Bundesnetzagentur

Ruling Chamber 9

BK9-19/612

DECISION

In the administrative proceedings pursuant to

section 29(1) of the Energy Industry Act (EnWG) in conjunction with section 56(1) sentence 1 para 2, sentences 2 and 3 EnWG in conjunction with section 72 EnWG in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) No 715/2009 in conjunction with Article 41(6)(a) of Directive 2009/73/EC in conjunction with Article 28 of Regulation (EU) 2017/460

concerning the determination of the level of multipliers, the determination of a discount at entry points from LNG facilities and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems and the determination of the level of discounts for interruptible standard capacity products at all interconnection points for the calendar year 2021 ("MARGIT 2021")

Party summoned:

Gazprom export LLC, Ostrovskogo Sq. 2a letter "A", St Petersburg 191023, Russia, represented by its Director General,

Legal representatives of the party summoned: Gleiss Lutz Hootz Hirsch PartmbB Rechtsanwälte, Steuerberater (HQ Stuttgart, AG Stuttgart PR 136)

Ruling Chamber 9 of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Tulpenfeld 4, 53113 Bonn,

represented by

the Chair	Dr Christian Schütte,
the Vice Chair	Dr Ulrike Schimmel
and the Vice Chair	Roland Naas

decided on 27 May 2020:

1. The following determinations in this decision are effective from 1 January 2021 to 31 December 2021.
2. For the conversion from yearly standard capacity products to non-yearly standard capacity products, a multiplier is to be applied at all interconnection points. The multiplier of a within-day standard capacity product is 2.0, the multiplier of a daily standard capacity product is 1.4, the multiplier of a monthly standard capacity product is 1.25 and the multiplier of a quarterly standard capacity product is 1.1.
3. A discount at entry points from LNG facilities and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems is not applicable.
4. Reserve prices for standard capacity products for interruptible capacity at interconnection points must be calculated by multiplying the reserve prices for the respective standard capacity products for firm capacity calculated as set out in Articles 14 and 15 of Regulation (EU) 2017/460 and determinations BK9-18/610-NCG and 611-GP and BK9-19/612 ("REGENT 2021") by the difference between 100% and the level of an ex-ante discount applicable at every interconnection point for the respective standard capacity product up to and including 30 September 2021 in accordance with Annex I and from 1 October 2021 in accordance with Annex II.
5. Operative part 4 is provisional as regards the period from 1 October 2021.
6. The right to order payment of costs is reserved.

Rationale

I.

1 The ruling chamber has opened own-initiative proceedings for the determination of the level of multipliers, the level of any discount at entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems, and the level of discounts for interruptible standard capacity products at all interconnection points.

2 Notification of the opening of proceedings was given in the Official Gazette 09/2019 of 15 May 2019 and simultaneously on the Bundesnetzagentur's website.

3 The background to these proceedings is the network code on harmonised transmission tariff structures for gas (Regulation (EU) 2017/460), which entered into force on 6 April 2017 and which constitutes directly applicable European law yet also requires several implementing acts from the national regulatory authority. These acts need to undergo comprehensive consultation processes.

4 The draft decision in German and in English was published on the Bundesnetzagentur website on 18 December 2019 for consultation. The publication was accompanied by a brief statement that the consultation pursuant to Article 28(1) of Regulation (EU) 2017/460 would run for two months. Legally binding, however, is solely the German version.

5 This publication and the consultation, by analogy with section 73(1a) sentence 1 EnWG and section 28(2) para 4 of the Administrative Procedure Act (VwVfG), took the place of the individual hearing required under section 67(1) EnWG for each party addressed.

6 On 20 December 2019, the consultation documents were submitted to the Agency within the meaning of Article 1(1) of Regulation (EC) No 713/2009 (hereinafter "ACER"). The national regulatory authorities of the neighbouring Member States were informed of the impending start of the consultation in a letter dated 20 December 2019.

7 On 11 October 2019, the Bundesnetzagentur notified the regulatory authorities of the federal states of the opening of proceedings in accordance with section 55(1) sentence 2 EnWG and gave the authorities the opportunity to comment on the intended determination in accordance with section 58(1) sentence 2 EnWG. Likewise, the Bundeskartellamt was given the opportunity to state its views on the intended determination in accordance with section 58(1) sentence 2 EnWG.

8 On 13 February 2020 the Committee of representatives of the federal state regulatory authorities was given the opportunity to comment in accordance with section 60a(2) sentence 1 EnWG.

9 Eight responses to the draft determination were received. They were published on the Bundesnetzagentur website in a version from which any business and trade secrets had been removed. The responses may be summarised as follows:

a. General

10 One market participant welcomed the fact that there had been no significant changes from the determination in the previous year, stating that this meant planning certainty for all market participants.

11 Another market participant took the view that MARGIT 2021 is based on the premise that the REGENT determination will be confirmed in court or not significantly changed by the REGENT 2021 determination. This respondent expressed doubt that the Bundesnetzagentur could make an appropriate decision on multipliers on this basis. As multipliers are based on the reference price of yearly capacity, the multipliers set out in MARGIT 2021 are closely linked to the reference price model in the REGENT determination, the respondent stated.

b. Seasonal factors

12 One trader welcomed the fact that seasonal factors were not to be applied.

c. Multipliers

13 There was a mixed response to the determination of the within-day multiplier at 2.0, depending on whether multipliers were seen as trade and market entry barriers and as a barrier to short-term gas trading or as an expression of the principle of cost-reflectivity. While one group called for the within-day multiplier to be lowered, the other group explicitly welcomed the determined value. One trader judged all multipliers to be too high.

14 From the transmission system operator side, in particular, the fact that the multipliers were to remain unchanged was welcomed, with this stability being said to increase the predictability of and confidence in regulatory decisions in the market.

