



Montel French Energy Day Paris 1er Octobre 2026

EEX Paris Branch

part of eex group

External

Comment les bourses s'adaptent elles aux évolutions du marché

Renewables are driving the evolution of wholesale power markets

Renewable growth is reshaping price profiles

Driver: rising renewable generation is reshaping power price profiles

1

More volatile midday

High solar pushes midday prices structurally lower while morning/evening peaks remain - widening intraday spreads.

2

Bigger daily spreads

Larger gaps between the cheapest and most expensive hours create both battery arbitrage value and new risk to manage.

3

Shape not captured by Base/Peak

Standard base and peak products do not adequately hedge midday depressions or weekday-vs-weekend structure.

Over time EEX has tracked these shifts with trading participants and adapted the product portfolio accordingly.

Top-to-Bottom (TBx) and Hourly Block Futures



TBx Futures: Products, Markets, Maturities

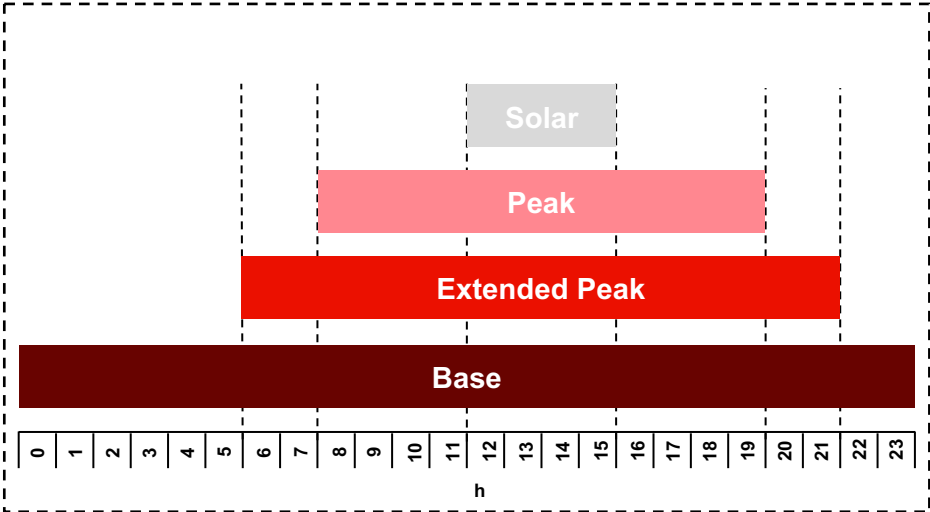
Standardized TB2 and TB4 profiles across key European power markets

Live 21 September 2026					
Market / Hub	Product	DA Auction Reference	Duration & MTU	Rationale	Maturities
Germany (DE)	TB2	EPEX	2 Hours • 8 × 15-min MTUs	Operational fleet dominated by 2h BESS (~1.5+ GW).	▪ Curr.+9 Months ▪ 11 Quarters ▪ 6 Years
Great Britain (GB)	GB TB2	EPEX	2 Hours • 2 × 60-min MTUs	Europe's most mature BESS market (~4 GW operational).	
France (FR)	TB2	EPEX	2 Hours • 8 × 15-min MTUs	Emerging storage market focused on 2h duration to complement nuclear baseload	
Italy (IT)	TB2 & TB4	GME	2h and 4h • 8 & 16 × 15-min MTUs	Fast-growing 2h merchant battery fleet in Northern Italy. MACSE regulatory auctions mandate & finance 4h storage	
Spain (ES)	TB4	OMIE	4 Hours • 16 × 15-min MTUs	Extreme midday solar penetration creates prolonged 4h–6h price depressions	

Hourly Block futures

Tailored hedging coverage, phased listing

Hourly block	Window	Maturities	Purpose	Status
Extended Peak	Mon–Fri 06–22	W, M, Q, Y	Working-day load & flex block	Go-Live: 21 Sep 2026
Weekend Base	Sat–Sun	M, Q, Y	Hedge weekend risk to long-term	Go-Live: 21 Sep 2026
Solar Block	Mon–Fri 12–16	We, W, M, Q, Y	Solar-heavy midday block	Roadmap: H1 2027 (ECC R7)
Weekend Solar	Sat–Sun 12–16	M, Q, Y	Weekend midday optimisation	Roadmap: H1 2027 (ECC R7)



For DE and FR markets.

