experience in clearing OTC derivatives products.
- 8.2 Maintenance margin is collected from each Clearing Member to cover potential losses in the event of that Clearing Member's default. The margining methodology is based on a value-at-risk model utilising historical simulation methodology.
- 8.3 Variation margin is calculated three times a day but called once each day during the life of the Contracts until final settlement. Such variation margin is marked-to-market during each cycle and settled in cash based on the settlement currency of the Contracts.
- 8.4 Further to this, each Clearing Member contributes to a clearing fund which would be drawn down in the event of a default in accordance with the SGX-DC Clearing Rules. This fund is utilised to cover any shortfall over and above the margins posted by the defaulting Clearing Member due to the liquidation or auction of such Clearing Member's portfolio.



9 Applicable Rules, Polices and Procedures

9.1 The rules, policies and procedures that apply to the clearing of the Contracts are set out in SGX-DC's Clearing Rules, which are publicly available at the following link: <u>http://rulebook.sgx.com/en/display/display_main.html?rbid=3271&element_id=1903.</u>

10 **Public Notice of Submission**

10.1 SGX-DC has made this submission publicly available on its website at the following address: <u>http://www.sgx.com/wps/portal/sgxweb/home/regulation/howwereg</u>.

11 **Contact Details**

11.1 Please do not hesitate to contact the undersigned at eli.cohen@sgx.com or +65 6236 5104 should you require any clarification.

Yours sincerely,

Eli Cohen Head, Legal (Regulation)

Appendix 1

Submission Cover Sheet

Appendix 2

Fee Schedules

X.	Fee Type		except where specified)	Fue	al Oil	Mini F	uel Oil	Gasolin	e Swaps
	Ticker Symbol	DO_31, GO_02	R, NT, DO_02 - - GO_31, KR_02 - _31	30_31, KR_02 F3_31		1M, 1M_02 to 1M31, 3M, 3M_02 to 3M_31		G2, G2_02 to G2_31 G5, G5_02 to G5_31	
		Excluding GST	Including GST	Excluding GST	Including GST	Excluding GST	Including GST	Excluding GST	Including GST
Cf 1	Trading Member (Individual)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf 2	Clearing Member House Account	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf 3	Trading Member (Broker) House Account	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1,20	US\$1.284	US\$0.80	US\$0.856
Cf 5	Clearing Member Customer Account	US\$1.20	US\$1.284	US\$7.00	US\$7.49	US\$1.50	US\$1.605	US\$1.00	US\$1.07
Cf 6	Trading Member (Broker) Customer Account	US\$1.20	US\$1.284	US\$7.00	US\$7.49	US\$1.50	US\$1.605	US\$1.00	US\$1.07
Cf 7	Trading Member (Proprietary) (Customer)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf 8	Clearing Member Related Company House Account	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf E	Trading Member's Trading Representatives (House)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf F	Trading Member's Trading Representatives (Customer)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf G	Clearing Member's Trading Representatives (House)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856
Cf K	Trading Member (Proprietary) (House)	US\$1.00	US\$1.07	US\$5.00	US\$5.35	US\$1.20	US\$1.284	US\$0.80	US\$0.856

Fee Type		200000000000000000000000000000000000000	zene aps	Naphtha Swaps		
	Ticker Symbol	BZ,BZ_C	2-BZ_31	NJ, NJ_0	2 – NJ_31	
		Excluding GST	Including GST	Excluding GST	Including GS	
Cf 1	Trading Member (Individual)	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cf 2	Clearing Member House Account	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cf 3	Trading Member (Broker) House Account	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cf 5	Clearing Member Customer Account	US\$50.00	US\$53.50	U\$\$7.00	US\$7.49	
Cf 6	Trading Member (Broker) Customer Account	US\$50.00	US\$53.50	US\$7.00	US\$7.49	
Cf 7	Trading Member (Proprietary) (Customer)	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cf 8	Clearing Member Related Company House Account	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
CFE	Trading Member's Trading Representatives (House)	US\$40.00	U\$\$42.80	US\$5.00	US\$5.35	
Cf F	Trading Member's Trading Representatives (Customer)	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cf G	Clearing Member's Trading Representatives (House)	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
Cř K	Trading Member (Proprietary) (House)	US\$40.00	US\$42.80	US\$5.00	US\$5.35	
	1	1		1		

	Fee Тура	Half-Day Capes Ba	ize Time Charter sket		pramax Time r Basket		nax Time Charter sket		ndysize Time Irter
3845	Ticker Symbol	C	M	S	M	F	M	H	M
			Including GST	After Discount (Excluding GST)*	Including GST	After Discount (Excluding GST)*	Including GST	After Discount (Excluding GST)*	Including GST
Cf 1	Trading Member (Individual)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf 2	Clearing Member House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Ċf 3	Trading Member (Broker) House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf 5	Clearing Member Customer Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf 6	Trading Member (Broker) Customer Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14

Corrency Pair USD/CNY USD/KRW USD/IDR USD/INR

Clearing Fee Rate 0.3 bp of Notional amount In USD

FX Forwards (FXF) The following clearing fees are chargeable upon confirmation of novation at the end of the business day.

Fee Type Ticker Symbol

		Excluding GST	Including GST	Excluding GST	Including GST	Excluding GST	Including GST
Cf 1	Trading Member (Individual)	US\$10.00	U\$\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
Ĉf 2	Clearing Member House Account	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
Cf 3	Trading Member (Broker) House Account	US\$10.00	US\$10.70	US\$8.00	US\$8.56	U\$\$7.00	US\$7.49
Cf 5	Clearing Member Customer Account	US\$12.00	US\$12.84	US\$10.00	US\$10.70	US\$9.00	US\$9.63
Cf 6	Trading Member (Broker) Customer Account	US\$12.00	US\$12.84	US\$10.00	US\$10.70	US\$9.00	US\$9.63
Cf 7	Trading Member (Proprietary) (Customer)	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
Cf 8	Clearing Member Related Company House Account	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
CfE	Trading Member's Trading Representatives (House)	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
Cf F	Trading Member's Trading Representatives (Customer)	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49
Cf G	Clearing Member's Trading Representatives (House)	US\$10.00	US\$10.70	. US\$8.00	US\$8.56	US\$7.00	US\$7.49
Cf K	Trading Member (Proprietary) (House)	US\$10.00	US\$10.70	US\$8.00	US\$8.56	US\$7.00	US\$7.49

Iron Ore Swaps FE

	Fee Type	Dry FFA (exce	pt CTC & HTC)	C	TC	Star - St	TC	Wet/Tan	ker FFAs
	Ticker Symbol	C3, C4, C5, C7	C3, C4, C5, C7, 2A, 3A, PV, SV		CV		HV		4, K5
		After Discount (Excluding GST)*	Including GST	After Discount (Excluding GST)*	Including GST	After Discount (Excluding GST)*	Including GST	Excluding GST	Including GST
Cf 1	Trading Member (Individual)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf 2	Clearing Member House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf 3	Trading Member (Broker) House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf 5	Clearing Member Customer Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$10.00	US\$10.70
Cf 6	Trading Member (Broker) Customer Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$10.00	US\$10.70
Cf 7	Trading Member (Proprietary) (Customer)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf 8	Clearing Member Related Company House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf E .	Trading Member's Trading Representatives (House)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56
CfF	Trading Member's Trading Representatives (Customer)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	U\$\$8.56
Cf G	Clearing Member's Trading Representatives (House)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	U\$\$2.00	US\$2.14	US\$8.00	US\$8.56
Cf K	Trading Member (Proprietary) (House)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$8.00	US\$8.56

