ICE Trade Vault Service and Pricing Schedule

The following fee structure for ICE Trade Vault is applicable to the reporting of data in respect of swaps in the Commodity, FX, Credit, and Interest Rates Asset Class to the ICE SDR Service:

- o Repository fees will be charged based on a published rate per quantity unit or notional for each asset class as set forth in the following:

    - Credit Asset Class - Annex A
    - Commodity Asset Class - Annex B.
    - FX Asset Class - Annex C.
    - Interest Rates Asset Class - Annex D.

- Repository Fees for all asset classes will be assessed upon acceptance of the initial trade record for a Swap by the SDR and will be charged as follows:

    - o Uncleared/Bilateral Swap or Uncleared/Bilateral Option[1] – A Repository Fee will be charged to each Participant that is a party to the Trade, except that only the party that is not the designated reporting party under CFTC Regulations will be charged in the case of a voluntary supplemental report (as such term is used in Part 45 of the CFTC Regulations);

    - o On-Facility "Intended-To-Be-Cleared" (ITBC) Trades[2] – No Repository Fee will be charged to either Participant that is a party to an original (aka "alpha") Swap or Option executed on a swap execution facility (SEF) or designated contract market (DCM) and submitted for clearing contemporaneously with execution. A repository fee will be charged to the SEF or DCM submitting the original Swap or Option to ICE Trade Vault;

    - o Clearing Swap or Clearing Option – A Repository Fee will be charged to the Derivatives Clearing Organization ("DCO") that cleared the Swap or Option; and

    - o Exchange for Related Position ("EFRP") – No Repository Fee will be charged to Participants that are a party to the EFRP.

- Investment Manager Participants[3]: Investment Manager Participants reporting trades on behalf of the funds and client accounts they manage or advise will be charged as a single entity for all trade sides for which they are listed as adviser. The underlying funds and client accounts will not be charged a fee. The minimum and cap listed herein will be applied at the Asset/Investment Manager/Agent Participant level, inclusive of their own trades or any trades reported by them as an Agent.

- For all transactions reported by a Third Party Reporter, the Third Party Reporter will only be charged a Repository Fee for those transactions it reports on behalf of non-Participants of ICE Trade Vault

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[1] The references to Uncleared/Bilateral Swap and Uncleared/Bilateral Option include an original (aka "alpha") Swap or Option that is **not** executed on a swap execution facility or designated contract market but is submitted for clearing following execution.

[2] This term refers to trades that are (i) of a type accepted for clearing by a DCO and (ii) intended to be submitted for clearing contemporaneously with execution.

[3] The term "Investment Manager Participant" refers to a firm that provides investment advice to or otherwise acts as investment manager for third party accounts or funds for compensation.

and will be charged in the following manner:

- o If the Third Party Reporter is reporting only for one non-Participant, it will be charged the Repository Fee.
- o The minimum and cap listed herein will be applied to each non-participant for which the Third Party Reporter is reporting.

- For all transactions reported by a Third Party Reporter on behalf of a Participant, the Participant will only be charged a Repository Fee for those transactions.

- Trusted Sources will be charged a $10,000 connection fee at the time of onboarding and a minimum monthly fee of $5,000 per month across all asset classes. In a given month, each Trusted Source shall be invoiced the greater of (i) the total of all Repository Fees incurred across all asset classes, or (ii) $5,000.

- The minimum monthly invoice per Participant (other than Trusted Sources) will be $375 across all asset classes. In a given month, each Participant shall be invoiced the greater of (i) the total of all Repository Fees incurred by Participant across all asset classes, or (ii) $375. The minimum monthly invoice only applies to Participants who have open positions in any asset class in the SDR.

- The maximum monthly invoice ("Cap") per Participant (other than Trusted Sources) will be $44,500 across all asset classes, including Commodities, Credit, FX, and Interest Rates. In a given month, no fee will be due to ICE Trade Vault from a Participant (other than a Trusted Source) above this amount.

- No rebates, share of profits, or dividends will be paid to any Participant or group of Participants.

- No additional fees will be assessed by ICE Trade Vault for storing trade data, processing life-cycle events, valuations, supporting upgrades, integrating and maintaining APIs or help desk assistance.

- ICE Trade Vault will only assess fees as detailed above. All fees charged by ICE Trade Vault are uniform, equitable and non-discriminatory and payments are due 30 calendar days from the invoice date.

- ICE Trade Vault invoices will be available by the 4th business day of each month via the web portal and it is the responsibility of each Participant or Trusted Source to print and/or export the invoices for payment as the invoices will not be sent to Participants. An accounting contact should be maintained in the Contact page to receive notifications of ICE Trade Vault invoice availability.

- A Participant has 30 days from the date of invoice to reconcile and dispute any charges, after which the Participant will be deemed to have accepted all charges as correct.