EEX's response: extend the toolbox for renewables hedging

Existing products plus new families

Existing toolbox

Day & Weekend Futures - rollout continuing

Year Future expiries extended to Cal+10

DE, ES, IT, FR, NL, Nordic System Price

New product families (WIP)

Phase 1: Launching 21 September 2026

- Top-to-Bottom (TB2 / TB4) Futures
- Extended Peak Futures (06–22)
- Weekend Futures extension

Phase 2 : In Delivery with ECC R7 (Target H1 2027)

Solar Block Futures (12–16) Weekday & Weekend
midday solar blocks

For more information:
sales@eex.com



Hourly blocks: contract specifications at a glance

	Extended Peak 06–22	Weekend	Solar Block 12–16
Product type	Cash-settled power futures	Cash-settled power futures	Cash-settled power futures
Underlying	DA auction prices 06:00–22:00	DA auction prices, Sat & Sun	DA auction prices 12:00–16:00
Index basis	Mean of 15-min DA MTUs in window, Mon-Fri	Mean of 15-min DA MTUs, all weekend hours	1. Mean of 15-min DA MTUs in window, Mon-Fri 2. Mean of 15-min DA MTUs in window, Sat-Sun
Contract volume	1 MW × 16h × days	1 MW × 24h × days	1 MW × 4h × days
Pricing / tick	EUR/MWh, 0.01 tick	EUR/MWh, 0.01 tick	EUR/MWh, 0.01 tick
Settlement window	17:05–17:15 CE(S)T	17:05–17:15 CE(S)T	17:05–17:15 CE(S)T
Maturities	Curr.+4 weeks, 9 months, 11 quarters, 6 years	9 months, 11 quarters, 6 years	5 weekends, curr.+4 weeks, 9 months, 11 quarters, 6 years

