ERSE
ENTIDADE REGULADORA
DOS SERVIÇOS ENERGÉTICOS

ERSE´s comments to CNMC's public consultation on the implementation of the Network Code on harmonised transmission tariff structures for gas

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On 13 February 2020, ERSE received CNMC's notification to respond to its public consultation (CIR/DE/003/19) on the "*Proposal for regulation ("Circular") of the national markets and competition commission (CNMC) establishing the methodology in the gas system concerning access tariffs related to the transmission network, local networks and LNG facilities*". That proposal includes the implementation of Commission Regulation (EU) 2017/460 of 16 March 2017, establishing a network code on harmonised transmission tariff structures for gas (hereafter: NC TAR).

This document provides ERSE's comments to said consultation. Section 1 presents comments on the topics referred to in Article 28(1) of the NC TAR, while Section 2 includes comments on other topics, namely regarding the reference price methodology and its consequences in the interconnection transmission tariffs.

The comments presented in this document refer exclusively to the consultation document including the impact assessment[1] in English, hereafter referred as 'Impact Assessment'.

1 COMMENTS ON THE TOPICS REFERRED TO IN ARTICLE 28(1) OF THE NC TAR

Article 28(1) of the NC TAR specifies that each national regulatory authority shall conduct a consultation with the national regulatory authorities of all directly connected Member States and the relevant stakeholders, namely as regards the level of the multipliers, the level of seasonal factors and levels of the discounts set out in Articles 9(2) and 16.

On the level of multipliers, ERSE considers that the approach to arrive at the multipliers is solid and does not present an obstacle to an appropriate balance of the aspects listed under Article 28(3)(a).

On the level of seasonal factors, since these will not be applied at interconnection points, ERSE does not provide any comments on the level of seasonal factors applied to the transmission tariffs at domestic exit points.

[1] «Consultation document: Impact assessment of the regulation establishing the tariff structure and the price methodology to set up transmission, regional network and regasification tariffs of natural gas», by CNMC, with reference CIR/DE/003/19 (February 2020).

On the level of the discounts set out in Article 16, ERSE considers that the application of the *ex-post* discount is based on an incorrect translation of the NC TAR from English to Spanish in Article 16(4).[2] According to EU law, in case of discrepancies of EU Regulations between the English version and versions in national language, the English version shall prevail.

On the level of the discounts set out in Article 9(2), ERSE understands that the introduction of the discount applied to entry points from LNG facilities follows from the legal requirement to respect the energy policy guidelines from the Government, in particular to promote existing national LNG facilities in preference to other international terminals. As explained in the Impact Assessment, the discount of 13.9% is computed as the ratio between the entry capacity of the LNG terminal in Barcelona and the aggregate entry capacity of the trunk transmission system. The rational underlying this computation is to exempt the role of Security of Supply (SoS) from paying transmission tariffs at the entry into this system, having in mind that the role of SoS is performed by the LNG terminal in Barcelona.

ERSE considers that the adoption of discounts applied to entry points from LNG facilities jeopardize the level playing field among Iberian LNG plants, modifying the current gas flows on the Iberian infrastructures. According to CNMC's Impact Assessment the discount applied to entry points from LNG facilities is apparently not being used to invert a competitive disadvantage into a competitive advantage of the Spanish LNG terminals.[3,4] Nevertheless, the significant tariff differentiation introduced with the proposed reference price methodology will have strong detrimental effects for the Portuguese gas market and for the development of MIBGAS. ERSE recommends against a discount to entry points from LNG facilities above the level indicated in the consultation.

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[2] English version: "*Such ex-post discount may only be used at interconnection points where there was no interruption of capacity due to physical congestion in the preceding gas year.*"

Spanish version: "*Este tipo de descuento expost solo podrá utilizarse en los puntos de interconexión en los casos en que la interrupción de la capacidad se haya debido a la congestión física en el año previo de gas.*"

[3] The international comparison in section 2.7 indicates that the tariffs proposed by CNMC, including the discount at entry points from LNG facilities, reduces at current tariff levels the competitive advantage from the LNG plant in Sines (Portugal) when compared to Spanish LNG plants from a cost advantage of 44% to 16% (including the costs from regasification and from the use of the trunk network).