Service and Pricing Schedule

Annex A: Repository Fees for the Credit Asset Class

Set forth below are the Repository Fee Rates to be applied upon acceptance of an initial trade record in respect of Swaps in the Credit Asset Class to the ICE SDR Service:

CREDIT ASSET CLASS

Repository Fee rates for the Credit Asset Class will be as follows:

Contract Type Rate	Cleared Swap Rate	Cleared Option
Index notional	$0.45 per $1mm notional	$0.45 per $1mm

Contract Type Uncleared/Bilateral Option	Uncleared/Bilateral Swap	
Index notional	$0.45 per $1mm notional	$0.45 per $1mm

Annex B: Repository Fees for the Commodity Asset Class

Set forth below are the Repository Fee Rates to be applied upon acceptance of an initial trade record in respect of Swaps in the Commodity Asset Class to the ICE SDR Service:

Uncleared/Bilateral Swap, Uncleared/Bilateral Option, Cleared Swap or Cleared Option:

Market Type	Quantity Unit/Notional Unit	Rate when Contract Type = Swap or Forward	Rate when Contract Type = Option or Swaption
COMMODITY INDEX	AUD	$0.00000079	$0.0000012
COMMODITY INDEX	CAD	$0.00058	$0.00087
COMMODITY INDEX	EUR	$0.00078	$0.0012
COMMODITY INDEX	GBP	$0.00091	$0.0014
COMMODITY INDEX	INDEX LEVEL	$0.00000011	$0.00000017
COMMODITY INDEX	ETF UNIT	$0.000028	$0.000042
COMMODITY INDEX	JPY	$0.0000000091	$0.000000014
COMMODITY INDEX	USD	$0.0000011	$0.0000017
CONTINENTAL FINANCIAL NATURAL GAS	KW	$0.00001	.000015
CONTINENTAL FINANCIAL NATURAL GAS	MWH	$0.00034	$0.00051
CONTINENTAL FINANCIAL NATURAL GAS	THERMS	$0.00000034	$0.00000051
CONTINENTAL FINANCIAL POWER	MWH	$0.00062	$0.00093
CONTINENTAL PHYSICAL NATURAL GAS	MWH	$0.00034	$0.00051
CONTINENTAL PHYSICAL POWER	MWH	$0.00062	$0.00093
EMISSIONS	CALIFORNIA CARBON ALLOWANCES	$0.00030	$0.00045
EMISSIONS	CAR	$0.00025	$0.00038
EMISSIONS	CFI	$0.00025	$0.00038
EMISSIONS	CRE	$0.00032	$0.00048
EMISSIONS	CROSS STATE AIR POLLUTION RULE TR NOX ANNUAL ALLOWANCE	$0.12	$0.18
EMISSIONS	CROSS STATE AIR POLLUTION RULE TR NOX OZONE SEASON TRADING PROGRAM ALLOWANCE	$0.12	$0.18
EMISSIONS	CROSS STATE AIR POLLUTION RULE TR SO2 GROUP 1 ALLOWANCE	$0.024	$0.036

EMISSIONS	CROSS STATE AIR POLLUTION RULE TR SO2 GROUP 2 ALLOWANCE	$0.024	$0.036
EMISSIONS	CRT	$0.00025	$0.00038
EMISSIONS	ERU	$0.00032	$0.00048
EMISSIONS	EU ALLOWANCE	$0.00032	$0.00048
EMISSIONS	EU CREDIT	$0.00032	$0.00048
EMISSIONS	EUAA	$0.00032	$0.00048
EMISSIONS	MT	$0.00025	$0.00038
EMISSIONS	MWH REPRESENTING CONNECTICUT CLASS 1 RECS	$0.0020	$0.0030
EMISSIONS	MWH REPRESENTING MASSACHUSETTS CLASS 1 RECS	$0.0020	$0.0030
EMISSIONS	MWH REPRESENTING NEW JERSEY CLASS 1 RECS	$0.0010	$0.0015
EMISSIONS	REGIONAL GREENHOUSE GAS INITIATIVE	$0.00010	$0.00015
EMISSIONS	SFI	0.0040	0.0060
EMISSIONS	TON	$0.00010	$0.00015
FINANCIAL AGRICULTURES	BOARD FEET	$0.00002	$0.00003
FINANCIAL AGRICULTURES	BU	0.000053	0.000079
FINANCIAL AGRICULTURES	CWT	$0.00066	$0.0010
FINANCIAL AGRICULTURES	KG	$0.000015	$0.000022
FINANCIAL AGRICULTURES	LBS	$0.0000066	$0.0000098
FINANCIAL AGRICULTURES	MT	$0.015	$0.022
FINANCIAL AGRICULTURES	ST	$0.0026	$0.0039
FINANCIAL COAL	MT	$0.000072	$0.00011
FINANCIAL COAL	ST	$0.000072	$0.00011
FINANCIAL NATURAL GAS	MMBTU	$0.000021	$0.000031
FINANCIAL NATURAL GAS	10,000 USD	$0.000030	$0.000045
FINANCIAL NATURAL GAS	BCF	$0.000000000021	$0.000000000031

