



Trading Appendix 3

# Products Specifications

CROATIAN POWER EXCHANGE Ltd.

## 1. INTRODUCTION

### 1.1. General

This Products Specifications form a part and applies together with Trading Rules in their entirety, with further rules and regulations regarding Products being set out in the Day Ahead Market Regulations, Intraday Market Regulations, the Trading Rules, and Membership Agreement, as applicable.

### 1.2. Time References

References to points in time refer to CET time, and unless otherwise specified time is denoted in the 24-hour format. Date references are to calendar days unless otherwise specified.

- a) Short-clock change:  
On the short-clock change day in March (beginning of summer savings time), there will only be 23 hours in the CROPEX Markets so that the clock hour between 02:00 and 03:00 will be skipped on that day.
- b) Long-clock change:  
On the long-clock change day in October (end of summer savings time) there will be 25 hours in the CROPEX Markets. The common price calculation and orders cover 25 hours. 25 hours must be reported and the two hours between 02:00 and 03:00 may be treated as two different hours.

### 1.3. Settlement Day(s)

Settlement for all deliveries taking place on each Delivery Day will take place on following Settlement Day(s), regardless of Product and of CROPEX Markets on which the Transaction was entered:

- a) For each invoice with net cash Settlement amounts owing to CROPEX:  
Invoicing Day + one (1) day
- b) For each self-billing invoice with net cash Settlement amounts owing from CROPEX:  
Invoicing Day + two (2) days

If Settlement Day should fall on a day which is not a Banking Day, Settlement Day will be the first following Banking Day.

Further rules and procedures relating to Settlement and Delivery are set out in the Trading Rules.

## 2. DAY AHEAD MARKET

### 2.1. General

- **Quotation Method:** Continuous submission of Orders until Gate Closure, followed by qualifying Orders being matched using the Auction method set out in the Day Ahead Market Regulations.
- **Trading Hours:** The coming 24 hours starting from 00:00 CET.
- **Gate Closure:** 12:00 CET
- **Trade Lot:** 0.1 MW
- **Tick Size:** Euro 0.01/MWh
- **Currency:** Orders can be submitted in EUR. Price calculation in EUR.
- **Order Types:** Hourly Orders, Block Orders, Linked Block Orders, Profile Block Orders, Spread Block Orders
- **Block Order Volume Limit:** 500 MW
- **Minimum number of consecutive hours in Block Orders:** 1 hour
- **Maximum number of Block Orders:** 6 per Trading Portfolio
- **Linked Block Orders:** The linking of blocks is limited on portfolio level. The linking is limited to three levels, and a total limitation of 4 blocks per family shall be applied.

- **Price Steps:** The number of Price Steps is 200 unique price steps per hour (including the upper and lower Order Price Limits)
- **Minimum Price Limit:** Euro - 500
- **Maximum Order Price Limit:** Euro +4000
- **High threshold for the Second Auction:** 2400 EUR/MWh
- **Low threshold for the Second Auction:** -500 EUR/MWh
- **Delivery:** As specified in the Order.
- **Settlement:** See Section 1.3. above. Settlement calculations will be based on actual Deliveries per Delivery Hour on each applicable Delivery Day.

## 2.2. Croatian Day Ahead Market contract codes

Suffix (variable)	Explanation	Range
<b>dd</b>	Day of month (two digits)	01 - 31
<b>mm</b>	Month of year (two digits)	01 - 12
<b>yyyy</b>	Year (four digits)	Current year (next year)
<b>nn</b>	Clock hour	00:00 - 24:00

## 2.3. Day Ahead Market Trading Hours

The time (Gate Opening) from which Orders for a Delivery Day (starting on 0:00h and ending on 24:00h) may be submitted, will normally occur 60 days prior to the start of the respective Delivery Day provided that, CROPEX may, in its sole discretion, postpone the Gate Opening, for example, but not limited to, due to technical or operational reasons.

## 3. INTRADAY MARKET

### 3.1. Intraday Continuous Market

#### 3.1.1. General

- **Quotation Method:** Continuous Trading during Trading Hours where transactions will be matched automatically when concurring Orders are registered in the ETS.
- **Trade Lot:** 0.1 MW
- **Tick Size:** Euro 0.01/MWh
- **Currency:** Orders are submitted in EUR. Price calculation in EUR.
- **Products:** (a) Hour (60-minute Product) (b) Block Order (hourly) (c) Quarter Hour (15-minute Product)
- **Order Types:**
  - a) **Fill** - matching may be effected either for the full volume or for a part of the volume. Any remaining volume shall remain valid with the ranking of the original Order.
  - b) **All-or-Nothing** - matching may only be effected for the full volume.
  - c) **Fill-or-Kill (FoK)** means an Order that shall be immediately matched for the whole order volume or cancelled.
  - d) **Immediate-or-Cancel (IoC)** means an Order that shall be immediately matched for as much of the order volume as possible and then cancelled.
  - e) **Iceberg Order (IBO)** means an Order in the Croatian Intraday Market that has a partly hidden overall volume. Each part of the Iceberg Order is called a Clip. When the Order has been submitted, other Participants will only see the first Clip as a part of the total volume when the Order is submitted. When the first Clip is matched, the next Clip receives a new order number and time stamp. Minimum Clip Size 5 MW.
  - f) **Block Order** is a type of All-or-Nothing which combines Order containing several consecutive individual **hours**.
- **Order quotation:** Please see Section 2. of Intraday Market Regulations.
- **Minimum Volume Limit:** 0.1 MW

- **Maximum Volume Limit:** 999 MW
- **Minimum Price Limit:** Euro - 9999
- **Maximum Order Price Limit:** Euro + 9999
- **Delivery:** As specified in the Order.
- **Settlement:** See Section 1.3. above. Settlement calculations will be based on actual Deliveries per Delivery Hour on each applicable Delivery Day.