[4] ERSE points out that when trying to reproduce the computations in Table 104 of the Impact Assessment it was not able to reach the value of average billing for the LNG storage service, both for Portugal and for Spain (except in the case of current tariffs applied in Spain).

Finally, ERSE remarks that the definition of the entry-exit split is not a neutral parameter, especially with the application of a discount to entry points from LNG facilities. Given a certain discount level, for instance the 13.9% discount proposed in the consultation, the higher the percentage of allowed revenues recovered at entry points, the larger the implicit benefit given to the LNG facilities entries when compared with the other entry points. Therefore, the change in the entry-exit split from approximately 28/72 to the proposed split of 50/50 is itself a change increasing the benefit provided to the Spanish LNG terminals.

2 COMMENTS ON OTHER TOPICS

Overall, ERSE acknowledges that the public consultation document is sufficiently detailed to allow for a clear understanding of the proposals, in particular regarding the proposed reference price methodology (RPM). Moreover, the realization of a joint consultation in English on transmission, distribution and LNG facilities can be considered as a best practice to allow for a more comprehensive understanding of the impact of the regulatory changes.

2.1 ALLOWED REVENUES ALLOCATED THROUGH THE RPM

As already referred in the comments to the previous public consultation on the implementation of the NC TAR in Spain, ERSE welcomes CNMC's decision to only allocate through the RPM the transmission revenues related to the trunk transmission network. That decision is important to avoid cross-subsidisation, as it ensures that interconnection points used for cross-system use will not be charged transmission costs related to transmission assets that they do not use.

2.2 CHOICE OF THE REFERENCE PRICE METHODOLOGY

On page 25 of the Impact Assessment, CNMC refers that in what regards tariff methodologies it prefers an approach based on the concept of «*average cost complemented by the introduction of efficiency signals in the use of the infrastructure*». This perspective has led CNMC to choose the CWD methodology applied in Article 8 of the NC TAR.

On page 36 of the Impact Assessment, CNMC indicates that one characteristic of the Spanish transmission network supporting the choice of the CWD methodology, with the resulting price differentiation across network points, is the existence of a dominant south-north flow. ERSE agrees that the latter is a valid and an important reason to choose a RPM that introduces efficiency signals in the use of the transmission network.

Moreover, in Annex II of the Impact Assessment CNMC provides a discussion of the results obtained with the CWD methodology. On the one hand, CNMC advocates that the proposed RPM induces efficient use of the network at entry point by providing, in general, higher prices in the south, disincentivizing the dominant south-north flows.[5] On the other hand, CNMC suggests that the CWD ensures a reasonable cost allocation at the exit points by providing higher exit prices in the Northwest area, which corresponds to a more peripheral region of the network.[6]

On the matter of efficiency signals provided by the proposed RPM, ERSE challenges the merits of the CWD methodology to provide such efficiency signals over time. In ERSE's opinion, the higher price signals at the entry points located in the south are almost entirely related to the distance that these entry points present towards the bulk of the exit points, and not to the dominant flow patterns.

To confirm this position, ERSE has performed a numerical exercise to understand how tariffs at entry points in the south would be impacted if flows in the south-north direction would diminish. For this purpose, ERSE reduced the contracted capacity at the entry points Tarifa and Almería by 20%, compensating that reduction with a symmetric increase in contracted capacity at the entry point from VIP Pirineos. As a result, the same tariff structure stays in place across all entry points despite a lower south-north flow, with the highest entry prices observed in the South and at VIP Iberico.[7]

[5] «*It is observed that, in general, capacity-based transmission tariffs at entry points from the Southern Spain are higher than those applicable to the entries through the East or North of Spain and that the entry points located in the central area of The Peninsula have the lowest capacity prices*», page 218 of the Impact Assessment.

[6] «It is observed that capacity-based tariffs at exit points located in the central area of The Peninsula are the lowest, while the highest prices are for the Northwest area.», page 223 of the Impact Assessment.