Shanghai Container B1, B2, B3, B5

Cf 7	Trading Member (Proprietary) (Customer)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf 8	Clearing Member Related Company House Account	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
CfE	Trading Member's Trading Representatives (House)	ÚS\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf F	Trading Member's Trading Representatives (Customer)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf G	Clearing Member's Trading Representatives (House)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14
Cf K	Trading Member (Proprietary) (House)	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14	US\$2.00	US\$2.14

Coal Swaps CI,CF

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Appendix 3

Contract Specifications of OTC Commodity Swaps

Product Category	Iron Ore & Steel	Freight	Freight
Product Name	Iron Ore Swaps	Dry Bulk FFA [Time Charter Average - Full Day swaps]	Dry Bulk FFA [Time Charter Average - Full Day swaps]
	Iron Ore CFR China (62% Fe Fines) Swap	Capesize Time Charter Basket FFA	Capesize Time Charter Average Futures
Contract Name			
licker Symbol	FE	CV	CVF
Contract Size	500 metric lonnes	1 Day	1 Day
Quality Specification	N.A.	N.A.	N.A.
	Up to 48 consecutive months starting with current month, 12	Up to 72 consecutive months starting with current month. 12	Up to 72 consecutive months starting with current month. 12
	consecutive months will be added upon expiry in December.	consecutive months will be added upon expiry in December.	consecutive months will be added upon expiry in December.
Contract Months			
Delivery Units	N.A.	N.A.	N.A.
Quotation	US\$ per tonne	US\$ per day	US\$ per day
	i US\$0.01 per metric tonne	US\$1.00 per day	US\$1.00 per day
lick Value	US\$5.00	U\$\$1.00	U\$\$1.00
Strike Prices	N.A.	N.A.	N.A.
201110 I 11063	T session: 8.00am - 8:00pm	T session: 8.00am 8:00pm	T session: 8.00am 8:00pm
	T+1 session: 8:00.01pm - 4.00am	T+1 session: 8:00.01pm - 2:00am	T+1 session: 9:00pm - 2.00am
	Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am – 8.00pm
Frading Hours		· ·	- / ·
	A person must not own or control any combination of Iron Ore	A person must not own or control any combination of relevant Freight	A person must not own or control any combination of relevant Freight
	Futures, Swaps, Options and any other product traded by the	Swaps, Options and any other product traded by the Exchange and/or	Swaps, Options and any other product traded by the Exchange and/o
	Exchange and/or accepted by the Clearing House for clearing with an	accepted by the Clearing House for clearing with an identical	accepted by the Clearing House for clearing with an identical
	identical underlying, that exceeds an equivalent of 3,000 regular-sized	underlying, that exceeds an equivalent of 2,000 full-day contracts on	underlying, that exceeds an equivalent of 2,000 full-day contracts on
	Iron Ore Swap contracts on the same side of the Market and in all	the same side of the Market and in all Contract Months combined.	the same side of the Market and in all Contract Months combined.
	Contract Months combined.		
Position Limit			
Daily Price Limit	N.A.	N.A.	N.A.
Methods of Delivery	N.A.	N.A.	N.A.
•	Cash settlement using the arithmetic average of all The Steel Index	Arithmetic average of all Baltic's daily spot assessments in the	Arithmetic average of all Baltic's daily spot assessments in the
	(TSI) iron ore reference prices in the expiring month, rounded to 2	Contract Month for the relevant underlying product, rounded to 1	Contract Month for the relevant underlying product, rounded to 1
	decimal places.	decimal place.	decimal place.
Exchange Delivery Sett	la		
Delivery Period	N.A.	N.A.	N.A.
Ports of Loading	N.A.	N.A.	N.A.
	Last publication day of The Steel Index (TSI) iron ore reference prices	Last publication day of Baltic Time Charter Average reference prices	Last publication day of Baltic Time Charter Average reference prices
	in the contract month	in the contract month	in the contract month
ast Trading Day			
Negotiated Large Trade	N.A.	N.A.	5 lots

Freight	Freight	Freight
Dry Bulk FFA [Time Charter Average - Full Day swaps]	Dry Bulk FFA [Time Charter Average - Full Day swaps]	Dry Bulk FFA [Time Charter Average - Full Day swaps]
Panamax Time Charter Basket FFA	Panamax Time Charter Average Futures	Supramax Time Charter Basket FFA
	Panamax Time Charlet Average Publics	Supramax Time Charlet Daskell I A
V	PVF	sv
Day	1 Day	1 Dav
N.A.	N.A.	N.A.
Jp to 72 consecutive months starting with current month. 12	Up to 72 consecutive months starting with current month. 12	Up to 72 consecutive months starting with current month.
consecutive months will be added upon expiry in December.	consecutive months will be added upon expiry in December.	12 consecutive months will be added upon expiry in December.
14.	N.A.	N.A.
JS\$ per day	US\$ per day	US\$ per day
	U\$\$1.00 per day	US\$1.00 per day
JS\$1.00 per day	US\$1.00 per day	US\$1.00 per day
JS\$1.00	N.A.	N.A.
I.A.	T session: 8.00am – 8:00pm	T session: 8.00am - 8:00pm
session: 8.00am – 8:00pm +1 session: 8:00.01pm - 2.00am	T session: 8.00am - 8:00pm T+1 session: 9:00pm - 2.00am	T+1 session: 8:00.01pm - 2:00am
ast Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am - 8.00pm	Last Trading Day: 8.00am – 8.00pm
aar maang pay, aayan - aayan	was maning way another another	coor many way or our or oppin
person must not own or control any combination of relevant Freight	A person must not own or control any combination of relevant Freight	A person must not own or control any combination of relevant Freight
	Swaps, Options and any other product traded by the Exchange and/or	
ccepted by the Clearing House for clearing with an identical	accepted by the Clearing House for clearing with an identical	accepted by the Clearing House for clearing with an identical
inderlying, that exceeds an equivalent of 4,000 full-day contracts on	underlying, that exceeds an equivalent of 4,000 full-day contracts on	underlying, that exceeds an equivalent of 4,000 full-day contracts on
he same side of the Market and in all Contract Months combined.	the same side of the Market and in all Contract Months combined.	the same side of the Market and in all Contract Months combined.
IA.	N.A.	N.A.
IA.	N.A.	N.A.
rithmetic average of all Baltic's daily spot assessments in the	Arithmetic average of all Baltic's daily spot assessments in the	Arithmetic average of all Baltic's daily spot assessments in the
Contract Month for the relevant underlying product, rounded to 1	Contract Month for the relevant underlying product, rounded to 1	Contract Month for the relevant underlying product, rounded to 1
lecimal place.	decimal place	decimal place
LA.	N.A.	N.A.
l.A.	N.A.	N.A.
ast publication day of Baltic Time Charter Average reference prices	Last publication day of Baltic Time Charter Average reference prices	Last publication day of Baltic Time Charter Average reference prices
n the contract month	in the contract month	in the contract month
4A.	5 lots	N.A.
Jume -	U TOLO	13/4 54

