

TO: Clearing Member Firms
Back Office Managers

DATE: November 22, 2021

FROM: CME Clearing

NOTICE #: 21-434

SUBJECT: **Modification of Cleared Over-the-Counter (“OTC”) British Pound (“GBP”), Japanese Yen (“JPY”) and Swiss Franc (“CHF”) Denominated Interest Rate Swap Products Referencing the London Interbank Offered Rate (“LIBOR”) and Limitation of Acceptance for Clearing**

Background

On March 5, 2021, the U.K. Financial Conduct Authority (“FCA”) announced that certain settings of GBP, CHF and JPY LIBOR (among other currencies) will be permanently discontinued or will cease to be provided in a “representative” manner by the administrator of ICE LIBOR¹, ICE Benchmark Administration Limited (“IBA”), immediately after publication on December 31, 2021.² While publication of certain GBP and JPY LIBOR settings will continue in “non-representative” form after December 31, 2021, use of these “non-representative” or “synthetic” LIBOR rates will be limited, either due to regulatory restrictions on market participants or as a result of the application of contractual “fallback” provisions in the terms of interest rate swap contracts that are triggered following the cessation or loss of “representativeness” of the relevant LIBOR. As a result, market participants are expected to transition the overwhelming majority of interest rate swap (“IRS”) products that reference the affected LIBOR rates to the relevant nominated successor “risk-free rates” (“RFRs”) following publication on December 31, 2021.³

The announcement of the permanent cessation or “non-representativeness” of a LIBOR rate constitutes an “Index Cessation Event” within the meaning of contractual “fallback” provisions within the International Swaps and Derivatives Association, Inc. (“ISDA”) IBOR Fallbacks Supplement, ISDA IBOR Fallbacks Protocol and the ISDA 2021 Interest Rate Derivatives Definitions (the “2021 ISDA Definitions”),⁴ triggering the contractual fallback of interest rate swaps referencing the relevant ISDA terms from the relevant LIBOR rate to the relevant term and spread adjusted nominated successor RFR⁵ (the “Fallback Rate”) on January 4, 2022 for each of GBP LIBOR, CHF LIBOR and JPY LIBOR (the “Index Cessation Effective Date” in each case).⁶ The relevant “Fallback Rate” in each case under the ISDA fallbacks is calculated and made publicly available by Bloomberg Index Services Limited (“BISL”) according to the industry-agreed methodology published by ISDA (the “ISDA Fallback Pricing Methodology”), based on the combination of the following components for each relevant tenor:

- Adjusted RFR: compounded setting in arrears RFR for each relevant term;

¹ The family of interest rate benchmarks known as “LIBOR” are also known as “ICE LIBOR” (LIBOR® and ICE LIBOR®) and are administered and published by ICE Benchmark Administration Limited, a U.K. authorised and regulated benchmark administrator. ICE LIBOR is a registered trademark of Intercontinental Exchange Holdings, Inc. and is used under license.

² See FCA announcement, March 5, 2021 available at <https://www.fca.org.uk/news/press-releases/announcements-end-libor>.

³ On September 29, 2021, the FCA announced that it will require IBA to continue to publish certain GBP and JPY LIBOR settings under a “synthetic” methodology, based on term RFRs, for the duration of 2022 on a “non-representative” basis, i.e. the rate will no longer be representative of the underlying market or the economic reality it is intended to measure.

⁴ Details on the ISDA IBOR Fallbacks Supplement and the ISDA IBOR Fallbacks Protocol are available at: <https://www.isda.org/2020/10/23/isda-launches-ibor-fallbacks-supplement-and-protocol/>. The 2021 ISDA Definitions came into effect in October 2021 and incorporate contractual fallbacks substantially similar to those contained in the ISDA IBOR Fallbacks Supplement and IBOR Fallbacks Protocol.

⁵ For GBP LIBOR IRS, the Sterling Overnight Index Average (“SONIA”) interest rate benchmark administered by the Bank of England is the nominated RFR successor to GBP LIBOR. For CHF LIBOR IRS, the Swiss Average Rate Overnight (“SARON”) interest rate benchmark administered and calculated by SIX Swiss Exchange Financial Information AG (“SIX”) is the nominated RFR successor to CHF LIBOR. For JPY LIBOR IRS, the Tokyo Overnight Average Rate (“TONA”) interest rate benchmark calculated and published by the Bank of Japan is the nominated RFR successor to JPY LIBOR.

⁶ The ISDA “Spread Adjustment” methodology is designed to reflect a portion of the structural differences between interbank offered rates, such as LIBOR, and the RFRs used for the fallbacks in the case of each LIBOR rate.

- ISDA Spread Adjustment: median of the historical differences between the relevant LIBOR rate for each tenor and the compounded RFR for that tenor over a five-year period prior to the relevant trigger event.

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CME cleared GBP LIBOR, CHF LIBOR and JPY LIBOR IRS Contracts (the “Affected LIBOR Swaps”) currently incorporate the ISDA “fallback” provisions to provide for contractual fallback to the relevant alternative spread and term adjusted RFR on an Index Cessation Effective Date.⁸ However, following extensive engagement between CME and cleared derivatives industry participants in 2021, market participants have indicated to CME that they do not wish CCPs to apply these fallback provisions to cleared GBP, JPY and CHF LIBOR IRS. Instead, market participants have expressed a clear preference for a CCP-led conversion of such IRS into standardized overnight index swaps (“OIS”) referencing the relevant nominated RFR, and accounting for the ISDA Spread Adjustment on the floating leg of such OIS, to take place before the “Index Cessation Effective Date” and the implementation of the ISDA-derived contractual fallback provisions in CCP rulebooks. As a result, in response to this market participant feedback, CME has determined that it will not implement the “Permanent Cessation Fallbacks” anticipated by CME Rule 90102.H. (“Application of Permanent Cessation Fallbacks”) for GBP, CHF and JPY LIBOR IRS on the relevant “Index Cessation Effective Date” in each case and proposes instead that, subject to regulatory review, CME shall effect a series of conversions of CME cleared trades in Affected LIBOR Swaps, amending the terms of such swaps to reference the relevant successor RFR floating rate option, with a cash adjustment mechanism to compensate for any resulting change in valuation and accounting for the relevant ISDA Spread Adjustment⁹ on the floating leg, further details of which are provided below. Following the relevant “Index Cessation Effective Date,” CME will provide only a limited clearing service in respect of Affected LIBOR Swaps, in order to continue to support clearing of any Affected LIBOR Swap that results from the exercise of a bilateral (uncleared) Swaption contract exercise after the Index Cessation Effective Date, and CME will subject any eligible swaps to a similar conversion process on the day of acceptance of such swap for clearing (such processes, together, the “GBP/CHF/JPY LIBOR Transition”).

⁷ BISL and its affiliates was selected by ISDA as the vendor to calculate and distribute the RFR adjustments determined in accordance with the ISDA Fallback Pricing Methodology. BISL publishes the ISDA Spread Adjustment data at https://assets.bbhub.io/professional/sites/10/IBOR-Fallbacks-LIBOR-Cessation_Announcement_20210305.pdf. BISL calculates and publishes the Adjusted RFR according to the prescribed ISDA methodology, as set out in the IBOR Fallback Rate and Adjustments Rule Book published by BISL at <https://data.bloomberglp.com/professional/sites/10/IBOR-Fallback-Rate-Adjustments-Rule-Book.pdf>. BISL publishes a summary of the IBOR Fallbacks process on its website at <https://data.bloomberglp.com/professional/sites/10/IBOR-Fallbacks-Fact-Sheet.pdf>. BLOOMBERG is a trademark and service mark of Bloomberg Finance L.P. (“BFLP”). ISDA is a trademark and service mark of the International Swaps and Derivatives Association, Inc. (“ISDA”). LIBOR® and ICE LIBOR® are trademarks of ICE Benchmark Administration Limited and/or its affiliates (collectively, “ICE”) and are used with permission under licence by ICE. Bloomberg Index Services Limited (“BISL” and, collectively with BFLP and their affiliates, “Bloomberg”) maintains and calculates the ‘fallback’ data comprising the ‘all in’ fallback rates and their component parts, the adjusted ‘risk-free’ reference rates and the spread adjustment (collectively with any other data or information relating thereto or contained therein, the “Fallback Rates Data”) under an engagement between BISL and ISDA. To the extent Bloomberg uses LIBOR in the determination of certain Fallback Rates Data, it does so under licence from ICE. None of Bloomberg, ISDA or, where applicable, ICE guarantees or makes any claim, prediction, warranty or representation whatsoever, express or implied, regarding the timeliness, accuracy, completeness of, or fitness for a particular purpose with respect to, the Fallback Rates Data and each shall have no liability in connection with the Fallback Rates Data. Without limiting the foregoing, to the fullest extent permitted by applicable law, none of Bloomberg, ISDA or, where applicable, ICE will be liable in contract or tort (including negligence), for breach of statutory duty or nuisance, or under antitrust laws, for misrepresentation or otherwise, in respect of any inaccuracies, errors, omissions, delays, failures, cessations or changes (material or otherwise) in the Fallback Rates Data, or for any damage, expense or other loss (whether direct or indirect) suffered by any person arising out of or in connection with the Fallback Rates Data or any reliance placed upon it by any person, and all implied terms, conditions and warranties, including, without limitation, as to quality, merchantability, fitness for purpose, title or non-infringement, in relation to the Fallback Rates Data, are hereby excluded. None of Bloomberg, ISDA or, where applicable, ICE makes any representations regarding whether the Fallback Rates Data would be appropriate for derivative or non-derivative financial instruments, including derivatives transacted outside of standard ISDA documentation and related protocols. Market participants are encouraged to consider and analyze the details of the Fallback Rates Data and determine independently whether they would be appropriate for any such use.