[7] One counterintuitive outcome is that all entry tariffs would increase by the same percentage, despite the fact that the same amount of revenue (50%) is recovered from the same aggregate amount of entry capacity. The reason for this effect is the reduction of capacity at two points presenting above-average entry tariffs, compensated with an increase in demand at a point with below-average entry tariffs. As a result, all entry tariffs need to increase to ensure revenue recovery.

Therefore, the proposed RPM does not seem adequate to induce efficiency signals capable of adapting itself to the flow scenario in the Spanish transmission network. Put differently, if the forecasted demand scenario was structurally different, with dominant gas flows entering through different points, the price structure of the entry tariffs would be approximately the same as now, and would therefore hardly incentivize any efficiency in that case. As a matter of fact, the changes introduced for the Spanish LNG terminals, including the single tank model and the introduction of a discount to entry points from LNG facilities may very well induce a different flow pattern in the future, as well as some other competition effects to be evaluated.

In its motivated decision ERSE has approved as RPM a methodology denominated as modified Capacity Weighted Distance (modified CWD). That methodology applies the formulas of the Capacity Weighted Distance methodology defined in Article 8 of the NC TAR, but instead of applying them to the forecasted contracted capacity and distance, the formulas are applied to different cost drivers, denominated as effective capacity[8] and effective distance[9].

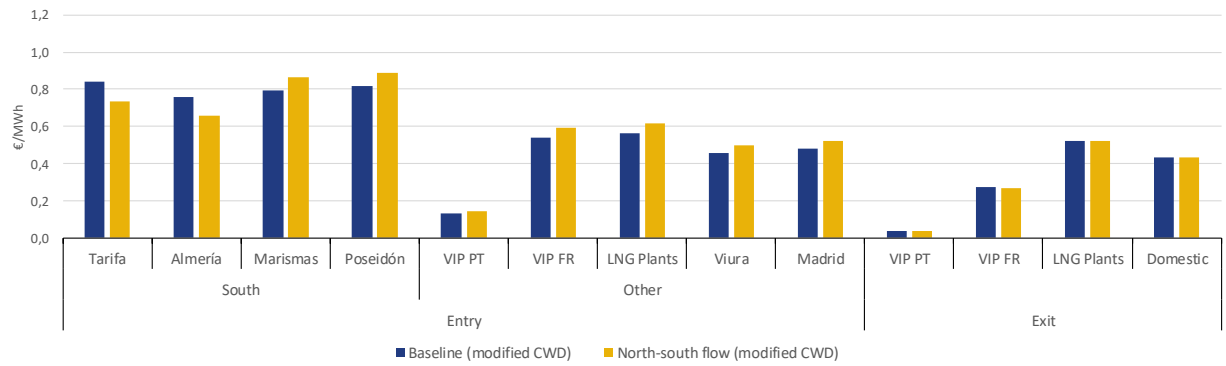
In order to illustrate the efficiency signals induced by the modified CWD methodology applied by ERSE, ERSE used the spreadsheet model provided by CNMC as starting point, employing some simplified assumptions, namely in what regards the technical capacities of the different network points.[10] Then, a comparison of two scenarios was performed: on the one hand, the 'Baseline' scenario, corresponding to the data for year 2020 provided by CNMC; on the other hand, the 'North-south flow' scenario, corresponding to the 'Baseline' scenario together with a 20% reduction of the contracted capacity at the entry points Tarifa and Almería, compensating that reduction with a symmetric increase in contracted capacity at the entry point from VIP Pirineos. The result of that exercise is illustrated in Figure 1.

[8] Effective capacity is obtained by multiplying contracted capacity by a point-specific factor, denominated as physical utilization factor. Effective capacity allows to identify how close the physical utilization of the network point is compared to the technical capacity, allowing to increase the price signal at points operating closer to the technical limit. Effective capacity aims at inducing efficient network utilization through scarcity signals.

[9] Effective distance is obtained by multiplying distance by a route-specific factor, denominated as economic value factor. Effective distance allows reflecting the investments in regional networks, which are only used by gas flows exiting to customers connected to the high pressure network or connected to distribution networks. Effective distance serves the purpose of avoiding cross-subsidization of network assets only used by domestic exits.

