

DECISION OF RAE NO. 62/2022¹

Approval of Product Specifications in the Gas Trading Platform of the Hellenic Energy Exchange in accordance with the provisions of subsections 4.2.2 to 4.2.8 and 4.4.3.4 of the Rulebook for the Natural Gas Trading Platform

The Regulatory Authority for Energy

In its regular meeting, at its headquarters, on the 20th January 2022, and

Taking into account:

- 1. Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 on "common rules for the internal market in natural gas and repealing Directive 2003/55/EC" (EU L 211/14.8.2009).
- 2. Regulation (EU) no. 312/2014 of the Commission of 26 March 2014 establishing a network code for the balancing of natural gas loads in transmission networks (EU L 91/27.03.2014) (hereinafter referred to as "Regulation 312/2014").
- 3. The provisions of Law 4001/2011 "On the operation of the Energy Markets of Electricity and Natural Gas for Research, Production and transmission networks of Hydrocarbons and other regulations" (Government Gazette A' 179/22.08.2011), as in force.
- 4. The provisions of Chapter C' "Provisions of Competence of the Ministry of Environment and Energy" of Law 4425/2016 "Urgent regulations of the Ministries of Finance, Environment and Energy, Infrastructure, Transport and Networks and Working, Social Security and Social Solidarity, of the agreement on fiscal targets and structural reforms and other provisions" (Government Gazette A' 185/30.09.2016), as in force and in particular the provisions of article 19.
- 5. The Decision No. Δ1/A/5346/22.03.2010 of the Deputy Minister of Environment, Energy and Climate Change on "Network Code of the National Natural Gas System" (Government Gazette B' 379/2010) (hereinafter, the "Network Code of NNGS" or the "Code"), as amended by No. 1096/2011 (Government Gazette B' 2227/04.10.2011), 526/2013 (Government Gazette B' 3131/09.12.2013), 239/2017 (Government Gazette B' 1549/05.05.2017 & Government Gazette B' 2159/23.06.2017), 123/2018 (Government Gazette B' 788/07.02.2018), 1005/2019 (Government Gazette B' 4088/08.11.2019),

¹ Unofficial translation from the Greek language as of 03/02/2022. In case of any discrepancy between the Greek and the English version, the Greek version prevails.



727/2020 (Government Gazette B' 1684/04.05.2020), 1035/2020 (Government Gazette B' 2840/13.07.2020), 1400/2020 (Government Gazette B' 4585/16.10.2020), 1433/2020 (Government Gazette B' 4799/30.10.2020 & Government Gazette B' 5078/17.11.2020), 735/2021 (Government Gazette B' 4687/11.10.2021) and 1060/2021 (Government Gazette B' 37/10.01.2022) Decisions of RAE.

- 6. Document no. 879/24.06.2021 of HEnEx and document no. 519/24.06.2021 of EnExClear (RAE I-305281/24.06.2021) on the "Natural Gas Trading Platform of the Energy Exchange", by which the Energy Exchange Group submitted its initial proposal for the operating framework of the Natural Gas Trading Platform.
- 7. Document no. 915/02.07.2021 of HEnEx and document no. 545/02.07.2021 of EnExClear (RAE I-305824/02.07.2021) on the "Natural Gas Trading Platform of the Energy Exchange", with which the Energy Exchange Group submitted the texts of the decisions contained in its original proposal (relevant 6) in English.
- 8. The views submitted in the context of the public consultation conducted by RAE during the period 29.06.2021 20.09.2021, regarding the framework that will govern the operation of the Natural Gas Trading Platform by the Hellenic Energy Exchange², i.e., those RAE documents under no.: RAE I -309425/10.09.2021 (CONFIDENTIAL), MOTOR OIL (RAE I-309451/13.09.2021), PPC (RAE I-309452/13.09.2021), ZENITH (RAE I-30/13.09.2021), IENE (RAE I-309455/13.09.2021), NATURAL GAS HELLENIC ENERGY COMPANY (RAE I-309456/13.09.2021) and DEPA EMPORIAS (RAE I-3094460/13.09.2021)³.
- 9. The e-mail of 30.09.2021 of RAE, requesting the views of HEnEx and EnExClear on the comments submitted to the public consultation.
- 10. The document no. 1514/15.10.2021 of HEnEx and the document no. 858/15.10.2021 of EnExClear (RAE I-311586/18.10.2021) on the "Opinions of the companies HEnEx S.A. and EnExClear on the results of the public consultation of RAE for the framework that will govern the operation of the Natural Gas Trading Platform by the Hellenic Energy Exchange".
- 11. The e-mail no. O-91013/25.11.2021 of RAE with subject "Comments of RAE on the proposal of HEnEx for the Rulebook of the Natural Gas Trading Platform and the relevant Decisions".
- 12. The document no. O-91199/3.12.2021 of RAE on "Decisions for the implementation of the Rulebooks for the Natural Gas Trading Platform of the Energy Exchange and the Clearing of Transactions of the Trading Platform of the Energy Exchange".