⁸ In January 2021, CME implemented certain changes to the CME Rulebook to incorporate “fallback” provisions into CME cleared IRS to provide for contractual fallback to a relevant alternative spread and term adjusted RFR on the permanent discontinuation or “non-representativeness” of certain key IBORs, including GBP, CHF and JPY LIBORs. See <https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2021/01/Chadv21-039.pdf>. In October 2021, concurrently with the implementation by ISDA of the 2021 ISDA Definitions, by way of amendment to the CME Rules and as set out in Clearing Advisory 21-335, CME revoked Clearing Advisory 21-039 and confirmed the incorporation into the CME Rules of the contractual fallback triggers and fallback provisions contained within the 2021 ISDA Definitions in CME Rule 90102.H (“Application of Permanent Cessation Fallbacks”), replacing those substantially equivalent provisions contained in the ISDA IBOR Fallbacks Supplement and subsequent additional supplements by ISDA.

⁹ In order to reflect the differences in standard floating leg day count between TONA OIS (actual/365.fixed) and JPY LIBOR Swaps (actual/360), CME will apply an adjustment to the ISDA Spread Adjustment that is applied to each tenor of JPY LIBOR Swaps subject to the relevant conversion processes. This procedure will ensure that the relevant ISDA Spread Adjustment is amended to take into account the day count differential between the relevant swap terms.

The conversion processes that together form the GBP/CHF/JPY LIBOR Transition have been determined by CME based on extensive discussions with market participants and to ensure alignment with wider industry initiatives for transition of cleared GBP LIBOR, JPY LIBOR and CHF LIBOR IRS products.

This Clearing Advisory sets out the terms of the GBP/CHF/JPY LIBOR Transition and shall be binding on Clearing Members and position holders of CME cleared IRS Contracts in Affected LIBOR Swaps from close of business on Friday, December 3, 2021.

Summary of Conversion Process

Conversion of CME cleared GBP, JPY and CHF LIBOR Swaps

Subject to regulatory review, CME will transition CME cleared GBP, JPY and CHF LIBOR Swaps by converting the relevant LIBOR referencing IRS to CME cleared standardized OIS referencing SONIA, TONA and SARON, respectively, and accounting for the relevant ISDA Spread Adjustment on the floating leg of the resulting standardized OIS, on the relevant Conversion Date determined by CME and specified in the table below by category of cleared contract (and thereafter on a daily basis for a limited category of contracts), utilizing a mandatory conversion process, as summarized below:

Date	Relevant Conversion Date Event	CME cleared swaps subject to Conversion on date
December 3, 2021	JPY/CHF Primary Conversion Date	<ul style="list-style-type: none"> JPY LIBOR IRS CHF LIBOR IRS with a maturity date after the JPY/CHF Primary Conversion Date
December 17, 2021	GBP Primary Conversion Date	<ul style="list-style-type: none"> GBP LIBOR IRS with a maturity date after the GBP Primary Conversion Date
January 3, 2022	CHF Secondary Conversion Date	<ul style="list-style-type: none"> CHF LIBOR IRS that reference a Fixing Day between the JPY/CHF Primary Conversion Date and the CHF Secondary Conversion Date CHF LIBOR IRS submitted for clearing after close of business ("COB") on the JPY/CHF Primary Conversion Date and before COB on the CHF Secondary Conversion Date CHF LIBOR IRS that result from exercise of bilateral swaptions submitted for clearing after the JPY/CHF Primary Conversion Date and before the CHF Secondary Conversion Date
January 4, 2022	JPY Secondary Conversion Date	<ul style="list-style-type: none"> JPY LIBOR IRS that reference a Fixing Day between the JPY/CHF Primary Conversion Date and the JPY Secondary Conversion Date JPY LIBOR IRS submitted for clearing after COB on the JPY/CHF Primary Conversion Date and before COB on the JPY Secondary Conversion Date JPY LIBOR IRS that result from exercise of bilateral swaptions submitted for clearing after the JPY/CHF Primary Conversion Date and before the JPY Secondary Conversion Date
January 4, 2022	GBP Secondary Conversion Date	<ul style="list-style-type: none"> GBP LIBOR IRS that reference a Fixing Day between the GBP Primary Conversion Date and the GBP Secondary Conversion Date GBP LIBOR IRS submitted for clearing after COB on the GBP Primary Conversion Date and before COB on the GBP Secondary Conversion Date GBP LIBOR IRS that result from exercise of bilateral swaptions submitted for clearing after the GBP Primary Conversion Date and before the GBP Secondary Conversion Date
Daily basis after relevant Secondary Conversion Date	Ongoing Conversion on the date of acceptance for clearing by CME	<ul style="list-style-type: none"> JPY LIBOR IRS CHF LIBOR IRS GBP LIBOR IRS with a start date after COB on the relevant Secondary Conversion Date, in order to support clearing and conversion of swaps that result from exercise of bilateral swaptions

Conversion of Affected LIBOR Swaps on the relevant Primary Conversion Date

With the exception of:

- (i) Affected LIBOR Swaps that mature on the relevant Primary Conversion Date; or
- (ii) Affected LIBOR Swaps which reference a Fixing Day between the relevant Primary Conversion Date and the relevant Secondary Conversion Date,

on the relevant Primary Conversion Date determined by CME for each contract, which date shall be prior to the relevant “Index Cessation Effective Date” for each of GBP, JPY and CHF LIBOR, CME will convert each cleared trade in Affected LIBOR Swaps into a corresponding standardized CME cleared OIS or series of corresponding standardized cleared swaps referencing the relevant nominated successor RFR, retaining the key economic terms of the original Affected LIBOR Swap trade, subject to certain adjustments determined by CME described below and applied according to its published methodology¹⁰:

- each resulting RFR swap arising from the relevant Conversion process (each, a “Conversion RFR Swap”) will account for the relevant ISDA Spread Adjustment on the floating leg of the swap;¹¹
- CME will maintain the known LIBOR rate coupons through the relevant Conversion process by the addition of known coupons as upfront fees to the relevant Conversion RFR Swap;
- in order to neutralize the value transfer from the relevant Conversion of the economic position of each Affected LIBOR Swap into each relevant Conversion RFR Swap, CME will calculate a cash adjustment amount that will be based on the difference between the net present value (“NPV”) of the Affected LIBOR Swap and the NPV of the Conversion RFR Swap on the relevant Conversion Date. The cash adjustment for each Conversion RFR Swap will be equal and opposite to the change in NPV calculated by CME, and therefore may be a positive or negative amount depending on the position (the “Cash Adjustment”).¹² The Cash Adjustment amount will be applied by CME in the form of upfront “fees” on each resulting cleared Conversion RFR Swap on the relevant Conversion Date;
- where applicable, known fixed and floating accruals will be calculated by CME and added to the Conversion RFR Swap as an upfront fee, in accordance with CME’s published methodology;¹³
- cash flows relating to the Cash Adjustment will be applied in the next end of day clearing cycle following the relevant Conversion Date;
- the Cash Adjustment will ensure that the NPV change for position holders impacted by the change of floating rate option from GBP LIBOR to SONIA, from CHF LIBOR to SARON and JPY LIBOR to TONA, as applicable, will be neutralized;
- in each case, the Conversion RFR Swap will be cleared as a CME cleared RFR OIS, retaining the key economic terms of the original trade, subject to certain adjustments set out above and determined by CME according to its published methodology, and the Floating Rate Option of the converted cleared trade will be:
 - GBP-SONIA-OIS Compound, the SONIA OIS reference rate, in the case of GBP LIBOR Swaps;
 - JPY-TONA-OIS Compound, the TONA OIS reference rate, in the case of JPY LIBOR Swaps;
 - and
 - CHF-SARON-OIS Compound, the SARON OIS reference rate, in the case of CHF LIBOR Swaps.

Swaps referencing a Fixing Day between a Primary Conversion Date and Secondary Conversion Date

With respect to CME cleared trades in Affected LIBOR Swaps that reference a Fixing Day between the relevant Primary Conversion Date and the relevant Secondary Conversion Date, at close of business on the relevant Secondary Conversion Date CME will convert such contracts to corresponding Conversion RFR Swaps utilizing

¹⁰ CME’s operational methodology for the GBP/CHF/JPY Transition Conversion processes was made available on the CME Group website in August 2021 at: <https://www.cmegroup.com/trading/interest-rates/files/cme-libor-conversion-for-chf-jpy-and-gbp-cleared-swaps.pdf> and is included as Exhibit 3 to CME Submission 21-515.