Who uses these — and why

Both physical and financial participants benefit

Physical: utility / retailer / CCGT

Buy 06–22 to hedge the main daytime/evening retail load

Use Base or Off-peak for night hours; add Weekend Base for weekends

CCGT producers lock margins over their real operating window

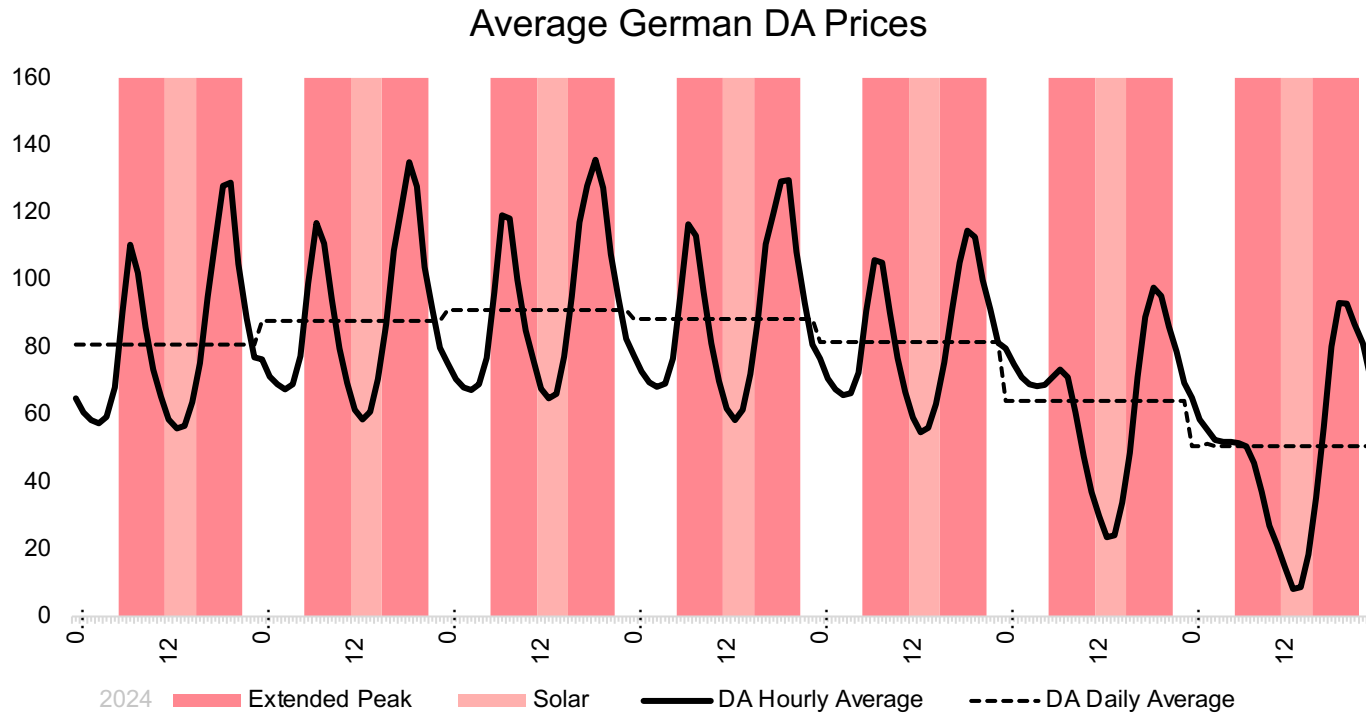
Financial & proprietary trading

Shape spreads: Extended Peak vs Peak, Base vs Weekend

Calendar & locational spreads, e.g. DE vs FR
Extended Peak

Why hourly blocks & weekends

Rising solar and wind create shape risk to hedge



Weekday midday prices are structurally lower than morning/evening levels.

Weekends show distinct load and renewable profiles vs. weekdays.

Base and peak products do not adequately hedge this long-term shape risk.

OTC desks already trade hourly blocks and weekday vs. weekend spreads. The market needs exchange-listed products to reflect these structures.

EPEX SPOT TBx Indices: Available Now

- **TB2 & TB4:** daily indices reflecting the theoretical spread available for 2-hour and 4-hour profiles, for all Epexspot markets.
- **Order by 31 December 2026** and receive the first 12 months of access free of charge.
- **Internal & external usage** is included in the promotional first year, subject to the applicable contract terms*.
- **EPEX SPOT Members** on the Premium and Advanced tiers receive the data for free.
- **Subscription:** Subscribe online or email marketdata.sales@epexspot.com
- Index technical description available on Epexspot website

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*After the one-year free period, the applicable data subscription fee for internal usage, as displayed on the webshop, will apply unless the subscription is cancelled at least two months prior to renewal.

TBx Futures: Contract Volume & Settlement Price Formation

Contract specification details and key links

Contract Volume & Sizing

- **1 Lot = 1 MW Nominal Capacity:** Across all TBx contracts, lot size represents 1 MW nominal capacity (the lot size is not 2 MW or 4 MW).
- **Volume Calculation Formula:** Total contract volume equals 1 MW × Daily Profile Duration × Days in Delivery Period (MWh).
- **TB2 Futures (2h Profile):** Daily Volume = 2 MWh/day (62 MWh per lot for a 31-day month).
- **TB4 Futures (4h Profile):** Daily Volume = 4 MWh/day (124 MWh per lot for a 31-day month).

[To the EEX Contract Specifications](#)

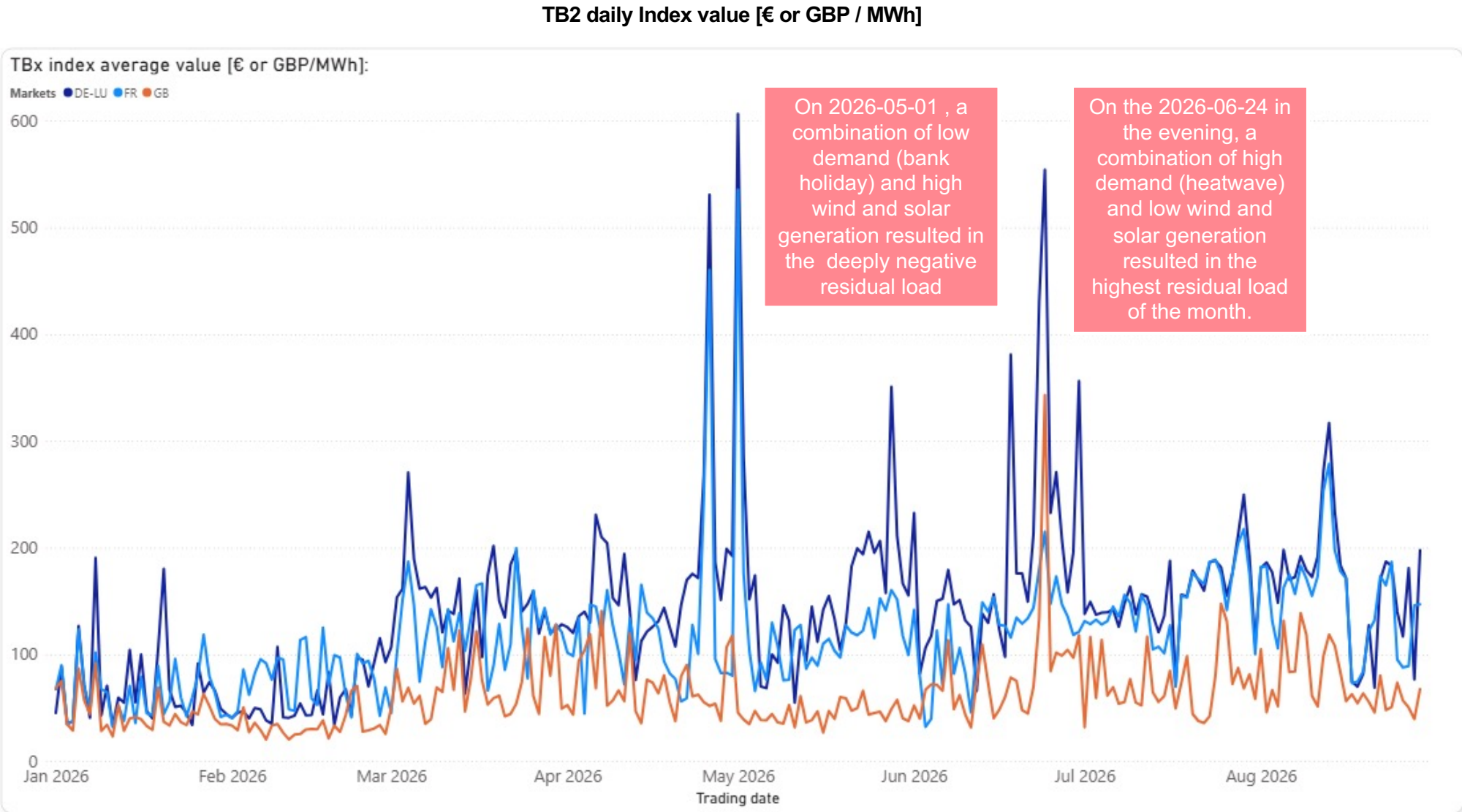
To the [EEX Price List](#) and [ECC Price List](#)

