



Trading Appendix 7

Hourly index

CROATIAN POWER EXCHANGE Ltd.

1. CRODAX – CROPEX Hourly Index (Day Ahead Market)

1.1. Description and purpose of the index

CRODAX (CROPEX Hourly Index) means the hourly index of CROPEX Day Ahead Market, which reflects the average price for a given hour, calculated as the arithmetic mean of all fifteen-minute price intervals within that hour.

Purpose of CRODAX-a is to provide a transparent and reliable indicator of hourly prices in the market.

1.2. Calculation methodology

- **Input data:** 96 positions (15-min products - QH) from Day ahead market
- **Aggregation:** Each hour (H01–H24) consists of four consecutive 15-minute prices (e.g. H01 = QH1–QH4).
- **Hourly price calculation:**
 - arithmetic mean:

$$CRODAX_{hourly,i} = \frac{QH_{i,1} + QH_{i,2} + QH_{i,3} + QH_{i,4}}{4}$$

Note: symbol *i* represents the hour in the range from 1 to 24 (ie. H01–H24)

1.3. Rules for the transition between summer and winter time (CRODAX)

a) Regular days

Days with no daylight saving time changes consist of 24 hours. CRODAX hourly index is calculated separately for each hour {1,2,...,24}

b) Transition from winter to summer time

On the day of the transition from winter to summer time, the clock is changed forward at 02:00 CET to 03:00 CET. Such a day has 23 trading hours.

c) Transition from summer to winter time

On the day of the change from summer to winter time, the clock is moved back at 03:00 CET to 02:00 CET. Such a day has 25 trading hours. The double hour (03:00) appears twice and is designated as H03a and H03b. The CRODAX hourly index value for that hour is calculated as the arithmetic mean of H03a and H03b.

Regarding the case of cancellation of Day ahead auction (no results) than for that day index from Intraday market is chosen.

2. CRIX – CROPEX Hourly Index (Intraday Continuous Market)

2.1 Description and purpose of the index

CRIX (CROPEX Intraday Continuous Hourly Index) means the hourly index of CROPEX Intraday Continuous Market, which reflects the average price for a given hour, calculated as the arithmetic mean of all fifteen-minute price intervals within that hour.

Purpose of CRIX is to provide a transparent and reliable indicator of hourly prices in the market.

2.2 Calculation methodology

- **Input data:**
 - 96 15-minute products (QH01-QH96)
 - 24 hourly products (H01-H24)
- **Aggregation:**
 - Each hour (H01-H24) is calculated based on **arithmetic mean VWAP hourly price products and VWAP prices of the corresponding four 15-minute products.**
 - Hourly price formula:

$$CRIX_{hourly,i} = \frac{VWAP_{hourly,Hi} + \frac{VWAP_{QH,(4i-3)} + VWAP_{QH,(4i-2)} + VWAP_{QH,(4i-1)} + VWAP_{QH,4i}}{4}}{2}$$

$$i = [1, 2, \dots, 24]$$

2.3 Rules for transition between summer and winter time (CRIX)

- **Regular days:** Days with no daylight saving time changes consist of 24 hours. CRIX hourly index is calculated separately for each hour $\{1, 2, \dots, 24\}$
- **Transition from winter to summer time:** Shift at 02:00 CET forward to 03:00 CET, the day has 23 trading hours; the hour that does not exist (03:00) is given the value 0.
- **Transition from summer to winter time:** Shift at 03:00 CET back to 02:00 CET, the day has 25 trading hours; double hour (03:00) is denoted H03a and H03b, and the hourly value is calculated as the arithmetic mean of H03a and H03b.

If there are no trading results on Intraday for a certain hour, that hour is ignored in the index calculation.

Zagreb, 16.9.2025 effective as of 30.9.2025.

Ante Mikulić, Director