¹¹ As noted above, CME will apply an adjustment to the ISDA Spread Adjustment that is applied to each tenor of JPY LIBOR Swaps subject to the relevant conversion processes to take into account the day count differential between the relevant swap terms.

¹² Where the holder of a Conversion RFR Swap had benefited from a change in NPV, an upfront fee equal and opposite to that amount of change in NPV would be applied to that Conversion RFR Swap and such amount would be due from the position holder at the next clearing cycle. Where the holder of a Conversion RFR Swap experiences a negative change in NPV, an upfront fee equal and opposite to that amount of change in NPV would be applied to the Conversion RFR Swap and such amount would be due to the position holder at the next clearing cycle. The net cash flow position for all participants is neutral. The net cash flow position for the Clearing House is neutral.

¹³ In cases where the Effective Date of the LIBOR swap is prior to the relevant Index Cessation Effective Date (Seasoned Swaps), CME will maintain any known LIBOR or Fixed coupon payments that have not yet paid, applying these amounts as upfront “fees” on the Conversion RFR Swap. Preserving any known LIBOR or Fixed coupons on the Conversion RFR Swaps was viewed by market participants as a critical element of the conversion process.

the applicable conversion process applied by CME to relevant Affected LIBOR Swaps on the relevant Primary Conversion Date, as described above.¹⁴

Affected LIBOR Swaps submitted prior to a Secondary Conversion Date

With respect to any Affected LIBOR Swap submitted for clearing after COB on the relevant Primary Conversion Date but before COB on the relevant Secondary Conversion Date (including Swaps that result from the exercise of a bilateral (uncleared) Swaption contract exercise), at close of business on the relevant Secondary Conversion Date CME will convert such Affected LIBOR Swap contracts to corresponding Conversion RFR Swap(s) utilizing the applicable process applied by CME to relevant Affected LIBOR Swaps on the relevant Primary Conversion Date, as described above.

Limitation of Clearing Support for GBP, JPY and CHF LIBOR Swaps after Secondary Conversion Date

From COB on the relevant Secondary Conversion Date, except for the limited exception noted below, CME will cease to accept the relevant Affected LIBOR Swaps for clearing.

Until further notice by CME to market participants, in order to continue to support clearing of any Affected LIBOR Swap that results from the exercise of a bilateral (uncleared) Swaption contract exercise after the relevant Secondary Conversion Date, CME will accept for clearing any Affected LIBOR Swap that is submitted to CME for clearing following COB on the relevant Secondary Conversion Date where the start date of such swap is on or after such date. At COB on the date of acceptance for clearing, CME will convert such Affected LIBOR Swap contract to a corresponding Conversion RFR Swap utilizing the applicable process applied by CME to relevant Affected LIBOR Swaps on the relevant Primary Conversion Date, as described above.

Where an eligible GBP, CHF or JPY LIBOR Swap is submitted for clearing with a Cleared Date that is on or after the Index Cessation Effective Date for the relevant LIBOR rate, where the Floating Rate Option of such residual swap references either GBP LIBOR, JPY LIBOR or CHF LIBOR, immediately on acceptance of the trade for clearing and prior to the conversion of the trade at close of business, CME shall be deemed to CME apply the Permanent Cessation Fallbacks in CME Rule 90102.H and shall amend the terms of such swap such that references to the relevant LIBOR rate shall be deemed to refer to the relevant Fallback Rate as the successor floating rate option to the relevant LIBOR rate for the purposes of clearing the trade prior to conversion at COB.

Operational Overview of Conversion Processes

The operational processing steps for the Conversion processes are summarized below:

Amendment of Cleared Trades in Affected LIBOR Swaps

In legal and contractual terms, each Conversion process will amend the terms of cleared trades in CME cleared Affected LIBOR Swaps, converting the terms of each relevant cleared trade to a standardized CME cleared swap referencing the corresponding RFR, accounting for the relevant ISDA Spread Adjustment (as adjusted by CME, in the case of JPY LIBOR Swaps) on the floating leg, with certain key economic terms from the original Affected LIBOR Swap preserved to the extent practicable (e.g. Currency, Fixed Direction, Maturity Date, Trade Date, etc.) and other economic terms amended as applicable in accordance with CME's published methodology referenced below.

From an operational perspective, the Conversion will be processed by CME as a "termination" of each relevant Affected LIBOR Swap and the establishment of a "new" corresponding cleared trade in the corresponding RFR OIS within the clearing system, the Conversion RFR Swap. CME will report the close-out of each Affected LIBOR

¹⁴ Where LIBOR fixings have occurred prior to the relevant Conversion process and are yet to settle on the relevant Primary Conversion Date, these will be maintained and carried over to the relevant Conversion RFR Swaps. Where LIBOR fixings would occur after the relevant Primary Conversion Date and prior to the relevant Index Cessation Effective Date, in order to maintain the economics and cash flows associated with these cleared trades, CME will convert these trades on the relevant Secondary Conversion Date, which is a date after the relevant fixing has occurred. The approach to LIBOR trades that reference a LIBOR Fixing Day between the relevant Conversion Date and the relevant Index Cessation Effective Date has been determined by CME based on extensive discussion with market participants. The approach determined by CME has the following advantages: (i) it respects the ICE LIBOR fixing between the relevant Conversion Date and the Index Cessation Effective Date; (ii) buy-side clients are sensitive to accepting basis swaps that might otherwise have been used to address the issue; (iii) this approach accounts for the compounded fixings for compounding and zero-coupon swaps; and (iv) this approach maintains the gross notional in each case.

Swap and the establishment of each Conversion RFR Swap in the account of the relevant position holder to the CME Swap Data Repository (“SDR”) under Part 45 of the CFTC’s Regulations. The “Prior USI” field for each Conversion RFR Swap report will reference the Unique Swap Identifier (“USI”) of the relevant corresponding Affected LIBOR Swap, reflecting the nature of the relevant LIBOR Conversion process.

Methodology for Converting LIBOR Swaps to Conversion RFR Swaps

The CME methodology for effecting the relevant Conversion processes was first made public in August 2021 on the CME website¹⁵ and is published as Exhibit 3 to CME Submission [21-515](#).

Calculation of Cash Adjustment Amount

The Cash Adjustment amount is necessary to account for the difference in valuation between the original Affected LIBOR Swap and the corresponding Conversion RFR Swap on the relevant Conversion Date. The difference in the NPV of each Affected LIBOR Swap and the corresponding Conversion RFR Swap(s) on the relevant Conversion Date represents a gain or loss to the relevant position holder in each case. In order to neutralize the transfer in value between position holders arising from the transition, CME will apply a Cash Adjustment amount equal and opposite to the change in NPV resulting from the transition to each Conversion RFR Swap.

The Cash Adjustment amount will be calculated by CME based on the difference between the NPV of the relevant Affected LIBOR Swap and the NPV of the corresponding Conversion RFR Swap on the relevant Conversion Date as follows (the “Conversion Calculation”):

- On or shortly after COB on the relevant Conversion Date, the Clearing House will conduct a standard valuation calculation during the end of day clearing cycle, to determine the NPV for each relevant Affected LIBOR Swap subject to the relevant Conversion process on that date, calculated utilizing CME’s closing curve marks on the relevant Conversion Date for each position account and the ISDA Fallback Pricing Methodology.
- Upon establishment of each Conversion RFR Swap within the clearing system, on or shortly after COB on the relevant Conversion Date, the Clearing House will conduct an additional calculation to determine the NPV for each Conversion RFR Swap calculated utilizing CME’s closing curve marks on the relevant Conversion Date for each position account.
- Note that the determination of the NPV of the Affected LIBOR Swap and the Conversion RFR Swap will be calculated on an “adjusted” basis, where the adjusted NPV in each case is the NPV less the present value of any fee due to bank on the following Business Day or subsequent Business Day, depending on the settlement convention.
- The difference between the two NPV calculations for each Affected LIBOR Swap and the corresponding Conversion RFR Swap represents the change in NPV arising from the conversion of the reference rate exposure of that position in an Affected Contract from the relevant LIBOR rate to the corresponding RFR.

The relevant Cash Adjustment amount to be applied to each Conversion RFR Swap in each position account shall be equal and opposite to the change in NPV calculated by CME in the Conversion Calculation in relation to such Conversion RFR Swap. As the Cash Adjustment for each Conversion RFR Swap will be equal and opposite to the change in NPV calculated by CME, it may therefore be a positive or negative amount depending on the position.

For example, where the holder of a Conversion RFR Swap had benefited from a change in NPV, i.e. where the Conversion RFR Swap NPV is greater than the corresponding Affected LIBOR Swap NPV, the Cash Adjustment would be a negative amount equal to that change in NPV and would be applied to the Conversion RFR Swap as an upfront fee which would be due and paid from the position holder at the next clearing cycle following the relevant Conversion Date. Where the holder of a Conversion RFR Swap experiences a negative change in NPV, the Cash Adjustment would be a positive amount and would be applied to the Conversion RFR Swap as an upfront fee which would be due and paid to the position holder at the next clearing cycle following the relevant Conversion Date.