[10] The assumptions applied are: (1) effective distance was set equal to distance (i.e. economic value factor = 1); (2) in each point the physical flow was assumed to be equal to the contracted capacity; (3) except for the two VIPs, the technical capacity was assumed to be equal to the contracted capacity in the baseline scenario (= demand forecast in year 2020).

Figure 1 - Modified CWD methodology applied to the Spanish trunk network under simplified assumptions[11]



Note: 'Baseline' = data for year 2020; 'North-south flow' = 'Baseline' + reduction of contracted capacity at entry points Tarifa and Almería by 20%, compensated by a symmetric increase in contracted capacity at the entry point from VIP Pirineos.

Figure 1 illustrates the efficiency signals conveyed by the modified CWD methodology. Firstly, as a result from lower gas entries through Tarifa and Almería in the 'North-south flow' scenario, the entry tariffs at those points would be lower, reflecting a lower scarcity signal. Secondly, the opposite would occur at VIP Pirineos (VIP FR) due to the assumption of higher gas entries at that point. Finally, the methodology would apply low entry and exit tariffs for VIP Iberico (VIP PT) under both scenarios. This occurs because of the demand forecast included by CNMC, which assumes that both directions of VIP Iberico will operate well below the technical capacity.

2.3 IMPACT OF THE UNIDIRECTIONAL PIPELINE BETWEEN THE COMPRESSOR STATIONS OF CÓRDOBA AND ALMENDRALEJO

A more thorough analysis of the CWD methodology provided in the spreadsheet model enabled ERSE to understand one of the reasons explaining the high entry tariff applied to VIP Iberico. Footnote 14 of the Impact Assessment explains that according to the technical manager of the gas system there is exactly one non-bidirectional pipeline in the transmission network, namely the pipeline between the compressor

[11] Please check assumptions referred in footnote 10.

stations of Córdoba and Almendralejo. That pipeline, with an approximated length of 163 km, can only flow gas from Córdoba to Almendralejo, according to the spreadsheet model, as illustrated in Figure 2.

Figure 2 – Illustration of the unidirectional pipeline between Córdoba and Almendralejo

Note: Illustration based on Infrastructure map in Spain, by Enagás. Yellow highlights added by ERSE.

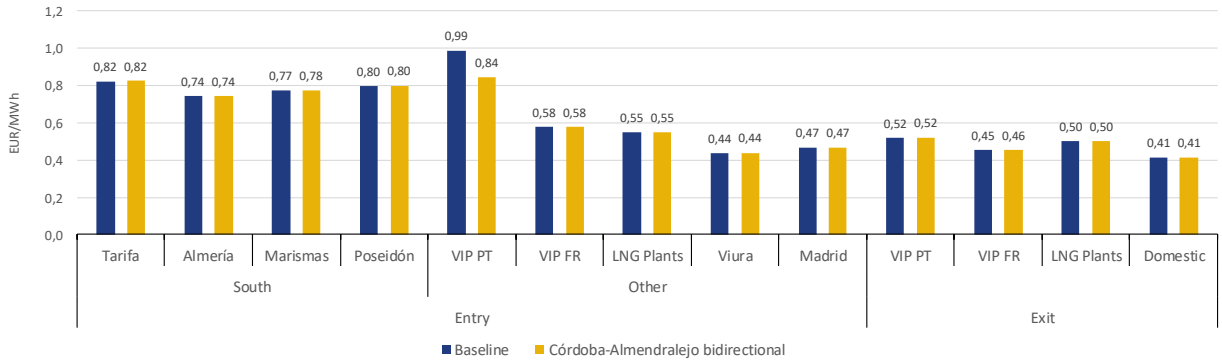
That technical constraint implies that distances for any gas route starting in Badajoz and leading to any exit point to the west of Almendralejo are significantly increased, as the corresponding route assumes a path through Plasencia-Valladolid-Toledo. For instance, the route from entry point Badajoz to exit point N07_Almendralejo increases due to the non-bidirectional pipeline from approximately 63 km to 1 233 km.

