April 17, 2024

Submitted via CFTC Portal

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

> Re: *tpSEF Inc. – Regulation 40.2 Certification of Mexican MXN F-TIIE/USD SOFR Cross-Currency Basis Swap (tpSEF Submission #24-02P)*

Dear Mr. Kirkpatrick:

tpSEF Inc. ("tpSEF") hereby notifies the Commodity Futures Trading Commission (the "Commission") of its intent to list Basis Swaps -- MXN F-TIIE/USD SOFR Cross-Currency Basis Swap (the "Contract") on tpSEF's swap execution facility. tpSEF intends to list this Contract on April 19, 2024.

Pursuant to Commission Regulation 40.2, this submission includes:

   i.   The intended listing date – April 19, 2024;

   ii.   A certification by tpSEF that: (a) the Contract complies with the Commodity Exchange Act, as amended, and the Commission regulations thereunder; and (b) concurrent with this submission, tpSEF posted on its website: (i) a notice of pending certification of the Contract, and (ii) a copy of this submission, attached as Exhibit A;

   iii. The terms and conditions of the Contract, attached as Exhibit B; and

   iv.   An explanation and analysis of the Contract's compliance with applicable core principles and Commission regulations, attached as Exhibit C.

tpSEF is listing the Contract by virtue of updating the terms and conditions of Basis Swaps originally submitted to the Commission for self-certification pursuant to Commission Regulation

40.2 on October 26, 2017, and last updated December 12, 2020 . A copy of the terms and conditions marked to show changes from the version submitted on December 10, 2020 is attached as Exhibit D.

Questions regarding this submission should be directed to Brian Donnelly, Chief Compliance Officer, at (201) 984-6956 or by email at bddonnelly@tullettprebon.com.

Very truly yours,

tpSEF Inc.

By:_____

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: April 17, 2024

Enclosures

cc: CFTC Division of Market Oversight (dmosubmissions@cftc.gov)
        Nancy Markowitz, CFTC (nmarkowitz@cftc.gov)

EXHIBIT A

CERTIFICATIONS PURSUANT TO SECTION 5c OF THE COMMODITY EXCHANGE
ACT, 7 U.S.C. §7A-2 AND COMMODITY FUTURES TRADING COMMISSION
REGULATION 40.2, 17 C.F.R. §40.2

tpSEF Inc. ("tpSEF") hereby certifies that: (i) Basis Swaps -- MXN F-TIIE/USD SOFR Cross-Currency Basis Swap (the "Contract") complies with the Commodity Exchange Act, 7 U.S.C. §1 *et seq*. and Commodity Futures Trading Commission ("Commission") regulations thereunder; and (ii) concurrent with this submission, tpSEF posted on its website: (a) a notice of pending certification of the Contract with the Commission and (b) a copy of this submission.

tpSEF Inc.

By:_____

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: April 17, 2024

EXHIBIT B

Terms and Conditions

Summary:	This covers basis swaps ("Basis Swaps").
Limitations on Available Selections and Default Settings:	The terms under which a Basis Swap may be traded are as specified in these terms and conditions and in the attached tables. For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest. For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options. The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET" is considered a location. In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them. It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency. In some cases, the same contract might have different terms depending on the market in which it is traded (*e.g.*, London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) ISDA Settlement Matrix (if Optional Early Termination applies) (c) ISDA OTC Taxonomies (d) FpML Location Codes For convenience, certain terms are mapped to their FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate
ISDA OTC Base Product:	IR Swap

ISDA OTC Sub-Product:	Basis
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as a number of Business Days or Banking Days from the Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount 1 ("FA1"):	
FA1 Payer ("payerPartyReference"):	As specified by the parties.
FA1 Currency Amount ("notionalAmount"):	As specified by the parties.
FA1 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
FA1 first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
FA1 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA1 initial Floating Rate:	As specified by the parties.
FA1 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA1 Designated Maturity ('indexTenor"):	As specified by the parties.
FA1 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA1 Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA1 Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA1 Spread:	As specified by the parties.
FA1 Day Count Fraction:	As specified by the parties.
FA1 Reset Dates ("resetDate"):	As specified by the parties.
FA1 Method of Averaging:	As specified by the parties.
FA1 Compounding:	As specified by the parties.
FA1 Compounding Dates:	In the event Compounding is selected, as selected by the parties.
FA1 Compounding Method (Compounding OR Flat Compounding):	In the event Compounding is selected, as selected by the parties.
FA1 Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
FA1 Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA1 Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days

FA1 Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA1 Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA1 Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount 2 ("FA2"):	
FA2 Payer ("payerPartyReference"):	As specified by the parties.
FA2 Currency Amount ("notionalAmount"):	As specified by the parties.
FA2 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
FA2 first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
FA2 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA2 initial Floating Rate:	As specified by the parties.
FA2 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA2 Designated Maturity ("indexTenor"):	As specified by the parties.
FA2 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA2 Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA2 Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA2 Spread:	As specified by the parties.
FA2 Day Count Fraction:	As specified by the parties.
FA2 Reset Dates ("resetDate"):	As specified by the parties.
FA2 Method of Averaging:	As specified by the parties.
FA2 Compounding:	As specified by the parties.
FA2 Compounding Dates:	In the event Compounding is selected, as selected by the parties.
FA2 Compounding Method (Compounding OR Flat Compounding):	In the event Compounding is selected, as selected by the parties.
FA2 Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
FA2 Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA2 Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA2 Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA2 Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA2 Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Mark-to-Market Currency Swap:	
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are in different Currencies.
Variable Currency Payer:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.
Constant Currency Payer:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.

Currency Exchange Rate:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap and ISDA MTM Matrix is not applicable.
ISDA MTM Matrix:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.
Initial Exchange:	
Initial Exchange Date:	As specified by the parties.
FA1 Payer Initial Exchange Amount:	As specified by the parties.
FA2 Payer Initial Exchange Amount:	As specified by the parties.
Interim Exchanges:	
Interim Exchange Dates:	As specified by the parties.
FA1 Payer Interim Exchange Amount:	As specified by the parties.
FA2 Payer Interim Exchange Amount:	As specified by the parties.
Final Exchanges:	
Final Exchange Date:	As specified by the parties.
FA1 Payer Final Exchange Amount:	As specified by the parties.
FA2 Payer Final Exchange Amount:	As specified by the parties.
Optional Early Termination:	
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties if only one party can terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
Optional Early Termination Procedure for Exercise:	
Commencement Date:	As specified by the parties, if the Option Style is American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Optional Early Termination Settlement Terms:	
Cash Settlement:	As specified by the parties.

ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a single currency Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a cross currency Transaction whose currencies are listed as a "currency pair" in the Cross Currency Settlement Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days Convention:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or "Cash Price—Alternate" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—Adjusted," "Par Yield Curve—Unadjusted" or "Zero Coupon Curve—Adjusted" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

Basis Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	HKHK
HUF	Hungarian Forint	HUBU

JPY	Japanese Yen	JPTO
MXN	New Mexican Peso	MXMC
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

Basis Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

Basis Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

Basis Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN, ZAR	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP, ZAR	Plus Zero

Basis Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective Date	Latest Effective Date	Earliest Termination Date	Latest Termination Date
N/A	N/A	N/A	N/A	N/A

Basis Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A

DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HKD	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
JPY	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	5,000,000	100,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

Basis Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
AUD-AONIA-OIS-COMPOUND-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSW-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-Annual Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-Swap Rate-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-CORRA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reference Banks				
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
CHF-TOIS-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
CLP-CLICP-Bloomberg	All quoted tenors	N/A	A/360	N
CLP-*Unidad de Fomento (UF/CLF)*	All quoted tenors	N/A	A/360	N
CZK-PRIBOR-PRBO	All quoted tenors	N/A	A/360	N
DKK-CIBOR-DKNA13	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR-DKNA13-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR2-DKNA13	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CITA-DKNA14-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
DKK-DKKOIS-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SwapMarker				
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-3 Month-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-AVERAGE	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-COMPOUND-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-Swap-Index	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Act/365	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TMM-CDC-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-SONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-WMBA-RONIA-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
GBP-WMBA-SONIA-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HIBOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HONIX-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
HUF-BUBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL-TONAR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reuters-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reuters-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Banxico-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
MXN-*Unidades de Inversión* (UDI)	N/A	N/A	See below	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	N
NOK-NIBOR-NIBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NOK-NIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
NZD-NZIONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
NZD-Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
NZD-Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
PLN-WIBOR_WIBO	All quoted tenors	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	N
SEK-SIOR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SGD-SONAR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SONAR-OIS-VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-VWAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
TRY-TRYIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	N
USD-BSBY	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-Federal Funds-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-SOFR	All quoted tenors	N/A	Per ISDA 2006	N
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-S&P Index-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
High Grade				
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	N
USD-SOFR-COMPOUND	All quoted tenors	N/A	Prior to publication of a supplement to ISDA 2006 including USD-SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	No
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-Secondary Market	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-T19901	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-T500	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	N

Definition of CLP-*Unidad de Fomento* (UF/CLF)

CLP-*Unidad de Fomento (UF/CLF)*	For any Reset Date, the difference between the value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile* for the calendar day preceding such Reset Date and the value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile* for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the CLP-*Unidad de Fomento* (UF/CLF). If for any Reset Date there is no published value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile*,

	the Calculation Agent shall determine the CLP-*Unidad de Fomento* (UF/CLF) for such day.

Definition of MXN-*Unidades de Inversión* (UDI)

MXN-*Unidades de Inversión* (UDI)	For any Reset Date, the difference between the value of the *unidad de inversión* (UDI) as published by the Mexican *Banco de México* for the calendar day preceding such Reset Date and the value of the *unidad de inversión* (UDI) as published by the Mexican *Banco de México* for such Reset Date.
	The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the CLP MXN-*Unidades de Inversión* (UDI). If for any Reset Date there is no published value of the MXN-*Unidades de Inversión* (UDI) as certified by the Mexican *Banco de México,* the Calculation Agent shall determine the CLP MXN-*Unidades de Inversión* (UDI) for such day.

Basis Requirements and Defaults
(Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day Convention:		No Adjustment
Termination Date Business Day Convention:		No Adjustment
Period End Dates:		Payment Dates
Payment Date Business Day Convention:		Modified Following
Linear Interpolation:		Applicable only to long or short stub periods
Designated Maturities for Linear Interpolation:		Tenors quoted next shorter and longer than the actual Calculation Period length
Compounding:		Inapplicable
Compounding Business Day Convention:	Same as Business Day Convention for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted Average	Unweighted Average
Compounding Method:	Straight Compounding, Flat Compounding, Spread Exclusive Compounding	
ISDA MTM Matrix		Applicable (to Mark-to-Market Cross Currency Swaps)
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day Convention:		Following
Interim Exchange Date Business Day Convention:		Modified Following
Final Exchange Date:		Termination Date
Final Exchange Date Business Day Convention:		Modified Following

Definition of USD-SOFR-COMPOUND

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006.

Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{SOFR}_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

"d_0", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to d_0, each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period;

"SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR_i", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a USD-SOFR-COMPOUND Index Cessation Event has not occurred, then SOFR_i for that day "i" will be SOFR as published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published

on the Federal Reserve's Website;

"n$_i$" is the number of calendar days in the relevant Calculation Period on which the rate is SOFR$_i$;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

(a)   a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;

(b)   the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or

(c)   a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov, or any Successor Source.

Basis Requirements and Defaults
(Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early Termination	Applicable (i.e., Transaction is **not** "torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date Business Day Convention:		Following
Mandatory Early Termination Date		Modified Following

Business Day Convention:		

Basis Requirements and Defaults
(Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement Currency (TARGET Settlement Day for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration Time	Other than Expiration Date, the Expiration Time

Basis Requirements and Defaults
(Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Cross Currency Settlement Matrix:		Applicable, if cross currency swap with currency pair included in Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date **but** one Valuation Business Day before Mandatory/Optional Early Termination Date for MXN and same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR-DKNA13" or "DKK-CIBOR-DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date Business Day Convention:		Following
Cash Settlement Method:	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as Notional Amount, otherwise as specified in ISDA Master

		Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	

EXHIBIT C

EXPLANATION AND ANALYSIS OF THE CONTRACTS' COMPLIANCE WITH
APPLICABLE CORE PRINCIPLES AND COMMISSION REGULATIONS

As required by Commodity Futures Trading Commission ("Commission") Regulation 40.2(a), the following analysis, in narrative form, demonstrates that Basis Swaps (the "Contracts") are consistent with the requirements of the Commodity Exchange Act, as amended (the "Act"), and the Commission regulations and guidance thereunder (in particular, Appendix B to Part 37 and Appendix C to Part 38).

