

TO: Clearing Member Firms
Back Office Managers

DATE: March 28, 2023

FROM: CME Clearing

NOTICE #: 23-103

SUBJECT: **Modification of Cleared Over-the-Counter (“OTC”) U.S. Dollar (“USD”) Denominated Interest Rate Swap Products Referencing the London Interbank Offered Rate (“LIBOR”) and Limitation of Acceptance for Clearing**

Background

On March 5, 2021, the UK Financial Conduct Authority (“FCA”) announced that all remaining settings of USD ICE LIBOR¹ would cease to be representative of the underlying market from June 30, 2023 (the “Scheduled Final Representative USD LIBOR Publication Date”).² These circumstances constitute an “Index Cessation Event” within the meaning of contractual “fallback” provisions within the ISDA IBOR Fallbacks Supplement, 2021 ISDA Interest Rate Derivatives Definitions and the Rulebook of Chicago Mercantile Exchange, Inc. (“CME”, the “Clearing House” or “CME Clearing”) (the “CME Rulebook”). As a result, under the current CME Rulebook fallback provisions following the Scheduled Final Representative USD LIBOR Publication Date, CME cleared IRS referencing USD LIBOR would transition to reference a term and spread adjusted fallback Secured Overnight Financing Rate (“SOFR”) on July 3, 2023, being the “Index Cessation Effective Date” within the meaning of those rules.

However, following the successful CME Clearing-led conversion of Non-USD LIBOR derivative contracts into corresponding standardised risk-free rate overnight index swaps (“OIS”) in December 2021 ahead of the relevant Index Cessation Effective Dates for those LIBOR rates (the “Non-USD LIBOR Conversion”),³ market participants have expressed a preference for a similar CCP-led conversion of OTC USD LIBOR IRS into corresponding standardized SOFR OIS in good time before the Scheduled Final Representative USD LIBOR Publication Date.

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

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/publication/documents/future-cessation-loss-representativeness-libor-benchmarks.pdf>.

³ In December 2021, CME effected a conversion of CME cleared British Pound (“GBP”), Japanese Yen (“JPY”) and Swiss Franc (“CHF”) OTC IRS contracts into standardized corresponding “risk-free rate” (“RFR”) overnight index swaps (“OIS”) ahead of the relevant “Index Cessation Effective Dates” for such contracts. This was driven by market participants’ clear preference for a CPP-led conversion process into standardized RFR OIS rather than reliance on the fallback provisions equivalent to those used in bilateral uncleared markets. See <https://www.cmegroup.com/content/dam/cmegroup/market-regulation/rule-filings/2021/9/21-412.pdf> and CME Submission 21-515, accessible at <https://www.cftc.gov/sites/default/files/filings/orgrules/21/11/rule111821cmeco001.pdf>.

Cessation Fallbacks”) for USD LIBOR IRS on the “Index Cessation Effective Date” for USD LIBOR after June 30, 2023. Instead, CME has determined that CME will convert:

- the majority of CME cleared USD LIBOR IRS to reference SOFR, the nominated successor to USD LIBOR on April 21, 2023, or such other date determined by CME in its sole and absolute discretion (the “Primary Conversion Date”); and
- the remainder of open CME cleared USD LIBOR IRS on July 3, 2023 (the “Secondary Conversion Date”).

In each case, the relevant conversion process will amend the terms of in scope USD LIBOR Swaps to reference the relevant successor SOFR floating rate option through conversion of open swaps into standardized SOFR OIS, where relevant, with a cash adjustment mechanism to compensate for any resulting change in valuation and accounting for the relevant ISDA Spread Adjustment (as defined below), utilizing CME’s publicly available methodology that accounts for any remaining representative USD LIBOR fixings, further details of which are provided below and provided in Appendix 1 to this Clearing Advisory Notice.⁴

Following the Secondary Conversion Date, CME will provide only a limited clearing service in respect of USD LIBOR Swaps, in order to continue to support clearing of any USD 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 “USD LIBOR Conversion”).

The conversion processes that together form the USD LIBOR Conversion have been determined by CME based on extensive discussions with market participants and are designed to be broadly aligned with wider industry initiatives for transition of cleared USD LIBOR IRS and listed interest rate derivative products to SOFR.

The modification to the terms of the USD LIBOR Swaps to implement the USD LIBOR Conversion is set out in this Clearing Advisory Notice which shall be binding on Clearing Members and position holders of CME cleared IRS Contracts in USD LIBOR Swaps from close of business on April 21, 2023.

Rationale for USD LIBOR Conversion Processes

The conversion of cleared USD LIBOR Swaps by the amendment of cleared trades into corresponding standardized SOFR OIS by CCPs is seen by market participants as a critical element in the overall process of ensuring an orderly and efficient transition from USD LIBOR rates in derivatives markets. The existing contractual fallbacks in CME cleared OTC derivative contracts⁵, as with bilateral uncleared derivative

⁴ For further details, see <https://www.cmegroup.com/content/dam/cmegroup/trading/interest-rates/files/cme-conversion-for-usd-libor-cleared-swaps.pdf> and CME Submission [23-082](#).

⁵ In January 2021, as part of regulatory and industry initiatives to transition away from certain key interbank offered rates (“IBORs”) and interest rate benchmarks, 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 “risk-free rate” (“RFR”) on the permanent discontinuation or “non-representativeness” of certain key IBORs, including USD LIBOR. 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 Interest Rate Derivatives Definitions (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

contracts incorporating the relevant ISDA contractual fallbacks, currently provide that USD LIBOR referencing swaps shall transition to a term and spread adjusted SOFR rate, calculated according to the industry-agreed methodology published by ISDA (the “ISDA Fallback Pricing Methodology”), following the “Index Cessation Effective Date”, i.e. July 3, 2023, being the next USD LIBOR publication date after the Scheduled Final Representative USD LIBOR Publication Date.⁶

However, as noted above, market participants have expressed a clear preference for CME to implement an approach similar to that utilized for the Non-USD LIBOR Conversion in December 2021, rather than to fully operationalize the relevant ISDA-derived fallbacks in CME Rule 90102.H (“Application of Permanent Cessation Fallbacks”) for USD LIBOR Swaps. This is because market participants believe that CCP application of the ISDA-derived contractual fallbacks to cleared USD LIBOR swaps would give rise to resulting positions that would not be on the same terms as, and therefore not fungible with, standardized cleared SOFR OIS. This could create difficulties for participants wishing to unwind non-standardized resulting SOFR swap contracts; to do so, market participants would need to execute and book additional non-standard swaps in an uncertain liquidity environment. During CME’s industry engagement processes in 2022, market participants informed CME that an alternative, CCP-led conversion of USD LIBOR swap exposures into market standard SOFR OIS (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 SOFR swaps;

incorporation into the CME Rules of the contractual fallback triggers and fallback provisions contained within the 2021 ISDA Definitions, replacing those substantially equivalent provisions contained in the ISDA IBOR Fallbacks Supplement and subsequent additional supplements by ISDA. See CME Rule 90102.H. (“Permanent Cessation Fallbacks”) and [CME Submission No. 21-431](#).