In order to understand the impact of the non-bidirectional pipeline from Córdoba to Almendralejo, ERSE has adjusted the distance matrix in the spreadsheet model assuming that the referred pipeline was bidirectional.[12] The resulting tariffs, measured in EUR/MWh, are compared in Figure 3 to the baseline

[12] The following assumptions have been employed by ERSE to adjust the distance matrix: (1) any gas route Badajoz-X, from entry point Badajoz to exit point X, passing through the Córdoba intersection, should present a distance that is lower than Tarifa-X by 77.4 km; (2) the previous adjustment is not performed for exit points Y located between Tarifa and Córdoba, equal to all points Y where the distance for Tarifa-Y is lower than 302.8 km: in those cases the distance Badajoz-Y was set to 225.4 km + (302.8 km –

scenario, defined as the RPM application by CNMC to year 2020. The most significant impact from assuming that all pipelines in the trunk network are bidirectional occurs for the tariff applied to the entry point from VIP Iberico (VIP PT), resulting in a reduction of 14.8%.

Figure 3 - Impact of considering the pipeline between Córdoba and Almendralejo as bidirectional



Note: Both scenarios assume input data on forecasted demand and allowed revenues for year 2020 in the spreadsheet model.

Taking into account the location of the non-bidirectional pipeline, the network point mostly penalized by non-bidirectional pipeline is the entry point Badajoz, which results in an increased entry tariff for VIP Iberico. ERSE expresses the following two concerns.

Firstly, the definition of «flow scenario» in Article 3(2) of the NC TAR should be taken into account, which is the basis for computing the distance for any gas route in the CWD methodology.[13] According to that definition a flow scenario exists between a combination of an entry point and an exit point if it «*reflects the use of the transmission system according to likely supply and demand patterns*». Having due regard of the prevailing south-north flow, the distances according to the spreadsheet model and the low gas imports from Portugal through VIP Iberico, it seems unlikely that the gas route from Badajoz (entry) to N07_Almendralejo (exit) is a relevant flow scenario to transport gas over a distance of 1 233 km, where the

distance of Tarifa-Y); (3) for all exit points Z located on the pipeline between Córdoba and Almendralejo, the distances of route Badajoz-Z have been shortened accordingly.

[13] Pursuant to Article 3(2) of the NC TAR: «*'flow scenario' means a combination of an entry point and an exit point which reflects the use of the transmission system according to likely supply and demand patterns and for which there is at least one pipeline route allowing to flow gas into the transmission network at that entry point and out of the transmission network at that exit point, irrespective of whether the capacity is contracted at that entry point and that exit point;*»

distance would be equal to 63 km in the absence of the technical restrictions. The same holds true for all exit points in the vicinity of that exit point, which also present increased distances towards the Badajoz entry point. Given the dominant south-north flows, it can be assumed with some certainty that the gas transported to Almendralejo (and surrounding exit points) will most likely come from the entry point Tarifa. Therefore, ERSE suggests to revise the feasibility of some gas routes starting at Badajoz towards the exit points that are impacted by the non-bidirectional pipeline and which are unlikely to be gas routes due to the dominant south-north flows in the Spanish gas system referred by CNMC.

Secondly, ERSE would like to request from CNMC to confirm with the technical manager of the gas system that the pipeline between Córdoba and Almendralejo is in fact unidirectional for technical restrictions during the entire year. In addition, ERSE would like to understand why that pipeline is the only non-bidirectional pipeline in the trunk network. In case the non-bidirectional nature of the referred pipeline is confirmed, ERSE recommends that the impact of that pipeline in terms of transmission tariffs should be laid-down in the motivated decision, expressing that VIP Iberico is the network point most affected.

2.4 ACER'S IMPLEMENTATION MONITORING REPORT ON THE NC TAR

In the Implementation Monitoring Report from the Agency for the Cooperation of Energy Regulators (ACER), on the implementation of the Network Code on harmonised transmission tariff structures for gas, published on 6 April 2020, ACER has expressed the view that CNMC and ERSE should collaborate on the application of transmission tariffs for the Iberian Peninsula: «*The Agency supports that both ERSE and CNMC coordinate the application of tariffs, for example by removing the common VIP. Such option could simplify the application of complex methodologies and foster market integration.*»[14] This collaboration would be particularly relevant for ensuring a level playing field for the LNG terminals in Spain and Portugal.