15 The group calling for the within-day multiplier to be lowered often supported a figure of 1.5. Traders justified their demand by arguing that it would not be appropriate to make short-term bookings less attractive with a within-day multiplier of 2.0 and that this was also not the intention of the legislature. They felt that it was not possible to understand how this multiplier had been derived. A multiplier of 2.0 would counteract the trend towards greater flexibility and short-term focus, which could lead to fewer bookings for transmission system operators. While it is true that the trend towards short-term bookings leads to lower revenues for transmission system operators, this is not true for within-day capacity. Economically, it makes little sense to shift daily bookings to within-day bookings. Within-day bookings arise from, for example, within-day changes in demand from interval-metered customers or the market area manager. The report produced in accordance with section 11(3) of the Gas Network Access Ordinance (GasNZV) and dated 14 November 2019 confirmed that the introduction of within-day booking opportunities had no effect on the portfolio and system balancing energy system and/or the level of specific transmission tariffs. Moreover, Article 13 of Regulation (EU) 2017/460 sets out that the multiplier for within-day capacity is to be restricted to no more than 1.5 provided that aspects comparable to the report under section 11(3)

GasNZV do not impede this. Also, competition in Europe should occur on the commodity side and not on the infrastructure side. Belgium and the Netherlands do not distinguish between daily capacity and within-day capacity. The German market is therefore at a disadvantage in the short-term range. Having the same multiplier for daily capacity and within-day capacity would also have the advantage that there would be no obligations to submit proof for PRISMA auctions. Moreover, it was said that the justification that within-day capacity rarely has a duration of a whole day was still not comprehensible. One trader put forward the view that a within-day multiplier of 1.5 would contribute to network stability.

16 Among the traders, there were calls for clarity that the level of within-day multipliers would depend on the product duration and not on the time of the booking. One trader was of the opinion that within-day capacity booked before 6am would have to be valued with the multipliers for daily capacity.

17 One trader argued that the multipliers should not be applied to points at storage facilities, so as to highlight the importance of these facilities for the flexibility of the system.

18 One trader stated that all multipliers were too high because non-yearly capacity was not the cause of vacancies but a means to avoid them. Non-yearly capacity would increase network utilisation to an extent that would not otherwise occur. Vacancies were caused not by demand peaks but rather by incorrect sizing or lower demand. It was not compatible with the principle of cost-reflectivity that these costs should be paid disproportionately via non-yearly capacity.

19 Another market participant believed that the principle that, in the event of a (contractual) change to already booked capacities, the previously calculated multiplier remains unchanged should also apply to the trading on the secondary market of part of a capacity right. It was said that the so-called vacancy costs of the part of the capacity right traded on the secondary market would already have been paid with the primary booking.

d. Discounts for interruptible capacity

20 The traders argued that past interruptions were insufficient to take adequate account of the trading risk in the calculation of the discount for interruptible capacity. The calculation formula does not adequately reflect how the value of interruptible capacity falls as the risk of interruption rises. Its value drops disproportionately because the risk costs (replacement, penalties) rise. The calculation formula should therefore be adjusted so that the adjustment factor is increased from 1 to 2 and in return, the safety margin is reduced from 10% to 5%. In addition, in determining the probability of interruption, re-nominations following an announced interruption should be taken into account as well as interruptions that have actually taken place, because the former alleviate the network situation and very likely only occur to avoid an imbalanced balancing group portfolio. The interruptible element of firm/conditionally firm capacity should also be factored into the calculation.

One trader expressed the view that the safety margin of 10% was by no means sufficient and not appropriate for the gas sector.

21 Traders also argued that the calculation formula would regularly only reflect 50% of the interruption probability at storage points due to their seasonal use.

22 One trader contradicted the ruling chamber's rationale for bundling the entry and exit points at the comparable system (according to gas quality), according to which the relevant points are interchangeable and a harmonisation is laid down in Article 21 of Regulation (EU) 2017/460. According to the respondent, this rationale does not apply especially in cases in which a particular customer wants to be supplied from a certain storage facility or feed line. The bundling creates a uniformity that does not exist in the gas sector. Article 21 of Regulation (EU) 2017/460 also assumes a point-specific consideration. The bundling would lead to a price being demanded at certain points that did not reflect the actual probability of interruption.

23 One market participant would welcome the level of discount being the same, regardless of the product duration.

e. Discounts at LNG terminals

24 One respondent was in favour of setting discounts for LNG terminals now. Owing to the strategic significance of LNG in diversifying supply, a discount should be set to create an economic incentive to build a terminal. This would provide planning certainty. The reason given in MARGIT – that no such terminal yet exists – does not take adequate account of the supply strategy, according to the response. The argument of the annual consultation did not have the desired effect either. Two market participants were in favour of a future discount, although one of them also argued for reduced entry tariffs in general.

25 One market participant welcomed the lack of a discount at LNG terminals, arguing that a discount would unilaterally benefit LNG terminals and disadvantage other international transmission feeds. A discount would considerably distort the international trade in gas and would only be appropriate if other transmission feeds also had a discount.

26 For further details, reference is made to the content of the file.

II.

27 In accordance with Article 41(6)(a) of Directive 2009/73/EC in conjunction with Article 28(1) of Regulation (EU) 2017/460, the Bundesnetzagentur is issuing a motivated decision on all points mentioned in Article 28(1) sentence 1 of Regulation (EU) 2017/460 by means of this determination.

28 The decision taken falls under the responsibility of the Bundesnetzagentur as provided for by section 29(1) EnWG in conjunction with section 56(1) sentence 1 para 2, sentences 2 and 3 in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) No 715/2009 in conjunction with Article 41(6)(a) of Directive 2009/73/EC in conjunction with Article 28(1) of Regulation (EU) 2017/460. The responsibility of the Ruling Chamber ensues from section 59(1) sentence 1 EnWG.

29 Article 2(1) sentence 1 of Regulation (EU) 2017/460 shows that the consultation and decision pursuant to Article 28(1) of Regulation (EU) 2017/460 refer to interconnection points, ie to cross-border and market area interconnection points of transmission system operators (see Article 3 point 2 of Regulation (EU) 2017/459). Pursuant to Article 2(1) sentence 2 of Regulation (EU) 2017/460, the regulatory authority can take a decision that the provisions of Chapter III also apply to entry points from third countries or exit points to third countries, or both. In its determination of 14 August 2015 (BK9-15/001 – "KARLA Gas 1.1"), the Bundesnetzagentur's Ruling Chamber 7 ruled that the provisions of the Network Code on Capacity Allocation Mechanisms (NC CAM) also applied to entry points from third countries and exit points to third countries within the meaning of Article 2(1) sentence 2 NC CAM from 1 November 2015. The consultation and decision pursuant to Article 28 of Regulation (EU) 2017/460 therefore also refer to these points.

30 Pursuant to Article 28(1) of Regulation (EU) 2017/460, the national regulatory authority must consider the positions of national regulatory authorities of directly connected Member States in its decision. No responses from other national regulatory authorities on the content of the determination were received by the Bundesnetzagentur.