Freight	Freight	Freight
Dry Bulk FFA [Time Charter Average - Full Day swaps]	Dry Bulk FFA [Time Charter Average - Full Day swaps]	Dry Bulk FFA [Time Charter Average - Full Day swaps]
Supramax Time Charter Average Futures	Handysize Time Charter Basket FFA	Handysize Time Charter Average Futures
	·····	
SVF	HV	HVF
1 Day	1 Day	1 Day
N.A.	N.A.	N.A.
Up to 72 consecutive months starting with current month.	Up to 72 consecutive months starting with current month.	Up to 72 consecutive months starting with current month.
12 consecutive months will be added upon expiry in December.	12 consecutive months will be added upon expiry in December.	12 consecutive months will be added upon expiry in December.
N.A.	N.A.	N.A.
US\$ per day	US\$ per day	US\$ per day
US\$1.00 per day	US\$1.00 per day	US\$1.00 per day
US\$1.00	US\$1.00	US\$1.00
N.A.	N.A.	N.A.
T session: 8.00am - 8:00pm	T session: 8.00am - 8:00pm	T session: 8.00am - 8:00pm
T+1 session: 9:00pm - 2.00am	T+1 session: 8:00.01pm - 2.00am	T+1 session: 9:00pm - 2.00am
Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am - 8.00pm	Last Trading Day: 8.00am - 8.00pm
A person must not own or control any combination of relevant Freight Swaps, Options and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 4,000 full-day contracts on the same side of the Market and in all Contract Months combined.	A person must not own or control any combination of relevant Freight Swaps, Options and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 4,000 full-day contracts on the same side of the Market and in all Contract Months combined.	A person must not own or control any combination of relevant Freight Swaps, Options and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 4,000 full-day contracts on the same side of the Market and in all Contract Months combined.
N.A.	N.A.	N.A.
N.A.	N.A.	N.A.
Arithmetic average of all Baltic's daily spot assessments in the	Arithmetic average of all Baltic's daily spot assessments in the	Anthmetic average of all Baltic's daily spot assessments in the
Contract Month for the relevant underlying product, rounded to 1	Contract Month for the relevant underlying product, rounded to 1	Contract Month for the relevant underlying product, rounded to 1
decimal place	decimal place	decimal place
N.A.	N.A.	N.A.
N.A.	N.A.	N.A.
Last publication day of Baltic Time Charter Average reference prices	Last publication day of Baltic Time Charter Average reference prices	Last publication day of Baltic Time Charter Average reference prices
in the contract month	in the contract month	in the contract month
5 lots	N.A.	5 lots

Freight	Freight	Freight
Dry Bulk FFA [Time Charter Average – Half Day]	Dry Bulk FFA [Time Charter Average – Half Day]	Dry Bulk FFA [Time Charter Average – Half Day]
Capesize Time Charter Basket FFA	Panamax Time Charter Basket FFA	Supramax Time Charter Basket FFA
CM	PM	SM
0.5 Day	0.5 Day	0.5 Day
N.A.	N.A.	N.A.
Moniths: Current month	Months: Current month	Months: Current month
Quarters: 5 consecutive quarters starting with current quarter	Quarters: 5 consecutive quarters starting with current quarter	Quarters: 5 consecutive quarters starting with current quarter
Years: 5 consecutive years contracts starting with current year plus 1	Years: 5 consecutive years contracts starting with current year plus 2	Years: 5 consecutive years contracts starting with current year plus 3
N.A.	N.A.	N.A.
US\$ per day	US\$ per day	US\$ per day
US\$1.00 per day	US\$1.00 per day	US\$1.00 per day
US\$0.50	US\$0.50	US\$0.50
N.A.	N.A.	N.A.
8.00am – 4.00am	8.00am – 4.00am	8.00am – 4.00am
Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am – 8.00pm
Note: System is not available from 4.00.01am to 7.59.59am daily	Note: System is not available from 4.00.01am to 7.59.59am daily	Note: System is not available from 4.00.01am to 7.59.59am daily
2,000 lots of Full-Day Contract or its equivalent in Half-Day Contracts	4,000 lots of Full-Day Contract or its equivalent in Half-Day Contracts each	4,000 lots of Full-Day Contract or its equivalent in Half-Day Contracts each

N.A. N.A. Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 1 decimal place

> N.A. N.A. Last business day of contract month

N.A.

N.A.

Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 1 decimal place N.A. Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 1 decimal place

N.A. N.A. Last business day of contract month

N.A.

N.A.

N.A.

Last business day of contract month

N.A.

N.A.

Freight Dry Bulk FFA [Time Charter Average - Half Dav] Handysize Time Charter Basket FFA

HM 0.5 Day N.A. Months: Current month Quarters: 5 consecutive quarters starting with current quarter Years: 5 consecutive years contracts starting with current year plus 4

N.A. US\$ per day US\$1.00 per day US\$0.50 N.A. 8.00am - 4.00am Last Trading Day: 8.00am - 8.00pm Note: System is not available from 4.00.01am to 7.59.59am daily Freight Dry Bulk FFA (Capesize Routes) Capesize Route C5 (Forward Freight Agreement, W Australia -Qinodao, 160.000mt)

C5 1.000 metric tonnes NA Up to 24 consecutive months starting with current month. 12 consecutive months will be added upon expiry in December Panamax Route P2A (FFA, Skaw/Gibraltar - Far East, re-delivery Taiwan/Japan range, 60/65 days) 2A

1 Dav N.A. Up to 48 consecutive months starting with current month. 12 consecutive months will be added upon expiry in December

N.A. US\$ per day US\$1.00 per Day US\$1.00 N.A. 8.00am - 4.00am Last Trading Day: 8.00am - 8.00pm Note: System is not available from 4.00.01am to 7.59.59am daily Note: System is not available from 4.00.01am to 7.59.59am daily

1.000 contracts each

4.000 lots of Full-Day Contract or its equivalent in Half-Day Contracts 1.000 contracts each each

N.A. N.A. Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 1 decimal place

decimal places N.A. N.A.

Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 4

Last business day of contract month

Arithmetic average of last 7 Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 4 decimal places N.A.

N.A. Last business day of contract month

N.A.

N.A.

N.A.

Last business day of contract month

N.A.

ΝA

\$10.00

N.A.

N.A.

N.A.

US\$ per toppe

8.00am - 4.00am

US\$0.01 per metric tonne

Last Trading Day: 8.00am - 8.00pm

N.A.

N.A.

N.A.

Freight

Dry Bulk FFA (Panamax Routes)

Freight Dry Bulk FFA [Panamax Routes] Panamax Route P3A (Trans Pacific round either via Australia or Pacific, delivery and re-delivery Japan/South Korea range, 35/50 davs) 3A 1 Day N.A. Up to 48 consecutive months starting with current month. 12 consecutive months will be added upon expiry in December

N.A. US\$ per day US\$1.00 per Day US\$1.00 N.A. 8.00am - 4.00am Last Trading Day: 8.00am - 8.00pm Note: System is not available from 4.00.01am to 7.59.59am daily

Freight Container Swaps Shanghai-Europe Container Swan

B1 10 Twenty-Foot Equivalent Units ("TEUs") NA 12 consecutive months

Container Swaps Shanohai-Mediterranean Container Swap

B2 10 Twenty-Foot Equivalent Units ("TEUs") NA 12 consecutive months

N.A. US\$ per day US\$1.00 per TEU US\$10.00 NA 8.00am - 4.00am Last Trading Day: 8.00am – 3.00pm Note: System is not available from 4.00.01am to 7.59.59am daily Last Trading Day: 8.00am - 3.00pm Note: System is not available from 4.00.01am to 7.59.59am daily

1.000 contracts each

6,000 contracts

N.A.