In this spirit, and following previous bilateral work between both regulatory authorities, ERSE proposes to establish a working group to study options on the application of transmission tariffs to foster market integration between Portugal and Spain, including the possibility to remove the common VIP, in view of the concrete development of internal natural gas market in Europe.

[14] Paragraph 446 on page 103 of the Country Assessment for Portugal in Volume II of the Implementation Monitoring Report.

2.5 TRANSITIONAL PERIOD

CNMC refers in chapter 9 of the Impact Assessment that having due regard of the network users affected[15] by the new tariff system, it intends to implement the changes only as of 1 October 2020 (coinciding with the new gas year 2020-2021). Moreover, in respect of the publication requirements set in the NC TAR, the same chapter refers that if the publication of the tariffs applied to the international connections with France and Portugal does not occur within the time-limits set by the NC TAR, the application of the new tariffs under the proposed RPM to those points would only be applied in the following gas year (i.e. 2021-2022).

ERSE considers that CNMC should take into account two additional circumstances when deciding on the date of application of the transmission tariffs to the international connections with Spain and Portugal. Firstly, the proposed RPM introduces significant price differentiation to a gas system that previously was subject to a postage stamp methodology. The most affected network point is without any doubt VIP Iberico, featuring both the highest entry tariff and the highest exit tariff under the new methodology. The implied tariff changes compared to the current situation should be taken into account when deciding on the date of application, especially having in due regard the peripheral position of Portugal in the European gas market.

Secondly, given the exceptional circumstances caused by the propagation of COVID-19, which is expected to impact heavily the Iberian gas market, the immediate application of the new price signals at the VIP Iberico would be detrimental to the economic recovery of Portugal.

2.6 COMPARISON OF TRANSMISSION TARIFFS IN THE IBERIAN PENINSULA BEFORE AND AFTER THE IMPLEMENTATION OF THE NC TAR

The analysis compares the situations before and after the periodic consultation processes under the NC TAR. The following table specifies the tariff periods used in the comparison.

[15] CNMC refers on page 146 of the Impact Assessment three areas where network users will be affected: (1) the differences in tariff levels between the new tariffs proposed by CNMC and the previous tariffs set by the government; (2) the need to adapt contracts to the new price structure; (3) the need to adapt billing systems.

Table 1 - Tariff periods used in this memorandum to evaluate the impact of the NC TAR

	Before	After
Portugal	Jul. 2018 – Sep. 2019 *	Gas year 2019/2020 (Oct.-Sep.)
Spain	Year 2019	Jan. 2020 – Set. 2020 *(values proposed in the new consultation)*

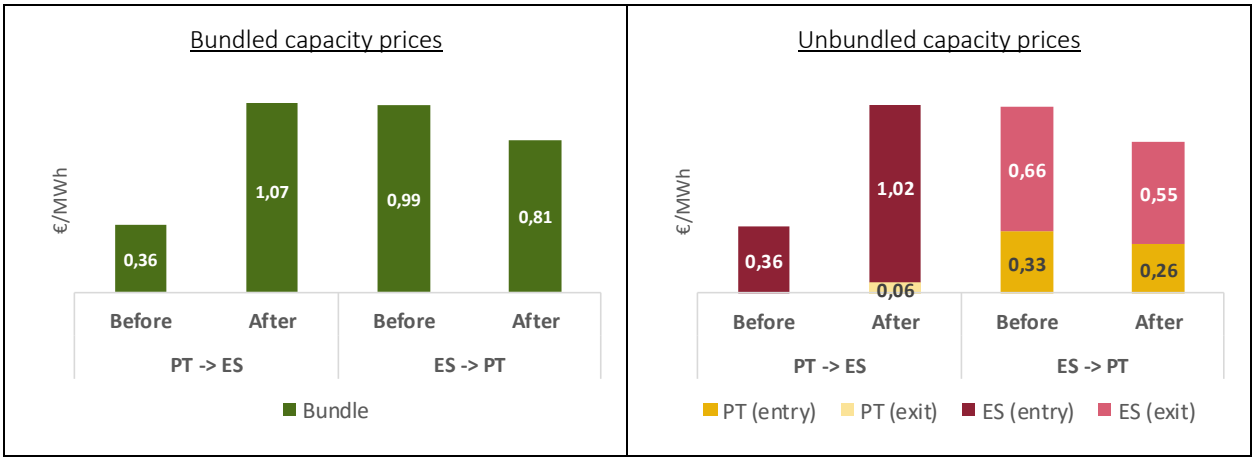
* The prices applicable in Portugal before the periodic consultation process were valid during 15 months in order to allow a transition in the tariff period from July-June to October-September.