Payment of Cash Adjustment Amount

¹⁵ See: <https://www.cmegroup.com/trading/interest-rates/files/cme-ibor-conversion-for-chf-jpy-and-gbp-cleared-swaps.pdf>.

The Cash Adjustment amount will be applied to each relevant position account as an upfront fee (which may be a positive or negative amount) representing the Cash Adjustment on such Conversion RFR Swap and will be banked by CME in the next end of day clearing cycle on the next Clearing Day (for GBP LIBOR Swaps) or the day following the next end of day clearing cycle (for CHF and JPY LIBOR Swaps) following the relevant Conversion Date for each Conversion RFR Swap, during which cycle settlement variation for positions in the Conversion RFR Swaps will be determined and outstanding exposures and payments netted and settled in accordance with CME Rule 814. ("Settlements, Settlement Variation Payment, and Option Value").

The Cash Adjustment process is a mandatory process that will apply in respect of cleared trades in Affected LIBOR Swaps in scope of the relevant Conversion process on the relevant Conversion Date.

Cash Adjustment Examples

The role of the Cash Adjustment process in each Conversion process is based on feedback from market participants and is designed to align with previous relevant industry initiatives, such as the industry-wide PA/Discounting transition in USD IRS to the Secured Overnight Financing Rate ("SOFR") in October 2020.¹⁶

Example 1:

The example below demonstrates the operational processing of a Conversion for a hypothetical GBP LIBOR Swap and the Cash Adjustment processes by CME, reflecting the operational characterization of the process as a "termination" of the Affected GBP LIBOR Swap and establishment of a "new" Conversion SONIA Swap. As noted above, in legal terms, the Conversion is treated as an amendment of the terms of the relevant cleared trade.

As of COB on Friday, December 17, 2021

	Value Date	Cleared Trade ID	Floating Rate Option	Status	NPV	NPV Adj.*	Previous NPV Adj.	Variation Margin	Upfront Payment	Fee Type	Payment Date	Net Cash Flow
Affected LIBOR Swap	12/17/21	12345	GBP-LIBOR-BBA	TERMINATED	0	0	55,000.00	-55,000.00	-	-	-	-55,000.00
Conversion RFR Swap	12/17/21	67890	GBP-SONIA-OIS Compound	CLEARED	56,000.00	60,000.00	0	60,000.00	-4,000.00	UPFRONT_FEE	12/20/2021	56,000.00

* NPV Adj. reflects the value of the swap removing any fee payments to be made the following business day (or subsequent settlement days, depending on the settlement offset; for example, for JPY LIBOR Swaps, settlement offset is 2 business days).

Cash Adjustment Calculation Example*

Affected LIBOR Swap Valuation NPV Adj. as at 12/17/21) = 56,000.00
 Conversion RFR Swap Valuation (NPV Adj. as at 12/17/21) = 60,000.00
 Cash Adjustment = Change in Adjusted NPV = 4,000.00

* Note: In this example, the cash adjustment offsets the gain of 4,000 between the Affected LIBOR Swap and the Conversion RFR Swap

Note: In the event where the relevant Conversion process results in an Affected LIBOR Swap being replaced by a set of Conversion RFR Swaps, the Cash Adjustment amount is determined by summation of the Adjusted NPV of each resulting Conversion RFR Swap arising from the conversion of the relevant Affected LIBOR Swap.

Conversion RFR Swap as of COB on Next Value Date

	Value Date	Cleared Trade ID	Floating Rate Index	Status	NPV	NPV Adj.	Previous NPV Adj.	Variation Margin	Upfront Payment	Fee Type	Payment Date	Net Cash Flow
	12/20/21	67891	GBP-SONIA-OIS Compound	CLEARED	61,000.00	61,000.00	60,000.00	1,000.00	-	-	-	1,000.00

¹⁶ See CME Clearing Advisory at <https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2020/10/Chadv20-391.pdf>.

Calculation Breakdown (12/17)

Affected LIBOR Swap VM = NPV Adj. – Previous NPV Adj.

$$= 0 - 55,000.00 = -55,000.00$$

PnL Change = NPV Adj. (Conversion RFR Swap) - NPV Adj. (Affected LIBOR swap)

$$= 60,000.00 - 56,000.00 = 4,000.00$$

Cash Adjustment Amount = (NPV Adj. of Affected LIBOR Swap – NPV Adj. of Conversion RFR Swap)

$$= 56,000.00 - 60,000.00 = -4,000.00$$

NPV Adj. (Conversion RFR Swap) = NPV – Upfront Payment

$$= 56,000.00 - (-4,000.00) = 60,000.00$$

Example 2: One-to-many scenario

The example below demonstrates the operational processing of a Conversion for a hypothetical GBP LIBOR Swap and the Cash Adjustment processes by CME, showing a “one-to-many” conversion where the Conversion RFR Swap output is two SONIA OIS (Conversion RFR Swap 1 and Conversion RFR Swap 2 in the illustration below).

As of COB on Friday, December 17, 2021

	Value Date	Cleared Trade ID	Floating Rate Option	Status	NPV	NPV Adj.*	Previous NPV Adj.	Variation Margin	Upfront Payment	Fee Type	Payment Date	Net Cash Flow
Affected LIBOR Swap	12/17/21	56789	GBP-LIBOR-BBA	TERMINATED	0	0	75,000.00	-75,000.00	-	-	-	-75,000.00
Conversion RFR Swap 1	12/17/21	34567	GBP-SONIA-OIS Compound	CLEARED	50,000.00	45,000.00	0	45,000.00	5,000.00	UPFRONT_FEE	12/20/2021	50,000.00
Conversion RFR Swap 2	12/17/21	34568	GBP-SONIA-OIS Compound	CLEARED	20,000.00	20,000.00	0	20,000.00	-	-	-	20,000.00

* NPV Adj. reflects the value of the swap removing any fee payments to be made the following business day (or subsequent settlement days, depending on the settlement offset; for example, for JPY LIBOR Swaps, settlement offset is 2 business days).

Cash Adjustment Calculation Example*

Affected LIBOR Swap Valuation NPV Adj. as at 12/17/21) = 70,000.00

Conversion RFR Swap 1 Valuation (NPV Adj. as at 12/17/21) = 45,000.00

Conversion RFR Swap 2 Valuation (NPV Adj. as at 12/17/21) = 20,000.00

Cash Adjustment = Change in Adjusted NPV = 70,000.00 – (45,000.00 + 20,000.00) = 5,000.00

Conversion RFR Swap as of COB on Next Value Date

Value Date	Cleared Trade ID	Floating Rate Index	Status	NPV	NPV Adj.	Previous NPV Adj.	Variation Margin	Upfront Payment	Fee Type	Payment Date	Net Cash Flow
12/20/21	34567	GBP-SONIA-OIS Compound	CLEARED	51,000.00	51,000.00	45,000.00	6,000.00	-	-	-	6,000.00
12/20/21	34568	GBP-SONIA-OIS Compound	CLEARED	20,500.00	20,500.00	20,000.00	500.00	-	-	-	500.00

Calculation Breakdown (12/17)

Affected LIBOR Swap VM = NPV Adj. – Previous NPV Adj.

$$= 0 - 75,000.00 = -75,000.00$$

PnL Change = NPV Adj. (Sum of Conversion RFR Swaps) - NPV Adj. (Affected LIBOR swap)

$$= (45,000.00 + 20,000.00) - 70,000.00 = -5,000.00$$

Cash Adjustment Amount = (NPV Adj. of Affected LIBOR Swap – Sum of NPV Adj. of Conversion RFR Swaps)

$$= 70,000.00 - (45,000.00 + 20,000.00) = 5,000.00$$

NPV Adj. (Sum of Conversion RFR Swaps) = Sum of Conversion RFR Swaps NPV – Upfront Payment

$$= (50,000.00 + 20,000.00) - (5,000.00) = 65,000.00$$

Where the holder of the position in a cleared trade in an Affected LIBOR Swap receives a positive change in NPV of that position resulting from the Conversion to the relevant RFR Floating Rate Option (which represents a change in value which must be paid to the account holder from the Clearing House as central counterparty and

therefore party to the other side of the cleared trade), the Cash Adjustment will operate to provide an equal and opposite offsetting adjustment amount which must be paid from the position holder to the Clearing House (again, in its capacity as central counterparty acting as the other party to the cleared trade) in the form of an upfront fee on the relevant Conversion RFR Swap. Given that the change in NPV and the Cash Adjustment are equal and opposite, the net cash flow for each account with respect to the change in valuation on each cleared trade is zero.

The position holder on the other side of the cleared trade receives a negative change in NPV of that position resulting from the Conversion to the relevant RFR Floating Rate Option, which must be paid from the account holder to the Clearing House (as central counterparty and party to the other side of the cleared trade). The Cash Adjustment provides for an equal and opposite offsetting adjustment amount which must be paid to the position holder from the Clearing House in the form of an upfront fee. Again, the net cash flow for each account with respect to the change in valuation on each cleared trade is therefore zero.