NA

US\$ per day

US\$10.00

US\$1.00 per TEU

8.00am - 4.00am

6.000 contracts

Freight

N.A. N.A. Arithmetic average of last 7 Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 4 decimal places	N.A. N.A. Cash settlement using the arithmetic average of all Shanghai Shipping Exchange's Shanghai Containerized Freight Index (SCFI) weekly spot assessments for the contract month, rounded to 2 decimal places.	N.A. N.A. Cash settlement using the arithmetic average of all Shanghai Shipping Exchange's Shanghai Containerized Freight Index (SCFI) weekly spot assessments for the contract month, rounded to 2 decimal places.
N.A. N.A. Last business day of contract month	N.A. N.A. Last Friday of the contract month, or the preceding Friday if the last Friday is a public holiday according to the Shanghai public holiday schedule.	N.A. N.A. Last Friday of the contract month, or the preceding Friday if the last Friday is a public holiday according to the Shanghai public holiday schedule.
N.A.	N.A.	N.A.

Freight Container Swaps Shanghai-US West Coast Container Swap

B3 10 Forty-Foot Equivalent Units ("FEUs") N.A. 12 consecutive months

N.A. US\$ per day US\$1.00 per FEU US\$10.00 N.A. 8.00am – 4.00am Last Trading Day: 8.00am – 3.00pm Note: System is not available from 4.00.01am to 7.59.59am daily Freight Container Swaps Shanghai-US East Coast Container Swap

B5 10 Forty-Foot Equivalent Units ("FEUs") N.A. 12 consecutive months

N.A. US\$ per day. US\$1.00 per FEU US\$10.00 N.A. 8.00am – 4.00am Last Trading Day: 8.00am – 3.00pm Note: System is not available from 4.00.01am to 7.59.59am daily

4.000 contracts

SGX API & CFR South China Coal Swap

SGX API 8 CFR South China Coal

Energy

1,000 metric tonnes N.A. Up to 24 consecutive months starting with the current month. Upon expiry of Dec contract, SGX will list another 12 months.

N.A. US\$ per tonne US\$10.00 per metric tonne US\$10.00 N.A. T session: 8.00am – 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Dav: 8.00am – 8.00pm

A person must not own or control any combination of API8 Coal Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,500 regular-sized API8 Coal Swap contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. N.A. N.A. N.A. NA. Cash settlement using the arithmetic average of all Shanghal Shipping Cash settlement using the arithmetic average of all Shanghai Shipping. Cash settlement using the arithmetic average of all shanghai Shipping. Exchange's Shanghai Containerized Freight Index (SCFI) weekly spot Exchange's Shanghai Containerized Freight Index (SCFI) weekly spot API 8 index published in the Argus/McCloskey Coal Price Index assessments for the contract month, rounded to 2 decimal places. assessments for the contract month, rounded to 2 decimal places; Report price in the expiring contract month, rounded to 2 decimals places. N.A. N.A. N.A. N.A. N.A. N.A. Last Friday of the contract month, or the preceding Friday if the last Last Friday of the contract month, or the preceding Friday if the last Last publication day of the API 8 marker in the contract month. Friday is a public holiday according to the Shanghai public holiday Friday is a public holiday according to the Shanghai public holiday schedule. schedule.

N.A.

4.000 contracts

N.A.

Enerav Enerav Energy SGX API & CER South China Coal SGX IHS McCloskey Indonesian Sub-Bit FOB Coal SGX IHS McCloskey Indonesian Sub-Bit FOB Coal SGX APL8 CER South China Coal Index Eutures SGX IHS McCloskey Indonesian Sub-hit EOB Coal Swan SGX IHS McCloskey Indonesian Sub-bit FOB Coal Index Eutures CEE CL CIE 100 metric tonnes 1 000 metric tonnes 100 metric tonnes MΑ N.A. NA Up to 24 consecutive months starting with the current month. Upon Up to 24 consecutive months starting with the current month. Upon Up to 24 consecutive months starting with the current month. Upon expiry of Dec contract, SGX will list another 12 months. expiry of Dec contract, SGX will list another 12 months. expiry of Dec contract. SGX will list another 12 months. NA N A N.A. US\$ per tonne US\$ per tonne US\$ per tonne US\$0.01 per metric tonne US\$0.01 per metric tonne US\$0.01 per metric tonne US\$1.00 US\$10.00 US\$1.00 N.A. N A N.A. T session: 8.00am - 8:00pm T session: 8.00am - 8:00pm T session: 8.00am - 8:00pm T+1 session: 8:00 01pm - 4 00am T+1 session: 9:00nm - 2 00am T+1 session: 9:00pm - 2.00am Last Trading Day: 8.00am - 8.00pm Last Trading Day: 8.00am - 8.00pm Last Trading Day: 8.00am - 8.00pm A person must not own or control any combination of Sub-Bituminous A person must not own or control any combination of Sub-Bituminous A person must not own or control any combination of API8 Coal Entures Swaps and any other product traded by the Exchange and/or. Coal EOB Indonesia Entures Swaps and any other product traded by Coal EOB Indonesia Entures Swaps and any other product traded by accepted by the Clearing House for clearing with an identical the Exchange and/or accepted by the Clearing House for clearing with the Exchange and/or accepted by the Clearing House for clearing with underlying, that exceeds an equivalent of 1,500 regular-sized API8 an identical underlying, that exceeds an equivalent of 1,500 regular- an identical underlying, that exceeds an equivalent of 1,500 regularsized Sub-Bituminous Coal Swap contracts on the same side of the Coal Swap contracts on the same side of the Market and in all sized Sub-Bituminous Coal Swap contracts on the same side of the Contract Months combined. Market and in all Contract Months combined. Market and in all Contract Months combined. NA. No price limits No price limits N.A. NA NA Cash settlement using the arithmetic average of all publications of the Cash settlement using the arithmetic average of all publications of the Cash settlement using the arithmetic average of all publications of the IHS McCloskey Indonesian Sub-Bit FOB marker in the expiring IHS McCloskey Indonesian Sub-Bit FOB marker in the expiring API 8 index published in the Argus/McCloskey Coal Price Index Report price in the expiring contract month, rounded to 2 decimals contract month, rounded to 2 decimals places. contract month, rounded to 2 decimals places. places. N.A. N.A. N.A. N.A. N.A. N.A. Last publishing day (Friday) of the weekly IHS McCloskey Indonesian Last publishing day (Friday) of the weekly IHS McCloskey Indonesian Last publication day of the API 8 marker in the contract month. Sub-Bituminous FOB marker in the contract month. If the last trading Sub-Bituminous FOB marker in the contract month. If the last trading day is a holiday, the preceding business day will be the LTD. day is a holiday, the preceding business day will be the LTD. N.A. 10 lots 10 lots

Energy Singapore Fuel Oil 180 cst Singapore Fuel Oil 180cst Swap, 3.5% Sulfur

F1 1 000 metric tonnes NA. Up to 15 consecutive months starting with the current month. A new guarter (3 months) will be listed upon expiry of the nearest guarter.