Appendix B to Part 37

CORE PRINCIPLE 3 OF SECTION 5H OF THE ACT—SWAPS NOT READILY SUSCEPTIBLE TO MANIPULATION; CORE PRINCIPLE 4 OF SECTION 5H OF THE ACT—MONITORING OF TRADING AND TRADE PROCESSING

The swap execution facility shall permit trading only in swaps that are not readily susceptible to manipulation.

(a) Guidance.

(1) In general, a swap contract is an agreement to exchange a series of cash flows over a period of time based on some reference price, which could be a single price, such as an absolute level or a differential, or a price index calculated based on multiple observations. Moreover, such a reference price may be reported by the swap execution facility itself or by an independent third party. When listing a swap for trading, a swap execution facility shall ensure a swap's compliance with Core Principle 3, paying special attention to the reference price used to determine the cash flow exchanges. Specifically, Core Principle 3 requires that the reference price used by a swap not be readily susceptible to manipulation. As a result, when identifying a reference price, a swap execution facility should either: Calculate its own reference price using suitable and well-established acceptable methods or carefully select a reliable third-party index.

(2) The importance of the reference price's suitability for a given swap is similar to that of the final settlement price for a cash-settled futures contract. If the final settlement price is manipulated, then the futures contract does not serve its intended price discovery and risk management functions. Similarly, inappropriate reference prices cause the cash flows between the buyer and seller to differ from the proper amounts, thus benefitting one party and disadvantaging the other. Thus, careful consideration should be given to the potential for manipulation or distortion of the reference price.

The reference rate for the floating rates of the Contracts is one of several widely used benchmarks such as USD-LIBOR-BBA. These rates are administered and calculated by third-party providers using specific guidelines. Many of these providers are regulated in their home jurisdictions.

The Contracts are not susceptible to manipulation for a number of reasons. First, interest rate products are very liquid – the market is very large and deep, making manipulation very difficult to achieve. Second,

tpSEF has established rules and an enforcement infrastructure to prevent manipulation. tpSEF staff conduct real-time market surveillance and the National Futures Association ("NFA") provides regulatory services on a T+1 basis. NFA's services include comprehensive trade practice and market surveillance services (the scope of which can be found in the Regulatory Services Agreement between NFA and tpSEF submitted to the Commission as part of tpSEF's swap execution facility application) (note that the foregoing also demonstrates compliance with Core Principle 4). Finally, the reference rates upon which the Contracts are based are difficult for any entity or group of market participants to manipulate.

(3) For swaps that are settled by physical delivery or by cash settlement refer to the guidance in Appendix C to Part 38 of this chapter—Demonstration of Compliance that a Contract is not Readily Susceptible to Manipulation, section b(2) and section c(4), respectively.

Please see below.

Appendix C to Part 38 - Demonstration of Compliance That a Contract Is Not Readily Susceptible to Manipulation

(c) Futures Contracts Settled by Cash Settlement. (1) Cash settlement is a method of settling certain futures or option contracts whereby, at contract expiration, the contract is settled by cash payment in lieu of physical delivery of the commodity or instrument underlying the contract. An acceptable specification of the cash settlement price for commodity futures and option contracts would include rules that fully describe the essential economic characteristics of the underlying commodity (e.g., grade, quality, weight, class, growth, issuer, maturity, source, rating, description of the underlying index and index's calculation methodology, etc.), as well as how the final settlement price is calculated. In addition, the rules should clearly specify the trading months and hours of trading, the last trading day, contract size, minimum price change (tick size) and any limitations on price movements (e.g., price limits or trading halts).

Essential Economic Characteristics of the Contract Terms

The terms and conditions of the Contracts match the terms of basis swaps that are commonly offered in the market and are listed in Exhibit B.

Calculation of Cash Settlement Price

The cash settlement price will be calculated in the following manner:

The floating amount payer will pay any appreciation in the level of the index (expressed as a percentage) times the notional quantity per calculation period.

The floating amount receiver will pay any depreciation in the level of the index (expressed as a percentage) times the notional quantity per calculation period plus the product of a fixed rate times the notional quantity per calculation period.

(2) Cash settled contracts may be susceptible to manipulation or price distortion. In evaluating the susceptibility of a cash-settled contract to manipulation, a designated contract market should consider the size and liquidity of the cash market that underlies the listed contract in a manner that follows the determination of deliverable supply as noted above in (b)(1). In particular, situations susceptible to manipulation include those in which the volume of cash market transactions and/or the number of participants contacted in determining the cash-settlement price are very low. Cash-

settled contracts may create an incentive to manipulate or artificially influence the data from which the cash-settlement price is derived or to exert undue influence on the cash-settlement price's computation in order to profit on a futures position in that commodity. The utility of a cash-settled contract for risk management and price discovery would be significantly impaired if the cash settlement price is not a reliable or robust indicator of the value of the underlying commodity or instrument. Accordingly, careful consideration should be given to the potential for manipulation or distortion of the cash settlement price, as well as the reliability of that price as an indicator of cash market values. Appropriate consideration also should be given to the commercial acceptability, public availability, and timeliness of the price series that is used to calculate the cash settlement price. Documentation demonstrating that the settlement price index is a reliable indicator of market values and conditions and is commonly used as a reference index by industry/market agents should be provided. Such documentation may take on various forms, including carefully documented interview results with knowledgeable agents.

The Contracts operate in a liquid market with numerous participants. Also, the cash settlement price is not easily susceptible to manipulation or distortion since, as to the index-based component, the composition of the index is announced by the index sponsor, as to the dividend leg, the dividends paid are announced by the issuer, and, in the case of the fixed or floating rate leg, the method of determining the price is based on factors that are fixed at the start of a Contract (i.e., payment frequency, day count conventions, fixed interest rate, floating reset dates) and the applicable reference rate. Each of the available indices is widely accepted by market participants and data is readily accessible through numerous news outlets.

(3) Where an independent, private-sector third party calculates the cash settlement price series, a designated contract market should consider the need for a licensing agreement that will ensure the designated contract market's rights to the use of the price series to settle the listed contract.