² https://www.rae.gr/diavoulefseis/10871

³ https://www.rae.gr/diavoulefseis/13888



- 13. The e-mail no. O-91767/28.12.2021 of RAE with subject "Natural Gas Trading Platform", with which the final remarks of RAE were submitted to the Energy Exchange on the texts of the Rulebooks for the Natural Gas Trading Platform of the Energy Exchange and the Clearing of Transactions of the Trading Platform of the Energy Exchange, which will be approved by RAE.
- 14. The working meetings that took place between the working group of RAE and the working group of the Energy Exchange Group for the joint elaboration of its proposal and the comments of the public consultation and the formulation of the final drafts of the Rulebooks for the Trading Platform and Clearing of Transactions of the Trading Platform and the related Decisions.
- 15. The document no. 20/07.01.2022 of HEnEx (RAE I-317397/07.01.2022) on "Recommendation for the determination of the Product specifications in the Natural Gas Trading Platform of the Hellenic Energy Exchange", with which the Final recommendation of the Energy Exchange Group for the Decision concerning the product specifications in the Natural Gas Trading Platform was submitted.
- 16. The RAE Decision no. 60/2022 on "Approval of the Operation of Natural Gas Markets by the societe anonyme "Hellenic Energy Exchange S.A." in accordance with the provisions of article 19 of law 4425/2016 (Government Gazette A' 185/30.09.2016), as in force" (under publication in Government Gazette).
- 17. The RAE Decision no. 61/2022 on "Approval of the Rulebook for the Natural Gas Trading Platform of the Energy Exchange, in accordance with the provisions of article 19 of law 4425/2016 (Government Gazette A' 185/30.09.2016), as in force" (under publication in the Government Gazette).
- 18. The fact that the regulatory decisions of RAE are published in the Government Gazette, in accordance with the provisions of article 32 par. 1 Law 4001/2011.
- 19. The provisions of Law 3861/2010 "Enhancing transparency with the mandatory posting of laws and acts of government, administrative and self-governing bodies on the Internet "Transparency Program" and other provisions" (Government Gazette A' 112/13.07.2010) as in force, and in particular the provision of Article 2 (4) case 4 thereof.
- 20. The fact that this decision does not impose a burden on the state budget.

Thought as follows:

Since, according to Regulation 312/2014 (relevant 2) the users of the transmission system have the responsibility of balancing their inputs and extractions in the natural gas system. Transmission System Operators perform any necessary residual balancing of transmission systems. As part of this action, the Operators should try to maximize the amount of gas balancing needs covered through the purchase and sale of short-term standardized products in the short-term wholesale gas market.



Since, according to paragraph 3 of article 6 of Regulation 312/2014: "The transmission system operator performs balancing operations through: a) the purchase and sale of short-term standardized products on a trading platform [...]"

Since, according to article 3 point 4) of Regulation 312/2014, the Trading Platform is defined as: "Electronic system provided and operated by the trading platform operator, through which the participants in the transaction are allowed to submit and accept, including the ability to review and withdraw gas offers required to meet short-term fluctuations in gas demand or supply, in accordance with the terms and conditions applicable to that trading platform and under which the transmission system carries out commercial transactions with the aim of undertaking balancing actions".

Since, according to article 10 of Regulation 312/2014: "1. For the purposes of supplying short-term standardized products, the transmission system operator shall trade in a trading platform that meets all of the following criteria:

(a) provide adequate support throughout the day for the supply of gas to both network users for their commercial transactions and transmission system operators to undertake appropriate balancing actions through the trading of the relevant short-term standardized products; [...]. »

Since, according to the provisions of article 19 of law 4425/2016 (relevant 4) RAE approves the operating conditions of the Natural Gas Markets as: "1. The Energy Exchange which operates in accordance with the provisions of Subchapter B of this law, may operate Natural Gas Markets as well as Environmental Markets. The operation of the Natural Gas Markets as well as the Environmental Markets requires approval by RAE applying the provisions of articles 11, 12, 13 and 14 of this law. 2. By decision of RAE, the terms and conditions of operation of the Natural Gas Markets as well as the Environmental Markets may be specified. By the same decision, the terms of operation of the Balancing Markets on natural gas and on the products traded in the Environmental Markets may be specified, within the framework of the provisions of the current legislation and the Union law."