⁶ The “Fallback Rate” under these contractual fallbacks is calculated and made publicly available by Bloomberg Index Services Limited (“BISL”). 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. 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. 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.

- providing participants certainty that “legacy” and “new” contracts would be fungible with one another upon transition to the SOFR fallback; and
- supporting market standard SOFR 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 Fallback arrangements.⁷

In addition, in providing their support for a CME-led conversion of USD LIBOR swaps to SOFR OIS, market participants have indicated a preference that the bulk of such transition should be scheduled to take place before the Index Cessation Effective Date, and broadly in line with other CCP conversion processes, to ease potential operational congestion for cash and derivatives market participants and CCPs relating to the scheduled transition for bilateral uncleared derivatives markets following end-June 2023. Stakeholders have expressed a clear preference that the timing of CME’s primary USD LIBOR transition process should be broadly aligned with other major CCPs clearing USD LIBOR swaps, which have expressed their intention to effect a conversion of USD LIBOR Swaps in April 2023.⁸ Given this feedback from market participants, CME has determined that the Primary Conversion Date of April 21, 2023 is the most appropriate date for the bulk of the CME USD LIBOR Swap conversion processes to take place, also being closely aligned with the corresponding date proposed for the CME-led conversion of CME Eurodollar Futures and Options contracts scheduled for April 2023⁹ to help mitigate systemic risk during the transition process.

CME has consulted with a diverse cross-section of market participants to obtain feedback on the operational processes for the USD LIBOR Conversion. As noted above, the proposed processes are substantively similar to the approach adopted by CME in December 2021 to effect the Non-USD LIBOR Conversion, in relation to which CME had conducted extensive outreach and engagement in late 2020 and 2021.¹⁰ During the course of 2022, as part of ongoing discussions with market participants on this issue, CME shared public details of the proposals to effect an “early” and “CCP-led” transition away from USD LIBOR ahead of the scheduled Index Cessation Effective Date following publication on June 30, 2023. A period of public consultation on the proposals ended in July 2022 and the final proposal was published by CME in August

⁷ The methodology for conversion utilized by CME will account for the payment lag arising from conversion into a standardized SOFR OIS.

⁸ CME understands that each of LCH Limited and Eurex Clearing AG propose to implement conversion processes for their respective customers in order to convert USD LIBOR swaps also to take place on or around the same conversion dates proposed by CME. See <https://www.eurex.com/ec-en/find/circulars/Eurex-Clearing-Readiness-Newsflash-EurexOTC-Clear-Timeline-for-OTCClear-transition-of-transactions-referencing-the-USD-LIBOR-benchmark-3244922> and <https://www.lch.com/membership/ltd-membership/ltd-member-updates/rates-reform-usd-libor-fallback-and-conversion-fees>.

⁹ The CME Eurodollar Futures and Options fallbacks implementation plan is available at <https://www.cmegroup.com/articles/2022/eurodollar-fallbacks-implementation-plan.html>. In December 2022, CME submitted amendments to the USD LIBOR fallback provisions in the contract terms to Three-Month Eurodollar Futures and Options on Three-Month Eurodollar Futures Contracts. See CME Submission 22-567, available at <https://www.cmegroup.com/content/dam/cmegroup/market-regulation/rule-filings/2022/12/22-567.pdf>. The corresponding CME SER 9115 confirmed the effectiveness of these rule changes: <https://www.cmegroup.com/notices/ser/2022/12/SER-9115.html>.

¹⁰ CME first presented an overview of the non-USD LIBOR 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 Non-USD LIBOR Conversion 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. 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>.

2022, which included a detailed operational methodology presentation providing full operational level detail on the processes that CME will follow to implement the transition.¹¹

Market participants, industry groups and regulators recognize these benefits of a CCP-led conversion of USD LIBOR Swaps to SOFR OIS and CME's approach has been well publicized and understood, as demonstrated by the non-USD LIBOR transitions led by CME and other major CCPs at the end of 2021. The FCA has welcomed the approach of CME and other major CCPs to undertake a CCP-led conversion of USD LIBOR swaps ahead of the Index Cessation Effective Date.¹²

Summary of USD LIBOR Conversion Process

Conversion of CME cleared USD LIBOR Swaps

CME will transition CME cleared USD LIBOR Swaps by converting such contracts to reference SOFR on the relevant conversion date determined by CME (and on a daily basis after the Secondary Conversion Date for a limited category of contracts), utilizing a mandatory conversion process and the relevant methodology determined by CME, as summarized below:

¹¹ See: <https://www.cmegroup.com/content/dam/cmegroup/trading/interest-rates/files/cme-conversion-for-usd-libor-cleared-swaps.pdf>

¹² See FCA comments on CCP-led transition in June and November 2022 respectively in relation to "synthetic" USD LIBOR, see <https://www.fca.org.uk/publication/consultation/cp22-11.pdf> and <https://www.fca.org.uk/publication/consultation/cp22-21.pdf>.