(i) Where an independent, private-sector third party calculates the cash settlement price series, the designated contract market should verify that the third party utilizes business practices that minimize the opportunity or incentive to manipulate the cash-settlement price series. Such safeguards may include lock-downs, prohibitions against derivatives trading by employees, or public dissemination of the names of sources and the price quotes they provide. Because a cash-settled contract may create an incentive to manipulate or artificially influence the underlying market from which the cash-settlement price is derived or to exert undue influence on the cash-settlement computation in order to profit on a futures position in that commodity, a designated contract market should, whenever practicable, enter into an information-sharing agreement with the third-party provider which would enable the designated contract market to better detect and prevent manipulative behavior.

As described above, the cash settlement price is calculated through a cash settlement method that is not easily susceptible to manipulation.

(ii) Where a designated contract market itself generates the cash settlement price series, the designated contract market should establish calculation procedures that safeguard against potential attempts to artificially influence the price. For example, if the cash settlement price is derived by the designated contract market based on a survey of cash market sources, the designated contract market should maintain a list of such entities which all should be reputable sources with knowledge of the cash market. In addition, the sample of sources polled should be representative of the cash market, and the poll should be conducted at a time when trading in the cash market is active.

Please see above regarding the calculation of the cash settlement price.

(iii) The cash-settlement calculation should involve computational procedures that eliminate or reduce the impact of potentially unrepresentative data.

(iv) The cash settlement price should be an accurate and reliable indicator of prices in the underlying cash market. The cash settlement price also should be acceptable to commercial users of the commodity contract. The registered entity should fully document that the settlement price is accurate, reliable, highly regarded by industry/market agents, and fully reflects the economic and commercial conditions of the relevant designated contract market.

Please see above regarding the calculation of the cash settlement price.

(v) To the extent possible, the cash settlement price should be based on cash price series that are publicly available and available on a timely basis for purposes of calculating the cash settlement price at the expiration of a commodity contract. A designated contract market should make the final cash settlement price and any other supporting information that is appropriate for release to the public, available to the public when cash settlement is accomplished by the derivatives clearing organization. If the cash settlement price is based on cash prices that are obtained from non-public sources (e.g., cash market surveys conducted by the designated contract market or by third parties on behalf of the designated contract market), a designated contract market should make available to the public as soon as possible after a contract month's expiration the final cash settlement price as well as any other supporting information that is appropriate or feasible to make available to the public.

The various index levels are readily available via a number of sources.

(4) Contract terms and conditions requirements for futures contracts settled by cash settlement.

(i) An acceptable specification of the terms and conditions of a cash-settled commodity contract will also set forth the trading months, last trading day, contract size, minimum price change (tick size) and daily price limits, if any.

Please see Exhibit B for the Contracts' terms and conditions.

(A) *Commodity Characteristics*: The terms and conditions of a commodity contract should describe the commodity underlying the contract.

The terms and conditions of the Contract specifically list the commodities on which counterparties can choose to base the Contract.

(B) *Contract Size and Trading Unit*: An acceptable specification of the trading unit would be a contract size that is consistent with customary transactions in the cash market. A designated contract market may opt to set the contract size smaller than that of standard cash market transactions.

The size of each Contract is consistent with customary transaction sizes in the market.

(C) *Cash Settlement Procedure*: The cash settlement price should be reliable, acceptable, publicly

available, and reported in a timely manner as described in paragraphs (c)(3)(iv) and (c)(3)(v) of this appendix C.

The cash settlement procedure and an explanation of how, in the context of these Contracts, it is not readily susceptible to manipulation, is described above.

(D) *Pricing Basis and Minimum Price Fluctuation (Minimum Tick)*: The minimum price increment (tick) should be set a level that is equal to, or less than, the minimum price increment commonly observed in cash market transactions for the underlying commodity. Specifying a futures' minimum tick that is greater than the minimum price increment in the cash market can undermine the risk management utility of the futures contract by preventing hedgers from efficiently establishing and liquidating futures positions that are used to hedge anticipated cash market transactions or cash market positions.

As agreed between counterparties.

(E) *Maximum Price Fluctuation Limits*: Designated contract markets may adopt price limits to: (1) Reduce or constrain price movements in a trading day that may not be reflective of true market conditions but might be caused by traders overreacting to news; (2) Allow additional time for the collection of margins in times of large price movements; and (3) Provide a "cooling-off" period for futures market participants to respond to bona fide changes in market supply and demand fundamentals that would lead to large cash and futures price changes. If price-limit provisions are adopted, the limits should be set at levels that are not overly restrictive in relation to price movements in the cash market for the commodity underlying the futures contract. For broad-based stock index futures contracts, rules should be adopted that coordinate with New York Stock Exchange ("NYSE") declared Circuit Breaker Trading Halts (or other market coordinated Circuit Breaker mechanism) and would recommence trading in the futures contract only after trading in the majority of the stocks underlying the index has recommenced.

As agreed between counterparties.

(F) Last Trading Day: Specification of the last trading day for expiring contracts should be established such that it occurs before publication of the underlying third-party price index or determination of the final settlement price. If the designated contract market chooses to allow trading to occur through the determination of the final settlement price, then the designated contract market should show that futures trading would not distort the final settlement price calculation.

The last trading day will be the last day of the calculation period, which is set by the individual counterparties.

(G) *Trading Months*: Trading months should be established based on the risk management needs of commercial entities as well as the availability of price and other data needed to calculate the cash settlement price in the specified months. Specification of the last trading day should take into consideration whether the volume of transactions underlying the cash settlement price would be unduly limited by occurrence of holidays or traditional holiday periods in the cash market. Moreover, a contract should not be listed past the date for which the designated contract market has access to use a proprietary price index for cash settlement.

Payments are settled in accordance with the payment frequency of the particular Contract, which is a flexible term.

(H) *Speculative Limits***: Specific rules and policies for speculative position limits are set forth in part 150 and/or part 151, as applicable, of the Commission's regulations.**

None required by Parts 150 or 151.

(I) *Reportable Levels***: Refer to § 15.03 of the Commission's regulations.**

tpSEF will adhere to the applicable reporting levels set forth in § 15.03 of the Commission's regulations.

(J) *Trading Hours***: Should be set by the designated contract market to delineate each trading day.**

Each Contract is traded twenty-three hours a day from Sunday to Friday. The Contracts are not traded between 5:30 p.m. and 6:30 p.m. Eastern Time.