CME's approach to "compensation" arising from change in NPV through the Cash Adjustment process is widely supported by market participants. The process has been discussed with clearing firms and their customers and is understood to be consistent with the needs and expectations of market participants, and consistent with wider industry initiatives.

Clearing of Conversion RFR Swaps

Each Conversion RFR Swap will be cleared by CME in accordance with the CME Rules.

From the completion of the end of day clearing cycle on the relevant Conversion Date, each Conversion RFR Swap will for the remaining lifecycle of the relevant cleared trade be subject to valuation and settlement variation (as defined in the CME Rules) for each clearing cycle following the relevant Conversion Date.

Fees for GBP/CHF/JPY Transition Conversion Processes

As set out in Clearing Advisory [21-355](#), in supporting transition to RFRs, CME will apply a transaction fee per line item for conversion of any CME cleared interest rate swaps that reference GBP LIBOR, CHF LIBOR or JPY LIBOR where such swaps are converted by the Clearing House into equivalent overnight index swaps referencing the relevant nominated successor RFR rate to GBP LIBOR, CHF LIBOR or JPY LIBOR respectively (a "Conversion Fee"). In each case the Conversion Fee shall be a fee of \$10 which shall be applied by the Clearing House per line item subject to the relevant Conversion and shall apply on the resulting RFR-referencing Conversion RFR Swap transactions.¹⁷

Fee Type	Trade Types	Products	Source, Terminate Reason (TR), Create Reason (CR)	HOUSE FM / NONFM	CUSTOMER Standard Client Schedule	High Turnover (HTS)
RFR Conversion Fee	All	All	CR = Index Conversion	\$10 per line item*	\$10 per line item*	\$10 per line item*

*This fee will be charged on the resulting RFR trades with the exception of single unit trades booked for the specific purposes of preserving additional payments, which will not be charged.¹⁸

Note: for bilateral swaption exercise that result in a Conversion RFR Swap under the legacy index reference rate (e.g. GBP LIBOR, etc), CME will conduct a daily conversion of these trades to the respective RFR rate. A charge of \$10 per converted trade will be applied to the position in addition to new trade clearing fees.

¹⁷ The Conversion Fee shall not apply to single unit trades booked for the specific purposes of preserving additional payments.

¹⁸ For example, in the case of a Seasoned LIBOR Swap with different fixed and floating coupon dates, the relevant LIBOR Swap will be converted to two Conversion RFR Swaps, the second of which is a "single unit trade" booked for the specific purposes of preserving additional payments and therefore no Conversion Fee will be charged in respect of the second Conversion RFR Swap as a result.

As a result, CME will apply a Conversion Fee of \$10 for each Conversion RFR Swap that is established as a result of the relevant Conversion process in each case.

Rationale for GBP/CHF/JPY Transition Processes

The conversion of cleared GBP, CHF and JPY LIBOR Swaps by the amendment of cleared trades into corresponding standardized RFR OIS by CCPs is seen by market participants as a critical element in the overall process of ensuring an orderly and efficient transition from GBP, CHF and JPY LIBOR rates in derivatives markets. As noted above, CME and other major CCPs have adopted “fallback” provisions designed to ensure certain cleared LIBOR IRS would be able to transition to the relevant successor RFR in each case on or shortly after the final date of publication or “representativeness” of such rate or rates. These contractual fallback provisions were based on the ISDA IBOR Fallbacks Supplement and corresponding ISDA IBOR Fallbacks Protocol and, in the case of CME, subsequently aligned in October 2021 with interest rate fallback provisions in the 2021 ISDA Definitions.

CME continues to support the use of ISDA’s contractual fallback provisions. However, in CME’s engagement with market participants in relation to the specific question of GBP, CHF and JPY LIBOR transition during the first half of 2021, market participants expressed a clear preference for CME to implement a modified approach to fallbacks rather than to fully operationalize the relevant ISDA-derived fallbacks in CME Rule 90102.H (Application of Permanent Cessation Fallbacks). Market participants have requested that CME should utilize the ISDA Spread Adjustment and ISDA Fallback Pricing Methodology instead to impose a mandatory conversion of cleared swaps referencing these LIBOR rates into corresponding standardized RFR OIS, accounting for the relevant ISDA Spread Adjustment on the floating leg of the replacement swap, a short period ahead of the last publication of a “representative” LIBOR rate in each case, rather than rely fully on the ISDA-derived contractual fallbacks that would otherwise apply under the CME Rules on the relevant “Index Cessation Effective Date”.

The industry consensus communicated to CME by market participants indicates that the significant majority of cleared market participants prefer such an “early” and CCP-led conversion of cleared GBP, CHF and JPY LIBOR Swaps into standardized successor RFR swaps (accounting for the ISDA Spread Adjustment on the floating leg of the resulting successor RFR swaps as part of the conversion process) as it has certain advantages for market participants over full reliance on the ISDA-derived contractual fallbacks. In particular, market participants noted that application of the ISDA contractual fallbacks without modification would give rise to resulting positions that would not be on the same terms as, and therefore not directly fungible with, standardized cleared RFR swaps. This could create difficulties for participants wishing to unwind non-standardized resulting RFR swap contracts; in order to do so, firms would need to execute and book additional non-standard swaps in an uncertain liquidity environment. During CME’s industry engagement processes, market participants have informed CME that the CCP-led conversion of LIBOR swap exposures into market standard RFR swaps (whilst accounting for the ISDA Spread Adjustment on the conversion) ensures sufficient alignment with the ISDA contractual fallbacks approach in bilateral uncleared swaps but also benefits the marketplace by:

- creating a single transparent liquidity pool for trading RFR swaps;
- providing participants certainty that “legacy” and “new” contracts would be fungible with one another upon transition to the RFR fallback; and
- supporting market standard RFR OIS that are themselves widely supported by market participants and market infrastructure, thereby removing the need to operationally support the “Observation Period Shift” (within the meaning of the ISDA 2021 Definitions) concept that operates under the ISDA IBOR Fallbacks.¹⁹

Market participants, industry groups and regulators recognize these benefits of a CCP-led conversion and CME’s proposed approach has been well publicized and understood. In its September 29, 2021 announcement and related consultation paper, the FCA acknowledged that permitted use of “synthetic” and “non-representative” LIBOR rates would not include CCP cleared derivative contracts, noting at the same time that “clearing houses

¹⁹ The methodology for conversion utilized by CME will account for the payment lag arising from conversion into a standardized RFR swap.

plan to transition all cleared sterling, Japanese yen, Swiss franc and euro LIBOR contracts to risk-free rates by end-2021.”²⁰

In addition, in providing their support for CCP-led conversion, market participants have indicated that an “early” transition of GBP, CHF and JPY LIBOR swaps to their respective RFR OIS could and should be scheduled before the end-December 2021 / early January 2022 time period in order to ease potential operational congestion for cash and derivatives market participants and CCPs due to the scheduled cessation of those LIBOR benchmarks on December 31, 2021. Furthermore, these stakeholders have expressed a clear preference that CME’s approach to the GBP, CHF and JPY LIBOR transition should be aligned as closely as possible with the wider industry approach, and specifically that of the UK and EU CCPs responsible for clearing the overwhelming majority of affected LIBOR Swaps, each of which have expressed their intention to effect a conversion of GBP, CHF and JPY LIBOR Swaps to reference the respective RFRs in early to mid-December 2021.²¹ Given the feedback from market participants, CME has determined to convert GBP, CHF and JPY LIBOR Swaps to the corresponding RFRs ahead of the last publication of the relevant Index Cessation Effective Date in each case, and to align its approach and proposed timing for the GBP/CHF/JPY LIBOR Transition as closely as possible with that of the other major CCPs clearing GBP, CHF and JPY LIBOR swaps. In each case, CME has determined that the relevant Primary Conversion Date shall be aligned with the corresponding date for conversion of corresponding GBP, CHF and JPY LIBOR swaps in the wider cleared swap market in order to help mitigate systemic risk during the transition process. As noted above, in order to ensure close alignment with the operational and economic terms of the ISDA contractual fallbacks that are applicable to bilateral uncleared derivatives, CME’s conversion process accounts for the relevant ISDA Spread Adjustment on the floating leg of the resulting CME cleared RFR swap.