Date	Conversion Date	CME cleared swaps subject to Conversion on date	Output of Conversion
April 21, 2023 ¹³	Primary Conversion Date	USD LIBOR vs Fed Funds Basis Swap	SOFR vs Fed Funds Basis Swap; and Short-Dated USD LIBOR vs Fed Funds Basis Swap
		USD LIBOR IRS with a maturity date after the Primary Conversion Date* *Excluding: <ul style="list-style-type: none"> • Zero Coupon Swaps; and • USD LIBOR IRS where the last USD LIBOR fixing date is before the Scheduled Final Representative USD LIBOR Publication Date, but which do not settle prior to the Scheduled Final Representative USD LIBOR Publication Date 	For Seasoned Swaps: <ul style="list-style-type: none"> • Short-Dated USD LIBOR Swap accounting for all remaining unsettled representative USD LIBOR fixings in respect of the original USD LIBOR Swap; and • Forward Starting SOFR OIS with start date of the maturity date of Short-Dated USD LIBOR Swap
			For Forward Starting Swaps: Forward Starting SOFR OIS with effective/maturity dates of original USD LIBOR Swap
July 3, 2023	Secondary Conversion Date	Zero Coupon USD LIBOR IRS	For Seasoned Swaps: Forward Starting SOFR OIS <ul style="list-style-type: none"> • Representative LIBOR fixings and compounded floating legs accounted for • Payment at maturity retained for floating and fixed leg • 2-day payment offset applied to coupon • Adjusted “known amount” on fixed leg • Adjusted notional to account for previous compounding periods
			For Forward Starting Swaps: Forward Starting SOFR OIS with payment at maturity
		USD LIBOR IRS and USD LIBOR vs Fed Funds Basis Swaps submitted for clearing after COB on the Primary Conversion Date and before COB on the Secondary Conversion Date	As for Primary Conversion
		USD LIBOR IRS that result from exercise of bilateral swaptions submitted for clearing after the Primary Conversion Date and before the Secondary Conversion Date	As for Primary Conversion
Daily basis after Secondary Conversion Date	Ongoing Conversion on the date of acceptance for clearing by CME (each, a “Conversion Date”)	USD LIBOR IRS that are spot or forward starting with a start date after COB on the Secondary Conversion Date, in order to support clearing and conversion of swaps that result from exercise of bilateral swaptions	As for Secondary Conversion

¹³ CME will reserve the right to determine an alternative date as the Primary Conversion Date in its sole and absolute discretion.

Conversion Processes - Adjustment Methodology

CME has published its detailed methodology for the Conversion processes, including worked examples (the “Published Methodology”), which is summarized below:¹⁴

- each resulting CME cleared SOFR OIS arising from the Conversion process (each, a “Forward Starting SOFR OIS”) will account for the ISDA Spread Adjustment on the floating leg of the SOFR OIS swap, retaining the key economic terms of the original trade, subject to certain adjustments described below and determined by CME according to the Published Methodology;
- each resulting CME cleared short-dated USD LIBOR Swap arising from the Conversion process (each, a “Short-Dated USD LIBOR Swap”) is designed to account for any known representative USD LIBOR rate coupons that will be unpaid on the Index Cessation Effective Date, restating these accrual periods as CME cleared Short-Dated USD LIBOR Swaps which will have economic terms as determined by CME according to the Published Methodology;
- in order to neutralize the value transfer from the conversion of the economic position of each original USD LIBOR Swap into each relevant Forward Starting SOFR OIS / replacement positions, CME will calculate a cash adjustment amount that will be based on the difference between the net present value (“NPV”) of the original USD LIBOR Swap and the combined NPV of the Forward Starting SOFR OIS and any Short-Dated USD LIBOR Swap on the relevant Conversion Date. The Cash Adjustment for each Forward Starting SOFR OIS 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”).¹⁵ The Cash Adjustment amount will be applied by CME in the form of upfront “fees” on each resulting cleared Forward Starting SOFR OIS on the relevant conversion date (each such date, a “Conversion Date”);
- 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 relevant conversion will be neutralized;
- in each case, any Forward Starting SOFR OIS will be cleared as a CME cleared SOFR OIS (referencing the USD-SOFR-OIS Compound Floating Rate Option) and any Short Dated USD LIBOR Swap will be cleared as a USD LIBOR Swap;
- for USD LIBOR – Fed Funds Basis Swaps, any open USD LIBOR payment period will be replaced with (i) a Short-Dated USD LIBOR vs Fed Funds Basis Swap with effective and maturity dates to match the current LIBOR period start and end dates, and (ii) a Forward Starting SOFR vs Fed Funds Basis Swap with effective date set as the next payment period start date for the original USD LIBOR basis swap with the same maturity date as the original USD LIBOR basis swap. The

¹⁴ See <https://www.cmegroup.com/content/dam/cmegroup/trading/interest-rates/files/cme-conversion-for-usd-libor-cleared-swaps.pdf>. Further details are also available in CME Submission [23-082](#).

¹⁵ Where the holder of a Forward Starting SOFR OIS 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 Forward Starting SOFR OIS and such amount would be due from the position holder at the next clearing cycle. Where the holder of a Forward Starting SOFR OIS experiences a negative change in NPV, an upfront fee equal and opposite to that amount of change in NPV would be applied to the Forward Starting SOFR OIS 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.

resulting SOFR vs Fed Funds Basis Swap will apply the ISDA Spread Adjustment on the first floating leg.

Primary Conversion Date – Conversion Processes

A: USD LIBOR IRS excluded from Primary Conversion

The following CME cleared USD LIBOR IRS open on the Primary Conversion Date are excluded from the conversion process on the Primary Conversion Date:

- (i) USD LIBOR Swaps that mature on the Primary Conversion Date;
- (ii) USD LIBOR IRS where the last USD LIBOR fixing date is before the Scheduled Final Representative USD LIBOR Publication Date, but which do not settle prior to the Scheduled Final Representative USD LIBOR Publication Date; and
- (iii) Zero Coupon USD LIBOR Swaps.

B: Conversion of Seasoned USD LIBOR Swaps on the Primary Conversion Date

CME will convert each eligible CME cleared USD LIBOR Swap open on the Primary Conversion Date that is not a Forward Starting Swap (each, a “Seasoned Swap”) into:

- (i) a corresponding standardized Forward Starting SOFR OIS, retaining the key economic terms of the original USD LIBOR Swap trade; and
- (ii) a Short-Dated USD LIBOR Swap accounting for all representative USD LIBOR fixings in respect of the original USD LIBOR Swap that are unpaid and settle after the Primary Conversion Date,

in each case subject to certain adjustments determined by CME described above (in section titled Adjustment Methodology), including the Cash Adjustment which shall be applied to each Forward Starting SOFR OIS, and applied according to the Published Methodology.

If the original Seasoned USD LIBOR Swap has a single representative LIBOR fixing that has not been paid/settled prior to the Index Cessation Effective Date:

- the resulting Short-Dated USD LIBOR Swap will be a single period Fixed – LIBOR swap that settles the coupon payments; and
- the Forward Starting SOFR OIS start date will be the maturity date of the Short Dated USD LIBOR Swap.

If the original Seasoned USD LIBOR Swap has multiple representative LIBOR fixings that have not been paid/settled prior to the Index Cessation Effective Date:

- the resulting Short-Dated USD LIBOR Swap will be a multiple period Fixed-LIBOR swap that settles the coupon payments; and
- the Forward Starting SOFR OIS start date will be the maturity date of the Short-Dated USD LIBOR Swap.