EXHIBIT D

Terms and Conditions
(Marked Against April 23, 2021 Version)

Summary:	This covers basis swaps ("Basis Swaps").
Limitations on Available Selections and Default Settings:	The terms under which a Basis Swap may be traded are as specified in these terms and conditions and in the attached tables.
	For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.
	For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.
	The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made. For these purposes "TARGET" is considered a location.
	In many cases there are normal "vanilla" terms on which the parties will transact. These are shown as "Default" and will apply unless the parties vary them.
	It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the "Available Terms" and/or "Default Terms" may vary by currency.
	In some cases, the same contract might have different terms depending on the market in which it is traded (*e.g.*, London versus NY). In that case the default settings may vary by market.
Incorporated Standards:	This contract description incorporates by reference the following industry standard documentation and standards: (a) 2006 ISDA Definitions (b) ISDA Settlement Matrix (if Optional Early Termination applies) (c) ISDA OTC Taxonomies (d) FpML Location Codes For convenience, certain terms are mapped to their FpML 5.5 equivalent.
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Interest Rate

ISDA OTC Base Product:	IR Swap
ISDA OTC Sub-Product:	Basis
Further Limitations:	None
Terms:	
Notional Amount ("notional"):	An amount in one of the Available Currencies (see below) agreed by the parties.
Effective Date ("effectiveDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Effective Date as a number of Business Days or Banking Days from the Trade Date ("relativeEffectiveDate").
Effective Date Business Days:	As specified by the parties from among the Available Business Days.
Effective Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Termination Date ("terminationDate"):	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention. The parties may express the unadjusted Termination Date as a number of days, months or years from the Effective Date ("relativeTerminationDate").
Termination Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount 1 ("FA1"):	
FA1 Payer ("payerPartyReference"):	As specified by the parties.
FA1 Currency Amount ("notionalAmount"):	As specified by the parties.
FA1 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
FA1 first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
FA1 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA1 initial Floating Rate:	As specified by the parties.
FA1 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA1 Designated Maturity ('indexTenor"):	As specified by the parties.
FA1 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA1 Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA1 Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA1 Spread:	As specified by the parties.
FA1 Day Count Fraction:	As specified by the parties.
FA1 Reset Dates ("resetDate"):	As specified by the parties.
FA1 Method of Averaging:	As specified by the parties.
FA1 Compounding:	As specified by the parties.
FA1 Compounding Dates:	In the event Compounding is selected, as selected by the parties.
FA1 Compounding Method (Compounding OR Flat Compounding):	In the event Compounding is selected, as selected by the parties.
FA1 Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
FA1 Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.

FA1 Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days
FA1 Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA1 Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA1 Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Floating Amount 2 ("FA2"):	
FA2 Payer ("payerPartyReference"):	As specified by the parties.
FA2 Currency Amount ("notionalAmount"):	As specified by the parties.
FA2 Period End Dates ("unadjustedCalculation Period Date"):	As specified by the parties.
FA2 first Period End Date:	As specified by the parties if there is a short initial Calculation Period.
FA2 Payment Dates ("unadjustedPaymentDate"):	As specified by the parties.
FA2 initial Floating Rate:	As specified by the parties.
FA2 Floating Rate Option ("floatingRateIndex"):	As specified by the parties.
FA2 Designated Maturity ("indexTenor"):	As specified by the parties.
FA2 Linear Interpolation:	For the Calculation Periods specified by the parties.
FA2 Shorter Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA2 Longer Designated Maturity for Linear Interpolation:	For a Calculation Period to which Linear Interpolation applies, as specified by the parties.
FA2 Spread:	As specified by the parties.
FA2 Day Count Fraction:	As specified by the parties.
FA2 Reset Dates ("resetDate"):	As specified by the parties.
FA2 Method of Averaging:	As specified by the parties.
FA2 Compounding:	As specified by the parties.
FA2 Compounding Dates:	In the event Compounding is selected, as selected by the parties.
FA2 Compounding Method (Compounding OR Flat Compounding):	In the event Compounding is selected, as selected by the parties.
FA2 Period End Dates Business Days:	As specified by the parties from among the Available Business Days.
FA2 Period End Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA2 Payment Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA2 Payment Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
FA2 Reset Dates Business Days:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
FA2 Reset Dates Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Mark-to-Market Currency Swap:	
Mark-to-Market Currency Swap:	As specified by the parties, if the Currency Amounts are in different Currencies.
Variable Currency Payer:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.
Constant Currency Payer:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.

Currency Exchange Rate:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap and ISDA MTM Matrix is not applicable.
ISDA MTM Matrix:	As specified by the parties if the transaction is a Mark-to-Market Currency Swap.
Initial Exchange:	
Initial Exchange Date:	As specified by the parties.
FA1 Payer Initial Exchange Amount:	As specified by the parties.
FA2 Payer Initial Exchange Amount:	As specified by the parties.
Interim Exchanges:	
Interim Exchange Dates:	As specified by the parties.
FA1 Payer Interim Exchange Amount:	As specified by the parties.
FA2 Payer Interim Exchange Amount:	As specified by the parties.
Final Exchanges:	
Final Exchange Date:	As specified by the parties.
FA1 Payer Final Exchange Amount:	As specified by the parties.
FA2 Payer Final Exchange Amount:	As specified by the parties.
Optional Early Termination:	
Optional Early Termination:	As specified by the parties.
Option Style:	As specified by the parties.
Optional Early Termination Date:	As specified by the parties.
Seller:	As specified by the parties if only one party can terminate.
Buyer:	As specified by the parties, if only one party can terminate.
Seller's Agent:	As specified by the parties, if only one party can terminate.
Business Days for Payments:	As specified by the parties from among the Available Business Days, subject to any Required Business Days.
Exercise Business Days:	As specified by the parties.
Optional Early Termination Procedure for Exercise:	
Commencement Date:	As specified by the parties, if the Option Style is American.
Bermuda Option Exercise Dates:	As specified by the parties, if the Option Style is Bermuda.
Expiration Date:	As specified by the parties.
Expiration Time:	As specified by the parties.
Earliest Exercise Time:	As specified by the parties.
Latest Exercise Time:	As specified by the parties.
Exercise Business Day:	As specified by the parties.
Partial Exercise:	As specified by the parties, if Option Style is European.
Multiple Exercise:	As specified by the parties, if Option Style is American or Bermuda.
Minimum Notional Amount:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Maximum Notional Amount:	As specified by the parties if Multiple Exercise is specified.
Integral Multiple:	As specified by the parties if Partial Exercise or Multiple Exercise is specified.
Optional Early Termination Settlement Terms:	
Cash Settlement:	As specified by the parties.