The comparison is based on the prices of yearly standard capacity products for firm capacity, assuming full use of the contracted capacity, and presents the values in €/MWh.

2.6.1 PRICES AT VIP IBERICO

The following figure shows the total cost of using VIP Iberico in each of the directions, before and after the public consultation. The values correspond to the bundled and unbundled capacity products.

Figure 4 - Capacity prices at VIP Iberico



Note: Before the public consultation process a zero price was applied at the exit point to the Iberian VIP in Portugal.

For better clarification, the following table breaks down the total variation in the bundled capacity price by jurisdiction. In the case of exports to Spain, Spanish prices are the main factor in the 201% increase, with a contribution of 185 percentage points (pp). In the case of imports from Spain, Spanish prices were also the main factor in the reduction of 18%, with a contribution of 11 pp.

Table 2 - Breakdown by jurisdiction of the variation in the bundled price of the Iberian VIP

Direction	Exports to Spain PT -> ES	Imports from Spain ES -> PT
Portugal	+ 16 pp	-7 pp
Spain	+ 185 pp	- 11 pp
TOTAL	+ 201 %	- 18 %

2.6.2 TRANSMISSION PRICES TO ACCESS THE VTP IN PORTUGAL

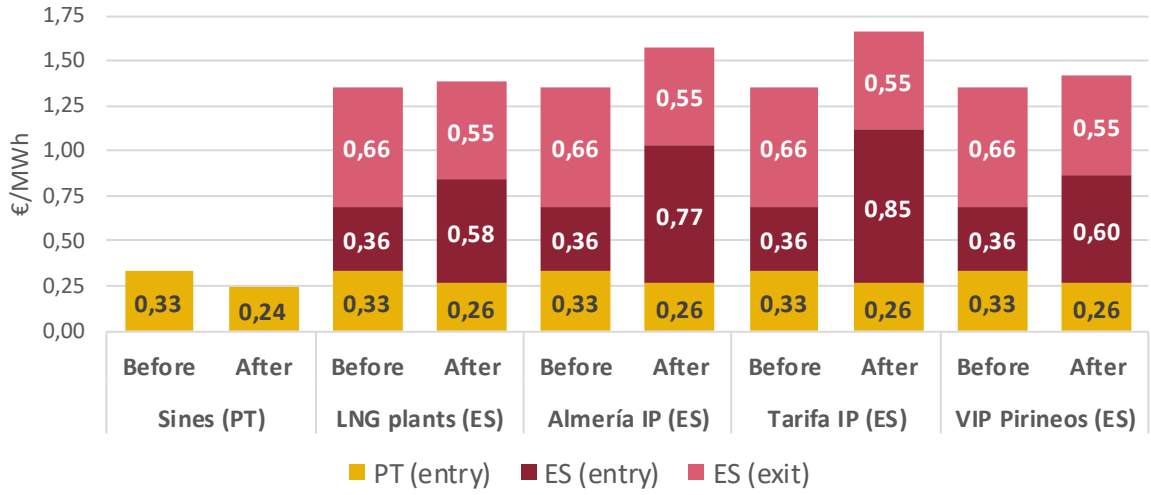
Although the changes in the bundled capacity prices at the Iberian VIP can benefit Portugal if gas exports to Spain remain below a certain threshold, when taking into account the entry prices of the Spanish gas system increases the cost to access the VTP in Portugal through Spain.

The following two figures illustrate the prices for the use of transmission networks in Portugal and Spain to access the VTP in Portugal, distinguishing five different entry points, namely:

1. LNG plant in Sines, Portugal.
2. LNG plants in Spain.
3. Interconnection point in Almería (Spain).
4. Interconnection point in Tarifa (Spain).
5. VIP Pirineos (Spain).