1. Period of validity and provisional order

31 The requirements are to be implemented pursuant to operative part 1 as from 1 January 2021 and hence included in the publication referred to in Article 29 of Regulation (EU) 2017/460. Under Article 38 of Regulation (EU) 2017/460, Chapters II, III and IV of the Regulation will apply as from 31 May 2019; thus Articles 13 to 16 of the Regulation are also covered, coming as they do under Chapter III and forming the basis of this decision. Accordingly, the transmission system operators had to apply the motivated decision pursuant to Article 28 of Regulation (EU) 2017/460 for the first time in respect of the tariff year 2020, ie from 1 January 2020. In accordance with Article 28(2) of Regulation (EU) 2017/460, the subsequent consultations will be conducted every tariff period as from the date of the decision. After each consultation and as set out in Article 32(a) of Regulation

(EU) 2017/460, the national regulatory authority takes and publishes a motivated decision on the aspects referred to in Article 28(1)(a), (b) and (c) of Regulation (EU) 2017/460. Pursuant to Article 3 sentence 2 point 23 of Regulation (EU) 2017/460, "tariff period" means the time period during which a particular level of reference price is applicable, which minimum duration is one year and maximum duration is the duration of the regulatory period; in this case it is the calendar year. The Ruling Chamber thus takes and publishes a motivated decision on the aspects referred to in Article 28(1)(a), (b) and (c) each year and the decision is effective for a calendar year. The effectiveness of this decision thus ends at the end of the calendar year 2021.

32 In accordance with operative part 5, the order under operative part 4 is issued for reserve prices for standard capacity products for interruptible capacity at interconnection points for the period from 1 October 2021 provisionally in accordance with section 72 EnWG. By way of derogation from the above principles and due to the merger of the two German market areas on 1 October 2021 as per section 21 GasNZV, the reference prices will exceptionally be adjusted during the year. The determination REGENT 2021 (BK9-19/610) is to set out the relevant rules for reference prices in the single German market area as of 1 October 2021. The tariff-setting system for conditionally firm, freely allocable capacity and firm, dynamically allocable capacity is also part of the REGENT determination. In accordance with operative part 3 of the REGENT determination, which has currently only undergone consultation and is not yet final, these can be given a discount but discounting must not reduce capacity tariffs for conditional firm, freely allocable capacity and firm, dynamically allocable capacity to below the capacity tariff for the interruptible standard capacity product with the lowest discount at this point. There is therefore a systematic connection between the arrangements for standard capacity products for interruptible capacity at interconnection points pursuant to operative part 4 of this determination and the consulted orders pursuant to operative part 3 of the REGENT determination.

33 As regards operative part 3 of the REGENT determination, an alternative system for discounting firm, dynamically allocable capacity was introduced in the course of the consultation. At the time of writing it is not yet clear whether and how this proposal will be implemented in the REGENT determination, especially as the proposal is the subject of controversy in the market. Part of the discussion is the systematic relationship of the pricing of standard capacity products for interruptible capacity and firm, dynamically allocable capacity. In any case, the ruling chamber wishes to avoid pre-empting this determination with a definitive arrangement for standard capacity products for interruptible capacity. The provisional order in accordance with section 72 EnWG is suitable to avoid this kind of pre-determination. If an adjustment of the arrangements for reserve prices for standard capacity products for interruptible capacity at interconnection points for the period from 1 October 2021 becomes necessary for systematic reasons, these adjustments could be made in parallel with the final decision version of the REGENT determination.

34 The provisions of Regulation (EU) 2017/460 do not prevent this. It is true that Article 28 of Regulation (EU) 2017/460 refers to a tariff period (Article 28(2) sentence 1 of Regulation (EU)

2017/460) that, in accordance with Article 3 point 23 of Regulation (EU) 2017/460, is at least one calendar year. However, a merger of the market areas does not exclusively involve a change to tariffs but also fundamental changes to product conditions, in particular concerning the access to a virtual trading point that is then to be created. In parallel to an adjustment during the year of the reference prices in accordance with Article 26 of Regulation (EU) 2017/460, the rules for reserve prices linked to reference prices in accordance with Article 28 of Regulation (EU) 2017/460 can also be altered during the year (with sufficient lead time) if necessary for systematic reasons. The possibility of provisional orders also arises from Article 41(10) of Directive 2009/73/EC. In addition, the tariffs that must be published by June 2020 in accordance with Article 29 of Regulation (EU) 2017/460 are only binding up to the end of the gas year on 30 September 2021 in accordance with Article 12(3) of Regulation (EU) 2017/460.

2. General

35 In taking this decision, the ruling chamber has taken account of the fact that it is an administrative act that, in accordance with Article 28 of Regulation (EU) 2017/460, is to be consulted on and issued independently of other determinations issued or to be issued in accordance with this Regulation. This independence is shown partly by the fact that decisions in accordance with Article 26 in conjunction with Article 27 of Regulation (EU) 2017/460 have to be made every five years at the latest, while decisions in accordance with Article 28 have to be made in every tariff period.

3. Level of multipliers

36 The decision pursuant to operative part 1 on the level of multipliers is based on section 29(1) EnWG in conjunction with section 56(1) sentence 1 para 2, sentences 2 and 3 EnWG in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) No 715/2009 in conjunction with Article 28(1) in conjunction with Article 13 of Regulation (EU) 2017/460.

37 Pursuant to Article 12(1) sentence 2 of Regulation (EU) 2017/460, for non-yearly standard capacity products, the reserve prices must be calculated as set out in Chapter III of Regulation (EU) 2017/460. With regard to the conversion of tariffs for yearly standard capacity products to tariffs for non-yearly standard capacity products, Article 13(1) of Regulation (EU) 2017/460 specifies ranges within which the multipliers must fall.

38 The multipliers determined by the Bundesnetzagentur fall within the specified ranges. For quarterly standard capacity products and monthly standard capacity products, the level of the respective multiplier must be no less than 1 and no more than 1.5, pursuant to Article 13(1)(a) of Regulation (EU) 2017/460. The multiplier of 1.1 determined for quarterly standard capacity products and the multiplier of 1.25 determined for monthly standard capacity products fall within this range.

Pursuant to Article 13(1)(b) of Regulation (EU) 2017/460, for daily standard capacity products and for within-day standard capacity products, the level of the respective multiplier must be no less than 1 and no more than 3. This is the case for the multipliers chosen of 1.4 for daily standard capacity products and 2.0 for within-day standard capacity products.