ISDA Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a single currency Transaction.
ISDA Cross Currency Settlement Matrix:	As specified by the parties, if Cash Settlement is applicable to a cross currency Transaction whose currencies are listed as a "currency pair" in the Cross Currency Settlement Matrix.
Cash Settlement Valuation Time:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Valuation Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Valuation Business Days:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Payment Date Business Days Convention:	If Cash Settlement is applicable, as specified by the parties, directly or via the ISDA Settlement Matrix.
Cash Settlement Method:	If Cash Settlement is applicable, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Currency:	If Cash Settlement is applicable, and "Cash Price" or "Cash Price—Alternate" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Settlement Rate:	If Cash Settlement is applicable, and "Par Yield Curve—Adjusted," "Par Yield Curve—Unadjusted" or "Zero Coupon Curve—Adjusted" apply, as specified by the parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix parties from Available Cash Settlement Methods, directly or via the ISDA Settlement Matrix.
Cash Settlement Reference Banks:	As specified by the parties, if Settlement Rate is applicable.
Cash Settlement Reference Banks:	If Cash Settlement is applicable, as specified by the parties.
Quotation Rate:	If Cash Settlement is applicable, as specified by the parties from among the Available Quotation Rates.
Calculation Agent:	As agreed by the parties.

Basis Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
AUD	Australian Dollar	AUSY
CAD	Canadian Dollar	CATO
CHF	Swiss Franc	CHZU
CLP	Chilean Peso	CLSA
CZK	Czech Koruna	CZPR
DKK	Danish Krone	DKCO
EUR	Euro	EUTA
GBP	Sterling	GBLO
HKD	Hong Kong Dollar	HKHK
HUF	Hungarian Forint	HUBU

JPY	Japanese Yen	JPTO
MXN	New Mexican Peso	MXMC
NOK	Norwegian Krone	NOOS
NZD	New Zealand Dollar	NZAU and NZWE
PLN	Polish Zloty	PLWA
SEK	Swedish Krona	SEST
SGD	Singapore Dollar	SGSI
TRY	Turkish Lira	TRIS
USD	United States Dollars	USNY
ZAR	South African Rand	ZAJO

Basis Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
No Adjustment
Preceding
FRN Convention/Eurodollar Convention

Basis Available Day Count Fractions

ISDA Name
1/1
30/360, 360/360, Bond Basis
Actual/360
Actual/365 (Fixed), Act/365 (Fixed), A/365 (Fixed), A/365F
Actual/Actual, Actual/Actual (ISDA), Act/Act, Act/Act (ISDA)
Actual/Actual (ICMA), Act/Act, Act/Act (ICMA)

Basis Default Effective Dates

Currency	Default Effective Date
All Currencies Other than CAD, GBP, MXN, ZAR	Plus Two Banking Days
MXN	Plus One Banking Day
CAD, GBP, ZAR	Plus Zero

Basis Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective Date	Latest Effective Date	Earliest Termination Date	Latest Termination Date
N/A	N/A	N/A	N/A	N/A

Basis Notional Amounts

Currency	Minimum	Increment	Maximum	Default
AUD	5,000,000	100,000	N/A	N/A
CAD	25,000,000	1,000,000	N/A	N/A
CHF	5,000,000	100,000	N/A	N/A
CLP	5,000,000	100,000	N/A	N/A
CZK	5,000,000	100,000	N/A	N/A

DKK	5,000,000	100,000	N/A	N/A
EUR	5,000,000	100,000	N/A	N/A
GBP	5,000,000	100,000	N/A	N/A
HKD	5,000,000	100,000	N/A	N/A
HUF	5,000,000	100,000	N/A	N/A
JPY	5,000,000	100,000	N/A	N/A
MXN	10,000,000	1,000,000	N/A	N/A
NOK	5,000,000	100,000	N/A	N/A
NZD	5,000,000	100,000	N/A	N/A
PLN	5,000,000	100,000	N/A	N/A
SEK	5,000,000	100,000	N/A	N/A
SGD	5,000,000	100,000	N/A	N/A
TRY	5,000,000	100,000	N/A	N/A
USD	5,000,000	100,000	N/A	N/A
ZAR	5,000,000	100,000	N/A	N/A

