



**CROATIAN ENERGY
REGULATORY AGENCY
Ulica grada Vukovara 14
10000 Zagreb**

**CLASS: 310-03/18-02/3
Reg. No.: 371-04-19-8
Zagreb, 23 May 2019**

Having regard to the Article 28(1) of the Commission Regulation (EU) 2017/460 from 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas, in accordance with Article 41(6) of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC and Article 11(1)(9) of the Act on the Regulation of Energy Activities (“Official Gazette” No. 120/12, 68/18) the Croatian Energy Regulatory Agency has adopted on the 12th session of the Board of Commissioners held on 23 May 2019 the following

DECISION

on discounts, multipliers and seasonal factors in accordance with Commission Regulation (EU) 2017/460 from 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas

1. Multipliers and seasonal factors shall be adopted in accordance with Commission Regulation (EU) 2017/460 from 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas, as follows:

- the level of multipliers for non-yearly standard capacity products:

<i>Capacity products</i>	<i>Quarterly</i>	<i>Monthly</i>	<i>Daily / within day</i>
Multipliers	1.2	1.3	2.5

- the level of seasonal factors for non-yearly standard capacity products, by months:

<i>Capacity products</i>	<i>Quarterly</i>	<i>Monthly</i>	<i>Daily / within-day</i>
January	1.3750	1.7413	1.7413
February	1.3750	1.3991	1.3991
March	1.3750	1.1666	1.1666
April	0.6542	0.8004	0.8004
May	0.6542	0.6219	0.6219
June	0.6542	0.5011	0.5011
July	0.5875	0.5137	0.5137
August	0.5875	0.5856	0.5856
September	0.5875	0.6553	0.6553
October	1.2917	1.1572	1.1572
November	1.2917	1.4074	1.4074
December	1.2917	1.7226	1.7226

2. The levels of multipliers and of seasonal factors set out in Point 1 of this Decision shall be applied to all gas transmission system entry and exit points of the Republic of Croatia.
3. A discount of 90% shall be applied at entry points to transmission system from storage facilities and discount of 100% at exit points from transmission system to storage facilities.
4. A discount of 15% shall be applied at entry points to transmission system from LNG facilities.
5. An *ex-post* discount shall be applied for calculation of reserve prices for standard capacity products for interruptible capacity, where *ex-post* compensation paid for each day on which an interruption occurred shall be equal to three times the reserve price for daily standard capacity products for firm capacity.
6. The elements set out in this Decision shall be applied with the beginning of a new tariff period together with the application of the elements of the methodology adopted by the Croatian Energy Regulatory Agency by a Decision on the elements of the methodology for determining the reference price for gas transmission services in accordance with Commission Regulation (EU) 2017/460 of 16 of March 2017 establishing a network code on harmonised transmission tariff structures for gas.
7. In accordance with this Decision, an appropriate amendment of the Methodology for determining the amount of tariff items for gas transmission (“Official Gazette”, No 48/18 and 58/18) shall be made accordingly.
8. This Decision shall be published on the website of the Croatian Energy Regulatory Agency.
9. This Decision shall enter into force on the date of its adoption.

Statement of grounds

The Croatian Energy Regulatory Agency (hereinafter: HERA, as a national regulatory authority acting in accordance with Article 41(6) (a) of Directive 2009/73/EC and as a party designated for conducting a regular consultations on discounts, multipliers and seasonal factors, in accordance with Article 17(1) of the Act on the Regulation of Energy Activities (“Official Gazette”, No 120/12, 68/18) and in accordance with Article 28 of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (hereinafter: NC TAR), adopts a Decision on discounts, multipliers and seasonal factors (hereinafter: Decision).

This Decision was preceded by a Consultation on discounts, multipliers and seasonal factors in accordance with Article 28 of NC TAR (hereinafter: Consultation) covering the period from 2021 to 2026, where year 2021 represents a new tariff period compared to the current Decision on the amount of tariff items for gas transmission for the years of the second regulatory period from 2019 to 2021, Class: 310-03/18-28/4, Reg. No.: 371-04-18-3, which was adopted by HERA on 7 December 2018, taking into account the planned beginning of operations of the liquefied natural gas terminal on the island of Krk from 1 January 2021.