C: Conversion of Forward Starting USD LIBOR Swaps with an effective date after the Index Cessation Effective Date on the Primary Conversion Date

CME will convert each CME cleared USD LIBOR Swap that is a Forward Starting Swap and is open on the Primary Conversion Date into:

- a corresponding standardized Forward Starting SOFR OIS, retaining the key economic terms of the original USD LIBOR Swap trade,

in each case subject to certain adjustments determined by CME described above (in Adjustment Methodology), including the Cash Adjustment which shall be applied to each Forward Starting SOFR OIS, and applied according to the Published Methodology.

Each resulting Forward Starting SOFR OIS will:

- maintain the effective/maturity dates and fixed leg economic terms (excluding pay offset) of the original USD LIBOR Swap;
- include a payment offset (2D) added to both legs of the swap, consistent with market standard OIS conventions;
- include a single compensation fee to be paid the following New York business day in the form of the Cash Adjustment.

D: Conversion of USD LIBOR – Fed Funds Basis Swaps on the Primary Conversion Date

CME will convert each cleared trade in USD LIBOR – Fed Funds Basis Swaps that is open on the Primary Conversion Date into:

- a corresponding SOFR vs Fed Funds Basis Swap; and
- a Short-Dated LIBOR vs Fed Funds Basis Swap

in each case subject to certain adjustments determined by CME described above, including the Cash Adjustment which shall be applied to the corresponding SOFR vs Fed Funds Basis Swap, and applied according to the Published Methodology.

In each case, the Fed Funds leg will continue to use averaging and a rate cut-off and the SOFR leg will use compounding and a payment offset.

E: Conversion of Compounding Swaps

For the conversion of compounding USD LIBOR Swaps, CME will respect the representative LIBOR fixings of any seasoned compounding swaps:

- if the compounding USD LIBOR Swap is forward starting, with an effective date after the Index Cessation Effective Date, then the swap will be converted into only a Forward Starting SOFR OIS with the original payment frequencies on both legs. The Cash Adjustment shall be applied to the Forward Starting SOFR OIS;
- for any other cases:

- CME will book a Short-Dated USD LIBOR Swap to settle the representative LIBOR floating and fixed accruals;
- the resulting Forward Starting SOFR OIS will be effective at the end of the next floating coupon period and the daily compounded rate will be applied to all future floating periods;
- Fixed and float cash flows on the Short-Dated USD LIBOR Swap may not match the original USD LIBOR Swap.

F: Conversion approach to Swap Stub Periods

Stubs require special processing when converting USD LIBOR Swaps into Short-Dated USD LIBOR Swaps as there are different methods used to specify the original Floating Rate Option. CME's Published Methodology requires that all current stub periods will be restated as a USD LIBOR Zero Coupon Swap.

Forward starting stub periods will maintain the period start and end dates with a daily compounded overnight rate.

Secondary Conversion Date – Conversion Processes

A: USD LIBOR IRS excluded from Secondary Conversion

The following CME cleared USD LIBOR IRS open on the Secondary Conversion Date are excluded from the conversion process on the Secondary Conversion Date:

- (i) USD LIBOR Swaps that mature on the Secondary Conversion Date;
- (ii) USD LIBOR IRS where the last USD LIBOR fixing date is before the Scheduled Final Representative USD LIBOR Publication Date, but which do not settle prior to the Scheduled Final Representative USD LIBOR Publication Date;
- (iii) Short-Dated LIBOR vs Fed Funds Basis Swaps arising from the Primary Conversion; and
- (iv) Short-Dated USD LIBOR Swaps arising from the Primary Conversion.

B: Conversion of USD LIBOR Swaps submitted prior to the Secondary Conversion Date

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

C: Conversion of Zero Coupon Swaps on the Secondary Conversion Date

CME will convert each CME cleared USD LIBOR Zero Coupon Swap open on the Secondary Conversion Date as follows:

- Forward starting Zero Coupon Swaps will be converted into a single Forward Starting SOFR OIS with payment at maturity;
- Seasoned Zero Coupon Swaps have representative USD LIBOR fixings and compounded floating legs that need to be accounted for in the replacement Forward Starting SOFR OIS:

- CME will keep the payment at maturity for both the floating and fixed leg (if applicable). A 2-day payment offset is applied to both coupon payments to stay consistent with standard SOFR OIS conventions;
- any accrued interest from past and current representative USD LIBOR periods is settled at maturity by adjusting the “known amount” on the fixed leg of the Forward Starting SOFR OIS;
- the replacement Forward Starting SOFR OIS will have adjusted notional to account for the previous compounding periods,

in each case subject to certain adjustments determined by CME described above (in Adjustment Methodology), including the Cash Adjustment which shall be applied to each Forward Starting SOFR OIS, and applied according to the Published Methodology.

Limitation of Clearing Support for USD LIBOR Swaps after Secondary Conversion Date

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

Until further notice by CME to market participants, in order to continue to support clearing of any USD LIBOR Swap that results from the exercise of a bilateral (uncleared) Swaption contract exercise after the Secondary Conversion Date, CME will accept for clearing any spot or forward starting USD LIBOR Swap that is submitted to CME for clearing following COB on the 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 USD LIBOR Swap contract utilizing the process applied by CME to forward starting USD LIBOR Swaps on the Primary Conversion Date, as described above.

Operational Overview of Conversion Processes

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

Methodology for Converting USD LIBOR Swaps

The Published Methodology for effecting the relevant Conversion processes was first made public in August 2022 on the CME website and was included in CME Submission [23-082](#) and is appended to this Clearing Advisory as Appendix 1.

Legal and Operational Characterization; Messaging and Reporting to SDR

In legal and contractual terms, each Conversion process will amend the terms of cleared trades in CME cleared USD LIBOR Swaps, converting the terms of each cleared trade to a standardized CME cleared SOFR OIS and, where applicable, a Short-Dated USD LIBOR Swap and/or relevant basis swap pair. From an operational perspective, each relevant Conversion will be processed by CME as a “termination” of each relevant USD LIBOR Swap and the establishment of “new” corresponding cleared trade(s) within the clearing system.

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

- a termination message to relevant CME Clearing Members in respect of the termination of each relevant converted USD LIBOR Swap; and
- a clearing confirmation message to relevant CME Clearing Members in respect of the establishment of any replacement swap(s).

