Project application for approval of the procedure initiated in 2019 for incremental capacitiy on the border between Switzerland and the market area Trading Hub Europe (THE)

October 7, 2020

Adjusted version of October 23, 2020

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1. Introduction

After completion of the demand assessment (Phase 1) of the procedure initiated in 2019 pursuant to Regulation (EU) 2017/459 (Network Code on Capacity Allocation Mechanisms in Transmission Networks, hereinafter "NC CAM") for the creation of incremental capacity at the market area border Switzerland - Trading Hub Europe (hereinafter CH - THE), the transmission system operators (TSOs) involved have started the planning phase for the corresponding projects (Phase 2). The "*Demand assessment report for the incremental capacity process starting 2019 between Switzerland and the German market area Trading Hub Europe*", published on October 21, 2019, shows a demand for incremental capacity, explicitly in the Lake Constance region, at this market area border.

The technical study, which was published as a consultation document on August 20, 2020 and consulted until September 10, 2020, describes how the network expansion can be carried out efficiently, taking into account the network topology and economic aspects. The present project application is a joint document of the affected TSOs of the future Trading Hub Europe (THE) market area.

Section 21 (1) sentence 2 GasNZV stipulates that the TSOs must form a joint market area from the existing two market areas by 01.04.2022 at the latest.

As part of the preparations for the merger of the two German market areas, the German TSOs announced that the market area merger is expected to be implemented on October 1, 2021. The name of the joint market area will be Trading Hub Europe (THE).

The Swiss network operator Erdgas Ostschweiz AG (EGO), which is located in the Lake Constance region, explained in a statement dated October 10, 2019, that for reasons of supply security (availability of N-1 supply), the non-binding requested demand cannot be represented via the already existing IPs and the connected pipelines on the Swiss side. Therefore, following the analysis of the Market Demand Report, a new IP in the Lake Constance region is to be planned, which completely covers the requested capacity demand.

The requested exit capacity for a new IP to be created in the affected Lake Constance region is therefore 2,000,000 kWh/h. This capacity includes an allocation requirement to the Burghausen hub (dynamically allocable capacity, DZK).

The TSOs intend to identify and market an injection DZK corresponding to the requested exit point at the Burghausen hub, which is to be allocated to the requested exit capacity (allocation requirement for the new IP to be created in the Lake Constance region).

The entry DZK at the Burghausen hub can be shown at the following bookable points:

- Überackern
- Überackern 2
- Storage Haidach
- Storage 7Fields

Grid revenues accruing at the injection points are not taken into account in the economic viability test; costs are allocated according to use. Here the case with the highest compression

energy costs with a complete allocation to the injection points Überackern and Überackern 2 was assumed for the economic test. A different allocation of the injection points may result in lower compression energy costs.

Within the framework of the consulted technical study, the TSOs have asked the market to take a position on the question to which of the bookable points mentioned above the corresponding injection DZK should be allocated and at what level. Regardless of the content of the comments received, the TSOs concerned have reserved the right, in justified cases, to deviate from the comments received.

The evaluation and assessment of the received request was carried out on the basis of the models of the still unconfirmed Gas Network Development Plan in the basic variant (in the following NEP) 2020 - 2030. Within the framework of the consulted technical study, the TSOs pointed out that this planning basis (e.g. the input parameters for capacity modelling) may change in the further course of the process for incremental capacity and that this may require a reconsideration of conclusions already drawn. As a consequence, the TSOs have pointed out that the level of demand for incremental capacity may also change in the course of a process for creating new capacity. The capacity modelling took into account all general conditions according to the current state of knowledge.

As already described in the technical study, EGO will not participate in the incremental procedure according to NC CAM, as EGO does not consider this procedure to be applicable to its Swiss supply area. For this reason, EGO was not involved in the preparation of the consultation document beyond the coordination of the technical framework conditions (in its role as adjacent network operator). Consequently, the entry capacities to be created on the Swiss side were not considered in the technical study, so that they were neither included in the economic viability test nor in the form of bundled marketing.