Since, with the RAE Decision 60/2022 (relevant 16) the operation of the Natural Gas Markets by the societe anonyme "Hellenic Energy Exchange S.A." was approved in accordance with the provisions of article 19 of law 4425/2016.

Since, with the RAE Decision 61/2022 (relevant 17) the Rulebook for the Natural Gas Trading Platform of the Energy Exchange was approved, according to article 19 of law 4425/2016.

Since, sections 4.2.2 to 4.2.8 of the Trading Platform Rulebook contain provisions concerning the Products that are tradable in the Trading Platform, while there is a provision that the product specifications, the process of introducing a product for trading, and the methodology for calculating the Reference Prices are specified by a Decision of RAE.

Since, subsection 4.4.3.4 of the Trading Platform Rulebook states that the RAE Decision determines the period (RTP: Random time period) within which, at a random time, Trading Method 2 (Automatic and instant trading - Auction) ends.

Since, RAE, in the context of formulating its decision for the approval of the product specifications in the Natural Gas Trading Platform thoroughly examined the proposal of the Hellenic Energy Exchange (HEnEx) (relevant 6 & 7), the views of the participants in the public consultation (relevant 8), as well as the views submitted by HEnEx on the comments of the public consultation



(relevant 10). In this context and after working meetings (relevant 14), RAE submitted its comments on the decision on the product specifications (relevants 11 & 13), while HEnEx submitted its final proposal with relevant 15.

Since, the recommendation of HEnEx (relevant 15) includes:

- a) Product specifications and in particular the product type and code, available series, place of delivery, trading period and hours per trading method, delivery period, volume and contract size, the minimum quantity that can be traded, the trading unit, the price unit, the minimum and maximum order price and the settlement currency.
- b) The prices related to trading and in particular: the auction price, the starting price, the reference prices.
- c) The gas spot indices and
- d) the definition of the interval (RTP) within which Trading Method 2 ends, equal to one minute.

Since, according to the recommendation of HEnEx, the product traded on the Trading Platform will be a daily title product with a delivery period on the current day (within day series) as well as the next three Gas Days (day-ahead series), which satisfies the obligation arising for the NNGS Operator from Regulation 312/2014, to trade in a Trading Platform where short-term standardized products are traded with delivery within the same or the next day.

Since, based on the recommendation of HEnEx, two trading sessions are foreseen at the Trading Platform, the Standard Period from 8:00 CET to 18:00 CET (09.00 EET to 19.00 EET) and the Extended Period from 07:00 CET to 1:30 CET (08.00 EET to 02.30 EET) of the next calendar day, for each day including working days, weekends and holidays, which satisfies the obligation of the NNGS Operator to trade in a Trading Platform which operates seven days a week, according to the provisions of paragraph 1 of article 7 of Regulation 312/2014.

Since, the Extended Trading Period is activated in case of request of the NNGS Operator for conducting an auction beyond the Standard Period, in order to carry out balancing actions in order to maintain, on a daily basis, the transmission network within its operational limits and the expected inputs and withdrawals, in accordance with the provisions of the NNGS Network Code (relevant 5).

Since, the recommendation of HEnEx includes the methodology for calculating the starting price of each series, which is based on the closing price of the previous day, if any, or the closest to it. In case the calculation is not possible with this procedure, such as for the first day of operation of the Platform, the price will be calculated taking into account gas prices in trading platforms of increased liquidity.

Since, the closing price is intended to produce a reference to the value of a contract, the weighted average of 30% of the trades is used to determine it, starting from the end of the extended trading period. A percentage equal to 30% is considered reasonable as it concerns transactions that took place towards the end of the meeting, i.e., close to closing but a significant percentage of transactions is considered in order for the closing price to be representative of the contract.

Since, HEnEx recommends the publication of reference prices for the current and the next day taking into account all the transactions during the Standard Trading Period, following the practice of other European Exchanges.



Since, in order to ensure the transparency of the auctions that take place during the activation of Trading Method 2, it is considered reasonable for the process to end at a random time, as is the case with the LNG auctions held at the Revythousa terminal as part of its annual LNG planning process (relevant 5).