39 In the event of a (contractual) change to already booked capacities or a withdrawal of capacity, the previously calculated multiplier remains unchanged, even if the original standard capacity product would fall into another category after the change or withdrawal, for example, if a previously quarterly capacity product would become a monthly capacity product. No recalculation takes place; the multiplier is applied according to which product was booked when the contract was concluded. By contrast, for the capacity product booked for the first time after the change or withdrawal, the "new product", a multiplier corresponding to the duration of the new product must be applied. In this case, too, the multiplier is applied according to which product was booked when the contract was concluded. This provision applies to all scenarios; it therefore affects in particular the return of capacity, the trading on the secondary market of part of the capacity rights, the conversion and the (partial) termination of capacity.

40 In its decision on the level of multipliers, pursuant to Article 28(3)(a) of Regulation (EU) 2017/460 the ruling chamber has taken into account the following aspects in particular:

41 The selected multipliers promote short-term gas trading and also provide long-term signals for efficient investment in the transmission system. The ruling chamber introduced multipliers for all entry and exit points for which capacity tariffs are applied with effect from 1 January 2016 in its determination of 24 March 2015 (ref BK9-14/608, hereinafter referred to as BEATE). These were determined for interconnection points for the calendar year 2020 for the first time on the basis of Regulation (EU) 2017/460. The multipliers for daily, monthly and quarterly products determined in this decision correspond to the level of the multipliers determined for the years 2016 to 2020; a multiplier of 2 for within-day standard capacity products was determined for the first time in the decision BK9-18/612 ("MARGIT"). Since the multipliers were introduced in 2016, it has become clear that they do not jeopardise liquidity in short-term trading, as it was neither the case that daily bookings were replaced by long-term bookings on a significant scale nor were they simply not made at all. The introduction of multipliers has not led to a reduction in trading activities in the past. There are no indications that this will change in the future. At the same time, the multipliers lead to a moderate price rise compared to the reference price so signals showing which point of the network it would be appropriate to invest in, for example because of congestion, are not distorted.

42 Moreover, the introduction of the chosen multipliers has no influence on the extent to which transmission services revenue is covered by the reference or reserve prices. In particular, in its "REGENT" (BK9-18/610-NCG and BK9-18/611-GP) and "REGENT 2021" (BK9-19/612) determinations, the ruling chamber has determined/will determine rescaling pursuant to

Article 6(4)(c) of Regulation (EU) 2017/460 at all entry and exit points of transmission system operators with the aim of actually being able to recover the transmission services revenue. No opinions to the contrary were received on this aspect; in fact, the transmission system operators welcomed the unchanged multipliers.

43 The determined multipliers improve the cost-reflectivity of reserve prices by reducing cross-subsidisation between user groups caused by duration. Cost-reflectivity in tarification means in this context that the level of tariffs for using a certain capacity must reflect the costs caused by using and providing this capacity. This in turn means that the level of network tariffs to be paid by a certain user group for capacity bookings should, as far as possible, reflect the costs caused by this user group through a specific contribution based on the corresponding costs. Put simply, the principle of cost-reflectivity means that whoever has caused certain costs should themselves, as far as possible, also pay these costs in the form of the network tariffs levied on them and these costs should not be subsidised by other user groups. A network user booking non-yearly capacity of different durations causes vacancy costs. The option of non-yearly booking allows network users to make structured bookings, ie they can book different amounts of capacity for different periods, whether within-day, daily, monthly or quarterly. If a network user books "x" amount of capacity on a particular day, month or quarter of a year, the network operator will generally keep at least this amount of capacity available (for the whole year). This applies even if the network user only books smaller amounts of capacity than "x" on the other days of the year. Moreover, it is not just one network user that books "x" amount of capacity for a quarter, a month, a single day or within-day in the course of the year, but many other network users book a certain amount of non-yearly capacity during the year as well. The network operator therefore keeps capacity available for all non-yearly capacity bookings from all network users making such bookings. The network operator incurs vacancy costs from keeping available capacity for network users with non-yearly bookings. These costs should, in accordance with the principle of cost-reflectivity, also be borne by the network users responsible for the capacity being kept available.

44 The determined multipliers will ensure that the vacancy costs in the gas network will be distributed in a largely cost-reflective manner. Network users whose non-yearly capacity bookings cause the network operator to keep certain capacity available also contribute to covering the costs incurred through the increased network tariff calculated using the multiplier. However, in the view of the ruling chamber, the sum of the tariffs for non-yearly capacities should be prevented from corresponding to the tariff for the yearly capacity. This would lead to the vacancy costs of the network being borne by all network users and in particular by the group of users that does not cause such costs on account of long-term capacity bookings.

45 It is appropriate to specify different multiplier values because doing so differentiates between the non-yearly capacity products in a way that appropriately reflects the different effects that the individual products have on vacancy costs. The result that the "multiplier for the within-day capacity product is higher than the multiplier for the daily capacity product is higher than the

multiplier for the monthly capacity product is higher than the multiplier for the quarterly product" is due to the fact that the shorter the product duration, the greater the effects on the vacancy costs. The longer the period for which no capacity is booked, the higher the volume of vacant capacity based on a twelve-month period. The vacancy costs thus depend on the booking duration. Network users can make more structured capacity bookings if overall they book capacity for shorter periods. If, ultimately, they only book capacity specifically on a few days, they inevitably cause vacancy costs on more days. This must be taken into consideration appropriately in setting the multipliers, so that the multiplier is higher the shorter the capacity booking, in accordance with the ranking given in operative part 2.

46 For the reasons given above, it is also appropriate in secondary marketing for a multiplier corresponding to the duration of the newly booked product to be applied, so the original level is not maintained. The principle that the multiplier is based on which product was booked when the contract was concluded is thus upheld. If the original multiplier were to be kept for secondary marketing, network users would pay less for non-yearly products of identical product quality there than on the primary market. This would not be appropriate. Moreover, the aims discussed above, in particular to reduce cross-subsidisation between user groups caused by duration, would come to nothing.

47 The call by one trader for within-day capacity booked before 6am to be valued with the multipliers for daily capacity is not possible because Regulation (EU) 2017/460 leaves no leeway for differentiation within the within-day multiplier.