2. Approval contents of the project application for incremental capacity at the border to Switzerland and the market area THE

2.1 Information on non-binding market demand

The non-binding requests for firm capacities summarized below have been included in the technical study and in the present project application:

TSO	Capacity Type (Direction of flow)	Interconnection Point	Current TAC (kWh/h/a)	Sum TAC	Demand (kWh/h/a)	Product
terranets bw GmbH	Ausspeisekapazität (THE →Schweiz)	Neu zu schaffender IP in der Bodenseeregion*	0	0	**2.000.000**	**DZK**

Table 1: Information on non-binding market demand

2.2 Information on dealing with comments received on the project application

During the consultation period of the Technical Study for incremental capacity on the border between Switzerland and the market area THE, two comments were received on the consulted Technical Study.

The comments criticize general issues related to the incremental procedure. These include, among other things, an insufficient depth of planning from the point of view of the comment-makers, the non-inclusion of the Swiss side with regard to measures and costs, the general unsuitability of the incremental method for addressing challenges of supply security, a too low granularity of the cost data from the point of view of the comment-makers and a calculation logic of the Federal Network Agency tool that is not comprehensible from the point of view of the comment-makers (e.g. interest rates, temporal cost allocation, etc.).

The TSOs involved would like to point out that they will adhere to the specifications of the NC CAM (including the recitals of the NC CAM) when processing the incoming request under the incremental procedure: In recital 11 of the COMMISSION REGULATION (EU) 2017/459 of 16. Recital 11 of Commission Regulation (EU) 2017/459 of 16 March 2017 ("NC CAM") explains that "a streamlined and consistent procedure for the supply of new capacity throughout the Union is necessary to respond to potential market demand for such capacity" and that "such a procedure should consist of regular demand analyses followed by a structured planning and allocation phase based on effective cooperation between transmission system operators and national regulatory authorities throughout the Union". It is also stated that "any investment decision taken after the analysis of market capacity demand should be subject to a performance audit to determine its economic viability". The background to this is that network users requesting capacity should bear the risks associated with their demand themselves, in order to prevent "trapped" customers from being exposed to the risk of such investments. Such a risk would be, for example, the increase of the general network charges in connection with the investments made, if presumed future bookings of the incremental capacity are not ultimately made.

Other aspects put forward by network users requesting capacity which are not covered by the scope of the NC CAM cannot be taken into account by the FNB in the context of the implementation of the incremental procedure. This applies both to assumptions regarding the continuing demand for incremental capacity and to the documents to be published and their structure.

The project proposal presented in the documents consulted can only provide a first overview of the measures to be taken and the costs at the time of its preparation. A further specification can only be made during the detailed planning phase in the network development plan (in case of an economic project).

The Federal Network Agency's calculation tool for the economic efficiency audit, which is bindingly applied by the TSOs, was published by the Federal Network Agency under the link mentioned in the technical study. Further information on the contents of the tool can be found in the explanatory file of the BNetzA, which is published in the same place.

As explained in the first paragraph, the TSOs rely on the cooperation of the adjacent network operator(s) in the neighbouring country when preparing their project proposals in order to

enable a complete presentation of the measures in a technical study. In particular, the participation of the adjacent network operator(s) in the neighbouring country in the incremental procedure and their recognition of the incremental procedure must be mentioned. This also includes the willingness for bundled marketing. This could not be realized on the Swiss side, so that the measures on the Swiss side could not become part of the standardized documents. Therefore, the German side and the measures to be taken there were considered alone.

The comments continue to criticize specific issues in connection with the technical study.

These include:

1. traceability of CAPEX and OPEX
2. the question of the allocation of the DZK for the injection points should "mainly" be based on the Haidach and 7Fields storage facilities
3. the advantages of the proposed measure for German and foreign gas supply have not been sufficiently taken into account
4. the high investments on the Swiss side would justify a long-term use of up to 50 years and lead to correspondingly long-term accounting.
5. short-term bookings of the reservation quota for Q1 and Q4 would be necessary against the background of the current relocation problems at existing border points (e.g. RC Basel) and would have to lead to the consideration of such bookings

The FNB answers as follows:

1. Due to the early stage of the project proposal for incremental capacity on the border between Switzerland and the THE market area, the planned cost rates specified in the draft Gas 2020-2030 Network Development Plan were used to estimate the investment costs. The planned cost rates are shown in Tables 49 to 51. The Gas 2020-2030 Network Development Plan is available to the public at www.fnb-gas.de/netzentwicklungsplan.
   Cost estimates for specific measures will be made after the project proposal has been made more concrete.
   It was assumed that the entire injection capacity (Entry DZK) will be taken over from the interconnection points Überackern and / or Überackern 2. This represents the most cost-intensive scenario of the assumed utilization with regard to OPEX and is used because at the time of the project proposal no sufficiently secure other utilization structure (e.g. via the storage connection points at the Burghausen node) is known.
   Furthermore, a compression at the Wertingen compressor station is necessary. The compression energy costs were calculated on the basis of the utilization structure sent by EGO. For the probability of occurrence of daily mean temperatures, a temperature evaluation of the years 1999 to 2019 inclusive was carried out.
   The compressors at the Burghausen grid node and at the Wertingen compressor station are electric compressors. The compression energy costs determined here

consist of the network charges, the provision charges and the energy costs for electricity. At the compressor station planned by terranets bw the compression energy costs were estimated on the basis of existing compressors and scaled to the required capacity. The compression energy costs here include the assumed costs for fuel gas and CO2 certificates.

2. the FNB cannot interpret the statement "mainly". For the correct execution of the marketing in the incremental procedure, a clear statement is required to be able to provide the necessary injection DZK concretely in the annual auction. Therefore, the most cost-intensive scenario of the assumed use with regard to OPEX is still assumed with 100% Überackern/Überackern 2.
3. here the TSOs concerned as also in the technical study and in this document described still see no advantage, which could be reflected in a lower f-factor. The same applies to any advantages in foreign markets, as these are not part of the procedure.
4. the TSOs have no long-term studies available to them on the gas demand in the EGO network or in the networks of other Swiss network operators. In particular, the statements on low booking expectations and the substitution by other injection points do not make a long-term booking out of the newly created interconnection point appear sufficiently certain. Therefore, no deviation is made from the originally set 15 years for the booking as acceptance in the economic test.
5. the TSOs do not assume that the need for a capacity shift will continue well beyond the date of capacity provision, as the capacity bottlenecks in the terranets bw network should be eliminated by the expected commissioning date (2028) (see also NEP 2020-2030). Furthermore, the requested DZK is not suitable for satisfying internal order capacities for the regional grid.

The TSOs took a critical look at the statements received. As a result, the TSOs came to the same conclusions as at the time of completion of the technical study. Accordingly, the FNB have incorporated large parts of the Technical Study into the project application without change.

2.3 Information about the expansion variant

The TSOs involved have, after a detailed assessment of possible measures to meet the market demand, identified a technically reasonable and efficient way to provide the requested exit capacity. This project proposal is schematically described in Figure 1 by the two red arrows. The consideration of the required measures starts at the Burghausen network node and ends at the German sovereign border (here assumed at a distance of approx. 10 meters from the German shore) at a point in the Lake Constance region which has yet to be defined in concrete terms. Both economic and network topological aspects were considered in the selection of the project proposal.

Figure 1:Schematic project proposal

<u>Transport via Hittistetten:</u>

The following project proposal corresponds to the technical parameters agreed with the grid operator EGO.

The red arrows in Figure 1 show the transport of the requested capacity from the Burghausen network node through the Burghausen-Finsing pipeline, which is solely owned by bayernets, and the Amerdingen-Anwalting-Schnaitsee pipeline, which is fractionally owned by bayernets and OGE, to the Wertingen node. From the Wertingen junction, the transport will be carried out via the planned bayernets transport system Wertingen-Kötz (NEP-ID 402-02) as well as via a new pipeline to be constructed from Kötz to Hittistetten. From there the gas volumes in Hittistetten will be transferred to terranets bw. The further transport is carried out via the transport systems of terranets bw (e.g. DOB pipeline), as well as via a new pipeline section to be constructed from the existing network of terranets bw to the newly created IP in the Lake Constance region. The following measures are necessary for the network expansion:

1. connecting pipeline (extension) from Wertingen-Kötz to Hittistetten (approx. 18 km)
2. connecting pipeline from the existing network of the terranets bw to the Lake Constance landing point (approx. 10 - 20 km)
3. compressor station terranets bw

The cost estimate of the above mentioned measures amounts to approx. € 137 million (based on the planned cost rates of the draft NEP2020-2030).