As part of the relevant Conversion process, a subset of Trade IDs from each original USD LIBOR Swap will be carried over to the relevant resulting swaps. The CME Trade ID and USI/UTI are not carried over but, in order to identify the link between each original USD LIBOR Swap and the relevant resulting swaps CME will add a replacement Trade ID and Original Trade ID respectively in the History section of the clearing confirmation messages.

CME will report the close out of each USD LIBOR Swap and the establishment of each replacement swap in the account of the relevant position holder to the CME Swap Data Repository (“SDR”) under Part 45 of the CFTC’s Regulations. With regard to reporting data submitted to SDR in respect of each replacement swap, CME will populate the “Prior USI” field with the USI of the relevant original USD 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 original USD LIBOR Swap and CME will ensure that each replacement swap will be reported as a “New Trade.”

CME has conducted a series of operational dress rehearsals to support market participant preparations for the conversion process.¹⁶

Examples of Cash Adjustment Amount Calculation and Processing

Calculation of Cash Adjustment Amount

The Cash Adjustment amount is necessary to account for the difference in valuation between the original USD LIBOR Swap and the combined valuation of the resulting replacement swap(s) on the relevant Conversion Date. The difference in the NPV of each original USD LIBOR Swap and the corresponding replacement swaps 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 the resulting replacement swap(s).

The Cash Adjustment amount will be calculated by CME on each 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 original USD 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 SOFR OIS and any Short-Dated USD LIBOR Swap, or such other replacement swap(s) within the clearing system, on or shortly after COB on the relevant Conversion Date, the Clearing House will conduct an additional calculation to

¹⁶ For further details, please see <https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2023/02/Chadv23-040.pdf> and <https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2023/02/Chadv23-067.pdf>.

- determine the NPV for each SOFR OIS and any Short-Dated USD LIBOR Swap (or such other replacement swap(s)) 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 original USD LIBOR Swap and the SOFR OIS and any Short-Dated USD LIBOR Swap (or such other replacement swap(s)) will be calculated on an "adjusted" basis, where the adjusted NPV in each case is the NPV less the present value of any fee or coupon payment due to bank on the following business day.
- The difference between the two NPV calculations for each original USD LIBOR Swap and the corresponding replacement swap(s) represents the change in NPV arising from the conversion of the reference rate exposure of that position from the USD LIBOR rate to SOFR.

The relevant Cash Adjustment amount to be applied to each resulting SOFR OIS / replacement swap in each position account shall be equal and opposite to the relevant change in NPV calculated by CME in the Conversion Calculation. As the Cash Adjustment for each SOFR OIS / replacement swap will be equal and opposite to the change in NPV calculated by CME, it may be a positive or negative amount depending on the position.

Payment of Cash Adjustment Amount

Where the holder of a resulting SOFR OIS / replacement swap(s) had benefited from a change in NPV, i.e. where the resulting swap(s) NPV is greater than the corresponding original USD LIBOR Swap NPV, the Cash Adjustment will be a negative amount equal to that change in NPV. The Cash Adjustment amount will be applied to the resulting SOFR OIS / replacement SOFR swap as an upfront fee which will be due and paid from the position holder (to the Clearing House as central counterparty and other party to the cleared trade), at the next clearing cycle following the relevant Conversion Date, during which cycle settlement variation for positions in the SOFR OIS / replacement SOFR swap will be determined and outstanding exposures and payments netted and settled in accordance with CME Rule 814 ("Settlements, Settlement Variation Payment, and Option Value"). Accordingly, where the holder of a resulting SOFR OIS experiences a negative change in NPV, the Cash Adjustment will be a positive amount and will be applied to the SOFR OIS as an upfront fee which will be due and paid to the position holder (from the Clearing House, as central counterparty and other party to the cleared trade).

Given that the change in NPV calculated by the Conversion Calculation is offset exactly by the Cash Adjustment amount, indicated by the figure in the "Net Cash Flow" column in the examples in the table below, the net cash flow with respect to the NPV change is zero on both a per account basis and an overall product basis for the Clearing House.

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

Cash Adjustment Examples

The example below demonstrates the operational processing of a Conversion for a hypothetical USD LIBOR Swap and the Cash Adjustment processes, reflecting the operational characterization of the process as a "termination" of the original USD LIBOR Swap and establishment of a "new" Forward Starting SOFR OIS and corresponding Short-Dated USD LIBOR 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, April 21, 2023

	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
Original USD LIBOR Swap	04/21/2023	11224	USD-LIBOR	TERMINATED	0	0	59,000.00	-59,000.00	-	-	-	-59,000.00
Short-Dated USD LIBOR Swap	04/21/2023	34563	USD-LIBOR	CLEARED	5,000.00	5,000.00	0	5,000.00	-	-	-	5,000
Forward Starting SOFR OIS	04/21/2023	67896	USD-SOFR-OIS Compound	CLEARED	55,000.00	53,000.00	0	53,000.00	2,000.00	UPFRONT_FEE	04/24/2023	55,000.00

* NPV Adj. reflects the value of the swap removing any fee payments to be made the following business day. In the event of multiple replacement swaps, all Adjusted NPVs are added to calculate the Cash Adjustment.

Cash Adjustment Calculation Example*

Original USD LIBOR Swap Valuation NPV Adj. as at COB April 21, 2023 = 60,000.00
Forward Starting SOFR OIS Valuation + Short-Dated USD LIBOR Swap Valuation (NPV Adj. as at 04/21/2023) = 5,000.00 + 53,000.00 = 58,000.00
PnL Change = (53,000.00 + 5,000.00) – 60,000.00 = - 2,000.00
Cash Adjustment = Change in Adjusted NPV = 2,000.00

* Note: In this example, the Cash Adjustment offsets the gain of 2,000.00 between the Original USD LIBOR Swap and the combined valuation of the Forward Starting SOFR OIS and the Short-Dated USD LIBOR Swap

Resulting swaps as of COB on Next Value Date – Variation Margin example

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
04/24/2023	34563	USD LIBOR	CLEARED	5,500.00	5,500.00	5,000.00	500.00	-	-	-	500.00
04/24/2023	67896	USD-SOFR-OIS Compound	CLEARED	53,500.00	53,500.00	53,000.00	500.00	-	-	-	500.00

Calculation Breakdown (04/21/2023)

Original USD LIBOR Swap VM = NPV Adj. – Previous NPV Adj.