In order to ensure transparency and provide information to the users of the transmission system regarding discounts, multipliers and seasonal factors, Consultation also covered the period from 2022 to 2026, which is the third regulatory period in the gas sector of the Republic of Croatia.

The Consultation was conducted simultaneously with the Final Consultation on the proposed Methodology for determining the reference price of gas transmission services in accordance with Articles 26 of NC TAR, respectively in the period from 18 December 2018 to 18 February 2019, when three responses were received from energy entities and from the Hungarian national regulator.

Upon completion of the Consultation and acting in accordance with Article 41(6)(a) of Directive 2009/73/EC, taking into account the responses received within the Consultations and aspects under

Article 28(3)(a) and (b) of NC TAR, HERA has adopted this Decision on all elements referred to in Article 28(1) of NC TAR and shall publish it accordingly.

Furthermore, pursuant to Article 11(1)(9) of the Act on the Regulation of Energy Activities (“Official Gazette”, No 120/12, 68/18) and Article 94(1)(5) of the Gas Market Act (“Official Gazette”, No 18/18), in accordance with this Decision, HERA will make appropriate amendments to the Methodology for determining the amount of tariff items for gas transmission (hereinafter: Methodology).

1. Calculation of level of multipliers and seasonal factors for non-yearly standard capacity products

In accordance with NC TAR, transmission tariffs should be presented in a transparent and unbiased manner, taking into account the actual costs incurred for providing transmission services, considering the level of complexity of the gas transmission network. Such an approach provides users of the transmission system with an insight into the costs which are the basis for calculation of transmission tariffs and can forecast the same.

Given the complexity of the Croatian gas transmission system, calculation of transmission tariffs in the Decision on the elements of the methodology for determining the reference price for gas transmission services in accordance with NC TAR of 16 of March 2017, establishing a network code on harmonised transmission tariff structures for gas, is based on a homogeneous group of entry and exit transmission system points.

The reference price methodology determines capacity-based transmission tariffs for calculating reference prices for yearly standard capacity product. For such a product, a reference price is used as a reserve price, while the reserve prices for non-yearly standard capacity products are calculated by using the multipliers and seasonal factors, if there are any.

Revenues of the transmission system operator obtained from capacity bookings should cover the justified costs incurred by carrying out the energy activity of gas transmission, whereas those revenues are not only affected by the amount of bookings, but also by a duration of capacity bookings, which besides on an annual basis, may be:

- Quarterly – capacity contracting on a quarterly level;
- Monthly – capacity contracting on a monthly level;
- Daily – capacity contracting on a daily level;
- Within-day – within-day capacity contracting on an hourly level.

The calculation of seasonal factors set out in this Decision is implemented in accordance with Article 15, paragraphs 2 to 6 of NC TAR, based on the proportion of a particular month in the total average gas flow achieved for the previous period from 2015 to 2017 and multiplied by the forecasted gas flows for the period from 2021 to 2026. The calculated average monthly gas flows for the period from 2021 to 2026 is divided by the total average annual gas volume of the same period. The resulting values are then multiplied by 12, and the obtained coefficient is potentiated by a power factor of 1.3, which, in accordance with Article 15(3) (e) of NC TAR should be no less than 0 and no more than 2, and the resulting value represents the seasonal factor on a monthly basis.

In the public Consultation, participants suggested correction of proposed seasonal factors on a monthly, daily and within-day level for the February, in a way that the proposed seasonal factors shall be balanced with the seasonal factors for November. Participants believed that such a correction on the proposed seasonal factors would ensure a balanced seasonality of the winter months in the first and second quarter of the gas year.

Based on the additional analysis, HERA accepted the proposed suggestions by correcting forecasts of gas flows for February in such a way that years with peak flow were taken into account, which

resulted in the balance of seasonal factors for February and November, thus achieving the optimal seasonality of the winter months.