48 The chosen multipliers ensure that the difference between the individual contributions to the costs is adequately expressed. This applies in particular also to the multiplier of 2.0 for within-day capacity products. The ruling chamber therefore takes the view that it is appropriate to determine a higher multiplier than for daily capacity products because, according to the principles stated, the vacancy costs rise further with the option of booking within-day capacity. In particular the transmission system operators stated in their responses to the consultation on the earlier proceedings BK9-18/612 that the proposed multiplier of 1.5 for within-day capacity products was too low. One of the arguments put forward was that the average duration of within-day bookings in the first half of 2018 was well below 24 hours, and this would be reinforced further by applying hourly pricing to within-day capacity products. In addition, it would create an unwanted incentive for network users to make bookings as late as possible. Thus a multiplier at the upper edge of the range should be set. There have now been frequent calls from traders for the within-day multiplier to be reduced to 1.5. One market participant judged all multipliers to be too high. In setting a new multiplier of 2.0, the ruling chamber has taken account of the fact that within-day capacity products do not often have a duration of a whole day or – as they are always booked for the rest of the gas day – nearly a whole day and the determined multiplier should therefore be clearly different to the daily multiplier. The Ruling Chamber takes the view that the determined multiplier of 2.0 appropriately reflects this fact. Insofar as the traders pointed to the report produced in accordance

with section 11(3) GasNZV and dated 14 November 2019, according to which the introduction of within-day booking opportunities would have no effect on the portfolio and system balancing energy system and/or the level of specific transmission tariffs, it should be noted that there is not yet a long enough observation period to assess the effects of the introduction of the multiplier of 2.0 on the market. The traders' reference to Article 13(3) of Regulation (EU) 2017/460 is not convincing at the present time either, because its restriction of within-day multipliers to 1.5 is only effective as of 1 April 2023 and only if ACER has issued a recommendation for the reduction. Ultimately, the multiplier of 2.0 in particular reconciles the conflicting interests – on the one hand, the calls from traders for a significant reduction in the within-day multiplier and, on the other hand, the previous call from transmission system operators for a multiplier much higher than 1.5 and up to the maximum possible of 3.0, who explicitly welcomed the unchanged multipliers in the course of this consultation, partly with a view to planning certainty.

49 The Ruling Chamber does not expect the multipliers to cause or expand physical or contractual congestion. In order to evaluate the effects of introducing multipliers on congestion, the BEATE determination (BK9-14/608) required transmission system operators to notify in writing, by 1 January each year, whether and to what extent in the previous gas year there had been excess demand or, due to long-term booking, no capacity offer at all at market area or cross-border interconnection points. The network operators also had to include in their notification information about the ratio of non-yearly booking vacancies (structural vacancy) to permanent yearly bookings (capacity completely sold in the year) and permanent booking vacancies (capacity not sold throughout the whole year). An evaluation of these notifications has shown that the introduction of multipliers has not contributed to the expansion or creation of physical or contractual congestion. There are no indications that this will change in the future.

50 The chosen multipliers have no effect on cross-border gas flows. In particular, there is no discriminatory, excessive participation of the network users that depend on cross-border gas flows (ie in particular those network users that execute cross-system bookings) in the addressed vacancy costs. With regard to requirements for converting yearly capacity prices into capacity prices for non-yearly capacity rights and requirements for appropriate arrangements for setting network tariffs pursuant to section 15(2) to (7) GasNEV, determination BK9-18/608 ("BEATE 2.0") introduced identical multipliers for corresponding non-yearly capacity products at points other than interconnection points. Regulation (EU) 2017/460 focuses on the avoidance of possibly differing (and therefore potentially discriminatory) treatment of cross-system and intra-system network use in several provisions, for example in Article 5 on the cost allocation assessments, in Article 7(c) and (e) on the assessment of the reference price methodology and in Article 28(3)(a)(v) on the assessment of multipliers. However, no such differing requirement is made with respect to multipliers, so that the approach taken does not indicate any unacceptable effects on cross-border gas flows. For reasons of cost-reflectivity and non-discrimination, the ruling chamber does not judge it to be appropriate to apply lower multipliers for cross-border gas flows.

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

51 The ruling chamber has not made use of the option to determine the level of seasonal factors in accordance with Article 28(1)(c). Therefore, seasonal factors are not applied in the calculation of reserve prices for non-yearly standard capacity products for firm capacity.

52 In accordance with Article 14 of Regulation (EU) 2017/460, the following calculation of reserve prices for non-yearly standard capacity products for firm capacity ensues:

- The following formula is used for quarterly standard capacity products, monthly standard capacity products and daily standard capacity products:

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

  Where:

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

  M is the value of the multiplier for the respective standard capacity product (quarterly standard capacity product: 1.1; monthly standard capacity product: 1.25, daily standard capacity product:1.4)

  T is the reference price;

  D is the duration of the respective standard capacity product, given in gas days.

  In leap years, the number 365 in the formula is replaced by 366.

- The following formula is used for within-day standard capacity products:

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

  Where:

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

  M is the value of the multiplier, ie 2.0;

  T is the reference price;

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

  In leap years, the number 8760 in the formula is replaced by 8784.

Thus a network user booking a within-day standard capacity product only has to pay for the hours booked for the rest of the gas day, including the multiplier.

5. Level of discounts according to Article 9(2)of Regulation (EU) 2017/460

53 At entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems, pursuant to Article 9(2) of Regulation (EU) 2017/460 a discount may be applied to the respective capacity-based transmission tariffs for the purposes of increasing security of supply.

54 The ruling chamber has used its discretion to decide that such a discount will not be determined at this time. There are currently no LNG facilities or infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems in Germany, so there is no experience in them among relevant stakeholders. In the awareness that the consultation pursuant to Article 28(1) of Regulation (EU) 2017/460 will take place each year, the Ruling Chamber has refrained from determining any discount. Nevertheless, the ruling chamber intends to enter into dialogue with the market on the issue this year.

6. Level of discounts for standard capacity products for interruptible capacity

55 The decision pursuant to operative part 4 on the level of discounts for standard capacity products for interruptible capacity is based on section 29(1) EnWG in conjunction with section 56(1) sentence 1 para 2, sentences 2 and 3 EnWG in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) No 715/2009 in conjunction with Article 28(1) in conjunction with Article 16 of Regulation (EU) 2017/460.

56 Pursuant to Article 12(1) sentence 2 of Regulation (EU) 2017/460, for both yearly and non-yearly standard capacity products for interruptible capacity, the reserve prices must be calculated as set out in Chapter III of Regulation (EU) 2017/460.

57 Article 16(1) of Regulation (EU) 2017/460 lays down that the reserve prices for standard capacity products for interruptible capacity must be calculated by multiplying the reserve prices for the respective standard capacity products for firm capacity calculated as set out in Articles 14 or 15, as relevant, by the difference between 100% and the level of an ex-ante discount. As an alternative to this, in accordance with Article 16(1) of Regulation (EU) 2017/460, the national regulatory authority may decide to apply an ex-post discount. The Ruling Chamber has not made use of this option.