Since, within the framework of its responsibilities, RAE monitors and supervises the operation of the natural gas market, for this reason it evaluates the data it receives from HEnEx and DESFA for the operation of the Trading Platform, in order to make changes to the framework whenever deemed necessary. Specifically for the trading product, the Authority decides, upon the recommendation of HEnEx, on the introduction or termination of the product as well as on modifications to the characteristics of the available product.

Since, RAE deems reasonable the final recommendation of the Operator for the Product Specifications in the Natural Gas Trading Platform of the Energy Exchange, as it includes the provisions of subsections 4.2.2 to 4.2.8 and 4.4.3.4 of the Rulebook of the Trading Platform and satisfies the obligations of the NNGS Operator, for his participation in the Trading Platform, as they arise from Regulation 312/2014.

For all above reasons,

Decides:

- 1. The approval of the Product Specifications in the Natural Gas Trading Platform of the Energy Exchange, in accordance with the content of the Annex of this decision, which is an integral part thereof.
- 2. The notification of this Decision to the company "Hellenic Energy Exchange S.A.".
- 3. The upload of this Decision on the official website of RAE and its publication in the Government Gazette.

Athens, 20 January 2022

The President of RAE

Assoc. Prof. Athanasios Dagoumas



Annex

"Product Specifications in the Gas Trading Platform of HEnEx"

Scope

This Proposal defines the following:

- a. The trading sessions of the Trading Platform;
- b. The specifications of the Products;
- c. The calculation methodologies of the Starting and Closing prices of each Contract;
- d. The calculation of the HEnEx Natural Gas Spot Indices.

Article 1 Product Specifications

Product Type	Title Product
Product Code	GRGDyymmdd where GR : Virtual Trading Point of National Natural Gas Transmission System (Greece), G : Natural Gas, D : Daily Product and yymmdd the Gas Day during which the Natural Gas will be delivered.
	Daily Product with a Gas Day Delivery Period, which consists of
Product and	A trading series for the current Gas Day (Within Day series)
available series	 Three trading series for the next three Gas Days (Day Ahead series).
Underlying	Natural Gas with physical delivery obligation, at the Virtual Trading Point (VTP) of the National Natural Gas Transmission System (NNGTS), in accordance with the terms and the conditions of the Network Code of NNGS.
Place of Delivery	The Virtual Trading Point of the National Natural Gas Transmission System.
Trading Session	Standard Trading Session
	Daily (including working days, weekend days and holidays)
	08:00 CET to 18:00 CET
	Extended Trading Session
	Daily (including working days, weekend days and holidays)
	07:00 CET to 01:30 CET (of the following calendar day)
Trading Methods and Trading Hours	Trading Method 1 (Automatic and continuous trading - Continuous trading)



	Daily, from 08:30 CET to 18:00 CET, except when Trading Method 2 is activated.
	Trading Method 2 (Automatic and instant trading - Call Auction)
	At the open: Daily, from 08:00 CET to 08:30 CET.
	Announced: From 07:00 CET of a calendar day to 01:00 CET of the following calendar day, during the first thirty (30) minutes of the respective hour following the announcement of the Call Auction (e.g. 07:00-07:30, 09:00-09:30,, 01:00-01:30).
	Announcements are made by HEnEx at least thirty (30) minutes before the start of the announced Call Auction, following a relevant request of the National Natural Gas Transmission System Operator (DESFA).
	The period concerning the random time of subsection 4.4.3.4 of the Rulebook (RTP: Random Time Period) for the above Call Auctions is set to one (1) minute.
	<u>Automatic</u> : Automatic activation for the purposes of the Automatic Volatility Interruption Mechanism as per subsection 4.6.5 of the Rulebook.
	Trading Method 3 (Pre-agreed trades) Daily, from 08:30 CET to 18:00 CET.
Delivery Period	The Gas Day is defined as the Delivery Period. The Gas Day on which the delivery will take place is determined by the Product Code yymmdd (for example: GRGD220301 refers to the Title Product delivered starting on 01 March 2022).
Contract Volume	1 MWh/d
Contract Size	1 MWh
Minimum Quantity	1 Contract
Trading Unit (Lot Size)	1 Contract
Price Unit	€/MWh with two decimals precision
Price Tick	0.01 €/MWh
Minimum Order Price	0.01 €/MWh
Maximum Order Price	999.99 €/MWh
Settlement Currency	Euro



Article 2 Calculation of Prices

2.1 Call Auction Price

Calculated according to subsection 4.4.3.2 of the Rulebook.