= 0 - 59,000.00 = -59,000.00

PnL Change = NPV Adj. (Forward Starting SOFR OIS) + NPV Adj. (Short Dated USD LIBOR swap) – NPV Adj. Original USD LIBOR Swap

= (53,000.00 + 5,000.00) – 60,000.00 = - 2,000.00

Cash Adjustment Amount = (NPV Adj. of Original USD LIBOR Swap – NPV Adj. of Forward Starting SOFR OIS + NPV Adj. (Short Dated USD LIBOR swap)

= 60,000.00 – (5,000.00 + 53,000.00) = 2,000.00

NPV Adj. (Forward Starting SOFR OIS) = NPV – Upfront Payment

= 55,000.00 – (2,000.00) = 53,000.00

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 Members 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 Forward Starting SOFR OIS and Short-Dated USD LIBOR Swaps

Each Forward Starting SOFR OIS and Short-Dated USD LIBOR Swap (and any other replacement swap arising out of a Conversion process) 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 swap resulting from any Conversion process 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.

From the completion of the end of day clearing cycle on the relevant Conversion Date, each Short-Dated USD LIBOR Swap will be cleared by CME and shall not be subject to any Conversion or Fallback process under the CME Rules.

Limitation of Acceptance for Clearing for USD LIBOR Referencing Swaps Following Secondary Conversion Date

As noted above, from close of business on the Secondary Conversion Date, in order to support ongoing clearing and conversion of USD LIBOR Swap trades resulting from exercise of bilateral (uncleared) Swaption contracts after the Secondary Conversion Date, CME will continue to accept USD LIBOR Swaps for clearing where the Start Date of the submitted USD LIBOR Swap is on or after the Cleared Date (date of submission) of the submitted USD LIBOR Swap, which must be on or after close of business on the Secondary Conversion Date.

CME will implement validation processes that shall apply from the Secondary Conversion Date which will provide that:

- If the Start Date of the submitted USD LIBOR Swap is on or after the Cleared Date, the trade will be accepted for clearing by CME; and
- If the Start Date of the submitted USD LIBOR Swap is before the Cleared Date, the trade will not be accepted for clearing by CME.

Where an eligible USD LIBOR Swap is submitted for clearing with a Cleared Date that is on or after the Index Cessation Effective Date (a "Residual Swap"), immediately on acceptance of the trade for clearing CME shall be deemed to apply the Permanent Cessation Fallbacks in CME Rule 90102.H. and shall amend the terms of the Residual Swap such that the references to USD LIBOR as the Floating Rate Option rate shall be deemed to refer to the SOFR fallback rate as the successor floating rate option to the USD LIBOR rate of such Residual Swap for the purposes of clearing the trade prior to conversion at COB.

At COB on the date of acceptance for clearing by CME of such Residual Swap, CME will apply the Conversion process to such trade to convert the Residual Swap into a corresponding Forward Starting SOFR OIS, utilizing the methodology for the relevant Primary Conversion Date.

Amendment to Primary Conversion Date in Limited Circumstances

CME reserves the right to amend the proposed Primary Conversion Date in its sole and absolute discretion prior to the Primary Conversion in limited circumstances, for example, where implementation of the conversion process on the previously communicated date could, in the opinion of the Clearing House, result in an unacceptable level of operational or market disruption or where financial stability issues could threaten

the orderly transition. In such circumstances, CME will communicate the amended Primary Conversion Date to market participants as soon as practicable upon making such determination.¹⁷

Fees for USD LIBOR Conversion Process

CME will apply a transaction fee per line item for conversion of any CME cleared interest rate swaps that reference USD LIBOR (a “Conversion Fee”). In each case the Conversion Fee for Clearing Member House positions shall be a fee of \$10 and the Conversion Fee for Customer positions shall be a fee of \$25 which shall be applied by the Clearing House per line item subject to the relevant Conversion and shall apply on the resulting Forward Starting SOFR OIS transactions.¹⁸

Fee Type	Trade Types	Products	Source, Terminate Reason (TR), Create Reason (CR)	HOUSE FM / NONFM	CUSTOMER Standard Client Schedule
SOFR Conversion Fee	All	All	CR = Index Conversion	\$10 per line item*	\$25 per line item*

*This fee will be charged on the resulting SOFR referencing trades, except for Short-Dated USD LIBOR Swaps (or the terminated LIBOR swaps) which will not be charged.

For bilateral swaption exercises that result in a Forward Starting SOFR OIS under the legacy index reference rate, CME will conduct a daily conversion of such trades to SOFR OIS and apply a charge of \$10 (for House positions) and \$25 (for Customer positions) per converted trade to the position and to which new trade clearing fees apply.

CME will apply a Conversion Fee of \$10 for each House Forward Starting SOFR OIS and a Conversion Fee of \$25 for each Customer Forward Starting SOFR OIS that is established as a result of the relevant Conversion process in each case.

Implementation of USD LIBOR Conversion

This Advisory Notice sets out the binding rules and operational processes under which CME Clearing will implement each element of the USD LIBOR Conversion, including the modification and operational close out of USD LIBOR IRS Contracts and the establishment of replacement corresponding USD SOFR standardized OIS interest rate swaps and, where applicable, Short-Dated USD LIBOR Swaps, which will be implemented by CME with respect to open cleared trades in affected CME cleared products at the

¹⁷ CME Clearing has identified a provisional contingency fallback date of May 12, 2023, in the event that the April 21, 2023, date for the Primary Conversion is determined to be unsuitable.

¹⁸ The Conversion Fee shall not apply to: Short-Dated USD LIBOR Swaps resulting from the Conversion process or to the termination of USD LIBOR Swaps. For bilateral swaption exercises that result in a cleared swap under the legacy LIBOR index, a Conversion Fee corresponding to the appropriate account type per converted trade will be applied to the position in addition to the new trade clearing fees.

relevant Conversion Date. The USD LIBOR Conversion is a mandatory process and the terms set out below in this Clearing Advisory will apply to all cleared trades in USD LIBOR Swaps from April 21, 2023.

