ERSE
ENTIDADE REGULADORA
DOS SERVIÇOS ENERGÉTICOS

BOARD OF DIRECTORS

DIRECTIVE N.º 3/2019

Approval of the reference price methodology for gas transmission tariffs[1]

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 above-mentioned European Regulation, ERSE held its 66th public consultation and, within the deadline, received comments from interested parties, as well as an evaluation by the Agency for the Cooperation of Energy Regulators (ACER).

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 document "Implementation of the Network Code for Harmonised Transmission Tariff Structures for Gas – Justification of the motivated decision", which describes the reference price methodology and the following elements:

1. Justification of the parameters used that are related to the technical characteristics of the system;
2. Corresponding information about the values of these parameters and the assumptions applied;
3. The value of the proposed adjustments to capacity-based transmission tariffs for entry points from storage facilities, exit points to storage facilities, entry points from LNG facilities or entry points from infrastructure developed with the purpose of ending the isolation of Member States;
4. Indicative reference prices subject to consultation;
5. The results, components and data relating to the cost allocation assessment provided for in Article 5 of the Tariff Network Code;
6. The methodological assessment of the proposed reference price in accordance with Article 7 of the Tariff Network Code;

[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.

7. Comparison of the proposed methodology with the capacity-weighted distance methodology;
8. Allowed revenues of the transmission system operator;
9. Transmission services revenue;
10. Revenue ratios for the following splits: capacity/energy; entry/exit; cross-system/intra-system;
11. Explanation of the difference in the level of transmission tariffs for the same type of transmission service applicable for the prevailing tariff period and for the tariff period for which the information is published;
12. Explanation of the estimated difference in the level of transmission tariffs for the same type of transmission service applicable for the tariff period for which the information is published and for each tariff period within the remainder of the regulatory period;
13. A simplified tariff model, enabling network users to calculate the transmission tariffs applicable for the next tariff period and to estimate their possible evolution beyond such tariff period.

Accordingly, as well as pursuant to Article 159(4) of the Portuguese Tariff Code, approved by Regulation No. 225/2018, published in the 2nd Series of *Diário da República* No 74/2018, of 16 of April, and under the terms of Article 31(2)(c) of the ERSE Statutes, approved by Decree-Law 97/2002, of 12 April, as amended by Decree-Law No 57-A/2018, of 13 of July, 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 document "Implementation of the Network Code for Harmonised Transmission Tariff Structures for Gas – Justification of the motivated decision", published by ERSE on its website.

Article 1

Object

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

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:

$$D^{e}_{i,j} = D_{i,j} \times v_{i,j} \qquad (1)$$

where:

$D^{e}_{i,j}$ – 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;

$v_{i,j}$ – 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:

$$K^{e}_{i} = K_{i} \times f_{i} \qquad (2)$$

$$K^{e}_{j} = K_{j} \times f_{j} \qquad (3)$$

where:

K^{e}_{i} effective capacity, measured in kWh/day, at entry point i;

K_i – forecasted capacity, measured in kWh/day, at entry point i;

f_i – physical utilization factor, to be set by ERSE, at entry point i;

K_j^e – effective capacity, measured in kWh/day, at exit point j;

K_j – forecasted capacity, measured in kWh/day, at exit point j;

f_j – physical utilization 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:

$$AD_i = \frac{\sum_{j=1}^{J} K_j^e \times D_{i,j}^e}{\sum_{j=1}^{J} K_j^e} \quad (4)$$

$$AD_j = \frac{\sum_{i=1}^{I} K_i^e \times D_{i,j}^e}{\sum_{i=1}^{I} K_i^e} \quad (5)$$

where:

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

K_j^e – effective capacity, measured in kWh/day, at exit point j;

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

AD_j – 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:

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

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

where:

$W_{c,i}$ – 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;

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

K_j^e – effective capacity, measured in kWh/day, at exit point j;

AD_j – weighted average distance, measured in km, for exit point j;

I – total number of entry points i;

J – total number of exit points j.

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

$$T_i = \frac{W_{c,i} \times S_I \times R_{total}}{K_i} \quad (8)$$

$$T_j = \frac{W_{c,j} \times S_J \times R_{total}}{K_j} \quad (9)$$

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 i;

T_j – pre-equalization price resulting from the reference price methodology for exit point 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 j.

4 - For the purposes of point e) of the preceding paragraph, the parameter S_I is equal to 28% and the parameter S_J is equal to 72%.

5 - 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.

6 - 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.

7 - 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 4.

8 - The reference prices resulting from the reference price methodology are updated at the beginning of each tariff period in accordance with the allowed revenue established by ERSE and the forecasted capacity values.

9 - Pre-scaling prices are constant during the regulatory period.

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(6).

Article 4

Discount to be applied to standard capacity products for interruptible capacity

1 - Where, in the previous gas year, no capacity interruption has occurred at interconnection points due to physical congestion, the reserve prices for standard interruptible capacity products shall be equal to the reserve prices for standard capacity products for firm capacity on the same horizon, applying an ex-post discount in the case of an interruption.

2 - The ex-post discount is an ex-post compensation paid for each day on which an interruption occurred and shall be equal to three times the reserve price for daily standard capacity products for firm capacity.

3 - Where, in the previous gas year, a capacity interruption due to physical congestion occurred at the interconnection points, the reserve prices for standard capacity products for interruptible capacity result from the application of an ex-ante discount, under the terms established in the Portuguese Tariff Code for the natural gas sector.

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 natural gas sector, referring to gas year 2019-2020.

Energy Services Regulatory Authority

14 March 2019

Board of Directors

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