Basis Floating Rate Options and Defaults

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-AONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
AUD-AONIA-OIS-COMPOUND-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-AUBBSW	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSW	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSW-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-BBSY (BID)	All quoted tenors	N/A	Per ISDA 2006	N
AUD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
AUD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Quarterly Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
AUD-Semi-Annual Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
AUD-Swap Rate-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-CDOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-BA-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-CORRA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
CAD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CAD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-BBA-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
CAD-REPO-CORRA	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-ISDD	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
CAD-TBILL-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
CHF USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
CHF-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CHF-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
CHF-ISDAFIX-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	N
CHF-LIBOR-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reference Banks				
CHF-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
CHF-TOIS-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
CLP-CLICP-Bloomberg	All quoted tenors	N/A	A/360	N
CLP-*Unidad de Fomento (UF/CLF)*	All quoted tenors	N/A	A/360	N
CZK-PRIBOR-PRBO	All quoted tenors	N/A	A/360	N
DKK-CIBOR-DKNA13	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR-DKNA13-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CIBOR2-DKNA13	All quoted tenors	N/A	Per ISDA 2006	N
DKK-CITA-DKNA14-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
DKK-DKKOIS-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-10:00-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-11:00-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SwapMarker				
EUR-Annual Swap Rate-3 Month	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-3 Month-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-AVERAGE	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-10:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-10:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-OIS-COMPOUND-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EONIA-Swap-Index	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Act/365	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Act/365-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
EUR-EURONIA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-EURIBOR Swap Rate-12:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-ISDA-LIBOR Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
EUR-ISDA-LIBOR Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
EUR-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TAM-CDC	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC10-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-CNO-SwapMarker	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TEC5-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
EUR-TMM-CDC-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
GBP USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	N
GBP-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
GBP-SONIA-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
GBP-WMBA-RONIA-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
GBP-WMBA-SONIA-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HIBOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HKAB	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-HKAB-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
HKD-HONIX-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
HKD-ISDA-Swap Rate-11:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-ISDA-Swap Rate-4:00	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-4:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
HKD-Quarterly-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
HUF-BUBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
JPY USD-Basis Swaps-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-BBSF-Bloomberg-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-ISDA-Swap Rate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
JPY-LIBOR-FRASETT	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
JPY-MUTANCALL-TONAR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-OIS-11:00-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17096	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-17097	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (10 Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (5 Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM (All Banks)-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-TIBM-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TIBOR-ZTIBOR	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reuters-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Reuters-15:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-10:00	All quoted tenors	N/A	Per ISDA 2006	N
JPY-TSR-Telerate-15:00	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Banxico	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Banxico-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
MXN-TIIE-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
MXN-F-TIIE-USD SOFR	All quoted tenors	N/A	Actual/360	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
MXN-*Unidades de Inversión* (UDI)	N/A	N/A	See below	N
NOK-NIBOR-NIBR	All quoted tenors	N/A	Per ISDA 2006	N
NOK-NIBOR-NIBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NOK-NIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-BID	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-FRA	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
NZD-BBR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
NZD-NZIONA-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
NZD-Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
NZD-Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
PLN-WIBOR_WIBO	All quoted tenors	N/A	Per ISDA 2006	N
SEK-Annual Swap Rate-SESWFI	All quoted tenors	N/A	Per ISDA 2006	N
SEK-SIOR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SEK-STIBOR-SIDE	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-ICAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-Semi-Annual Swap Rate-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
SGD-SIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SIBOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SONAR-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SONAR-OIS-VWAP-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-VWAP	All quoted tenors	N/A	Per ISDA 2006	N
SGD-SOR-VWAP-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
TRY-TRYIBOR-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-Annual Swap Rate-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-BA-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-BMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	N
USD-BSBY	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-CD-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reference Banks-ICAP SwapPX	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMS-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7051	All quoted tenors	N/A	Per ISDA 2006	N
USD-CMT-T7052	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-FHLBSF	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Reuters	All quoted tenors	N/A	Per ISDA 2006	N
USD-COF11-Telerate	All quoted tenors	N/A	Per ISDA 2006	N
USD-CP-H.15	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
USD-CP-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-H.15-OIS-COMPOUND	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-Reference Dealers	All quoted tenors	N/A	Per ISDA 2006	N
USD-Federal Funds-SOFR	All quoted tenors	N/A	Per ISDA 2006	N
USD-FFCB-DISCO	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDA-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate	All quoted tenors	N/A	Per ISDA 2006	N
USD-ISDAFIX3-Swap Rate-3:00	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA	All quoted tenors	N/A	Per ISDA 2006	N
USD-LIBOR-BBA-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-ISDA	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-LIBO	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-LIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	GBLO (Applies to Both Legs)
USD-OIS-11:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-LON-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-11:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-BGCANTOR	All quoted tenors	N/A	Per ISDA 2006	N
USD-OIS-3:00-NY-ICAP	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-Prime-	All quoted tenors	N/A	Per ISDA 2006	N

Floating Rate Option	Available Tenors	Default Tenor	Default Day Count Fraction	Additional Business Day Locations
Reference Banks				
USD-S&P Index-High Grade	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIBOR-SIBO	All quoted tenors	N/A	Per ISDA 2006	N
USD-SIFMA Municipal Swap Index	All quoted tenors	N/A	Per ISDA 2006	N
USD-SOFR-COMPOUND	All quoted tenors	N/A	Prior to publication of a supplement to ISDA 2006 including USD-SOFR-COMPOUND, not applicable and thereafter, per ISDA 2006	No
USD-TBILL-H.15	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-H.15-Bloomberg	All quoted tenors	N/A	Per ISDA 2006	N
USD-TBILL-Secondary Market	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-ISDC	All quoted tenors	N/A	Per ISDA 2006	N
USD-TIBOR-Reference Banks	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-ICAP BrokerTec	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-SwapMarker100	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-SwapMarker99	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-T19901	All quoted tenors	N/A	Per ISDA 2006	N
USD-Treasury Rate-T500	All quoted tenors	N/A	Per ISDA 2006	N
ZAR-JIBAR-SAFEX	All quoted tenors	N/A	Per ISDA 2006	N

Definition of CLP-*Unidad de Fomento* (UF/CLF)

CLP-*Unidad de Fomento (UF/CLF)*	For any Reset Date, the difference between the value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile* for the calendar day preceding such Reset Date and the value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile* for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount

	payable by reference to the CLP-*Unidad de Fomento* (UF/CLF). If for any Reset Date there is no published value of the *unidad de fomento* (UF/CLF) as certified by the Chilean *Banco Central de Chile*, the Calculation Agent shall determine the CLP-*Unidad de Fomento* (UF/CLF) for such day.

Definition of MXN-*Unidades de Inversión* (UDI)

MXN-*Unidades de Inversión* (UDI)	For any Reset Date, the difference between the value of the *unidad de inversión* (UDI) as published by the Mexican *Banco de México* for the calendar day preceding such Reset Date and the value of the *unidad de inversión* (UDI) as published by the Mexican *Banco de México* for such Reset Date. The Calculation Agent shall convert such difference to the appropriate annualized percentage based on the terms of the Floating Amount payable by reference to the CLP MXN-*Unidades de Inversión* (UDI). If for any Reset Date there is no published value of the MXN-*Unidades de Inversión* (UDI) as certified by the Mexican *Banco de México,* the Calculation Agent shall determine the CLP MXN-*Unidades de Inversión* (UDI) for such day.

Basis Requirements and Defaults
(Excluding Optional Early Termination and Mandatory Early Termination)

Variable	Requirement	Default
Effective Date Business Day Convention:		No Adjustment
Termination Date Business Day Convention:		No Adjustment
Period End Dates:		Payment Dates
Payment Date Business Day Convention:		Modified Following
Linear Interpolation:		Applicable only to long or short stub periods
Designated Maturities for Linear Interpolation:		Tenors quoted next shorter and longer than the actual Calculation Period length
Compounding:		Inapplicable
Compounding Business Day Convention:	Same as Business Day Convention for Period End Dates	
Method of Averaging:	Weighted Average or Unweighted Average	Unweighted Average
Compounding Method:	Straight Compounding, Flat Compounding, Spread Exclusive Compounding	
ISDA MTM Matrix		Applicable (to Mark-to-Market Cross Currency Swaps)
Initial Exchange Date:		Effective Date
Initial Exchange Date Business Day Convention:		Following
Interim Exchange Date Business Day Convention:		Modified Following
Final Exchange Date:		Termination Date

Final Exchange Date Business Day Convention:		Modified Following

<div align="center">Definition of USD-SOFR-COMPOUND</div>

From and after the date on which ISDA publishes a supplement to ISDA 2006 containing a definition of USD-SOFR-COMPOUND, per ISDA 2006.