### 3.1.2. Intraday Continuous Market contract codes

The following contract codes are used to identify the Intraday Market Products in the ETS:

Type	Prefix (fixed)	Suffix (variable)	Example
Hour	PH-	yyyymmdd-ph	<b>PH-20240120-10</b> <ul style="list-style-type: none"> <li>• 20.1.2024</li> <li>• Hour 10</li> <li>• Delivery period 09:00-10:00 CET</li> </ul>
User Defined Hourly Block Orders	PH- <Suffix>- PH- <Suffix>	yyyymmdd-ph	<b>PH-20240120-01 – PH-20240120-04</b> <ul style="list-style-type: none"> <li>• 20.1.2024</li> <li>• Hour 01 to Hour 04</li> <li>• Delivery period 00:00-04:00 CET</li> </ul>
Quarter Hour	QH-	yyyymmdd-qh	<b>QH-20240120-37</b> <ul style="list-style-type: none"> <li>• 20.1.2024</li> <li>• Quarter Hour time position 37</li> <li>• Delivery period 09:00-09:15 CET</li> </ul>

Suffix (variable)	Explanation	Range
<b>yyyy</b>	Year (four digits)	Current year (next year)
<b>mm</b>	Month of year (two digits)	01 - 12
<b>dd</b>	Day of month (two digits)	01 - 31
<b>PH</b>	Hour of day (two digits)	01 - 24
<b>QH</b>	15-minute time position in the day (two digits)	01 - 96

### 3.1.3. Trading and delivery times for Hourly and Quarter Hour (15-minute) Intraday Continuous Market Products

Start and end times of Trading in the table denotes the start and end time of availability for Trading for Hourly and Quarterly Products in relation to the Delivery Day on which Delivery for the Products first commences.

Intraday Continuous Market product listing schedule (CET)					
Product Type	Trading starts*	Trading Ends*	Examples		
			Instrument	Trading starts	Trading ends
Hourly Product	15:00 D-1 day	D-30 minutes	<b>PH-20240120-10</b>	19.1.2024 - 15:00	20.1.2024 - 08:30
15-min Product	15:00 D-1 day	D-30 minutes	<b>QH-20240120-37</b>	19.1.2024 - 15:00	20.1.2024 - 08:30

\*D = Delivery Period, D-1 day = One day prior to Delivery Period, D-nn minutes = nn minutes prior to start of first Delivery Period

### 3.2. Intraday Auctions Market

#### 3.2.1. General

- **Quotation Method:** Submission of Orders from the Gate Opening until the Gate Closure as specified for the relevant Intraday Auction in the table below (see paragraph 3.2.2.), following which, qualifying Orders will be matched using the Intraday Auction method set out in the Intraday Market Regulations (part B. Intraday Auctions Market)
- **Delivery Period:** Either 24 or 12 hours, or alternatively, 96 or 48 quarter hours, respectively, as specified for the relevant auction in the table below (see paragraph 3.2.2) following the Gate Closure of the relevant Intraday Auction.
- **Trade Lot:** 0.1 MW
- **Tick Size:** Euro 0.01/MWh
- **Currency:** Orders can be submitted in EUR. Price calculation in EUR.
- **Order Types:** 15-minute Orders, Block Orders, Linked Block Orders, Profile Block Orders, Spread Block Orders
- **Block Order Volume Limit:** 500 MW
- **Minimum number of consecutive 15-minutes in Block Orders:** One 15-minutes product
- **Maximum number of Block Orders:** 6 per Trading Portfolio
- **Price Steps:** The number of Price Steps is 200 unique price steps per 15-minute product (including the upper and lower Order Price Limits)
- **Minimum Price Limit:** Euro - 9999
- **Maximum Order Price Limit:** Euro +9999
- **Delivery:** As specified in the Order
- **Settlement:** See Section 1.3. above. Settlement calculations will be based on actual Deliveries per Delivery Period on each applicable Delivery Day.

#### 3.2.2. SIDC Intraday Auctions offered

Auction short name	IDA1 15:00h auction	IDA2 22:00h Auction	IDA3 10:00h Auction
Intraday Auction Gate Opening	See paragraph 3.2.4 below		
Intraday Auction Start Time	14:40	21:40	09:40
Intraday Auction Gate Closure	15:00	22:00	10:00
Intraday Auction End Time	15:20	22:20	10:20
Delivery Period	00:00 – 24:00 the following day	00:00 – 24:00 the following day	12:00 – 24:00 the same day

#### 3.2.3. Croatian Intraday Auctions Market contract codes

Market Codes : CROPEX\_IDA\_1, CROPEX\_IDA\_2, CROPEX\_IDA\_3

Contract Codes : CROPEX\_IDA\_x-yyyymmdd-nn\_pp

Suffix (variable)	Explanation	Range
<b>dd</b>	Day of month (two digits)	01 – 31
<b>mm</b>	Month of year (two digits)	01 - 12
<b>yyyy</b>	Year (four digits)	Current year (next year)
<b>nn</b>	Clock quarter hour	01 - 96
<b>pp</b>	Contract granularity	QH (15 min contracts)
<b>x</b>	Intraday Auction: 1 denotes contract traded in IDA1, 2 in IDA2 and 3 in IDA3	1,2,3

### **3.2.4. Intraday Auctions Market Trading Hours**

The time (Gate Opening) from which Orders for a Delivery Day (starting on 0:00h and ending on 24:00h) may be submitted, will normally occur 60 days prior to the start of the respective Delivery Day provided that, CROPEX may, in its sole discretion, postpone the Gate Opening, for example, but not limited to, due to technical or operational reasons.

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Ante Mikulić, CEO