Specification

PEGAS CEGH END OF DAY INDEX (CEGHEDI®)

The CEGHEDI® is a price index based on exchange trades and / or orders of PEGAS CEGH Gas Exchange Spot Market. It is used as industry benchmark index for the CEE region. Please find below details about its publication and determination.

1. Publication and Data Services

The CEGHEDI® is published after trading phase on a daily basis but limited to exchange trading days on the website of CEGH.

You can find the most recent publications via the following link: http://cegh.at/market-data

Exchange holidays are published at: http://cegh.at/trading-calendar

The index is determined daily and calculated separately for each product (i.e. each delivery period) tradable on the respective exchange trading day. Cancelled trades and the Within-Day product are not taken into account.

2. Determination of CEGHEDI®

The CEGHEDI® is determined based on below mentioned calculation methods depending on trades or the order book situation within the settlement window period. The CEGHEDI® is calculated according to the "methodology for establishing PEGAS Spot EOD Price references" which can be found in the "Powernext market notices". That means it is calculated based on volume weighted trades concluded on PEGAS CEGH Gas Exchange Spot Market excluding Within-Day contracts. If there were not enough trades and/or orders within a certain spread and minimum duration, CEGHEDI® is determined as a weighted mixture of these. If there were neither trades, nor orders, CEGHEDI® is equal to CEGHIX®.

2.1. Definition of the settlement window:

Only prices and / or orders within a certain period of time are taken into account. This settlement window is defined from 05:15pm till 05:30pm. Therefore, all trades and / or valid orders are considered for the determination. The different assessment types applicable depend on the order book situation and on whether there were trades concluded within the settlement window or not. The different determination methods are described below.

2.2. Determination methods

2.2.1. Calculation when 3 or more trades were concluded during the settlement window:

If three or more trades were concluded for the respective product during the settlement window, the volume weighted average price of these transactions will be defined as CEGHEDI®. It is ensured that trades have to be bigger than the minimum trade/order size of **10MWh**. Lower trade/order sizes and cancelled trades are not taken into consideration.

$$CEGHEDI = \frac{\sum_{i=1}^{z} (Close_i * Volume_i)}{\sum_{i=1}^{z} Volume_i}$$

CEGHEDI	…	PEGAS CEGH End of Day Spot Index [€/MWh]
Close	…	price of a trade [€/MWh]
Volume	…	volume of a trade (min. 10MWh) [MWh]
z	…	number of trades

2.2.2. Calculation when 1 or 2 trades were concluded during the settlement window:

2.2.2.1. Mixed weighted average price of CEGHEDI®

If 1 or 2 trade(s) have been concluded during the settlement window for the respective product and the following conditions A & B are fulfilled, a mix of weighted trade volume and time weighted average mid of sufficient orders is calculated.

- **Condition A: (Minimum Cumulated Spread Duration)**

    Cumulated Spread Duration ≥ 0.2 * SettlementPeriodDuration (15 min)

- **Condition B: (Maximum Average Spread Level)**

    AverageSpread ≤ MaxSpread [0.40 €/MWh]

Volume weighted average trade price (weighted with 75% of CEGHEDI®)

$$CEGHEDI = \frac{\sum_{i=1}^{z}(Close_i * Volume_i)}{\sum_{i=1}^{z} Volume_i}$$

CEGHEDI	…	PEGAS CEGH End of Day Spot Index	[€/MWh]
Close	…	price of a trade	[€/MWh]
Volume	…	volume of a trade (min. 10MWh)	[MWh]
z	…	number of trades	

Best Bid / Ask time weighted average price (weighted with 25% of CEGHEDI®)

$$CEGHEDI = \frac{\sum_{i=1}^{z}\left(\frac{bid_i + ask_i}{2} * t_i\right)}{\sum_{i=1}^{z} t_i}$$

bid	…	best buy order during the respective time period t	[€/MWh]
ask	…	best sell order during the respective time period t	[€/MWh]
t	…	time period of one buy- / sell constellation rounded in seconds	[sec]
z	…	number of buy- / sell constellations	

It is ensured that trades have to be bigger than the minimum trade/order size of 10MWh. Lower trade/order sizes and cancelled trades are not taken into consideration. It is ensured that cancelled trades are not taken into account.

2.2.2.2. Volume weighted average trade price of CEGHEDI®

If 1 or 2 trade(s) of sufficient volume has occurred during the Calculation Period for that Product (including Trades coming from Spreads on that Product) and one of the conditions (or both of them) A and B is (are) not satisfied, then CEGHEDI® is equal the volume weighted average trade price.

2.2.3. Calculation in case of no trades were concluded:

If there were no trades during a settlement window, the best and valid bid and ask prices within the settlement window will be used to determine a time weighted CEGHEDI®. It is ensured that only those orders will be used which are valid according to conditions A & B.

$$CEGHEDI = \frac{\sum_{i=1}^{z}\left(\frac{bid_i + ask_i}{2} * t_i\right)}{\sum_{i=1}^{z} t_i}$$

bid	…	best buy order during the respective time period t	[€/MWh]
ask	…	best sell order during the respective time period t	[€/MWh]
t	…	time period of one buy- / sell constellation rounded in seconds	[sec]
z	…	number of buy- / sell constellations	

2.2.4. Parameters:

Maximum valid spread if CEGHEDI$_{TD-1}$ [€/MWh]	=	0.400	[€/MWh]
Settlement window	=	05:15pm – 05:30pm	
Minimum order & trade size	=	10 contracts	

2.3. *Calculation in the case of the absence of reasonable bid-/ask orders:*

In case of no trades during the settlement window coinciding with the absence of reasonable bid-/ask orders the CEGHEDI® is equal to CEGHIX®**.** If also no CEGHIX® is available, a price committee is used to determine a reasonable price.

For any questions, please do not hesitate to contact the Gas Exchange Services Team.
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Kind regards,

your PEGAS CEGH Gas Exchange Services Team