In case of a Call Auction without a trade, no price will be calculated.

2.2 Starting Price

The Starting Price of each series is equal to the latest available Closing Price of the specific series. In case of unavailability of such latest Closing Price for this specific series, then the last available Closing Price of the series with the closest Delivery Period in which at least one transaction under Trading Methods 1 and 2 has taken place, is used. If there is no series that meets the above requirements, the Starting Price is taken equal to the latest available Closing Price of the series with the nearest Delivery Period. In case the calculation of the Starting Price is not feasible according to the above procedure, HEnEx determines the Starting Price considering representative reference prices of Natural Gas of relevant liquid trading platforms.

2.3 Reference Prices

2.3.1 Closing Price (End of Day Price - EOD)

The Closing Price of each series is calculated as the weighted average of a set percentage, equal to 30%, of the daily trading volume, applying the following rules:

- 1) The Closing Price of a series is calculated from the weighted, by the volume of the trades, average of the prices of the set percentage of the trading volume during the Extended Trading Period via Order Book of this series.
- 2) At first, the set percentage of the trades is calculated in relation to their total volume. Calculation of the Closing Price begins with the last trades before the end of the Extended Trading Period continuing toward the beginning of the Extended Trading Period, until the absolute number of the trades which corresponds to the specific percentage of the trading volume, is reached and then weighting them with the price at which they have been traded.
- 3) To determine the trades that participate in the calculation of the Closing Price, the following shall apply:
 - a. The trades that participate in the calculation of the Closing Price are those concluded in the Order Book under Trading Methods 1 and 2.
 - b. If no trades have been concluded for the series, the Starting Price will be used as the Closing Price.
 - c. In the event that the calculation of the Closing Price results in an invalid tick size, the price is rounded to the nearest valid tick size. If the Closing Price is equidistant from two tick sizes, the price is rounded to the highest of the two.
 - d. Canceled trades do not participate in the calculation of the Closing Price.



2.3.2 HEnEx Gas Spot Indices (HGSI)

2.3.2.1 HEnEx Gas Spot Index – Day Ahead (HGSIDA)

At the end of the Standard Trading Session during each Gas Day, HEnEx determines HGSI_{DA} as the weighted average of the prices of all trades, executed under Trading Methods 1 and 2, of the Day Ahead series D+1 (namely, of the next Gas Day) which have been executed during the Standard Trading session, weighted by their volumes. Cancelled trades are not considered.

HGSI_{DA} is calculated according to the following formula:

$$HGSI_{DA} = \sum_{i \in I} (Pi \times Qi) / \sum_{i \in I} Qi$$

Where:

i: Trade index

I: Set of trades until the end of the Standard Trading Session for the Day Ahead series D+1 (of the next Gas Day).

Pi: price of trade i

Qi: the total Contract Size of trade i

In the event that the calculation of the $HGSI_{DA}$ results in an invalid tick size, the $HGSI_{DA}$ is rounded to the nearest valid tick size. If the $HGSI_{DA}$ is equidistant from two tick sizes, the $HGSI_{DA}$ is rounded to the highest of the two.

If there has not been a trade in Day Ahead series D+1 until the end of the Standard Trading Session, HGSI_{DA} is equal to the Starting Price of the Day Ahead series D+1 (of the next Gas Day).

2.3.2.2 HEnEx Gas Spot Index – Within Day (HGSI_{WD})

At the end of the Standard Trading Session during each Gas Day, HEnEx determines $HGSI_{WD}$ as the average weighted price of all trades, executed under Trading Methods 1 and 2, of the Within Day series which have been executed during the Standard Trading session, weighted by their volumes. Cancelled trades are not considered.

HGSI_{WD} is calculated according to the following formula:

$$HGSI_{WD} = \sum_{i \in I} (Pi \times Qi) / \sum_{i \in I} Qi$$

Where:

i: Trade index

I: Set of trades until the end of the Standard Trading Session for the Within Day series

Pi: price of trade i

Qi: the total Contract Size of trade i



In the event that the calculation of the $HGSI_{WD}$ results in an invalid tick size, the $HGSI_{WD}$ is rounded to the nearest valid tick size. If the $HGSI_{WD}$ is equidistant from two tick sizes, the $HGSI_{WD}$ is rounded to the highest of the two.

If there has not been a trade in the Within Day series until the end of the Standard Trading Session, $HGSI_{WD}$ is equal to the Starting Price of the Within Day series.