



To: All Members and other interested parties

Ref: 23/190

Classification: Trading General

Date: 31 October 2023

Subject: **PRICING PROCEDURES FOR CASH-SETTLED FUTURES**

Summary

1. This Notice (the “**Notice**”) replaces LME Notice 19/061, dated 01 March 2019 (*Ferrous Pricing Procedures*), and sets out the pricing methodology and procedures that The London Metal Exchange (“**LME**”) will follow in determining the Cash-Settled Futures Daily Settlement Price (“**Daily Settlement Price**”) for all Cash-Settled Futures. The Notice also details the Cash-Settled Future Index that will be used by the LME as the Cash-Settled Futures Final Settlement Price (“**Final Settlement Price**”) for each of the Cash-Settled Futures.

Defined Terms

2. Capitalised terms not otherwise defined in this Notice shall have the meaning ascribed to them in the Rules and Regulations of the LME (“**LME Rulebook**”). All times set out in this Notice shall refer to prevailing UK time.

Cash-Settled Futures

3. The Special Contract Rules for the Cash-Settled Futures are set out in Part 6C (Special Contract Rules for Cash-Settled Futures – Ferrous) and Part 6D (Special Contract Rules for Cash-Settled Futures – Non-Ferrous) of the LME Rulebook.

Methodology and timing

4. The Daily Settlement Price will, for each tradeable Prompt Date for each Cash-Settled Future, (pursuant to Regulation 5.7 of Part 3 of the LME Rulebook), typically be determined using a volume weighted average price (“**VWAP**”). The VWAP will utilise transactions executed on LME Select, subject to the minimum volume threshold being met (see paragraph 9 below). The prices will be determined by the LME Trading Operations team using the procedures set out in this Notice.

VWAP process

5. The Daily Settlement Prices will each be calculated on the basis of a VWAP over a 5 minute pricing period. The start and end time of each VWAP window is set out below, along with the approximate times by which the LME will publish each Daily Settlement Price. The VWAP calculation and resulting value will subsequently be reviewed by the LME Trading Operations team to ensure that the VWAP inputs are appropriate. Daily Settlement Prices for all Prompt Dates (i.e. all tradable months) will be published to market participants through LME licensed data vendors. The



LME will also notify market participants, via an LME Select market message, when each Daily Settlement Price is available.

<u>Contract</u>	<u>VWAP window</u>	<u>Approximate publication time</u>
<u>Cash-Settled Futures – Non-Ferrous</u>		
LME Alumina (Platts)	17:20 – 17:25	17:40
LME Lithium Hydroxide CIF (Fastmarkets MB)	15:00 – 15:05	15:20
LME Cobalt (Fastmarkets MB)	16:50 – 16:55	17:10
LME Molybdenum (Platts)	16:50 – 16:55	17:10
LME Aluminium UBC Scrap US (Argus)	17:20 – 17:25	17:40
LME Aluminium Premium Duty Paid US Midwest (Platts)	17:20 – 17:25	17:40
LME Aluminium Premium Duty Paid European (Fastmarkets MB)	16:55 – 17:00	17:15
LME Aluminium Premium Duty Unpaid European (Fastmarkets MB)	16:55 – 17:00	17:15
<u>Cash-Settled Futures – Ferrous</u>		
LME Steel CFR Scrap (Platts)	16:25 – 16:30	16:45
LME Steel FOB Rebar (Platts)	16:25 – 16:30	16:45
LME Steel HRC FOB China (Argus)	15:45 – 15:50	16:05
LME Steel Scrap CFR India (Platts)	15:45 – 15:50	16:05
LME Steel Scrap CFR Taiwan (Argus)	15:45 – 15:50	16:05
LME Steel HRC NW Europe (Argus)	16:25 – 16:30	16:45
LME Steel HRC N. America (Platts)	16:25 – 16:30	16:45

6. The following table provides an illustrative example of how the VWAP calculation operates (where the minimum volume threshold (see paragraph 9) has been met):

<u>Lots</u>	<u>Price (USD)</u>	<u>Tonnes per lot</u>	<u>Contract value(USD)</u>
10	\$301.00	10	\$30,100.00
8	\$302.00	10	\$24,160.00
7	\$305.00	10	\$21,350.00
1	\$303.00	10	\$3,030.00
16	\$304.00	10	\$48,640.00
18	\$306.00	10	\$55,080.00
60			\$182,360.00



\$182,360.00 divided by number of lots (10) divided by 60	\$303.93		
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7. In the above example, the Daily Settlement Price for the relevant Prompt Date will be USD 303.93. The value resulting from this illustrative VWAP calculation will be rounded to two decimal places. In the above example, the USD 303.933 value would therefore be rounded down to USD 303.93.
8. The minimum volume threshold ("**MVT**") requirement for the calculation of each Daily Settlement Price will (in relation to each Prompt Date) be as stated on the LME website from time to time.