CME has consulted with a diverse cross-section of market participants to obtain feedback on the operational processes for the GBP/CHF/JPY LIBOR Transition. CME first informed IRS Clearing Members of its intention to effect the GBP/CHF/JPY LIBOR Transition in late 2020 and CME first presented an overview of the transition proposals to market participants in January 2021, with further updated proposals in Q1 2021, culminating in publication of a summary of the proposed final methodology for the GBP/CHF/JPY LIBOR Transition which was provided to market participants and made publicly available in June 2021. Further, operational level details were provided by CME to market participants in August 2021.²² Operational testing and additional support was scheduled and provided by CME prior to the proposed date of implementation, including a New Release Dress Rehearsal for the CHF/JPY Conversion for JPY and CHF LIBOR Swaps on October 2, 2021 and a corresponding Dress Rehearsal for GBP LIBOR Swaps on November 5, 2021.²³ An additional New Release Dress Rehearsal took place for JPY, CHF and GBP LIBOR Swaps that fix between the corresponding New Release Dress Rehearsal Conversion Date (October 22 or November 5) and Friday, November 12, 2021. For any JPY, CHF or GBP LIBOR Swaps cleared in New Release on November 15, 2021 or thereafter, CME will run a daily conversion cycle in the New Release environment to establish Conversion RFR Swaps in the New Release environment.²⁴

Implementation of GBP/CHF/JPY Transition

This Advisory Notice sets out the binding rules and operational processes under which CME Clearing will implement each Conversion process of the GBP/CHF/JPY LIBOR Transition, including the modification and operational close-out of GBP LIBOR, CHF LIBOR and JPY LIBOR IRS Contracts and the establishment of

²⁰ See FCA announcement, September 29, 2021: <https://www.fca.org.uk/news/press-releases/further-arrangements-orderly-wind-down-libor-end-2021> and [consultation paper](#).

²¹ CME understands that each of LCH Limited and Eurex Clearing AG propose to implement conversion processes for their respective customers in order to convert GBP, CHF and JPY LIBOR swaps to the respective successor RFRs in each case, also to take place on the same conversion dates proposed by CME.

²² CME provided an initial IBOR Conversion Overview Proposal to market participants in January 2021, with further engagement and updates in February 2021. In March 2021, CME provided a further updated proposal to market participants and CME’s “IBOR Conversion Proposal for Cleared Swaps” was provided to market participants in April 2021. CME published a detailed conversion plan in June 2021, available at: <https://www.cmegroup.com/trading/interest-rates/files/cleared-swaps-considerations-for-ibor-fallbacks-and-conversion-plan.pdf>. A further public overview was made available on the CME Group website in August 2021 at: <https://www.cmegroup.com/trading/interest-rates/files/cme-ibor-conversion-for-chf-jpy-and-gbp-cleared-swaps.pdf>.

²³ Details of the relevant Dress Rehearsals are available in [CME Clearing Advisory 21-392](#) and [CME Clearing Advisory 21-377](#).

²⁴ The public overview is available on the CME Group website at: <https://www.cmegroup.com/trading/interest-rates/files/cme-ibor-conversion-for-chf-jpy-and-gbp-cleared-swaps.pdf>.

replacement corresponding GBP SONIA, CHF SARON and JPY TONA standardized OIS interest rate swaps, which will be implemented by CME with respect to open cleared trades in affected CME cleared products at the relevant Conversion Date. The GBP/CHF/JPY LIBOR Transition is a mandatory process and the terms set out below in this Clearing Advisory will apply to all cleared trades in Affected LIBOR Swaps from December 3, 2021, subject to regulatory review.

Capitalized terms not defined below shall have the meaning set out in the CME Rules.

CME Cleared Contracts Subject to the GBP/CHF/JPY Transition and this Advisory Notice

The Conversion process will apply to all cleared trades in CME cleared Interest Rate Swaps that reference GBP LIBOR, JPY LIBOR or CHF LIBOR²⁵ as the interest rate swap rate option (the "Floating Rate Option") and that are open at close of business ("COB") on the relevant Conversion Date²⁶ and that do not mature on the relevant Conversion Date (the "Affected Contracts").

Terms and Operation of Conversion Processes

JPY LIBOR IRS

1. Except with respect to cleared JPY LIBOR IRS to which paragraph 2 below applies, at or shortly after COB on December 3, 2021 (the "JPY/CHF Primary Conversion Date"), CME Clearing will amend the terms of each cleared trade in JPY LIBOR IRS that is open at COB on the JPY/CHF Primary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion JPY Swap") such that the cleared trade shall be converted into a corresponding CME cleared Overnight Index Swap ("OIS") referencing the Tokyo Overnight Average Rate ("TONA") interest rate benchmark (a "Conversion JPY Swap") in the position account of the relevant position holder, with the terms of such Conversion JPY Swap determined according to CME's published methodology²⁷.
2. With respect to each cleared JPY LIBOR IRS that:
 - (a) references a Fixing Day between the JPY/CHF Primary Conversion Date and January 4, 2022; or
 - (b) is accepted for clearing by CME after COB on the JPY/CHF Primary Conversion Date and prior to COB on January 4, 2022,

at or shortly after COB on January 4, 2022 (the "JPY Secondary Conversion Date"), CME Clearing will amend the terms of each such cleared trade in JPY LIBOR IRS that is open at COB on the JPY Secondary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion JPY Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the TONA interest rate benchmark (a "Conversion JPY Swap") in the position account of the relevant position holder, with the terms of such Conversion JPY Swap determined according to CME's published methodology.

3. With respect to each cleared JPY LIBOR IRS that:
 - (a) has a start date on or after COB on the JPY Secondary Conversion Date; and
 - (b) is accepted for clearing by CME after COB on or after the JPY Secondary Conversion Date,

at or shortly after COB on the date of acceptance of the trade for clearing, CME Clearing will amend the terms of each such cleared trade in JPY LIBOR IRS in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion JPY Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the TONA interest rate benchmark (a "Conversion JPY Swap") in the position account of the relevant position holder, with the terms of such Conversion JPY Swap determined according to CME's published methodology.

²⁵ GBP LIBOR Swaps include any CME cleared IRS referencing "GBP-LIBOR-BBA" or "GBP LIBOR" as the Floating Rate Option. JPY LIBOR Swaps include any CME cleared IRS referencing "JPY-LIBOR-BBA" or "JPY LIBOR" as the Floating Rate Option. CHF LIBOR Swaps include any CME cleared IRS referencing "CHF-LIBOR-BBA" or "CHF LIBOR" as the Floating Rate Option.

²⁶ A reference to a "relevant Conversion Date" in relation to any cleared trade shall be to the corresponding Primary Conversion Date, Secondary Conversion or other date of conversion of such cleared trade.

²⁷ The methodology is available in Exhibit 3 of CME Submission [21-515](#).

4. At or shortly after COB on, as applicable:
- (a) the JPY/CHF Primary Conversion Date;
 - (b) the JPY Secondary Conversion Date; or
 - (c) each Business Day following the JPY Secondary Conversion Date on which CME accepts for clearing JPY LIBOR IRS that satisfy the requirements in paragraph 3 above,
- (each a “JPY Conversion Date”),
- with respect to each relevant position account, CME will calculate the difference in net present value (“NPV”) at COB on such relevant JPY Conversion Date (at closing curve levels on the relevant JPY Conversion Date) between:
- (i) each Pre-Conversion JPY Swap subject to Conversion on such JPY Conversion Date; and
 - (ii) the corresponding Conversion JPY Swap,
- (the “Conversion Calculation”).
5. CME Clearing will determine settlement variation for each Conversion JPY Swap on the relevant JPY Conversion Date (at closing curve levels on the relevant JPY Conversion Date) for valuation for the end of day clearing cycle on the relevant JPY Conversion Date.
6. At the next end of day clearing cycle following the relevant JPY Conversion Date, for each Conversion JPY Swap, CME Clearing will:
- (a) apply as an upfront fee to each Conversion JPY Swap an offsetting cash compensation amount that is equal and opposite to the difference in NPV between the Conversion JPY Swap and the corresponding Pre-Conversion JPY Swap, as determined by CME Clearing during the Conversion Calculation (the “Cash Adjustment”):
 - i. where the Conversion Calculation determines that the NPV of a Conversion JPY Swap is greater than the NPV of the corresponding Pre-Conversion JPY Swap, the Cash Adjustment applied to the Conversion JPY Swap will be negative;
 - ii. where the Conversion Calculation determines that the NPV of a Conversion JPY Swap is less than the NPV of the corresponding Pre-Conversion JPY Swap, the Cash Adjustment applied to the Conversion JPY Swap will be positive; and
 - (b) settle outstanding exposures and payments from the end of day clearing cycle (including for the avoidance of doubt, settlement variation and the Cash Adjustment) in accordance with CME Rule 814. The relevant Cash Adjustment will offset the change in NPV for each Conversion JPY Swap such that the net cash flow in respect of the Conversion will be zero for each cleared trade in such Affected Contract per account.
7. Following the relevant JPY Conversion Date, each Conversion JPY Swap will be cleared by CME subject to the terms of the Rules applicable to JPY TONA OIS.