58 The ex-ante discount determined as per operative part 3 ($D_{iex\text{-}ante}$) was calculated in accordance with Article 16(1) of Regulation (EU) 2017/460 separately for each standard capacity product using the following formula:

$$Di_{ex\text{-}ante} = Pro \times A \times 100\ \%$$

a. *Pro* factor

59 *Pro* is the factor for the probability of interruption which is set or approved in accordance with Article 41(6)(a) of Directive 2009/73/EC and in line with Article 28, and which refers to the type of standard capacity product for interruptible capacity.

60 The *Pro* factor is calculated for each, some or all interconnection points per type of standard capacity product for interruptible capacity offered in accordance with Article 16(3) of Regulation (EU) 2017/460. The ruling chamber has decided in a first step to calculate the *Pro* factor separately for each interconnection point using the prescribed formula. This approach ensures to the greatest extent possible that the probability of interruption, which can vary from point to point, is specifically reflected in the level of *Pro*. In a second step, the *Pro* calculated for each point will be standardised per standard capacity product at all entry and all exit points to the same entry-exit system or comparable systems for each gas quality (L-gas and H-gas). To do this, the weighted average of the *Pro* factors calculated per standard capacity product for all interconnection points in the respective entry-exit system is calculated. The standardisation of the *Pro* factor per standard capacity product at all entry and all exit points of the same entry-exit system or comparable systems is based on the fact that within each gas quality the affected entry and exit points are interchangeable for the network user. Moreover, Article 21 of Regulation (EU) 2017/460 provides for a standardisation of the tariffs there.

61 The calculation of the *Pro* factor for the individual interconnection points, broken down by standard capacity product, is carried out in accordance with Article 16(3) on the basis of forecasted information related to the individual components of the formula below:

$$Pro = \frac{N \times D_{int}}{D} \times \frac{CAP_{av.int}}{CAP}$$

Where:

N is the expectation of the number of interruptions over *D*.

D_{int} is the average duration of the expected interruptions expressed in hours.

D is the total duration of the respective type of standard capacity product for interruptible capacity expressed in hours.

$CAP_{av.int}$ is the 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. In determining this value, the fact is taken into account that within-day capacity will be interrupted before day-ahead capacity, day-ahead capacity before monthly capacity, monthly capacity before quarterly capacity, and quarterly capacity before yearly capacity. This is because, in accordance with Article 35(1) of Regulation (EU) 2017/459, the order in which interruptions are performed is determined on the basis of the contractual time stamp of the relevant transport contracts for interruptible capacity. It follows from Article 9 in conjunction with

Articles 11 to 15 of Regulation (EU) 2017/459 that yearly capacity will be auctioned before quarterly capacity, quarterly capacity before monthly capacity, monthly capacity before day-ahead capacity, and day-ahead capacity before within-day capacity; given that the order of interruptions is based on the time stamp, it can therefore be assumed that capacity will be interrupted in the reverse order to which contracts were concluded. *CAP* is the total amount of interruptible capacity for the respective type of standard capacity product for interruptible capacity.

The discount calculated using the above formula is rounded up to the full percent.

62 Expected values from N, D_{int} and $CAP_{av.int}$ contribute to the calculation of the Pro factor. The ruling chamber takes the view that sufficiently reliable forecast figures can only be derived from examining a period in the past. The past values can be used as the basis to indicate the probability of a future interruption. However, it is not appropriate to use a reference period that goes back too far. That could lead to distortions, for example if changes to the actual conditions at a connection point that occurred long ago (eg due to network expansion) affect the probability of interruption in the present. In addition, for reasons of practicability a reference period that is too long should not be used, because network operators cannot easily identify interruptions from the distant past. On the other hand, a reference period that is too short is not appropriate either, because of the possibility of distortions and special circumstances that occur in the short term and are not representative of the general probability of interruption. The ruling chamber takes the view that a reference period of three years is appropriate. The variables N, D_{int} and $CAP_{av.int}$ must therefore be calculated on the basis of interruptions in interruptible capacity over a period of three years. This reference period is expected to minimise the risk of, on the one hand, taking account of conditions that no longer correspond to the actual circumstances and, on the other, distortions caused by an insufficient and unrepresentative data basis. A reference period of three years therefore provides an appropriate balance. The last three completed gas years will be used. In derogation of this, this second consultation and decision pursuant to Article 28 of Regulation (EU) 2017/460 uses the data from the last two completed gas years because there are currently no reliable and comparable values for a longer period owing to the changes resulting from the revision of the NC CAM in Regulation (EU) 2017/459. The ruling chamber will extend the reference period to three gas years in the course of the annual consultations next year.

63 Since the values for N, D_{int} and $CAP_{av.\ int}$ are based on data referring to the past, the ruling chamber has included a contingency mark-up of 10 percentage points in the calculation of the *Pro* factor. This ensures that the provisions of Article 16(3) of Regulation (EU) 2017/460 are applied with regard to the use of forecast values. The contingency mark-up is necessary because a period in the past is used to calculate the probability and it cannot be guaranteed that the probability of interruption in the present can be calculated with absolute accuracy by looking at the previous year. The framework conditions could have changed, affecting the actual probability of interruption. In any case, it cannot be ruled out that the calculation would not fully correspond to

the real conditions. Moreover, the values calculated for N, D_{int} and $CAP_{av.\ int}$ are only forecast values, indicated by past experience. The contingency mark-up thus covers any differences between the calculation based on historic data and the current situation. The wording of Article 29(b)(ii) point 3 of Regulation (EU) 2017/460 ("historical or forecasted data, or both, used for the estimation of the probability of interruption referred to in point (2)") also indicates that it is appropriate to combine past and forecast values to calculate the probability of interruption appropriately.

64 In determining the safety margin of 10 percentage points, the ruling chamber has also taken into account that, even if a discount of 10 percentage points were not sufficient in individual cases to cover the costs of an interruption completely, it would still be more than sufficient especially considering the entire trading portfolio. The level of the safety margin is a multiple of the *Pro* factor calculated using the formula in Article 16(3) of Regulation (EU) 2017/460, so any inaccuracies in the determining of this factor for storage facilities used only seasonally or exclusively by network users would be adequately compensated for. The legislature has accepted these potential inaccuracies. This is shown in particular in Article 16(3) in conjunction with Article 21 of Regulation (EU) 2017/460, which permit the *Pro* factor to be standardised for each standard capacity product at all entry and all exit points to the same entry-exit system or to comparable systems.