Daily Settlement Price Discovery Waterfall

9. If the MVT required for the calculation of the relevant Daily Settlement Price is not reached, then the LME Trading Operations team will follow the Daily Settlement Price waterfall set out below, exercising expert judgement where necessary to ensure that a reflective Daily Settlement Price is identified:
 - The last traded price within the bid/offer on the close of the pricing period;
 - If the last traded price is outside of the bid/offer on the close of the pricing period, then the closest price to the last trade that falls within the bid/offer will be used;
 - If the contract is untraded, then the mid-point of the bid/offer on the close of the pricing period will be used. Where this is not appropriate, then the Cash-Settled Futures Daily Settlement Price will be determined by the LME in its absolute discretion using Expert Judgement. Expert Judgement would typically involve observing the last trade/valuation prior to the Pricing Period and/or refinement of the curve;
 - If the contract is untraded and there is no bid and/or offer available on the close, then the LME Trading Operations team may, in its absolute discretion, reference the last traded price, before the beginning of the pricing period, however, the LME Trading Operations team will not be obliged to discover the price at this level;
 - If the contract is untraded and there is no bid and/or offer available and there have been no trades prior to the pricing period, then the LME Trading Operations team, may at its absolute discretion, discover the price as close as possible to the previous day's Daily Settlement Price, taking into account bids and/or offers at the close of the pricing period;
 - It is typically the case that the main volumes traded will be in the nearby months and therefore establishment of the forward months out to the furthest tradeable Prompt Date shall take into account the same processes as above, but with further reference to any available spread trading information in the event of a lack of liquidity for outright trades. The most active months shall form the basis for the forward price curve in this instance and prices should be supported and referenced against price information as provided by any quoted settlement price ("**QSP**") information (see further below). QSP shall



constitute an average of quoted prices provided by relevant market participants; and

- In the event that there is no pricing information in LME Select, particularly for the front month (month 1), then the LME Trading Operations team shall, using expert judgement, reference all available pricing information as a basis for the price curve.
10. In the event that the waterfall above results in a Daily Settlement Price that the LME Trading Operations team considers to be unrepresentative of prevailing market conditions, the LME Trading Operations team shall exercise discretion and/or expert judgement to determine the relevant Daily Settlement Price. In these circumstances, the LME Trading Operations team may, for example, have regard to all relevant market information sources (including data referred to in paragraph 10 above) and/or choose to discount any of the market information available if deemed necessary for the publication of a credible, robust and reliable price curve.

Quoted Settlement Pricing

11. Where the process as set out in paragraph 10 results in an unreflective Daily Settlement Price, the LME Trading Operations team may in its absolute discretion choose to utilise QSP values, if the LME Trading Operations team deems it appropriate. Typically, the QSP process will be used in relation to Prompt Dates for which the VWAP MVT has not been met, and no LME Select data is available. In using the QSP process for determining the Daily Settlement Price on any Business Day, the LME Trading Operations team will look to average pricing information across all of the data obtained by the LME, having discounted outliers using expert judgement.

Expert judgement

12. Where the Daily Settlement Price process set out in this Notice results in circumstances where prices remain to be determined, the LME Trading Operations team in its absolute discretion will apply expert judgement to determine prices with regard to all relevant information sources available.
13. In the event that there is an outage on LME Select, resulting in unavailability of LME Select datapoints for the relevant period, the methodologies detailed in this Notice will be used to determine and publish Daily Settlement Prices, utilising the relevant aspects of the Daily Settlement Price waterfall set out in paragraph 9.

Publication

14. The approximate publication time for the Daily Settlement Price for each Cash-Settled Future is listed below:

<u>Contract</u>	<u>Provisional LME Select message</u>	<u>Provisional prices to vendors</u>	<u>Confirmed prices to vendors</u>
Cash-Settled Futures – Non-Ferrous			
LME Alumina (Platts)	17:40	17:40	17:50
LME Lithium Hydroxide CIF (Fastmarkets MB)	15:20	15:20	17:50
LME Cobalt (Fastmarkets MB)	17:10	17:10	17:50
LME Molybdenum (Platts)	17:10	17:10	17:50
LME Aluminium UBC Scrap US (Argus)	17:40	17:40	17:50



LME Aluminium Premium Duty Paid US Midwest (Platts)	17:40	17:40	17:50
LME Aluminium Premium Duty Paid European (Fastmarkets MB)	17:15	17:15	17:50
LME Aluminium Premium Duty Unpaid European (Fastmarkets MB)	17:15	17:15	17:50
Cash-Settled Futures – Ferrous			
LME Steel CFR Scrap (Platts)	16:45	16:45	17:50
LME Steel FOB Rebar (Platts)	16:45	16:45	17:50
LME Steel HRC FOB China (Argus)	16:05	16:45	17:50
LME Steel Scrap CFR India (Platts)	16:05	16:05	17:50
LME Steel Scrap CFR Taiwan (Argus)	16:05	16:05	17:50
LME Steel HRC NW Europe (Argus)	16:45	16:45	17:50
LME Steel HRC N. America (Platts)	16:45	16:45	17:50