CHF LIBOR IRS

8. Except with respect to cleared CHF LIBOR IRS to which paragraph 9 below applies, at or shortly after COB on December 3, 2021 (the “JPY/CHF Primary Conversion Date”), CME Clearing will amend the terms of each cleared trade in CHF LIBOR IRS that is open at COB on the JPY/CHF Primary Conversion Date in the account of the relevant position holder (each such cleared trade, a “Pre-Conversion CHF Swap”) such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the Swiss Average Rate Overnight (“SARON”) interest rate benchmark (a “Conversion CHF Swap”) in the position account of the relevant position holder, with the terms of such Conversion CHF Swap determined according to CME’s published methodology.
9. With respect to each cleared CHF LIBOR IRS that:

- (a) references a Fixing Day between the JPY/CHF Primary Conversion Date and January 3, 2022; or
- (b) is accepted for clearing by CME after COB on the JPY/CHF Primary Conversion Date and prior to COB on January 3, 2022,

at or shortly after COB on January 3, 2022 (the "CHF Secondary Conversion Date"), CME Clearing will amend the terms of each such cleared trade in CHF LIBOR IRS that is open at COB on the CHF Secondary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion CHF Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SARON interest rate benchmark (a "Conversion CHF Swap") in the position account of the relevant position holder, with the terms of such Conversion CHF Swap determined according to CME's published methodology.

10. With respect to each cleared CHF LIBOR IRS that:

- (a) has a start date on or after COB on the CHF Secondary Conversion Date; and
- (b) is accepted for clearing by CME after COB on or after the CHF Secondary Conversion Date,

at or shortly after COB on the date of acceptance of the trade for clearing, CME Clearing will amend the terms of each such cleared trade in CHF LIBOR IRS in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion CHF Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SARON interest rate benchmark (a "Conversion CHF Swap") in the position account of the relevant position holder, with the terms of such Conversion CHF Swap determined according to CME's published methodology.

11. At or shortly after COB on, as applicable:

- (a) the JPY/CHF Primary Conversion Date;
- (b) the CHF Secondary Conversion Date; or
- (c) each Business Day following the CHF Secondary Conversion Date on which CME accepts for clearing CHF LIBOR IRS that satisfy the requirements in paragraph 10 above,

(each a "CHF Conversion Date"),

with respect to each relevant position account, CME will calculate the difference in net present value ("NPV") at COB on such relevant CHF Conversion Date (at closing curve levels on the relevant CHF Conversion Date) between:

- (iii) each Pre-Conversion CHF Swap subject to Conversion on such CHF Conversion Date; and
- (iv) the corresponding Conversion CHF Swap,

(the "Conversion Calculation").

12. CME Clearing will determine settlement variation for each Conversion CHF Swap on the relevant CHF Conversion Date (at closing curve levels on the relevant CHF Conversion Date) for valuation for the end of day clearing cycle on the relevant CHF Conversion Date.

13. At the next end of day clearing cycle following the relevant CHF Conversion Date, for each Conversion CHF Swap, CME Clearing will:

- (a) apply as an upfront fee to each Conversion CHF Swap an offsetting cash compensation amount that is equal and opposite to the difference in NPV between the Conversion CHF Swap and the corresponding Pre-Conversion CHF Swap, as determined by CME Clearing during the Conversion Calculation (the "Cash Adjustment"):
 - i. where the Conversion Calculation determines that the NPV of a Conversion CHF Swap is greater than the NPV of the corresponding Pre-Conversion CHF Swap, the Cash Adjustment applied to the Conversion CHF Swap will be negative;

- ii. where the Conversion Calculation determines that the NPV of a Conversion CHF Swap is less than the NPV of the corresponding Pre-Conversion CHF Swap, the Cash Adjustment applied to the Conversion CHF Swap will be positive; and
 - (b) settle outstanding exposures and payments from the end of day clearing cycle (including for the avoidance of doubt, settlement variation and the Cash Adjustment) in accordance with CME Rule 814. The relevant Cash Adjustment will offset the change in NPV for each Conversion CHF Swap such that the net cash flow in respect of the Conversion will be zero for each cleared trade in such Affected Contract per account.
14. Following the relevant CHF Conversion Date, each Conversion CHF Swap will be cleared by CME subject to the terms of the Rules applicable to CHF SARON OIS.

GBP LIBOR IRS

15. Except with respect to cleared GBP LIBOR IRS to which paragraph 16 below applies, at or shortly after COB on December 17, 2021 (the "GBP Primary Conversion Date"), CME Clearing will amend the terms of each cleared trade in GBP LIBOR IRS that is open at COB on the GBP Primary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion GBP Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the Sterling Overnight Index Average ("SONIA") interest rate benchmark (a "Conversion GBP Swap") in the position account of the relevant position holder, with the terms of such Conversion GBP Swap determined according to CME's published methodology.
16. With respect to each cleared GBP LIBOR IRS that:
- (a) references a Fixing Day between the GBP Primary Conversion Date and January 4, 2022; or
 - (b) is accepted for clearing by CME after COB on the GBP Primary Conversion Date and prior to COB on January 4, 2022,
- at or shortly after COB on January 4, 2022 (the "GBP Secondary Conversion Date"), CME Clearing will amend the terms of each such cleared trade in GBP LIBOR IRS that is open at COB on the GBP Secondary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion GBP Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SONIA interest rate benchmark (a "Conversion GBP Swap") in the position account of the relevant position holder, with the terms of such Conversion GBP Swap determined according to CME's published methodology.
17. With respect to each cleared GBP LIBOR IRS that:
- (a) has a start date on or after COB on the GBP Secondary Conversion Date; and
 - (b) is accepted for clearing by CME after COB on or after the GBP Secondary Conversion Date,
- at or shortly after COB on the date of acceptance of the trade for clearing, CME Clearing will amend the terms of each such cleared trade in GBP LIBOR IRS in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion GBP Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SONIA interest rate benchmark (a "Conversion GBP Swap") in the position account of the relevant position holder, with the terms of such Conversion GBP Swap determined according to CME's published methodology.
18. At or shortly after COB on, as applicable:
- (a) the GBP Primary Conversion Date;
 - (b) the GBP Secondary Conversion Date; or
 - (c) each Business Day following the GBP Secondary Conversion Date on which CME accepts for clearing GBP LIBOR IRS that satisfy the requirements in paragraph 17 above,
- (each a "GBP Conversion Date"),

with respect to each relevant position account, CME will calculate the difference in net present value (“NPV”) at COB on such relevant GBP Conversion Date (at closing curve levels on the relevant GBP Conversion Date) between:

- (i) each Pre-Conversion GBP Swap subject to Conversion on such GBP Conversion Date; and
- (ii) the corresponding Conversion GBP Swap,

(the “Conversion Calculation”).

19. CME Clearing will determine settlement variation for each Conversion GBP Swap on the relevant GBP Conversion Date (at closing curve levels on the relevant GBP Conversion Date) for valuation for the end of day clearing cycle on the relevant GBP Conversion Date.
20. At the next end of day clearing cycle following the relevant GBP Conversion Date, for each Conversion GBP Swap, CME Clearing will:
 - (a) apply as an upfront fee to each Conversion GBP Swap an offsetting cash compensation amount that is equal and opposite to the difference in NPV between the Conversion GBP Swap and the corresponding Pre-Conversion GBP Swap, as determined by CME Clearing during the Conversion Calculation (the “Cash Adjustment”):
 - i. where the Conversion Calculation determines that the NPV of a Conversion GBP Swap is greater than the NPV of the corresponding Pre-Conversion GBP Swap, the Cash Adjustment applied to the Conversion GBP Swap will be negative;
 - ii. where the Conversion Calculation determines that the NPV of a Conversion GBP Swap is less than the NPV of the corresponding Pre-Conversion GBP Swap, the Cash Adjustment applied to the Conversion GBP Swap will be positive; and
 - (b) settle outstanding exposures and payments from the end of day clearing cycle (including for the avoidance of doubt, settlement variation and the Cash Adjustment) in accordance with CME Rule 814. The relevant Cash Adjustment will offset the change in NPV for each Conversion GBP Swap such that the net cash flow in respect of the Conversion will be zero for each cleared trade in such Affected Contract per account.
21. Following the relevant GBP Conversion Date, each Conversion GBP Swap will be cleared by CME subject to the terms of the Rules applicable to GBP SONIA OIS.

General Provisions

22. CME will account for:
 - (a) the relevant ISDA Spread Adjustment published by Bloomberg Index Services Limited (the “ISDA Spread Adjustment”) in determining the floating amount of each Conversion GBP Swap or Conversion CHF Swap; and
 - (b) the relevant ISDA Spread Adjustment multiplied by 365 divided by 360 in determining the floating amount of each Conversion JPY Swap,in each case in accordance with CME’s published methodology.
23. Where applicable, known fixed and floating accruals relating to each Affected Contract which have not been settled on the relevant Conversion Date will be calculated by CME and added to the corresponding Conversion JPY Swap, Conversion CHF Swap or Conversion GBP Swap, as applicable, as an upfront fee, in accordance with CME’s published methodology.
24. CME will apply a fixed conversion surcharge of \$10 (the “Conversion Fee”) for each Conversion JPY Swap, Conversion GBP Swap or Conversion CHF Swap or set of such swaps that is established as a result of the Conversion process in respect of each relevant Pre-Conversion Swap.
25. Except as expressly stated in relation to IRS Contracts falling within paragraphs 3, 10 or 17 (“Residual Swaps”), CME will not apply the Permanent Cessation Fallbacks in CME Rule 90102.H (Application of Permanent Cessation Fallbacks) in respect of any Affected Contract. On acceptance

for clearing of a Residual Swap on or after COB on the relevant Secondary Conversion Date, for the purposes of clearing such Residual Swap, CME will amend the terms of the Residual Swap such that any reference to GBP LIBOR, JPY LIBOR or CHF LIBOR shall be deemed to be a reference to the relevant nominated successor Fallback Rate published by Bloomberg Index Services Limited for such Residual Swap prior to conversion at COB.