65 In the view of the ruling chamber, the safety margin of 10 percentage points is also an adequate means of taking into account any inaccuracies arising from not assessing re-nominations as interruptions for the calculation of the probability of interruption. It is true that it might be possible to assume that such re-nominations, which are undertaken by the network user at the request of the transmission system operator for the very purpose of not being interrupted, do at least partially correspond to actual interruptions in terms of their effect from the perspective of the transmission system operator. However, the ruling chamber is of the opinion that it would be disproportionate to make a general requirement of every transmission system operator to factor the "involuntary" re-nominations into the calculation of the probability of interruption of the respective entry and exit points. The practice of carrying out interruptions and re-nominations is not dealt with in the same way by all market participants. Owing to the way they process data, some market participants cannot class re-nominations as interruptions following the announcement of an interruption but can only distinguish between an actual interruption and a re-nomination, whether voluntary or not. A determination requiring network operators to record "involuntary" re-nominations only, and not voluntary ones, would cause great difficulties for some network operators and their electronic data-processing systems. Any effects resulting from this non-consideration in the form of "too low probabilities of interruption" will in fact be absorbed as a precaution by the safety margin of 10 percentage points. However, owing to the considerations under margin numbers 322 et seq, the final decision might contain adjustments for the safety margin as of 1 October 2021 arising from, for example, more up-to-date findings on the specific consequences of the merger of the market areas on the expected interruptions.

b. Adjustment factor *A*

66 As well as *Pro*, *A* is the other factor in the calculation of the ex-ante discount. *A* is the adjustment factor which is set or approved by the regulatory authority in accordance with Article 41(6)(a) of Directive 2009/73/EC and pursuant to Article 28 and that reflects the estimated economic value of the type of standard capacity product for interruptible capacity. The Ruling Chamber sets the value of *A* for all standard capacity products at 1. This complies with Article 16(2) of Regulation (EU) 2017/460, pursuant to which *A* must be calculated for each, some or all interconnection points and must be no less than 1. While Article 16(2) of Regulation (EU) 2017/460 provides for the possibility of estimating the economic value of each standard capacity product to calculate *A*, the Ruling Chamber takes the view that this estimation is neither necessary nor appropriate. An estimate relating to standard capacity products would not take into account the fact that the adjustment factor would have to have very different economic values depending on the type of network user and the purpose of the booking. In this case, differentiating purely by standard capacity product would not be an appropriate way of forming an average. There is no indication that applying the *Pro* factor in conjunction with the contingency mark-up of ten percentage points would lead to the calculation of inappropriate discounts, which would require adjustment using the adjustment factor *A*.

67 The suggestion from traders that the calculation formula should be adjusted so that the adjustment factor is increased from 1 to 2 and, in return, the safety margin is reduced from 10% to 5% is mathematically understandable. However, the explanations in the consultation response show that risk costs increase in a linear manner. It is therefore unclear why the value of capacity should fall disproportionately. As explained above, the ruling chamber assumes that a discount of at least 10 percentage points is more than sufficient, especially when taking into account the whole portfolio. Also given the fact that the calculation formula used in the past worked well for the majority of market participants, the ruling chamber does not currently see any need for an adjustment. However, owing to the considerations under margin numbers 32 et seq, the final decision might contain adjustments for the adjustment factor A as of 1 October 2021 arising from, for example, more up-to-date findings on the monetary consequences of interruptions in the single market area.

68 The explanation of the effects of capacity changes on multipliers given in margin number 39 applies accordingly to the change of an interruptible standard capacity product. In this case, too, the calculation of a discount (including its level) depends on the facts at the time the contract was concluded. The discount is not subsequently lost if an interruptible standard capacity product is converted into a firm one. It remains unchanged for the period that has already expired. However, for the firm capacity product that is then booked, the network user must pay the tariff for a firm standard capacity product without the discount that results from the probability of interruption, plus a multiplier where applicable.

The discounts calculated in line with these explanations ($Di_{ex\text{-}ante)}$ should be taken from Annex I up to the merger of the market areas NCG and Gaspool. They should be taken from Annex II after the merger of the market areas NCG and Gaspool. However, owing to the considerations under margin numbers 322 et seq, the final decision might contain adjustments for the period as of 1 October 2021.

6. Order for payment of costs

69 Regarding costs, a separate notice will be issued as provided for by section 91 EnWG.

7. Public notification

70 Since the determination is issued in relation to all German transmission system operators within the meaning of section 3 para 5 EnWG, the Ruling Chamber is giving public notification of the determination in place of service pursuant to section 73(1) sentence 1 EnWG in accordance with section 73(1a) sentence 1 EnWG. According to section 73(1a) sentence 2 EnWG this public notification is effected by publication of the operative part of the determination, the notification of appellate remedies and a brief statement that the decision in full has been published on the regulatory authority's website in the Bundesnetzagentur's Official Gazette. In accordance with section 73(1a) sentence 3 EnWG the determination is considered to have been served on the day on which two weeks have elapsed since the date of public notification in the regulatory authority's Official Gazette.

8. Annex

Annexes I and II form part of this decision.

Notification of appellate remedies

Appeals against this decision may be brought within one month of its service. Appeals should be filed with the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen (address: Tulpenfeld 4, 53113 Bonn). It is sufficient if the appeal is received by the Higher Regional Court of Düsseldorf within the time limit specified (address: Cecilienallee 3, 40474 Düsseldorf).

The appeal must be accompanied by a written statement setting out the grounds for appeal. The written statement must be provided within one month. The one-month period begins with the filing of the appeal; this deadline may be extended by the court of appeal's presiding judge upon request. The statement of grounds must state the extent to which the decision is being contested and its modification or revocation sought and must indicate the facts and evidence on which the appeal is based. The appeal and the grounds for appeal must be signed by a lawyer.

The appeal does not have suspensory effect (section 76(1) EnWG).