Furthermore, for calculation of seasonal factors set out in this Decision, a power factor of 1.3 was applied, achieving optimal seasonality in price of short-term products, compared to the power factor of 1.5 which was applied for calculations of seasonal factors during the Consultation. By reducing this factor, an additional reduction in monthly and daily capacity booking costs in January and December was achieved, while maintaining a sufficient level of seasonality regarding the difference in monthly and daily capacity booking price of winter months compared to the summer months.

Following the above and with regards to the level of consulted seasonal factors, a new calculation of seasonal factors was conducted, whose monthly amounts are shown in Table 1.

Table 1 The level of seasonal factors, by months

Capacity products	Quarterly	Monthly	Daily / within-day
January	1.3750	1.7413	1.7413
February	1.3750	1.3991	1.3991
March	1.3750	1.1666	1.1666
April	0.6542	0.8004	0.8004
May	0.6542	0.6219	0.6219
June	0.6542	0.5011	0.5011
July	0.5875	0.5137	0.5137
August	0.5875	0.5856	0.5856
September	0.5875	0.6553	0.6553
October	1.2917	1.1572	1.1572
November	1.2917	1.4074	1.4074
December	1.2917	1.7226	1.7226

Furthermore, according to the mentioned provisions of Article 13(1) of NC TAR, for the calculation of the reserve price for non-yearly standard capacity products, levels of multipliers were determined, for quarterly capacity products in the amount of 1.2, for monthly capacity products in the amount of 1.3, while daily and within-day capacity products were set in the amount of 2.5.

The product of multiplier and seasonal factors that shall be used to calculate the reserve price for non-yearly standard capacity products by months are shown in Table 2.

Table 2. The product of multiplier and seasonal factors for non-yearly standard capacity products, by months

Product of multiplier and seasonal factor	Quarterly	Monthly	Daily / within-day
January	1.650	2.264	4.353
February	1.650	1.819	3.498
March	1.650	1.517	2.917
April	0.785	1.040	2.001
May	0.785	0.808	1.555
June	0.785	0.651	1.253
July	0.705	0.668	1.284
August	0.705	0.761	1.464
September	0.705	0.852	1.638
October	1.550	1.504	2.893
November	1.550	1.830	3.518
December	1.550	2.239	4.307

For the purpose of comparing the products of multiplier and seasonal factors set out in this Decision, with the coefficients for determination of the reserve price for non-yearly standard capacity products from the current Methodology, coefficients are reduced from monthly to the annual level.

