



**Evaluation of the probability of
interruption for the Interconnection
Point as established in Commission
Regulation (EU) 2017/406, 16th March
VIP Ibérico
Gas Year 2019 / 2020**

Version 1

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1 Framework

The publication of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariffs structures for gas (Tariff Network Code) has defined the rules for the calculation of reserve prices for standard capacity products for interruptible capacity. In particular, Article 16 (1) specifies that the reserve prices for interruptible capacity products should be calculated by applying a discount to the reserve prices of their respective standard capacity products. As established in Article 146 (17) of the Portuguese Tariff Regulation for the natural gas sector¹, it is foreseen that, for the establishment of prices for standard capacity products for the use of the network infrastructure, the respective transmission system operator shall annually evaluate the probability of interruption according to the above-mentioned Commission Regulation. This evaluation shall include:

- 1) a list of all types of standard capacity products for interruptible capacity offered, including the respective interruption probability and level of the discount applied;
- 2) an explanation on how the interruption probability is calculated for each type of product;
- 3) the data used to calculate the probability of interruption.

According to Directive ERSE n.º 3/2019², Article 4, regarding the discount to be applied to interruptible standard products, there are two possible scenarios:

- If there was no interruption of capacity due to physical congestion in the interconnection points in the previous gas year, the reserve prices of these products are equal to the standard capacity products on the same horizon, with a subsequent discount in case an interruption occurs. This discount consists of a compensation paid for each day an interruption occurred, and equals to three times the reserve price for standard daily capacity products (according to paragraphs 1 and 2)

- If an interruption of capacity due to physical congestion occurred at the point of interconnection in the previous year, the reserve prices of

¹ National Regulation 361/2019 published in Diário da República on 23th april, 2019.

² National Directive n.º 8/2019 published in Diário da República on 4th april, 2019.

standard interruptible capacity products are the result of a previous discount calculated according to the Tariff Regulation of the natural gas sector (paragraph 3).

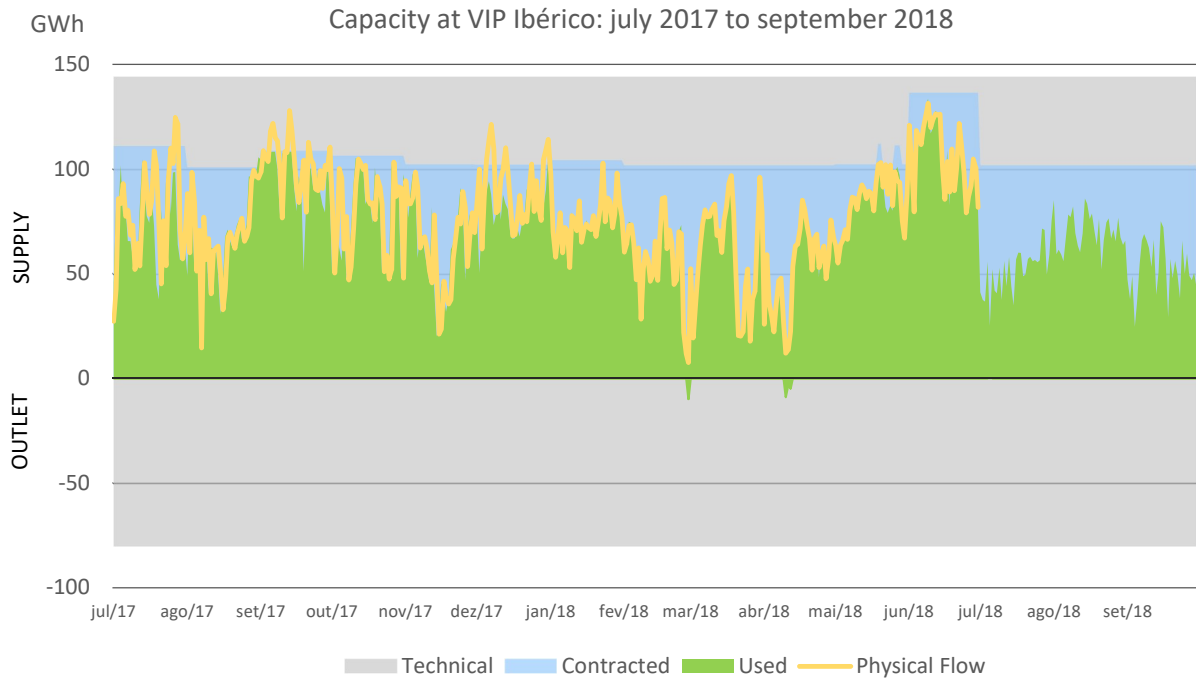
2 Probability of interruption for the gas year 2019 / 2020

The probability of interruption shall be calculated for each type of standard capacity product for interruptible capacity to be offered, considering forecasts based on:

- expected number of interruptions;
- average duration of expected interruptions;
- total duration of the respective type of standard capacity product for interruptible capacity;
- expected average amount of interrupted capacity for each interruption, where such amount is related to the respective type of standard capacity product for interruptible capacity;
- total amount of interruptible capacity for the respective standard interruptible capacity product type.

At interconnection points of the national natural gas transmission network and up to the moment, there has been no interruption of capacity due to physical congestion.

The following graph shows the levels of contracted and used capacity at the International Interconnection point, VIP Ibérico, considering both natural gas flow directions.



Due to the lack of historical data suitable for this computation, the probability of interruption takes an infinitesimal value whichever standard capacity product for interruptible capacity is offered.

3 Applicable discount

The document " Implementação do Código de Rede relativo a Estruturas Tarifárias Harmonizadas para o Transporte de Gás Natural – Documento justificativo da decisão fundamentada", approved by ERSE Directive 3/2019, establishes that the discount is calculated according to the following expression³:

$$\underbrace{\text{Ex – post discount}}_{\text{€}} = 3 \times \underbrace{\text{Reserve Price (Standard daily product)}}_{\text{€/(kWh/day)}} \times \underbrace{\text{Contracted capacity}}_{\text{kWh/day}}$$

Contracted capacity: the contracted capacity of a standard capacity product of interruptible capacity of a user whose capacity was interrupted.

This formula, and in particular, the fact that the discount is calculated on the basis of the contracted capacity was driven by ACER's interpretation published in response to the public consultation of the Tariff Network Code held by the Dutch regulatory authority.

Hence, the Portuguese Transmission System Operator proposes to maintain the application of this discount in the monthly settlement of each user. In what concerns the daily and within day horizons, the amount of the discount will affect and be limited to the aggregated monthly amount of interruptible capacity contracted by the respective user in these horizons. This rule mitigates the possibility of significant deviations in the revenues from contracting interruptible products in these horizons. In case standard interruptible capacity products are offered in the daily and within day horizons, if made available by the effect of (re)nomination in each gas day, there is the possibility of generating artificial discounts to be supported by the system.

³ See reference 73 (“capítulo 6 – Descontos e Multiplicadores / subcapítulo 6.2 – Desconto aplicável a produtos de capacidade interruptível normalizados”).

4 Types of standard normalized interruptible capacity products

Regulation (EU) 2017/459 establishes a network code for capacity allocation mechanisms in gas transmission networks and determines that transmission system operators must offer products with standard interruptible capacity at least in the daily and within day horizons.

It is proposed to offer these products at interconnection point, which are harmonized between each side of the border.

The supply of these products will be carried out in accordance with the rules defined in Regulation (EU) 2017/459.