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

CME Cleared Contracts Subject to the USD LIBOR Conversion and this Advisory Notice

The Conversion processes will apply to all cleared trades in CME cleared Interest Rate Swaps that:

- (i) reference USD LIBOR as the interest rate swap rate option (the "Floating Rate Option")¹⁹;
- (ii) are open at close of business ("COB") on the relevant Conversion Date; and
- (iii) do not mature on the relevant Conversion Date,

(the "Affected Contracts").²⁰

Terms and Operation of Conversion Processes

Primary Conversion

1. The "Primary Conversion Date" shall be April 21, 2023 except where the Clearing House determines in its sole and absolute discretion prior to the Primary Conversion process that implementation of the conversion process on April 21, 2023, or such other previously communicated date, could:
 - (a) result in an unacceptable level of operational or market disruption, or
 - (b) threaten the orderly transition due to issues of financial stability,in which case the Clearing House shall determine an alternative date as the "Primary Conversion Date" in its sole and absolute discretion prior to the Primary Conversion and shall communicate the revised Primary Conversion Date to market participants as soon as practicable upon making such determination.
2. Except with respect to cleared USD LIBOR vs Fed Funds basis swaps to which paragraph 3 below applies, or USD LIBOR IRS to which paragraph 4 below applies, at or shortly after COB on the Primary Conversion Date, CME Clearing will amend the terms of each cleared trade in USD LIBOR IRS that is open at COB on the Primary Conversion Date in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion Swap") such that the cleared trade shall be converted into:
 - (a) a corresponding CME cleared Overnight Index Swap ("OIS") referencing the Secured Overnight Financing Rate ("SOFR") interest rate benchmark, with start date matching the start of the floating period following July 3, 2023 (each, a "SOFR OIS Conversion Swap"); and

¹⁹ USD LIBOR Swaps include USD LIBOR vs Fed Funds basis swaps and any CME cleared IRS referencing "USD-LIBOR-BBA" or "USD LIBOR" as the Floating Rate Option.

²⁰ Note that forward rate agreements referencing USD LIBOR ("FRAs") are excluded from the scope of the USD LIBOR Conversion. CME has ceased clearing USD LIBOR FRAs with effective dates after June 30, 2023, removing FRAs from the conversion scope. USD LIBOR FRAs with effective dates on or prior to this date remain eligible for clearing. USD LIBOR IRS where the last USD LIBOR fixing date is before the Scheduled Final Representative USD LIBOR Publication Date but which do not settle before such date are also excluded from the Conversion processes.

- (b) a short-dated USD LIBOR replacement swap accounting for LIBOR floating period coupons on the Pre-Conversion Swap, with start and end dates matching the representative LIBOR floating periods with unsettled coupons (each, a "Short-Dated LIBOR Swap"),

(each, a "Conversion Swap"), in the position account of the relevant position holder, with the terms of each such Conversion Swap determined according to CME's published methodology.

3. With respect to each cleared USD LIBOR vs Fed Funds basis swap that is open at COB on the Primary Conversion Date in the account of the relevant position holder, CME Clearing will amend the terms of each such cleared trade such that the cleared trade shall be converted into:

- (a) a corresponding CME cleared SOFR vs Fed Funds Basis Swap, with start date matching the start of the floating period following July 3, 2023; and

- (b) a short-dated USD LIBOR vs Fed Funds Basis Swap replacement swap with start and end dates matching the representative USD LIBOR floating periods with unsettled coupons,

in the position account of the relevant position holder, with the terms of such replacement basis swaps determined according to CME's published methodology.

Secondary Conversion

4. With respect to each cleared USD LIBOR IRS that is a Zero Coupon Swap that is open at COB on July 3, 2023 (the "Secondary Conversion Date"), at or shortly after COB on the Secondary Conversion Date, CME Clearing will amend the terms of each such cleared trade in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SOFR interest rate benchmark, with start date matching the start of the floating period following July 3, 2023 (a "SOFR OIS Conversion Swap") in the position account of the relevant position holder, with the terms of such SOFR OIS Conversion Swap determined according to CME's published methodology.

5. With respect to each cleared USD LIBOR IRS that is accepted for clearing by CME after COB on the Primary Conversion Date and prior to COB on the Secondary Conversion Date, at or shortly after COB on the Secondary Conversion Date, CME Clearing will amend the terms of each such cleared trade in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion Swap") such that the cleared trade shall be converted into:

- (a) a corresponding CME cleared OIS referencing the SOFR interest rate benchmark, with start date matching the start of the floating period following July 3, 2023 (each, a "SOFR OIS Conversion Swap"); and

- (b) a short-dated USD LIBOR replacement swap accounting for LIBOR floating period coupons on the Pre-Conversion Swap, with start and end dates matching the

representative LIBOR floating periods with unsettled coupons (each, a "Short-Dated LIBOR Swap"),

(each, a "Conversion Swap"), in the position account of the relevant position holder, with the terms of each such Conversion Swap determined according to CME's published methodology.

6. With respect to each cleared USD LIBOR vs Fed Funds Basis Swap that is open at COB on the Secondary Conversion Date in the account of the relevant position holder, CME Clearing will amend the terms of each such cleared trade such that the cleared trade shall be converted into:

- (a) a corresponding CME cleared SOFR vs Fed Funds Basis Swap, with start date matching the start of the floating period following July 3, 2023; and

- (b) a short-dated USD LIBOR vs Fed Funds Basis Swap replacement swap with start and end dates matching the representative LIBOR floating periods with unsettled coupons,

(each, a "Conversion Swap"), in the position account of the relevant position holder, with the terms of such replacement basis swaps determined according to CME's published methodology.

Daily Conversions after Secondary Conversion Date

7. With respect to each cleared USD LIBOR IRS that:

- (a) has a start date on or after COB on the Secondary Conversion Date; and

- (b) is accepted for clearing by CME after COB on or after the 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 USD LIBOR IRS in the account of the relevant position holder (each such cleared trade, a "Pre-Conversion Swap") such that the cleared trade shall be converted into a corresponding CME cleared OIS referencing the SOFR interest rate benchmark (a "SOFR OIS Conversion Swap") in the position account of the relevant position holder, with the terms of such SOFR OIS Conversion Swap determined according to CME's published methodology.

Conversion Processing

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

- (a) the Primary Conversion Date;

- (b) the Secondary Conversion Date; or

- (c) each Business Day following the Secondary Conversion Date on which CME accepts for clearing USD LIBOR IRS that satisfy the requirements in paragraph 7 above,

(each a "Conversion Date"),

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

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

(the “Conversion Calculation”).