- All prices published by the LME Trading Operations team will be available for Members to retrieve on the SFTP server as a PDF document.
- This document will be available for Members to formally review as part of the Daily Settlement Price objection process.
- The objection process will commence once the prices are available on the SFTP server(see the “Provisional LME Select message” price column above) and will last for 5 minutes. This 5 minute window is referred to as the **“Objection Period”**.
- Any objections should be sent to the LME Trading Operations team at closingprices@lme.com.
- The LME Trading Operations team will review any objections received during the Objection Period. The LME shall have no obligation to consider objections received outside the Objection Period. The LME Trading Operations team shall consider the merits of any objections and shall notify resolutions to the market as soon as is practicably possible after the end of the Objection Period:
 - (a) changes will result in a new PDF available on the SFTP server;
 - (b) no changes will result in prices being confirmed in line with the above timelines where possible; and
 - (c) all changes, where appropriate, will be communicated via an LME Select market message.
- Prices will also be made available to licensed data vendors in line with the times specified in the table above.

Final Settlement Price Procedure

15. As set out in Regulation 1.10 of Part 6C (for Cash-Settled Futures – Ferrous) and Regulation 1.10 of Part 6D (for Cash-Settled Futures – Non-Ferrous) of the LME Rulebook, the LME shall specify, by way of Notice issued from time to time, the Cash-Settled Futures Index that shall be used as the Final Settlement Price for each Cash Settled Future.



16. The Final Settlement Prices will be established on the last Business Day of each calendar month, upon receipt by the LME of the Cash-Settled Futures Index for each Cash-Settled Future. The LME will receive the Cash-Settled Futures Indices at the times listed below, with the confirmed Final Settlement Price for each Cash-Settled Future to be published at the times approximated. The timing of the publication of the Final Settlement Prices is subject to the successful receipt of the prices from the index providers:

<u>Contract</u>	<u>Index received</u>	<u>Confirmed publication</u>
<u>Cash-Settled Futures – Non-Ferrous</u>		
LME Alumina (Platts)	15:00	17:40
LME Lithium Hydroxide CIF (Fastmarkets MB)	15:00	16:30
LME Cobalt (Fastmarkets MB)	15:00	17:10
LME Molybdenum (Platts)	17:00	17:10
LME Aluminium UBC Scrap US (Argus)	14:00 T + 1	17:40 T + 1
LME Aluminium Premium Duty Paid US Midwest (Platts)	00:30 T+1	17:40 T+1
LME Aluminium Premium Duty Unpaid European (Fastmarkets MB)	16:00	17:15
LME Aluminium Premium Duty Unpaid European (Fastmarkets MB)	16:00	17:15
<u>Cash-Settled Futures – Ferrous</u>		
LME Steel CFR Scrap (Platts)	16:30	16:45
LME Steel FOB Rebar (Platts)	16:30	16:45
LME Steel HRC FOB China (Argus)	10:00	16:05
LME Steel Scrap CFR India (Platts)	17:00	17:10
LME Steel Scrap CFR Taiwan (Argus)	14:00	16:05
LME Steel HRC NW Europe (Argus)	17:00	17:00
LME Steel HRC N. America (Platts)	19:30	16:45 T + 1

17. In the event of a failure of the necessary SFTP feeds, the LME's business continuity procedures stipulate alternative methods for receiving the daily and monthly Index Prices, either by email or by telephone.

Trading on a known Final Settlement Price

18. In certain circumstances, the relevant Cash-Settled Futures Index may be published prior to the last trading date and/or last trading time (see paragraph 4 above). In these circumstances, it will be possible to identify the relevant Final Settlement Price basis from the known Cash-Settled Futures Index. It will therefore also be possible in these circumstances to trade on LME Select and in the inter-office market on the basis of a known Final Settlement Price.
19. These circumstances arise owing to the publication schedule of Cash-Settled Futures Indices being set by the relevant index provider (rather than the LME) and, as a result, publication dates may on occasion not align in all cases with the LME's trading calendar. Market participants are therefore invited to take note of the



publication time (including relevant time zone) and date of the relevant Cash-Settled Futures Index, and of the last trading time for the relevant Cash-Settled Future. Additionally, the LME notes that index providers may operate different publication calendars around public holidays.

20. The LME shall not be responsible for any losses that may be incurred in relation to any trading that is undertaken by a market participant after the relevant Cash-Settled Futures Index is known.

General

21. Members and other interested parties with queries in respect of this Notice should contact the LME by email to: tradingoperations@lme.com.

James Macdonald
Head of Trading Operations

cc: Board directors
User Committee
Steel Committee
Aluminium Committee
Cobalt Committee
Molybdenum Committee