NA US\$ per tonne US\$0.01 per metric tonne US\$10.00 N A T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

Futures, Swaps and any other product traded by the Exchange and/or Futures, Swans and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 300 regular-sized full month underlying, that exceeds an equivalent of 300 regular-sized full month underlying, that exceeds an equivalent of 300 regular-sized full month contracts on the same side of the Market and in all Contract Months combined. combined.

- N.A. ΝA Arithmetic average of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.
- N.A. N.A.

Last publication day of the Platts Singapore Fuel Oil 180cst index in the contract month

N.A.

Energy Singapore Fuel Oil 180 est Mini Singapore Euel Oil 180cst Swap, 3.5% Sulfur

1M 100 metric tonnes NA Up to 15 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest quarter.

Arithmetic average of Platts daily spot assessments in the Contract

Month for the relevant underlying product, rounded to 3 decimal

Balance-of-Month EOB Singapore Euel Oil 180cst Swap, 3.5% Sulfur

E1 02 to E1 31 1 000 metric tonnes NA Current and next Business Days of the current contract month. excluding the first Business Day

NΑ US\$ per tonne US\$0.01 per metric tonne US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

Energy

Singapore Fuel Oil 180 est

A person must not own or control any combination of Fuel Oil 180cst A person must not own or control any combination of Fuel Oil 180cst A person must not own or control any combination of Fuel Oil 180cst Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical contracts on the same side of the Market and in all Contract Months contracts on the same side of the Market and in all Contract Months combined.

> N.A. N.A.

Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

NA Last publication day of the Platts Singapore Fuel Oil 180cst index in Last publication day of the Platts Singapore Fuel Oil 180cst index in the contract month

NA

N.A.

N.A.

N.A.

places.

N.A.

N.A.

N.A.

the contract month

US\$ per tonne

US\$1.00

US\$0.01 per metric tonne

T session: 8.00am - 8:00pm

T+1 session: 8:00.01pm - 4.00am

Last Trading Day: 8.00am - 8.00pm

N.A.

Eneray Energy Singanore Fuel Oil 180 cst Singapore Euel Oil 380cst Singapore Fuel Oil 380cst Swap, 4% Sulfur Balance-of-Month Mini Singapore Fuel Oil 180cst Swap, 3.5% Sulfur

F3

N.A.

N.A.

US\$ per tonne

US\$10.00

combined.

N.A.

NA.

places.

N.A.

N.A.

US\$0.01 per metric tonne

1M 02 to 1M 31 100 metric tonnes N.A. Current and next Business Days of the current contract month. excluding the first Business Day

N.A. US\$ per tonne US\$0.01 per metric tonne US\$1.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am

T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm Last Trading Day: 8.00am - 8.00pm A person must not own or control any combination of Fuel Oil 180cst A person must not own or control any combination of Fuel Oil 380cst Futures, Swaps and any other product traded by the Exchange and/or Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical accepted by the Clearing House for clearing with an identical underiving, that exceeds an equivalent of 300 regular-sized full month

underlying, that exceeds an equivalent of 300 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. NA

N.A.

N.A.

Last publication day of the Platts Singapore Fuel Oil 180cst index in the contract month

N.A.

1 000 metric tonnes NΔ Up to 15 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest guarter.

Arithmetic average of Platts daily spot assessments in the Contract

Last publication day of the Platts Singapore Fuel Oil 380cst index in

Month for the relevant underlying product, rounded to 3 decimal

3M 100 metric tonnes NΔ

Mini Singapore Fuel Oil 380cst Swap, 4% Sulfur

Up to 15 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest guarter.

NA US\$ per tonne US\$0.01 per metric tonne US\$1.00 N.A. T session: 8.00am – 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Fuel Oil 380cst Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 300 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

> N.A. NA.

Energy

Singanore Euel Oil 380cst

Arithmetic average of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

Last publication day of the Platts Singapore Fuel Oil 380cst index in the contract month

the contract month

N.A.

N.A.

N A

Energy Singapore Fuel Oil 380cst Balance-of-Month EOB Singapore Fuel Oil 380cst Swap, 4% Sulfur

E3 02 to E3 31 1 000 metric tonnes NA Current and next Business Days of the current contract month. excluding the first Business Day

NA US\$ per tonne US\$0.01 per metric toppe US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Fuel Oil 380cst Futures. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 300 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. N.A. Last publication day of the Platts Singapore Fuel Oil 380cst index in

the contract month

Singapore Fuel Oil 380cst Balance-of-Month Mini Singapore Fuel Oil 380cst Swap, 4% Sulfur 3M 02 to 3M 31

100 metric tonnes N.A. Current and next Business Days of the current contract month. excluding the first Business Day

NΔ US\$ per tonne US\$0.01 per metric tonne US\$1.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00 01pm - 4 00am Last Trading Day: 8.00am - 8.00pm

Energy

Eutures. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 300 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. N.A. N.A. N.A. Last publication day of the Platts Singapore Fuel Oil 380cst Index in the contract month

GO 1 000 barrels N.A. Up to 12 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest guarter.

N.A US\$ ner barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00 01pm - 4 00am Last Trading Day: 8.00am - 8.00pm

Energy

Gasoil FOB Singapore

Gasoil Swan EOB Singanore

A person must not own or control any combination of Fuel Oil 380cst A person must not own or control any combination of Gasoil Futures. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

> N.A. Arithmetic average of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

Last publication day of the Platts Gasoil FOB Singapore index in the contract month

N.A.

N.A.

N.A.

Enerav Gasoil FOB Singapore Balance-of-Month Gasoil Swap FOB Singapore

GO 02 to GO 31 1.000 barrels NA Current and next Business Days of the current contract month. excluding the first Business Day

NΑ US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am – 8.00pm

A person must not own or control any combination of Gasoil Futures. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1.000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. NA Last publication day of the Platts Gasoil FOB Singapore index in the contract month

N.A.

Energy Kerosene FOB Singapore Kerosene Swap FOB Singapore

KR 1 000 barrels N.A. Up to 12 consecutive months starting with the current month. A new guarter (3 months) will be listed upon expiry of the nearest guarter.

ΝA LIS\$ ner harrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Kerosene accented by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined

N.A. N.A. Arithmetic average of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. N.A. Last publication day of the Platts Kerosene EOB Singapore index in the contract month

Eneray Kerosene FOB Singapore Balance-of-Month Kerosene Swap FOB Singapore

KR 02 to KR 31 1 000 barrels NA Current and next Business Days of the current contract month. excluding the first Business Day

US\$ ner harrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Kerosene Futures, Swaps and any other product traded by the Exchange and/or Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

> N.A. N.A.

N.A.

N.A.

ΝA

Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. Last publication day of the Platts Kerosene FOB Singapore index in the contract month

Energy Naptha CFR Japan Naphtha Swap CFR Japan

NJ 1.000 metric tonnes NA Up to 12 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest quarter.

