

DIRECTIVE N.º 2/2024

Approval of the reference price methodology for gas transmission tariffs¹

Pursuant to Regulation (EU) 2017/460 of 16 March 2017, establishing a network code on harmonised transmission tariff structures for gas (hereinafter, «Tariff Network Code»), including rules on the application of a reference price methodology, ERSE is responsible for holding periodic public consultations on the reference price methodology, to ensure that it meets the requirements set out in the Tariff Network Code.

In compliance with the aforementioned European Regulation, ERSE held its 117th public consultation and, within the deadline, received the opinion of its Tariff Council, the comments of other interested parties, and the assessment of the Agency for the Cooperation of Energy Regulators (ACER), which were summarised and published on ERSE's website.

Taking into account the comments received, ERSE must approve and publish a motivated decision on the elements provided for in Article 26(1) of the Tariff Network Code.

In view of the above, ERSE hereby approves and publishes the report «Justification of the motivated decision in accordance with Article 27(4) of the Network Code on harmonised transmission tariff structures for gas», which describes the reference price methodology and all other mandatory elements.

The set of mandatory elements includes the justification of the parameters used that are related to the technical characteristics of the system, the value of the proposed adjustments to the capacity-based transmission tariffs for entry points from storage facilities and exit points to storage facilities, as well as the indicative reference prices subject to consultation.

In addition, this report also presents the results, the components and the data relating to these components for the cost allocation assessments relating to transmission service revenue, as provided for in Article 5 of the Tariff Network Code, the compliance assessment of the reference price methodology, in

¹ In the event of inconsistency or discrepancy between the English version and the Portuguese version of this publication, the Portuguese language version shall prevail.



accordance with Article 7 of the Tariff Network Code, the comparison of the methodology with the capacity-weighted distance methodology, and the transmission service revenue and the transmission system operator's allowed revenues.

As legally required, the simplified tariff model, that allows for network users to calculate the transmission tariffs for the next tariff period and an estimate of their possible evolution beyond that period, is available at ERSE's website.

The aforementioned documentation, including this directive, is also made available in English.

Accordingly, as well as pursuant to Article 189(4) of the Portuguese Tariff Code, approved by Regulation No. 825/2023, of 28 of July, and under the terms of Articles 31(2)(d) and 31(2)(e) of the ERSE Statutes, approved by Decree-Law 97/2002, of 12 April, in its current wording, ERSE's Board of Directors approves the Directive corresponding to the motivated decision provided for in Article 27(4) of Regulation (EU) 2017/460, of 16 March 2017, adopting the modified capacity-weighted distance methodology, under the terms and basis of the report «Justification of the motivated decision in accordance with Article 27(4) of the Network Code on harmonised transmission tariff structures for gas», published on ERSE's website.

Article 1

Object

This Directive defines the reference price methodology to be applied in determining transmission tariffs and the discount to be applied at entry points from and at exit points to storage facilities.

Article 2

Reference price methodology

- 1 The applicable reference price methodology is the modified capacity weighted distance methodology.
- 2 The modified capacity weighted distance methodology determines reference prices for capacity-based transmission tariffs by applying the process defined in the following paragraphs.
- 3 Pre-equalization prices are calculated from the concepts of effective distance and effective capacity in the following successive steps:



a) The expression for determining the effective distance is as follows:

$$D_{i,j}^{e} = D_{i,j} \times v_{i,j} \tag{1}$$

where:

- $D_{i,i}^e$ effective distance, measured in km, between an entry point i and an exit point j;
- $D_{i,j}$ —distance, measured in km, between an entry point i and an exit point j;
- ${f v}_{i,j}$ economic value factor to be set by ERSE for the path between an entry point i and an exit point j, to reflect the economic value of the assets of the transmission system being used.
- b) Expressions for determining effective capacity at entry points and exit points are as follows:

$$K_i^e = K_i \times f_i \tag{2}$$

$$K_i^e = K_i \times f_i \tag{3}$$

where:

- K_i^e effective capacity, measured in kWh/day, at entry point i;
- K_i forecasted capacity, measured in kWh/day, at entry point i;
- f_i commercial utilisation factor, to be set by ERSE, at entry point i;
- K_i^e effective capacity, measured in kWh/day, at exit point j;
- K_i forecasted capacity, measured in kWh/day, at exit point j;
- f_i commercial utilisation factor, to be set by ERSE, at exit point j.



c) The expressions for determining the weighted average distance at entry points and exit points are as follows:

$$AD_{i} = \frac{\sum_{j=1}^{J} K_{j}^{e} \times D_{i,j}^{e}}{\sum_{j=1}^{J} K_{j}^{e}}$$
 (4)

$$AD_{j} = \frac{\sum_{i=1}^{I} K_{i}^{e} \times D_{i,j}^{e}}{\sum_{i=1}^{I} K_{i}^{e}}$$
 (5)

where:

 AD_i — weighted average distance, measured in km, for entry point i;

 K_i^e — effective capacity, measured in kWh/day, at exit point j;

 $D_{i,i}^e$ — effective distance, measured in km, between an entry point i and an exit point j;

 AD_i — weighted average distance, measured in km, for exit point j;

 K_i^e — effective capacity, measured in kWh/day, at entry point i;

J – total number of exit points j;

I — total number of entry points i.

d) The expressions for determining the weight of cost at entry points and exit points are as follows:

$$W_{c,i} = \frac{K_i^e \times AD_i}{\sum_{i=1}^I K_i^e \times AD_i}$$
 (6)

$$W_{c,j} = \frac{K_j^e \times AD_j}{\sum_{j=1}^J K_j^e \times AD_j}$$
 (7)



where:

 W_{ci} — weight of cost for entry point i;

 K_i^e — effective capacity, measured in kWh/day, at entry point i;

 AD_i — weighted average distance, measured in km, for entry point i;

I — total number of entry points i;

 $W_{c,j}$ — weight of cost for entry point j;

 K_i^e — effective capacity, measured in kWh/day, at exit point j;

 $\mathrm{AD_{j}}$ — weighted average distance, measured in km, for exit point j;

J – total number of exit points j.

e) The expressions for determining pre-equalization prices at entry points and exit points are as follows:

$$T_{i} = \frac{W_{c,i} \times S_{I} \times R_{total}}{K_{i}}$$
 (8)

$$T_{j} = \frac{W_{c,j} \times S_{J} \times R_{total}}{K_{j}}$$
 (9)

where:

 T_i — pre-equalization price resulting from the reference price methodology for entry

point *i*;

 $W_{c,i}$ — weight of cost for entry point i;

 S_{I} — proportion of allowed revenues to be recovered across all entry points i;



R _{total}	 allowed revenues of transmission services, measured in euros, to be recovered from capacity-based transmission tariffs;
K_{i}	– forecasted capacity, measured in kWh/day, at entry point $m{i}$;
T_{j}	– pre-equalization price resulting from the reference price methodology for exit point \boldsymbol{j} ;
$W_{c,j}$	– weight of cost for exit point j ;
S_J	– proportion of allowed revenues to be recovered across all exit points j ;
K_j	– forecasted capacity, measured in kWh/day, at exit point $m{j}$.

- 4 For the purposes of point a) of paragraph 3 -, the economic value factor will be kept constant until new periodic consultation, in accordance with article 26 of the Tariff Network Code.
- 5 For the purposes of point b) of paragraph 3 -, the commercial utilisation factor is given by the ratio between the commercial capacity and the technical capacity of each entry or exit point, and may be updated, in a justified manner, before a new periodic consultation, in accordance with article 26 of the Tariff Network Code, if relevant changes occur in the use of entry and exit points of the transmission network.
- 6 For the purposes of point e) of paragraph 3 -, the parameter $S_{\rm I}$ is equal to 28% and the parameter $S_{\rm J}$ is equal to 72%.
- 7 From the pre-equalization prices referred to in the preceding paragraphs, post-equalization prices shall be determined by equalizing the prices applicable to the following points:
- a) Interconnection points;
- b) Exit points to customers connected at High Pressure and to distribution networks.



- 8 From post-equalization prices, the pre-scaling prices shall be determined by applying the multipliers applicable to non-yearly standard capacity products, the multipliers applicable to tariff options for customers connected at High Pressure and the tariff adjustments referred to in Article 3 of this Directive.
- 9 From pre-scaling prices, reference prices are determined by applying a multiplicative scaling factor to the prices at entry points and a multiplicative scaling factor to the prices at exit points to ensure that the allowed revenue is obtained, taking into account forecasted capacity, while maintaining the entry-exit split referred to in paragraph 6 -.
- 10 The reference price methodology, defined in this article, will be maintained until further periodic consultation, in accordance with article 26 of the Tariff Network Code, while being applied each gas year to update the prices referred to in the previous paragraphs.

Article 3

Tariff adjustments at entry points from and exit points to storage facilities

Tariffs at entry points from and exit points to storage facilities shall include a 100% discount, in accordance with Article 2 -(8 -).

Article 4

Repealing rule

Directive no. 8/2019, published in the Diário da República, 2nd series, no. 67/2019, of 4 April, which approved the methodology for determining the reference prices of the tariff for the use of the natural gas transmission network, is repealed.

Article 5

Entry into force

This resolution shall enter into force on the day following its publication in Diário da República, taking effect with the beginning of the tariff period defined under the Portuguese Tariff Code for the gas sector, referring to gas year 2024-2025.



Energy Services Regulatory Authority

28th March 2024

Board of Directors