Figure 5 - Transmission price to access the VTP in Portugal, by entry point

Figure 6 - Entry and exit prices to access the VTP in Portugal, by entry point



For a better clarification, the following table breaks down the total variation in the total transport price by jurisdiction, presenting the results for each of the five entry points evaluated.

Table 3 - Breakdown by jurisdiction of the variation in the transmission price to access the VTP in Portugal

Entry point	Sines (PT)	LNG plants (ES)	Almería IP (ES)	Tarifa IP (ES)	VIP Pirineos (ES)
Portugal	- 27 pp	- 5 pp	- 5 pp	- 5 pp	- 5 pp
Spain	n/a	+ 8 pp	+ 22 pp	+ 28 pp	+ 10 pp
TOTAL	- 27 %	+ 3 %	+ 17 %	+ 23 %	+ 5 %

n/a – not applicable

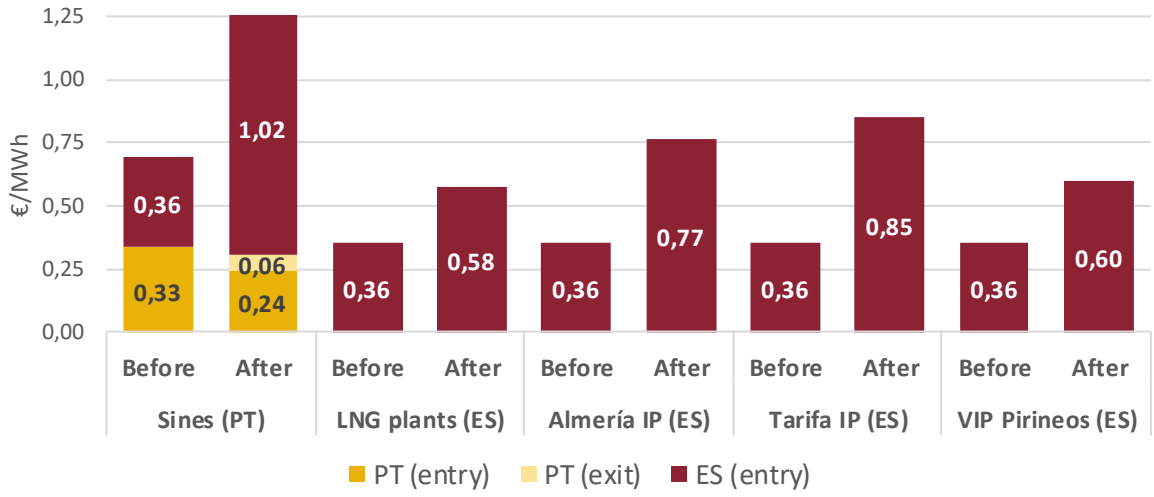
2.6.3 TRANSMISSION PRICES TO ACCESS THE VTP IN SPAIN

The following two figures illustrate the prices for the use of transmission networks in Portugal and Spain to access the VTP in Portugal, distinguishing five different entry points.[16] There is a huge change on relative prices to entry in Spain: before there was a postage stamp and now the highest entry tariff in Spain (VIP Iberico) is 80% higher than the lowest entry tariff (LNG plants in Spain).

Figure 7 - Transmission price to access the VTP in Spain, by entry point

[16] Please refer to chapter **Erro! A origem da referência não foi encontrada.** for the list of entry points considered in the analysis.

Figure 8 - Entry and exit prices to access the VTP in Spain, by entry point



For a better clarification, the following table breaks down the total variation in the total transport price by jurisdiction, presenting the results for each of the five entry points evaluated.

Table 4 - Breakdown by jurisdiction of the variation in the transmission price to access the VTP in Spain

Entry point	Sines (PT)	LNG plants (ES)	Almería IP (ES)	Tarifa IP (ES)	VIP Pirineos (ES)
Portugal	- 5 pp	n/a	n/a	n/a	n/a
Spain	+ 95 pp	+ 61 pp	+ 115 pp	+ 138 pp	+ 69 pp
TOTAL	+ 90 %	+ 61 %	+ 115 %	+ 138 %	+ 69 %

n/a – not applicable