N.A. US\$ per tonne US\$0.01 per metric tonne US\$10.00 NΑ T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Naphtha CFR Japan Futures, Swaps and any other product traded by the Exchange Japan Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Arithmetic average of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

- N.A.
- N.A.

N.A.

Last publication day of the Platts Naphtha CFR Japan index in the contract month

Energy Nantha CFR Japan Balance-of-Month Nanhtha Swan CER Janan

NJ 02 to NJ 31 1 000 metric tonnes N.A. Current and next Business Days of the current contract month. excluding the first Business Day

N.A. US\$ per tonne US\$0.01 per metric tonne US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Naphtha CFR and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. N.A. Last publication day of the Platts Naphtha CFR Japan index in the contract month

DO 1 000 barrels NA Up to 36 consecutive months starting with the current month. A new year (12 months) will be listed upon expiry of the first quarter.

N.A. US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

Energy

N.A.

N.A.

N.A.

Dubai Crude Oil

Duhai Crude Oil Swan

A person must not own or control any combination of Dubai Crude Oil Futures*. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 2,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

ΝA Cash settlement using arithmetic average of Platts daily spot assessments in the contract month, rounded to three decimal places.

N.A. Last publication day of the Platts Dubai Crude Oil index in the contract month

Energy Dubai Crude Oil Balance-of-Month Dubai Crude Oil Swap

DO 02 to DO 31 1 000 barrels N.A. Current and next Business Days of the current contract month. excluding the first Business Day

N.A. US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Dubai Crude Oil A person must not own or control any combination of Gasoline 92 Eutures*, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 2,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

NA Cash settlement using arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month for the relevant underlying product, rounded to 3 decimal places.

N.A. N.A. N.A. N.A. Last publication day of the Platts Dubai Crude Oil index in the contract Last publication day of the Platts Gasoline 92 RON FOB Singapore index in the contract month month

N.A.

N.A.

N.A.

Eneray Gasoline 92 Gasoline 92 RON FOB Singapore Swap

G2 1.000 barrels NA 3 consecutive months starting with the current month

ΝA US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00 01pm - 4:00am Last Trading Day: 8.00am - 8.00pm

Futures*, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1.000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Cash settlement using arithmetic average of Platts daily spot assessments in the contract month, rounded to three decimal places.

Gasoline 92 Balance-of-Month Gasoline 92 RON FOB Singapore Swap

Energy

G2 02 to G2 31 1,000 barrels NA Current and next Business Days of the current contract month, excluding the first Business Day

NA US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Gasoline 92 Futures*. Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Cash settlement using the arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month (inclusive of the current Business Day), rounded to three decimal places.

N.A.

N.A.

N.A.

Last publication day of the Platts Gasoline 92 RON FOB Singapore index in the contract month

Energy Gasoline 95 Gasoline 95 RON FOB Singapore Swap

G5 1,000 barrels N.A. 3 consecutive months starting with the current month

N.A. US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00om

A person must not own or control any combination of Gasoline 95 Futures*, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Cash settlement using arithmetic average of Platts daily spot assessments in the contract month, rounded to three decimal places.

N.A. N.A.

Last publication day of the Platts Gasoline 95 RON FOB Singapore index in the contract month

Energy Gasoline 95 Balance-of-Month Gasoline 95 RON FOB Singapore Swap

G5_02 to G5_31 1,000 barrels N.A. Current and next Business Days of the current contract month, excluding the first Business Day

N.A. US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8:00am – 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8:00am – 8:00pm

A person must not own or control any combination of Gasoline 95 Futures*, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A. N.A. Cash settlement using the arithmetic average of the remaining assessments of Platts daily spot assessments in the Contract Month (inclusive of the current Business Day), rounded to three decimal places. N.A. N.A. Last publication day of the Platts Gasoline 95 RON FOB Singapore index in the contract month

N.A.

NT 1.000 barrels

Energy

Naptha FOB Singapore

Naphtha Swap FOB Singapore

N.A. Up to 12 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest quarter.

N.A. US\$ per barrel US\$0.01 per barrel US\$10.00 N.A. T session: 8.00am - 8:00pm T+1 session: 8:00.01pm - 4.00am Last Trading Day: 8.00am - 8.00pm

A person must not own or control any combination of Naphtha FOB Singapore Futures*, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 1,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.

N.A.

N.A.

N.A.

N.A.

Last publication day of the Platts Naphtha FOB Singapore index in the contract month

N.A. Last publication day of the Platts Naphtha FOB Singapore index in the contract month

Fuel Oil Visco Spread	Energy Regrade Spread Kerosene vs Gasoil Swaps Differential	Energy Benzene FOB Korea Benzene Swap FOB Korea
	Relosene va Ozabil owapa Diretentizi	
VC ····································	RG	BZ
	1,000 barrels	500 metric tonnes
N.A.	N.A.	N.A.
	Up to 12 consecutive months starting with the current month. A new quarter (3 months) will be listed upon expiry of the nearest quarter.	4 consecutive months starting with the current month
N.A.	Ň.A.	N.A.
US\$ per tonne	US\$ per barrel	US\$ per tonne
US\$0.01 per metric tonne	US\$0.01 per barrel	US\$0.01 per metric tonne
US\$10.00	US\$10.00	US\$5.00
N.A.	N.A.	N.A.
	T session: 8.00am – 8:00pm	8.00am – 4.00am
	T+1 session: 8:00.01pm - 4.00am	Last Trading Day: 8.00 am - 8.00pm
Last Trading Day: 8.00am – 8.00pm	Last Trading Day: 8.00am – 8.00pm	Note: System is not available from 4.00.01am to 7.59.59am daily
Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 2,000 regular-sized full month contracts on the same side of the Market and in all Contract	A person must not own or control any combination of Regrade Spread Futures, Swaps and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 3,000 regular-sized full month contracts on the same side of the Market and in all Contract Months combined.	300 lots of combined limit for Benzene Swap FOB Korea and BOM Benzene Swap FOB Korea
N.A.	N.A.	N.A.
N.A.	N.A.	N.A.
Settlement Prices of the SGX Singapore Fuel Oil 180cst Swap and the SGX Singapore Fuel Oil 380cst Swap in the contract month, rounded	Cash settlement using the arithmetic difference between the Final Settlement Prices of the SGX Kerosene Swap FOB Singapore and the SGX Gasoil Swap FOB Singapore in the contract month, rounded to three decimal places.	Cash settlement using the arithmetic average of Platts daily spot marker physical cargo assessments in the contract month, rounded to three decimal places
N.A.	N.A.	N.A.
N.A.	N.A.	N.A.
Last trading day of SGX Singapore Fuel OII 180cst Swap and the SGX Singapore Fuel Oil 380cst Swap in the contract month	Last trading day of SGX SGX Kerosene Swap FOB Singapore and the SGX Gasoil Swap FOB Singapore in the contract month	Last business day of contract month

N.A.

N.A.