Bonn, 27 May 2020

Chair	Vice Chair	Vice Chair
Dr Christian Schütte	Dr Ulrike Schimmel	Roland Naas

Net Connect Germany							
			$Di_{ex\text{-}ante}$				
Flussrichtung am Netzkopplungspunkt Flow direction at connection point	Name des angrenzenden Marktgebietes Name of adjacent market area	Gasqualität Gas quality	untertägige Kapazität within-day capacity	Tageskapazität daily capacity	Monatskapazität monthly capacity	Quartalskapazität quarterly capacity	Jahreskapazität yearly capacity
Entry	Czech Balancing Zone	H-Gas	11%	11%	11%	11%	11%
Exit	Czech Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	Austrian Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Exit	Austrian Balancing Zone	H-Gas	13%	12%	11%	11%	11%
Entry	Voralberg	H-Gas	10%	10%	10%	10%	10%
Exit	Voralberg	H-Gas	10%	10%	10%	10%	10%
Entry	VIP Kiefersfelden-Pfronten	H-Gas	10%	10%	10%	10%	10%
Exit	VIP Kiefersfelden-Pfronten	H-Gas	10%	10%	10%	10%	10%
Entry	Belgian and Luxembourg Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Belgian and Luxembourg Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	Dutch Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Dutch Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	Dutch Balancing Zone	L-Gas	11%	11%	11%	11%	11%
Exit	Dutch Balancing Zone	L-Gas	10%	10%	10%	10%	10%
Entry	Danish Balancing Zone	H-Gas	11%	11%	10%	10%	10%
Exit	Danish Balancing Zone	H-Gas	11%	10%	10%	10%	10%
Entry	GASPOOL Balancing Zone	H-Gas	11%	11%	11%	10%	10%
Exit	GASPOOL Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	GASPOOL Balancing Zone	L-Gas	10%	10%	10%	10%	10%
Exit	GASPOOL Balancing Zone	L-Gas	10%	10%	10%	10%	10%
Entry	Norwegen	H-Gas	11%	11%	11%	11%	10%
Exit	Norwegen	H-Gas	10%	10%	10%	10%	10%
Entry	RC Thayngen-Fallentor	H-Gas	10%	10%	10%	10%	10%
Exit	RC Thayngen-Fallentor	H-Gas	10%	10%	10%	10%	10%
Entry	RC Basel	H-Gas	10%	10%	10%	10%	10%
Exit	RC Basel	H-Gas	10%	10%	10%	10%	10%
Entry	Wallbach	H-Gas	10%	10%	10%	10%	10%
Exit	Wallbach	H-Gas	11%	11%	11%	10%	10%
Entry	PEG North	H-Gas	10%	10%	10%	10%	10%
Exit	PEG North	H-Gas	11%	11%	10%	10%	10%

Gaspool							
			$Di_{ex\text{-}ante}$				
Flussrichtung am Netzkopplungspunkt Flow direction at connection point	Name des angrenzenden Marktgebietes Name of adjacent market area	Gasqualität Gas quality	untertägige Kapazität within-day capacity	Tageskapazität daily capacity	Monatskapazität monthly capacity	Quartalskapazität quarterly capacity	Jahreskapazität yearly capacity
Entry	Polish E-gas Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Polish E-gas Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	YAMAL (TGPS) Pipeline	H-Gas	10%	10%	10%	10%	10%
Exit	YAMAL (TGPS) Pipeline	H-Gas	10%	10%	10%	10%	10%
Entry	Czech Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Czech Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Entry	Belgian and Luxembourg Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Belgian and Luxembourg Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Entry	Dutch Balancing Zone	H-Gas	11%	10%	10%	10%	10%
Exit	Dutch Balancing Zone	H-Gas	11%	11%	11%	10%	10%
Entry	Dutch Balancing Zone	L-Gas	12%	12%	12%	12%	10%
Exit	Dutch Balancing Zone	L-Gas	11%	11%	11%	10%	10%
Entry	Danish Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Danish Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	NCG Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	NCG Balancing Zone	H-Gas	11%	11%	11%	11%	11%
Entry	NCG Balancing Zone	L-Gas	10%	10%	10%	10%	10%
Exit	NCG Balancing Zone	L-Gas	10%	10%	10%	10%	10%
Entry	Russland	H-Gas	11%	11%	10%	10%	10%
Exit	Russland	H-Gas	10%	10%	10%	10%	10%
Entry	Norwegen	H-Gas	10%	10%	10%	10%	10%
Exit	Norwegen	H-Gas	10%	10%	10%	10%	10%

Trading Hub Europe (THE)							
			$Di_{ex\text{-}ante}$				
Flussrichtung am Netzkopplungspunkt Flow direction at connection point	Name des angrenzenden Marktgebietes Name of adjacent market area	Gasqualität Gas quality	untertägige Kapazität within-day capacity	Tageskapazität daily capacity	Monatskapazität monthly capacity	Quartalskapazität quarterly capacity	Jahreskapazität yearly capacity
Entry	Czech Balancing Zone	H-Gas	11%	11%	11%	11%	11%
Exit	Czech Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Entry	Austrian Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Exit	Austrian Balancing Zone	H-Gas	13%	12%	11%	11%	11%
Entry	Voralberg	H-Gas	10%	10%	10%	10%	10%
Exit	Voralberg	H-Gas	10%	10%	10%	10%	10%
Entry	VIP Kiefersfelden-Pfronten	H-Gas	10%	10%	10%	10%	10%
Exit	VIP Kiefersfelden-Pfronten	H-Gas	10%	10%	10%	10%	10%
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Exit	Belgian and Luxembourg Balancing Zone	H-Gas	11%	11%	11%	11%	10%
Entry	Dutch Balancing Zone	H-Gas	11%	10%	10%	10%	10%
Exit	Dutch Balancing Zone	H-Gas	11%	11%	11%	10%	10%
Entry	Dutch Balancing Zone	L-Gas	11%	11%	11%	11%	11%
Exit	Dutch Balancing Zone	L-Gas	11%	11%	10%	10%	10%
Entry	Danish Balancing Zone	H-Gas	11%	11%	10%	10%	10%
Exit	Danish Balancing Zone	H-Gas	11%	10%	10%	10%	10%
Entry	Norwegen	H-Gas	11%	11%	11%	11%	10%
Exit	Norwegen	H-Gas	10%	10%	10%	10%	10%
Entry	RC Thayngen-Fallentor	H-Gas	10%	10%	10%	10%	10%
Exit	RC Thayngen-Fallentor	H-Gas	10%	10%	10%	10%	10%
Entry	RC Basel	H-Gas	10%	10%	10%	10%	10%
Exit	RC Basel	H-Gas	10%	10%	10%	10%	10%
Entry	Wallbach	H-Gas	10%	10%	10%	10%	10%
Exit	Wallbach	H-Gas	11%	11%	11%	10%	10%
Entry	PEG North	H-Gas	10%	10%	10%	10%	10%
Exit	PEG North	H-Gas	11%	11%	10%	10%	10%
Entry	Polish E-gas Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Exit	Polish E-gas Balancing Zone	H-Gas	10%	10%	10%	10%	10%
Entry	YAMAL (TGPS) Pipeline	H-Gas	10%	10%	10%	10%	10%
Exit	YAMAL (TGPS) Pipeline	H-Gas	10%	10%	10%	10%	10%
Entry	Russland	H-Gas	11%	11%	10%	10%	10%
Exit	Russland	H-Gas	10%	10%	10%	10%	10%