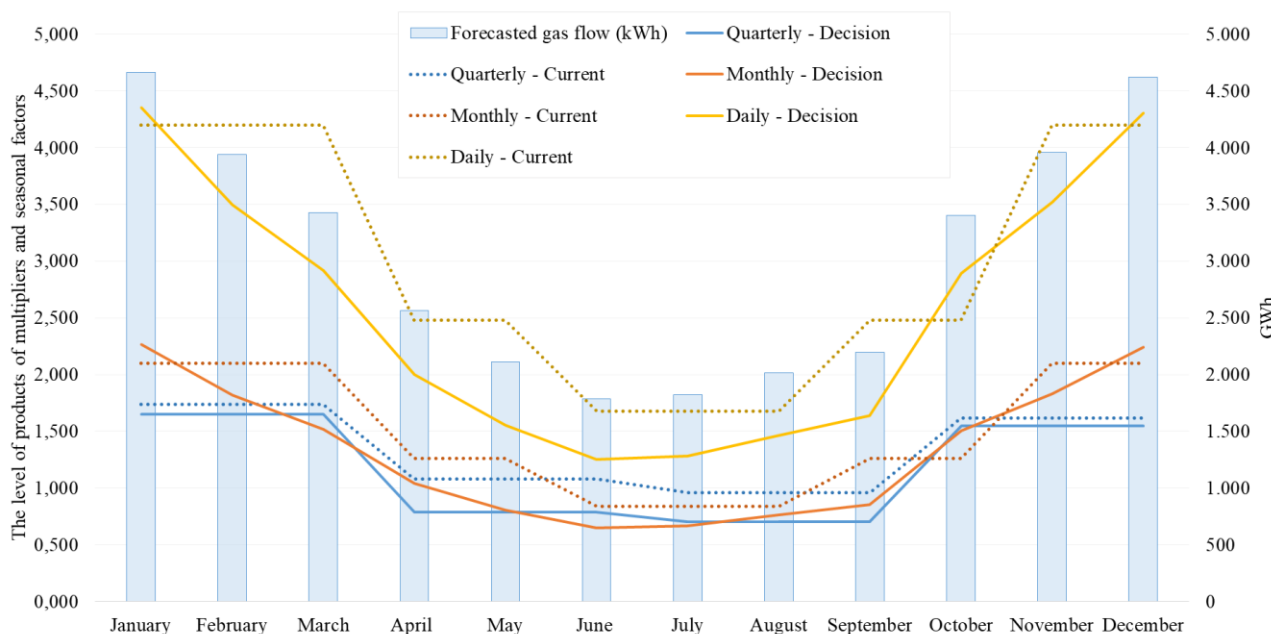
The ratio between average products of multiplier and seasonal factors according to this Decision and the coefficients from valid Methodology reduced to the annual level results in a reduction in the reserve price for non-yearly standard capacity products, i.e. a reduction of short-term capacity booking costs compared to the current Methodology, by 13.2% in average amount. Table 3 shows the average level of coefficients reduced to an annual level according to the current Methodology and the level of product of multiplier and seasonal factors according to the consulted document and this Decision, as well as their mutual relation.

Table 3 The average amount of product of multiplier and seasonal factors and coefficients reduced to the annual level, for non-yearly standard capacity products

<i>Capacity products</i>	<i>Quarterly</i>	<i>Monthly</i>	<i>Daily / within-day</i>
According to the current Methodology	1.350	1.505	2.996
According to the Consulted document	1.173	1.356	2.608
<i>Consultation / Current</i>	<i>-13.1%</i>	<i>-9.9%</i>	<i>-13.0%</i>
According to this Decision	1.173	1.329	2.557
<i>Decision / Current</i>	<i>-13.1%</i>	<i>-11.7%</i>	<i>-14.7%</i>

Overview of current coefficients reduced to an annual level and new products of multipliers and seasonal factors for non-yearly standard capacity products set out by this Decision, by months, are shown in Picture 1.

Picture 1 Overview of products of multipliers and seasonal factors and coefficients reduced to the annual level, for non-yearly standard capacity product, by months



2. Calculation of reserve prices for non-yearly standard capacity products for firm capacity

When applying seasonal factors, reserve prices for quarterly standard capacity products, for monthly standard capacity products and for daily standard capacity products, are calculated in accordance with the following formula:

$$P_{st} = (M \times SF \times T/365) \times D$$

Where:

P_{st} - is the reserve price for the respective standard capacity product;

M - is the level of the multiplier corresponding to the respective standard capacity product;

SF - is the seasonal factor;

T - is the reference price;

D - is the duration of the respective standard capacity product expressed in gas days.

For leap years, the formula shall be adjusted so that the figure 365 is substituted with the figure 366.

The reserve prices for within-day standard capacity products, in accordance with the following formula:

$$P_{st} = (M \times SF \times T/8760) \times H$$

Where:

P_{st} - is the reserve price for the within-day standard capacity product;

M - is the level of the corresponding multiplier;

SF - is the seasonal factor;

T - is the reference price;

H - is the duration of the within-day standard capacity product expressed in hours.

For leap years, the formula shall be adjusted so that the figure 8760 is substituted with the figure 8784.

3. Discounts at entry and exit points of the gas storage system

The Croatian natural gas storage facility is located at Okoli, managed by energy company Podzemno skladište plina Ltd (hereinafter: PSP Okoli). Gas storage plays an important role in the energy system and represents a significant interest for the Republic of Croatia. PSP Okoli is used for seasonal balancing of the gas system and has a technical capacity of 553 million m³ of natural gas.