Energy Benzene FOB Korea Balance-of-Month Benzene Swap FOB Korea

BZ_02 to BZ_31 500 metric tonnes N.A. Current and next Business Days of the current Contract Month, excluding the first Business Day

N.A. US\$ per tonne US\$0.01 per metric tonne US\$5.00 N.A. 8.00am – 4.00am Last Trading Day: 8.00 am - 8.00pm Note: System is not available from 4.00.01am to 7.59.59am daily

300 lots of combined limit for Benzene Swap FOB Korea and BOM Benzene Swap FOB Korea

N.A. N.A. Cash settlement using the arithmetic average of the remaining assessments of Platts's daily spot marker physical cargo assessments in the contract month (inclusive of the current Business Day), rounded to three decimal places. N.A. Last business day of contract month

Appendix 4

Contract Specifications of OTCF Swaps

Over-The-Counter Interest Rate Swap Contract Terms

The terms of a registered Over-The-Counter Interest Rate Swap Contract ("IRS Contract Terms") are provided herein and shall comprise:

- (1) Interpretation; and
- (2) Economic Terms; and
- (3) Standard Terms.

In the event of any inconsistency between the Economic Terms and the Standard Terms, the Standard Terms will prevail.

Subject to the SGX-DC Rules (the "Rules") and the Over-The-Counter Financial Derivatives Clearing Member Handbook (the "OTCF Clearing Member Handbook"), the Clearing House will use the IRS Contract Terms applicable to a IRS Contract to calculate the amounts due under the IRS Contract to, or from, the Clearing House in accordance with the OTCF Clearing Member Handbook.

1. Interpretation

- 1.1. "ISDA Definitions" means the 2006 ISDA Definitions as published by the International Swaps and Derivatives Association, Inc. ("ISDA"), and the same are incorporated by reference herein.
- 1.2. Words and expressions used in these IRS Contract Terms shall have the same meaning as the ISDA Definitions, unless provided otherwise in the Rules or the OTCF Clearing Member Handbook.
- 1.3. References in the ISDA Definitions to a "Swap Transaction" shall be deemed to be references to an "IRS Transaction" for the purposes of IRS Contracts.
- 1.4. Save when explicitly specified to the contrary, any occurrences of "Section" shall take on the same meaning as Sections in the ISDA Definitions.
- 1.5. Any amendments to the ISDA Definitions shall apply to the IRS Contracts with a Trade Date falling after the date of such amendment with immediate effect.

2. Economic Terms

Currency	Singapore Dollars	U.S. Dollars
Trade Date	Daily	Daily
[see Section 3.7 for definition]		
Effective Date	In general 2 business days after Trade Date or a	any date as agreed by the parties to the Contract
[see Section 3.2 for definition]		
Termination Date	Up to 30 year tenure, but no longer than	Up to 30 year tenure, but no longer than 10,970
[see Section 3.3 for definition]	10,970 days from present.	days from present.
Notional Amount	As determined by the parties to the contract.	
[see Section 4.7 for definition]		
Additional Payments/Fees	As determined by the parties to the contract.	
(a) the Payer of the Additional		
Payments/Fees (if any)		
(b) the amount of the Additional		
Payments/Fees (specify zero if none)		
Business Day		
[see Section 1.4 for definition]		

Business Day for Settlement	Singapore	London & New York
Business Day for Fixing	Two Singapore and London Banking Days before Reset Date	Two London business days before Reset Date
Business Day Convention	(a) Following	(a) Following
[see Section 4.12 for definition]	(b) Modified Following	(b) Modified Following
	(c) Preceding	(c) Preceding
Fixed Amount:	Notional Amt X Fixed Rate X Fixed Rate Day	Count Fraction
[see Section 4.4 for definition]		
Fixed Rate Payer	As determined by the parties to the contract.	
[see Section 2.1 for definition]		
Fixed Rate Payer Payment Dates [see Section 4.9 for definition of "Payment Date"]	As determined by the parties to the contract.	
Fixed Rate [see Section 5.2(a) for definition]	As determined by the parties to the contract.	
Fixed Rate Day Count Fraction	(a) Actual/Actual	(a) Actual/Actual
[see Section 5.2(b) for definition]	(b) Actual/365 (Fixed)	(b) Actual 365/(Fixed)
· / -	(c) Actual/360	(c) Actual/360
	(d) 30/360	(d) 30/360
	(e) 30E/360	(e) 30E/360

	(f) 30E/360 (ISDA)	(f) 30E/360 (ISDA)
	(g) IMM Settlement Dates	(g) IMM Settlement Dates
Fixed Rate Payer Period End Dates	As determined by the parties to the Period shall be 1M, 3M, 6M or 1Y.	e contract, provided that each Fixed Rate Payer Calculation
Floating Amount: [see Section 4.5 for definition]	Notional Amt X [Floating Rate + Sp	read (if any)] X Floating Rate Day Count Fraction
Floating Rate Payer [see Section 2.2 for definition]	As determined by the parties to the c	ontract.
Floating Rate Payer Payment Dates [see Section 4.9 for definition of "Payment Date"]	As determined by the parties to the c	ontract.
Floating Rate for initial Calculation Period [see Section 4.13 for definition of "Calculation Period"]	As determined by the parties to the c	ontract.
Floating Rate Option [see Section 6.2(h) for definition]	SGD-SOR-VWAP	USD-LIBOR-BBA
Designated Maturity [see Section 7.3(b) for definition of "Designated Maturity"]	1	e contract, provided that each Fixed Rate Payer Calculation

Spread	As determined by the parties to the contract.		
[see Section 6.2(e) for definition]	on]		
Reset Dates	As determined by the parties to the contract.		
see Section 6.2(b) for definition]			
Floating Rate Day Count Fraction	(a) Actual/Actual	(a) Actual/Actual	
[see Section 6.2(f) for definition]	(b) Actual/365 (Fixed)	(b) Actual 365/(Fixed)	
	(c) Actual/360	(c) Actual/360	
	(d) 30/360	(d) 30/360	
	(e) 30E/360	(e) 30E/360	
	(f) 30E/360 (ISDA)	(f) 30E/360 (ISDA)	
	(g) IMM Settlement Dates	(g) IMM Settlement Dates	
Calculation Agent	SGX-DC shall be the calculation agent for IRS Contracts.		
[see Section 4.14 for definition]			

3. Standard Terms

3.1. <u>Business Days</u>

The Business Days specified in the calendar published by the Clearing House from time to time will apply to an IRS Contract.

3.2. <u>Payments under an IRS Contract</u>

Payments under, and in respect of, an IRS Contract shall be calculated by the Clearing House and shall be made by, or to, the Clearing Member in accordance with the provisions of the Rules and OTCF Clearing Member Handbook.

3.3. The Rules and OTCF Clearing Member Handbook

An IRS Contract shall be subject to the Rules and OTCF Clearing Member Handbook, which shall form a part of its terms. In the event of any inconsistency between these IRS Contract Terms and the Rules and OTCF Clearing Member Handbook, the Rules and OTCF Clearing Member Handbook shall prevail.

3.4. <u>Governing Law</u>

Each IRS Contract shall be governed by and construed in accordance with the laws of Singapore.

3.5. Third Party Rights

A person who is not a party to this IRS Contract shall have no rights under or in respect of it. Save as otherwise provided in the Rules, rights of third parties to enforce any terms of this FXF Contract pursuant to the Contracts (Rights of Third Parties) Act (Chapter 53B) are expressly excluded.