FINANCIAL NATURAL GAS	MCF	$0.000021	$0.000031
FINANCIAL NATURAL GAS	GJ	$0.000022	$0.000033
FINANCIAL NATURAL GAS LIQUIDS	BBL	$0.00032	$0.00049
FINANCIAL NATURAL GAS LIQUIDS	GAL	$0.0000077	$0.0000116
FINANCIAL NATURAL GAS LIQUIDS	LBS	$0.0000013	$0.0000019
FINANCIAL NATURAL GAS LIQUIDS	MT	$0.0028	$0.0042
FINANCIAL OIL	BBL	$0.00013	$0.00020
FINANCIAL OIL	GAL	$0.000003	$0.000005
FINANCIAL OIL	KL	$0.000021	$0.000032
FINANCIAL OIL	L	$0.000000021	$0.000000032
FINANCIAL OIL	MT	$0.0011	$0.0016
FINANCIAL OIL	CUBIC METERS	$0.000892	$0.0014
FINANCIAL OIL	RIN	$0.0001	$0.00015
FINANCIAL POWER	MW	$0.015	$0.023
FINANCIAL POWER	MWH	$0.00064	$0.00096
FINANCIAL POWER	KW	$0.000015	$0.000023
FREIGHT	CHARTER DAY	$0.48	$0.71
FREIGHT	MT	$0.00035	$0.00053
FREIGHT	WORLDSCALE POINTS	$0.00035	$0.00053
METALS	DMT	$0.0020	$0.0030
METALS	FTO	$0.00013	$0.00020
METALS	LBS	$0.00000076	$0.0000011
METALS	MT	$0.0017	$0.0025
METALS	ST	$0.0019	$0.0028
METALS	T/O	$0.000000052	$0.000000078
PHYSICAL CRUDE OIL	BBL	$0.00013	$0.00020
PHYSICAL CRUDE OIL	CUBIC METERS	$0.00085	$0.0013
PHYSICAL CRUDE OIL	GAL	$0.0000032	$0.0000048
PHYSICAL NATURAL GAS	GJ	$0.000022	$0.000033
PHYSICAL NATURAL GAS	MMBTU	$0.000021	$0.000031

PHYSICAL NATURAL GAS LIQUIDS	BBL	$0.00032	$0.00049
PHYSICAL NATURAL GAS LIQUIDS	CUBIC METERS	$0.0000032	$0.0000048
PHYSICAL NATURAL GAS LIQUIDS	GAL	$0.0000077	$0.000012
PHYSICAL NATURAL GAS LIQUIDS	LBS	$0.0000013	$0.0000019
PHYSICAL POWER	MW	$0.023	$0.015
PHYSICAL POWER	MWH	$0.00064	$0.00096
PHYSICAL REFINED PRODUCTS	BBL	$0.00013	$0.00020
PHYSICAL REFINED PRODUCTS	GAL	$0.0000032	$0.0000048
UK FINANCIAL NATURAL GAS	THERM	$0.0000021	$0.0000031
UK FINANCIAL NATURAL GAS	MMBTU	$0.0000021	$0.0000031
UK FINANCIAL POWER	MWH	$0.00024	$0.00036
UK PHYSICAL NATURAL GAS	THERM	$0.0000021	$0.0000031
UK PHYSICAL POWER	MWH	$0.00024	$0.00036
VIRTUAL CURRENCIES	XBT	$0.10	$0.15
VIRTUAL CURRENCIES	ETH	$0.004	$0.004
VIRTUAL CURRENCIES	XRP	$0.0000046	$0.0000046
VIRTUAL CURRENCIES	BCH	$0.0043	$0.0043
VIRTUAL CURRENCIES	BSV	$0.002	$0.002
WEATHER	INDEX POINT	$0.016	$0.024
All	EXOTIC – Per Trade Fee	$16.00	$16.00

Annex C: Repository Fees for the FX Asset Class

Set forth below are the Repository Fee Rates to be applied upon acceptance of an initial trade record in respect of Swaps in the FX Asset Class to the ICE SDR Service:

Asset Class	Quantity Unit/Notional Unit	Rate when Contract Type = Swap or Forward	Rate when Contract Type = Option or Swaption
FX	BRL	$0.00000014	$0.00000021
FX	CAD	$0.00000048	$0.00000072
FX	CNY	$0.00000014	$0.00000021
FX	EUR	$0.0000005	$0.00000075
FX	GBP	$0.00000069	$0.0000001
FX	USD	$0.00000045	$0.00000068

Annex D: Repository Fees for the Interest Rates Asset Class

Set forth below are the Repository Fee Rates to be applied upon acceptance of an initial trade record in respect of Swaps in the Interest Rates Asset Class to the ICE SDR Service:

Asset Class	Swaps rate	Options/Swaptions Rate
Interest Rates (USD)	$1.02 per $1mm notional	$1.53 per $1mm notional
Interest Rates (Euros)	$1.08 per €1mm notional	$1.62 per €1mm notional
Interest Rates (Pounds)	$1.49 per £1mm notional	$2.24 per £1mm notional