Prior to such date:

"USD-SOFR-COMPOUND" means that the rate for a Reset Date, calculated in accordance with the formula set forth below in this subparagraph, will be the rate of return of a daily compound interest investment (it being understood that the reference rate for the calculation of interest is SOFR). Upon the occurrence of a USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the rate (inclusive of any spreads or adjustments) formally designated, nominated or recommended as the replacement for SOFR by the Federal Reserve Board or a committee officially endorsed or convened by the Federal Reserve Board for purposes of designating, nominating or recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator). If no such rate is formally designated, nominated or recommended within one U.S. Government Securities Business Day of the USD-SOFR-COMPOUND Index Cessation Event, the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to OBFR. If at the time of the USD-SOFR-COMPOUND Index Cessation Event, publication of OBFR has been permanently or indefinitely discontinued, it has been publicly announced that OBFR will be permanently or indefinitely discontinued as of a specific date or there has been a public statement by a regulator or other official sector entity prohibiting the use of OBFR (which statement applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions), then the rate for each day in a Calculation Period occurring on or after the USD-SOFR-COMPOUND Index Cessation Effective Date will be determined as if references to SOFR were references to the FOMC Target Rate.

"USD-SOFR-COMPOUND" will be calculated as follows, and the resulting percentage will be rounded, if necessary, in accordance with the method set forth in Section 8.1(a):

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{SOFR}_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

"d_0", for any Calculation Period, is the number of U.S. Government Securities Business Days in the relevant Calculation Period;

"i" is a series of whole numbers from one to d_0, each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Calculation Period;

"SOFR" is the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website;

"SOFR_i", for any day "i" in the relevant Calculation Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following that day "i". If, by 5:00 p.m., New York City time, on the U.S. Government Securities Business Day immediately following any day "i", SOFR in respect of such day "i" has not been published and a

USD-SOFR-COMPOUND Index Cessation Event has not occurred, then $SOFR_i$ for that day "i" will be SOFR as published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the Federal Reserve's Website;

"n_i" is the number of calendar days in the relevant Calculation Period on which the rate is $SOFR_i$;

"d" is the number of calendar days in the relevant Calculation Period;

"USD-SOFR-COMPOUND Index Cessation Event" means the occurrence of one or more of the following events:

(d)   a public statement by the Federal Reserve Bank of New York (or a successor administrator of SOFR) announcing that it has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR;

(e)   the publication of information which reasonably confirms that the Federal Reserve Bank of New York (or a successor administrator of SOFR) has ceased or will cease to provide SOFR permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide SOFR; or

(f)   a public statement by a regulator or other official sector entity prohibiting the use of SOFR that applies to, but need not be limited to, Swap Transactions, including existing Swap Transactions;

"USD-SOFR-COMPOUND Index Cessation Effective Date" means, in respect of a USD-SOFR-COMPOUND Index Cessation Event, the date on which the Federal Reserve Bank of New York (or a successor administrator of SOFR) ceases to publish SOFR or the date as of which SOFR may no longer be used; and

"OBFR" is the daily Overnight Bank Funding Rate as provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve's Website.

"FOMC Target Rate" is the short-term interest rate target set by the Federal Open Markets Committee and published on the Federal Reserve's Website or, if the Federal Open Markets Committee does not target a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Markets Committee and published on the Federal Reserve's Website (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c))

"Federal Reserve's Website" means the website of the Board of Governors of the Federal Reserve System at http://www.federalreserve.gov, or any Successor Source.

Basis Requirements and Defaults
(Optional Early Termination and Mandatory Early Termination)

Setting	Requirement	Default
Optional Early Termination:		Inapplicable
Mandatory Early Termination:		Inapplicable
Option Style:	American, Bermuda, European	
Cash Settlement:	Required for Mandatory Early Termination	Applicable (i.e., Transaction is **not** "torn up for no value")
Optional Early Termination Date:		Cash Settlement Payment Date
Optional Early Termination Date		Following

Business Day Convention:		
Mandatory Early Termination Date Business Day Convention:		Modified Following

Basis Requirements and Defaults
(Optional Early Termination—Exercise)

Setting	Requirement	Default
Commencement Date:	American only	
Partial Exercise:		Inapplicable
Multiple Exercise:		Inapplicable
Exercise Business Day:		Banking Day for cash Settlement Currency (TARGET Settlement Day for EUR)
Latest Exercise Time:	On Expiration Date, the Expiration Time	Other than Expiration Date, the Expiration Time

Basis Requirements and Defaults
(Cash Settlement)

Setting	Requirement/Choices	Default
Cash Settlement Amount:		
ISDA Cross Currency Settlement Matrix:		Applicable, if cross currency swap with currency pair included in Matrix
ISDA Settlement Matrix:		Applicable, if single currency swap with Currency included in Matrix
Cash Settlement Valuation Time:		
Cash Settlement Valuation Date:		Two Valuation Business Days before Mandatory/Optional Early Termination Date **but** one Valuation Business Day before Mandatory/Optional Early Termination Date for MXN and same day for CAD, GBP or DKK with Floating Rate Option of "DKK-CIBOR-DKNA13" or "DKK-CIBOR-DKNA13-Bloomberg"
Valuation Business Day:		Banking Days in locations per the Business Day Location Table, plus additional days required by for fixings under the Floating Rate Option(s)
Cash Settlement Payment Date Business Day Convention:		Following
Cash Settlement Method:	Cash Price Cash Price—Alternate Method Collateralized Cash Price Par Yield Curve—Adjusted Par Yield Curve—Unadjusted Zero Coupon Yield—Adjusted	
Cash Settlement Currency:		For single currency, same as

		Notional Amount, otherwise as specified in ISDA Master Agreement, or otherwise same as Notional Amount for Fixed Amount
Settlement Rate:	ISDA Source/Other Price Source/Reference Banks	
Cash Settlement Reference Banks:		Fallbacks per ISDA 2006 Definitions
Quotation Rate:	bid ask mid Exercising Party Pays (Optional Early Termination Only)	