Over-The-Counter FX Forwards Contract Terms

The terms of a registered Over-The-Counter FX Forward Contract ("FXF Contract Terms") are provided herein and shall comprise:

- (1) Interpretation; and
- (2) Economic Terms; and
- (3) Standard Terms.

In the event of any inconsistency between the Economic Terms and the Standard Terms, the Standard Terms will prevail.

Subject to the SGX-DC Rules (the "Rules") and the Over-The-Counter Financial Derivatives Clearing Member Handbook (the "OTCF Clearing Member Handbook"), the Clearing House will use the FXF Contract Terms applicable to a FXF Contract to calculate the amounts due under the FXF Contract to, or from, the Clearing House in accordance with the OTCF Clearing Member Handbook.

1. Interpretation

- 1.1. "ISDA Definitions" means the 1998 FX and Currency Option Definitions (including Annex A thereto) as published by the International Swaps and Derivatives Association, Inc. ("ISDA"), the Emerging Markets Traders Association ("EMTA") and the Foreign Exchange Committee ("FXC"), and the same are incorporated by reference herein.
- 1.2. "Template Terms" means, singly and collectively, the 2004 SFEMC, EMTA & FXC Template Terms for:

1.2.1. CNY/USD Non-Deliverable FX Transaction;

1.2.2. IDR/USD Non-Deliverable FX Transaction;

- 1.2.3. INR/USD Non-Deliverable FX Transaction;
- 1.2.4. KRW/USD Non-Deliverable FX Transaction;

1.2.5. MYR/USD Non-Deliverable FX Transaction;

- 1.2.6. TWD/USD Non-Deliverable FX Transaction; and
- 1.2.7. PHP/USD Non-Deliverable FX Transaction,

and the same are incorporated by reference herein.

"SFEMC" means Singapore Foreign Exchange Market Committee

- 1.3. Words and expressions in these FXF Contract Terms shall have the same meaning as the ISDA Definitions or the Template Terms, unless provided otherwise in the Rules or the OTCF Clearing Member Handbook.
- 1.4. References in the ISDA Definitions and the Template Terms to a "Non-Deliverable FX Transaction" shall be deemed to be references to a "FXF Transaction" for the purposes of FXF Contracts.
- 1.5. Save when explicitly specified to the contrary, any occurrences of "Section" shall take on the same meaning as Sections in the ISDA Definitions.
- 1.6. Any amendments to the ISDA Definitions and the Template Terms shall apply with immediate effect to the FXF Contracts with a Trade Date falling after the date of such amendment with immediate effect.

2. FXF Contract Terms

Trade Date:	Daily
[see Section 1.25 for definition]	
Reference Currency	Local Currencies:
[see Section 1.19 for definition]	Chinese Yuan (CNY)
	Indonesian Rupiah (IDR)
	Indian Rupee (INR)
	Korean Won (KRW)
	Malaysian Ringgit (MYR)
	New Taiwan Dollar (TWD)
	Philippine Peso (PHP)
Notional Amount:	US Dollars
[see Section 1.17 for definition]	
Forward Rate:	As determined by the parties to the contract
[see Section 2.1(a) for definition]	
Reference Currency Buyer	As determined by the parties to the contract
[see Section 1.20 for definition]	
Reference Currency Seller	As determined by the parties to the contract
[see Section 1.22 for definition]	

Settlement Currency	US Dollar	
[see Section 1.16(b) for definition]		
Settlement Date	As determined by the parties,	but no longer than 370 days from present, subject to adjustment in
[see Section 1.24 for definition]	accordance with the Template	Terms relating to the Reference Currency of the Transaction if the
	Scheduled Valuation Date is ac	ljusted in accordance with the Following Business Day Convention
	or if Valuation Postponement a	pplies.
Settlement	Since FXF is non-deliverable, i	t shall be net settled.
Settlement Rate Option	CNY (SAEC):	9:15:00 Beijing time
(with Thomson Reuters Ref Page;	KRW(KFTC18):	15:30:00 Seoul time
SG time)	INR (RBIB):	12:00:00 Mumbai time
[see Section 1.16(d) for definition]	TWD (TAIFX1/Telerate6161):	11:00:00 Taipei time
	IDR (ABSFIX01):	11:30:00 Singapore time
	PHP (PDSPESO):	11:30:00 Manila time
	Fixed one Manila day in advance	
	MYR (MYRFIX2):	11:10:00 Kuala Lumpur time
Fixing Date	Scheduled valuation date, subje	ect to adjustment in accordance with the Template Terms relating to
	the Reference Currency of the Transaction	
Valuation Date		
[see Section 1.16(f) for definition]		
Disruption Events		
[see Section 5.1(a) for definition]		

Price Source Disruption Applicable [see Section 5.1(d)(xi) for definition]

Disruption Fallbacks [see Section 5.2(a) for definition]

1. Valuation Postponement [see the Template Terms relating to the Reference Currency of the transaction]

2. Fallback Reference Price [see Section 5.2(c)(v) for definition]

3. Fallback Survey Valuation Postponement [see the Template Terms relating to the Reference Currency of the transaction]

4. Calculation Agent Determination of Settlement Rate [see Section 5.2(c)(ii) for definition]

Other Terms

Unscheduled Holiday [see the Template Terms relating to the Reference Currency of the transaction] "Deferral Period" for Unscheduled Holiday [see the Template Terms relating to the Reference Currency of the transaction]

Cumulative Events	· · · · · · · · · · · · · · · · · · ·
[see the Template Terms relating to the	
Reference Currency of the transaction]	
Maximum Days of Postponement	[14 calendar days]
Business Day for fixing	KRW : Seoul
	CNY : Beijing
Relevant City for Business Day for	TWD : Taipei
Valuation Date	INR : Mumbai
[see Section 1.1(b) for definition]	PHP : Manila
	MYR : Kuala Lumpur
	IDR : Jakarta and Singapore
Business Days for Settlement	All Business Days for Settlement for FXF Contracts shall follow New York Business Days.
Relevant City for Business Day for	
Settlement Date	
[see Section 1.1(a) for definition]	
Calculation Agent	SGX-DC shall be the Calculation Agent for EXE Contracts

Calculation AgentSGX-DC shall be the Calculation Agent for FXF Contracts.[see Section 1.3 for definition]

3. Standard Terms

3.1. Business Days

The Business Days specified in the calendar published by the Clearing House from time to time will apply to a FXF Contract.

3.2. Payments under a FXF Contract

Payments under, and in respect of, a FXF Contract shall be calculated by the Clearing House and shall be made by, or to, the Clearing Member in accordance with the provisions of the Rules and OTCF Clearing Member Handbook.

3.3. The Rules and OTCF Clearing Member Handbook

A FXF Contract shall be subject to the Rules and OTCF Clearing Member Handbook, which shall form a part of its terms. In the event of any inconsistency between these FXF Contract Terms and the Rules and OTCF Clearing Member Handbook, the Rules and OTCF Clearing Member Handbook shall prevail.

3.4. Governing Law

Each FXF Contract shall be governed by and construed in accordance with the laws of Singapore.

3.5. Third Party Rights

A person who is not a party to this FXF Contract shall have no rights under or in respect of it. Save as otherwise provided in the Rules, rights of third parties to enforce any terms of this FXF Contract pursuant to the Contracts (Rights of Third Parties) Act (Chapter 53B) are expressly excluded.