9. CME Clearing will determine settlement variation for each Conversion Swap on the relevant Conversion Date (at closing curve levels on the relevant Conversion Date) for valuation for the end of day clearing cycle on the relevant Conversion Date.
10. At the next end of day clearing cycle following the relevant Conversion Date, for each Conversion Swap, CME Clearing will:
 - (a) apply as an upfront fee to each SOFR OIS Conversion Swap (or Conversion Swap, as applicable) an offsetting cash compensation amount that is equal and opposite to the difference in NPV between the Conversion Swap(s) and the corresponding Pre-Conversion Swap, as determined by CME Clearing during the Conversion Calculation (the “Cash Adjustment”):
 - i. where the Conversion Calculation determines that the NPV of the relevant Conversion Swap(s) is greater than the NPV of the corresponding Pre-Conversion Swap, the Cash Adjustment applied to the SOFR OIS Conversion Swap will be negative;
 - ii. where the Conversion Calculation determines that the NPV of the relevant Conversion Swap(s) is less than the NPV of the corresponding Pre-Conversion Swap, the Cash Adjustment applied to the SOFR OIS Conversion 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 the relevant Conversion Swap(s) such that the net cash flow in respect of the Conversion will be zero for each cleared trade in such Affected Contract per account.
11. Following the relevant Conversion Date, each Conversion Swap will be cleared by CME subject to the terms of the Rules applicable to USD SOFR IRS and this Clearing Advisory and any Short-Dated USD LIBOR Swap will be cleared by CME subject to the CME Rulebook and the terms of this Clearing Advisory.
12. CME will account for the relevant ISDA Spread Adjustment published by Bloomberg Index Services Limited (the “ISDA Spread Adjustment”) in determining the floating amount of each SOFR OIS Conversion Swap in each case in accordance with CME’s published methodology.

Conversion Process Fees

13. CME will apply to each resulting SOFR OIS Conversion Swap (or such other Conversion Swap, as determined by CME) a fixed conversion surcharge of:
- (a) \$10 for each SOFR OIS Conversion Swap that is established as a result of the Conversion process in respect of each relevant Pre-Conversion Swap in Clearing Member House accounts; and
 - (b) \$25 for each SOFR OIS Conversion Swap that is established as a result of the Conversion process in respect of each relevant Pre-Conversion Swap for Customer positions, (each, the “Conversion Fee”).

Miscellaneous Provisions

14. Except as expressly stated in this paragraph in relation to IRS Contracts falling within paragraph 7 (“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 or position resulting from the USD LIBOR Conversion process. On acceptance for clearing of a Residual Swap on or after COB on the Secondary Conversion Date, for the purposes of clearing such Residual Swap prior to conversion, CME will amend the terms of the Residual Swap such that any reference to USD 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 in accordance with paragraph 7.
15. 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.
16. The terms of this Advisory Notice and each relevant Conversion process are binding on Clearing Members and position holders in all Affected Contracts, effective April 21, 2023. 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 Secondary Conversion Date

From COB on the Secondary Conversion Date, with the exception of Residual Swaps that meet the relevant requirements in paragraph 7 above, after COB on the Secondary Conversion Date, CME Clearing will cease to accept for clearing trades in the Affected Contracts.

From COB on the Secondary Conversion Date, CME Clearing will continue to accept Residual Swaps that meet the requirements in paragraph 7 above. Such trades will be subject to the relevant Conversion process described above in paragraphs 7 to 10.

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 has been updated accordingly, such that, effective July 3, 2023, CME will cease to accept IRS Contracts referencing USD-LIBOR-BBA or USD-LIBOR except where the start date of such swap is on or after July 3, 2023, from July 3, 2023, as detailed in CME Submission [23-082](#) and set out in Appendix 2 to this Advisory Notice.

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 Contracts and Conversion Swaps; and
- LIBOR to SOFR 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 original USD LIBOR Swap and the revised NPV for each Conversion 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 in January 2023 until the Secondary Conversion Date. 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 Members in respect of the termination of each relevant converted USD LIBOR Swap; and
- a clearing confirmation message to relevant CME Clearing Members in respect of the establishment of each new relevant Conversion Swap.

As part of the relevant Conversion process, a subset of Trade IDs from each original USD LIBOR Swap will be carried over to the relevant resulting Conversion Swap(s). The CME Trade ID and USI/UTI are not carried over but, in order to identify the link between each original USD LIBOR Swap and the relevant resulting Conversion Swap(s), 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 close out of each USD LIBOR Swap and the establishment of each Conversion Swap in the account of the relevant position holder to the CME SDR under Part 45 of the CFTC's Regulations. With regard to reporting data submitted to SDR in respect of each Conversion Swap, CME will populate the "Prior USI" field with the USI of the relevant original USD 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 original USD LIBOR Swap and CME will ensure that each Conversion Swap will be reported as a “New Trade.”

Additional details regarding the Conversion may be viewed in **CME Submission No. [23-082](#)**.

Inquiries regarding the aforementioned may be directed to:

Jim Roper - Clearing	jim.roper@cmegroup.com	312.338.7137
Steve Dayon - OTC Products	steven.dayon@cmegroup.com	312.466.4447

Appendix 1 to Clearing Advisory Notice

Published Methodology for effecting the relevant USD LIBOR Conversion processes:

<https://www.cmegroup.com/trading/interest-rates/files/cme-conversion-for-usd-libor-cleared-swaps.pdf>

Appendix 2 to Clearing Advisory Notice

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****
****As set out in CME Clearing Advisory Notice 23-103, effective July 3, 2023, CME will cease to accept for clearing IRS Contracts referencing USD-LIBOR-BBA or USD-LIBOR except where the start date of such swap is on or after July 3, 2023.		
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*
*As set out in CME Clearing Advisory Notice 21-434, 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.		
7.	GBP-SONIA-COMPOUND	GBP-SONIA-OIS Compound
8.	JPY-LIBOR-BBA**	JPY-LIBOR**
**As set out in CME Clearing Advisory Notice 21-434, 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.		
9.	JPY-TONA-OIS-COMPOUND	JPY-TONA-OIS Compound
10.	CHF-LIBOR-BBA***	CHF-LIBOR***
***As set out in CME Clearing Advisory Notice 21-434, 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.		
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.	HUF-BUBOR-Reuters	HUF-BUBOR
23.	PLN-WIBOR-WIBO	PLN-WIBOR
24.	CZK-PRIBOR-PRBO	CZK-PRIBOR
25.	ZAR-JIBAR-SAFEX	ZAR-JIBAR
26.	MXN-TIIE-Banxico	MXN-TIIE
27.	USD-SOFR-COMPOUND	USD-SOFR-OIS Compound
28.	EUR-EuroSTR-COMPOUND	EUR-EuroSTR-OIS Compound
39.	CHF-SARON-OIS-COMPOUND	CHF-SARON-OIS Compound
30.	USD-BSBY	USD-BSBY
31.	Not supported	SGD-SORA-OIS Compound

[Remainder of Rule unchanged.]