Settlement Price Formation & Access

- **Daily Settlement Procedures:** Standard EEX settlement price procedures apply for daily settlement pricing, supported by market input and model-based valuation for illiquid maturities: [Settlement Price Procedure](#)
- **Full Curve Transparency:** EEX will establish settlement prices for all maturities: Curr.+9 months, 11 quarters, 6 years, providing market view on future spread values.
- **Free Access via Market Data Hub:** Prices are available freely on the [EEX Market Data Hub](#) (dropdown: TB products; table/graph views; rolling 6-week historical series).
- **Extended Subscriptions:** Access beyond 6 weeks and automated data feeds are available via EEX price subscriptions: [EEX Group Webshop](#)

[To the EEX Market Data Hub](#)

EPEX SPOT TBx Indices: Historical Data View



TBx Futures: Methodology & Settlement

Transparent price-only spread methodology: from Day-Ahead auction to futures cash settlement

PRICE-ONLY METHODOLOGY

STEP 1: NON-CONSECUTIVE RANKING

- **Sort Day-Ahead MTUs:** Sort all Day-Ahead auction MTUs across the 24h delivery day (00:00–24:00) from highest to lowest by price.
- Non-consecutive price selection.

STEP 2: TOP-TO-BOTTOM SPREAD FORMULA

- **TB2:** Mean of 8 highest vs. 8 lowest 15-min MTUs (2 hours).
- **GB TB2 :** Mean of 2 highest vs. 2 lowest 60-min MTUs (2 hours).
- **TB4:** Mean of 16 highest vs. 16 lowest 15-min MTUs (4 hours).

STEP 3: FINANCIAL CASH SETTLEMENT

- **Final settlement:** The arithmetic mean of daily TBx spreads across the delivery tenor (Month / Quarter / Year).
- **Central Clearing (ECC):** 100% financially cash-settled via ECC.

ILLUSTRATIVE SETTLEMENT: WEEKLY TB2 FUTURE

Day	Avg 8 highest 15-min	Avg 8 lowest 15-min	Daily TB2 (€/MWh)
Mon	91.36	58.24	33.12
Tue	103.70	61.42	42.28
Wed	124.71	54.40	70.31
Thu	112.82	63.91	48.91
Fri	96.84	41.50	55.34
Sat	87.56	12.30	75.26
Sun	73.35	0.50	72.85
Week TB2 Settlement	—	—	56.87 €/MWh

**Illustrative weekly example (€/MWh). Final settlement = arithmetic mean of the 7 daily spreads.*

TBx Location Spreads: Cross-Border Flexibility

Exchange-traded spread instruments across Continental TB2 markets (Germany, France, Italy)

Leg A Product	Market	Leg B Product	Market	Tenors	Spread Type	Pricing
EEX DE Power TB2	DE	EEX FR Power TB2	FR	Month, Quarter, Year	TB Location Spread	EUR
EEX DE Power TB2	DE	EEX IT Power TB2	IT	Month, Quarter, Year	TB Location Spread	EUR
EEX FR Power TB2	FR	EEX IT Power TB2	IT	Month, Quarter, Year	TB Location Spread	EUR

Cross-Border Flexibility Arbitrage

Trade structural price shape differentials between interconnected European bidding zones, with guaranteed simultaneous execution of both legs.