26. CME shall make such further amendments to the terms of Affected Contracts as it deems necessary in its sole and absolute discretion to implement the terms of this Advisory Notice.
27. The terms of this Advisory Notice and each relevant Conversion process are binding on Clearing Members and position holders in all Affected Contracts, effective December 3, 2021. To the extent that there is any conflict between the Rules and the terms of this Advisory Notice with respect to any Conversion process, this Advisory Notice shall prevail. For the purposes of this Advisory Notice, Rule 90103.A (Contract Modifications; CME Rules) shall not apply to the extent it purports to restrict modification to the terms of IRS Contracts that are the subject of this Advisory Notice.

Each Conversion process on a relevant Conversion Date is a mandatory process. Each Conversion and the relevant Cash Adjustment in each case will therefore apply to all positions in cleared trades in relevant Affected Contracts on the relevant Conversion Date, as set out in this Advisory Notice. Market participants should consider the terms and impact of each relevant Conversion as set out in this Advisory Notice and take appropriate action prior to the relevant Conversion Date. Position holders that do not wish to participate in a Conversion process must close out any positions in relevant Affected Contracts prior to the relevant Conversion Date.

Limitation of Acceptance for Clearing for Affected Contracts Following Relevant Secondary Conversion Date

From COB on the relevant Secondary Conversion Date, with the exception of Residual Swaps that meet the relevant requirements in paragraph 3, 10 or 17 above, as applicable, after COB on the relevant Secondary Conversion Date, CME Clearing will cease to accept for clearing trades in the Affected Contracts.

From COB on the relevant Secondary Conversion Date, CME Clearing will continue to accept Residual Swaps that meet the relevant requirements in paragraph 3, 10 or 17 above, as applicable. Such trades will be subject to the relevant Conversion process described above in:

- paragraphs 3 to 7 for JPY LIBOR Swaps;
- paragraphs 10 to 14 for CHF LIBOR Swaps; and
- paragraphs 17 to 21 for GBP LIBOR Swaps.

The list of IRS Rate Options in CME Rule 90102.E.1. (Interest Rate Swaps Rate Options) in Chapter 901 ("Interest Rate Swaps Contract Terms") of the CME Rulebook will be updated accordingly from December 3, 2021, as detailed in CME Submission [21-515](#) and illustrated in Exhibit 1 to this Clearing Advisory.

Operational Information

CME Clearing will provide the following information in relation to Affected Contracts:

- End of Day Trade Register report made available by the Clearing House only to IRS clearing members and clients via an sFTP site;
- CME OTC IRS Bookkeeping document, made available to IRS Clearing Members and their customers on request;
- FpML Confirmations for Affected LIBOR Swaps and Conversion RFR Swaps; and
- LIBOR to RFR Cash Adjustment Report made available by the Clearing House only to IRS Clearing Members and clients via an sFTP site, illustrating the NPV for each Affected LIBOR Swap and the revised NPV for each Conversion RFR Swap and the Cash Adjustment at the trade level for each position account. This report will be available as an "Indicative Analysis Report" in the CME Production Environment on a daily basis beginning on Monday November 1, 2021 until January 3, 2022. The actual Cash Adjustment amounts will be indicated in the IRS Trade Register at COB on the relevant Conversion Date.

To reflect the operational processes within the clearing system, CME will send:

- a termination message to relevant CME clearing firms in respect of the termination of each relevant Affected LIBOR Swap; and
- a clearing confirmation message to relevant CME clearing firms in respect of the establishment of each new relevant Conversion RFR Swap.

As part of the relevant Conversion process, all relevant Trade IDs on the relevant Affected LIBOR Swaps will be carried over to the relevant Conversion RFR Swaps. In order to identify the link between each Affected LIBOR Swap and the relevant Conversion RFR Swap, CME will add a replacement Trade ID and Original Trade ID respectively in the History section of the clearing confirmation messages.

Reporting to SDR

CME will report the result of the relevant Conversion in each case to CME SDR in accordance with the requirements of the CFTC's Part 45 Regulations, to reflect the conversion of each Affected LIBOR Swap into each corresponding Conversion RFR Swap. With regard to reporting data submitted to SDR in respect of each Conversion RFR Swap, CME will populate the "Prior USI" field with the USI of the relevant Affected LIBOR Swap to reflect the nature of the Conversion process. For SDR reporting purposes, reporting rows will be generated and submitted to CME SDR terminating the USI of each Affected LIBOR Swap and CME will ensure that each Conversion RFR Swap will be reported as a "New Trade."

Additional details regarding the Conversion may be viewed in **CME Submission No. [21-515](#)**.

Inquiries regarding the aforementioned may be directed to:

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Steve Dayon - OTC Products	steven.dayon@cmegroup.com	312.466.4447

Exhibit 1
CME Rulebook
(additions underscoring; deletions ~~overstruck~~)

Chapter 901
Interest Rate Swap Contract Terms

90102. CONTRACT TERMS

90102.E. Rate Options

90102.E.1. Interest Rate Swaps Rate Options

With respect to an IRS Contract, the Floating Rate Option elected by the IRS Clearing Participant in accordance with Rule 90002.F from the following Floating Rate Options names specified in the 2006 ISDA Definitions or Floating Rate Options names specified in the ISDA Definitions Floating Rate Matrix, or combination of rate options:

	2006 ISDA Definitions Floating Rate Option ("FRO") Name	2021 ISDA Definitions FRO Name
1.	USD-LIBOR-BBA	USD-LIBOR
2.	USD-Federal Funds-H.15-OIS-COMPOUND	USD-Federal Funds-OIS Compound
3.	USD-Federal Funds-H. 15	USD-Federal Funds
4.	EUR-EURIBOR-Reuters	EUR-EURIBOR
5.	EUR-EURIBOR-Telerate (as defined in the 2000 ISDA Definitions, as published by ISDA)	Not applicable
6.	GBP-LIBOR-BBA*	GBP-LIBOR*
<u>*As set out in CME Clearing Advisory Notice [], effective January 4, 2022, CME will cease to accept for clearing IRS Contracts referencing GBP-LIBOR-BBA or GBP-LIBOR except where the start date of such swap is on or after January 4, 2022.</u>		
7.	GBP-SONIA-COMPOUND	GBP-SONIA-OIS Compound
8.	JPY-LIBOR-BBA**	JPY-LIBOR**
<u>**As set out in CME Clearing Advisory Notice [], effective January 4, 2022, CME will cease to accept for clearing IRS Contracts referencing JPY-LIBOR-BBA or JPY-LIBOR except where the start date of such swap is on or after January 4, 2022.</u>		
9.	JPY-TONA-OIS-COMPOUND	JPY-TONA-OIS Compound
10.	CHF-LIBOR-BBA***	CHF-LIBOR***
<u>***As set out in CME Clearing Advisory Notice [], effective January 3, 2022, CME will cease to accept for clearing IRS Contracts referencing CHF-LIBOR-BBA or CHF-LIBOR except where the start date of such swap is on or after January 3, 2022.</u>		
11.	CAD-BA-CDOR	CAD-CDOR
12.	CAD-CORRA-OIS-COMPOUND	CAD-CORRA-OIS Compound
13.	AUD-BBR-BBSW	AUD-BBSW
14.	AUD-AONIA-OIS-COMPOUND	AUD-AONIA-OIS Compound
15.	SEK-STIBOR-SIDE	SEK-STIBOR
16.	DKK-CIBOR-DKNA13	DKK-CIBOR
17.	DKK-CIBOR2-DKNA13	DKK-CIBOR2
18.	NOK-NIBOR-NIBR	NOK-NIBOR
19.	NOK-NIBOR-OIBOR	NOK-NIBOR
20.	HKD-HIBOR-HKAB	HKD-HIBOR
21.	NZD-BBR-FRA	NZD-BKBM FRA
22.	SGD-SOR-VWAP	SGD-SOR
23.	HUF-BUBOR-Reuters	HUF-BUBOR
24.	PLN-WIBOR-WIBO	PLN-WIBOR
25.	CZK-PRIBOR-PRBO	CZK-PRIBOR
26.	ZAR-JIBAR-SAFEX	ZAR-JIBAR
27.	MXN-TIIE-Banxico	MXN-TIIE
28.	USD-SOFR-COMPOUND	USD-SOFR-OIS Compound

29.	EUR-EuroSTR-COMPOUND	EUR-EuroSTR-OIS Compound
30.	CHF-SARON-OIS-COMPOUND	CHF-SARON-OIS Compound
31.	USD-BSBY	USD-BSBY
32.	Not supported	SGD-SORA-OIS Compound

[Remainder of Rule unchanged.]