For the purpose of avoiding double charging for transmission tariffs at the entry and exit points of the gas storage, the NC TAR stipulates a discount of at least 50%, taking into account the contribution that the storage infrastructure provides for system flexibility and security of supply.

With regard to all of the above, the following tariff discounts are determined:

- 90% discount for entry into the gas transmission system from storage;
- 100% discount for exit from the transmission system and entry to the storage.

Considering the current Methodology, the discounts for gas storage system remain unchanged.

4. Discount at LNG terminal entry point

The NC TAR encourages the security of supply, in a manner that it is possible to apply a discount on corresponding capacity-based transmission tariffs at entry points from the LNG terminal.

The NC TAR does not prescribe a minimum level of discount, as is the case of storage facilities, therefore it is determined that the discount for entry from the LNG terminal shall be:

- 15% discount on gas transmission for contracted firm capacity at the annual level for entry from the LNG terminal

HERA considers that by approving the discount on gas transmission for entry from the LNG terminal, it encourages use of existing and new transmission system infrastructure, and ensures diversified gas routes, both with the aim of securing long-term gas supply.

5. Calculation of reserve price for standard capacity products for interruptible capacity

According to the NC TAR, Article 16 (4), the national regulatory authority may decide to apply an *ex-post* discount instead of the recommended *ex-ante* discount, if there was no interruption of capacity due to physical congestion at the interconnection points in the previous gas year. In case of usage of *ex-post* discounts, network users are compensated after the actual interruptions incurred.

Due to the fact that in gas transmission system of the Republic of Croatia there was no capacity disruption due to physical congestion at the interconnection points in the previous gas year, HERA determines the application of *ex-post* discounts for reserve price calculation for standard capacity products for interruptible capacity. The *ex-post* compensations paid for each day on which an interruption occurred are equal to three times the reserve price for daily standard capacity products for firm capacity.

6. Conclusion

HERA considers that this Decision with defined level of discounts, multipliers and seasonal factors allow users of Croatian transmission system a more cost effective short-term lease of capacities, encouraging the efficient use of gas transmission network capacities. This refers to different user profiles, from those with moderate differences in gas consumption between summer and winter months to those who have higher fluctuations in consumption, or a noticeable seasonal character of gas consumption.

Therefore, the defined seasonal factors together with associated levels of multipliers, with the precondition of optimizing the required capacity in accordance with the individual customer portfolio, provide less financial burden on transmission system users, who shall be contracting capacities on a quarterly, monthly, daily and within-day basis.

This Decision, through the defined levels of discounts, multipliers and seasonal factors, enables greater network utilization, better planning for non-yearly reservation capacities and greater savings for transmission system users.

By adopting this Decision HERA considers that all aspects in accordance with Article 28(3)(a) and (b) of NC TAR have been taken into account, respectively:

(a) for multipliers:

- i. facilitate a balance between short-term gas trading and long-term benefits for the signal for efficient investment in the transport system;
- ii. the effect on revenue from transport services and its collection.

(b) for seasonal factors:

- i. the effect of facilitating efficient and effective use of infrastructure;
- ii. the need for reserve prices to be more cost-effective.

Further to the foregoing, it has been decided as in points 1 to 7 of the operative part of this Decision.

Pursuant to Article 27(9) of the Act on the Regulation of Energy Activities it is stipulated that individual decisions taken by the Board of Commissioners of HERA in exercising public authorities are announced on the HERA's website, and therefore, it has been decided as in Point 8 of the operative part of this Decision.

**President of the Board of Commissioners
Tomislav Jureković, B.Sc.**

Legal remedy:

This Decision is enforceable.

This Decision shall not be subject to an appeal, however, it is possible to initiate an administrative action through a lawsuit with the Administrative Court in Zagreb, within 30 days from the day of delivery of this Decision.