Portfolio Hedging & Optimization

Enables pan-European storage operators and renewable developers to manage geographic basis risk across multi-country battery assets.

Capital & Margin Efficiency

Centrally cleared by ECC with direct cross-margining margin offsets between correlated TB2 outright contracts.

TBx : Why a Price-Only Benchmark?

Standardising wholesale spread exposure to build liquid, exchange-cleared derivatives

Liquidity Aggregation

- **Attracts Non-BESS Desks:** Pure price-spread futures draw in utilities, cross-commodity traders, and financial desks.
- **Consolidates Market Flow:** Prevents liquidity fragmentation across bespoke asset profiles, aggregating two-way trading volume into a common reference point.
- **Broad Market Applicability:** Multi-segment participation delivers liquidity potential and lower execution risk for hedgers.

Utilities • Proprietary Traders • BESS Operators • Origination Desks

Transparent Replicability

- **Exchange-Cleared Integrity:** Settles against transparent, published day-ahead auction prices, not opaque model outputs.
- **Zero Black-Box Assumptions:** Eliminates debatable assumptions around degradation, state-of-charge, cycling limits, or proprietary dispatch logic.
- **Confidently Back-testable:** Enables risk committees, lenders, and algorithmic optimizers to model and price risk with full empirical certainty.

BESS Optimisers • Storage Owners • Risk Committees • Project Lenders

Durability & Benchmarking

- **Permanent Contract Standard:** Futures benchmarks endure for decades, whereas models and technologies change over time.
- **Rising Merchant Importance:** As ancillary services rapidly saturate across Europe, wholesale spread capture will rise in importance as a battery revenue driver.
- **Industry Price Reference:** EPEX TBx Indices and EEX TBx Futures provide transparent benchmarks for long-term tolling agreements, bilateral deals, and structured products.

Infrastructure Funds • Tolling Counterparties • Commercial Banks • Originators

TBx Futures: One Hedge, Three Sources of Value

Commercial benefits and target market segments: utilities, CCGTs, storage, financials

1

Utilities & CCGTs

- Gas-fired plants (CCGTs/peakers) set marginal top prices: TBx hedges peak generation margins without midday solar drag.
- Utilities own/operate BESS fleets and act as primary counterparties to third-party storage & tolling deals.
- **Vital risk transfer** for price risk and counterparty credit risk, freeing limits to conclude more bilateral deals with better terms.

**Utilities • CCGT / Peaker Hedgers •
BESS Operators • Origination**

2

Storage & Renewables

- BESS operators monetize battery flexibility forward without volumetric or dispatch penalties.
- Renewable & solar generators hedge midday price cannibalization and avoid negative-price capture discounts.
- Lock in forward price spreads up to Cal+6 to stabilize merchant returns.

**BESS Optimisers • Storage Owners •
Solar IPPs & Developers**

3

Financials

- Trade renewable shape volatility without managing physical assets, grid balancing, or dispatch logistics.
- Express macro views on gas-to-power peaking margins, renewable build-out penetration, or cross-border spread differentials.

**Proprietary Trading Desks •
Commodity Trading Houses • Market
Makers**

TBx Futures: Contract Specifications at a Glance

	TB2 (DE, IT, FR)	GB TB2 (GB)	TB4 (IT, ES)
Product type	Cash-settled power futures	Cash-settled power futures	Cash-settled power futures
Underlying	Day-Ahead auction prices (00:00–24:00)	Day-Ahead 60-min auction prices	Day-Ahead auction prices (00:00–24:00)
Index basis	8 highest vs 8 lowest 15-min MTUs	2 highest vs 2 lowest 60-min MTUs	16 highest vs 16 lowest 15-min MTUs
Contract volume	1 MW × 2h × days in period	1 MW × 2h × days in period	1 MW × 4h × days in period
Min lot	1 contract	1 contract	1 contract
Pricing / tick	EUR/MWh, 0.01 tick	GBP/MWh, 0.01 tick	EUR/MWh, 0.01 tick
Settlement window	17:05–17:15 CE(S)T	17:05–17:15 CE(S)T	17:05–17:15 CE(S)T
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