For the above project, a transfer pressure of approx. 43 barg will be provided at the transfer point to EGO in the Lake Constance region and compressed by EGO itself to the requested pressure of 55 barg.

Result:

As a result of the planning phase and after a detailed examination of the comments received, the TSOs involved recommend the provision of the requested capacity on the route described and hereby apply for.

2.4 Information on the handling of available capacities (existing capacities) at the market area border Switzerland - THE

As already described and justified above, a new interconnection point is planned in the Lake Constance region. Therefore no existing capacities are available, so that the total requested capacity consists of incremental capacity.

2.5 Approval content according to Art 28(1) NC CAM

2.5.1 Offer level (Art. 28 (1 a)) NC CAM)

In the economic test pursuant to Art. 22 NC CAM, a check is made for each bid level to determine whether the present value of the total revenues from bookings of incremental capacity in the 2021 annual auctions ("revenues") corresponds at least to the product of the f-factor and the present value of the estimated increase in the TSO's permissible revenues corresponding to the bid level ("costs"). Pursuant to Art. 22 para. 3 sentence 2 NC CAM, among the successful bid levels the bid level is implemented which contains the largest capacity quantity. Since the entire requested capacity must be newly created under the framework conditions of the project presented, only one offer level is provided for.

In the 2021 annual auction, terranets bw will offer this offer level for newly created capacity at the newly created IP in the Lake Constance region. The calculation of the capacities to be offered is carried out in accordance with Art. 11 para. 6 NC CAM. The mandatory reservation rate of 20% for new capacities in accordance with Article 8 (8) NC CAM and the specification of the Federal Network Agency BK7-15-001 (KARLA Gas) is taken into account. The capacity products are offered unbundled, as it is currently assumed that the adjacent network operator EGO will not participate in bundled marketing or is not subject to the obligations to bundle capacity.

The supply level is offered in accordance with Article 11 (3) sentence 2 NC CAM for a period of 15 years after the start of operational use, i.e. from gas year (GWJ) 28/29 to GWJ 42/43. The capacity products of the supply level are shown in the following table:

From	To	Free available capacity considering 20 % reservation quote; kWh/h	Expansion-Level I from demand request considering 20 % reservation quote; kWh/h	Total Offer Level I; kWh/h	Capacity Product
01.10.2028	01.10.2043	0	1.600.000	1.600.000	DZK

Table 2:Offer Level

2.5.2 Supplementary terms and conditions (Art. 28(1)(b) NC CAM)

The draft Supplementary Terms and Conditions are attached to this document as Annex I.

2.5.3 Timetables for the project (Article 28(1)(c) NC CAM)

The project described above will be launched in July 2021 on the capacity booking platform PRISMA after the auction of annual capacity has been completed. Operational readiness of all

technical facilities is scheduled for October 01, 2028 at the earliest - under the assumption that the economic test carried out after the auction is successful.

The further procedure within the current process cycle is as follows:

Start Date	End Date	Description
20.07.2020		Publication of the consultation documents
20.07.2020	10.09.2020*	Public consultation
11.09.2020*	06.10.2020*	Planning of the offer levels by the TSOs in close cooperation with the NRA
07.10.2020*		Submission of the project proposal to the NRA
07.10.2020*	06.04.2021	Processing of the project proposal by the NRA
07.04.2021		Approval and publication of the required parameters by the national regulatory authorities pursuant to Art. 28 (1) NC CAM
08.04.2021	04.05.2021	Adaptation of the offer levels by the TSOs in consideration of the requirements of the NRA
05.05.2021		Publication of the approved parameters, the capacity products and the template of the contract(s) for the capacities offered within the framework of the network expansion project
05.07.2021		Annual auction/Economical test

Table 3: Provisional Timeline
*adjusted on 10th of August 2020

The above dates are provisional and may therefore be subject to change. If the results of the economic test are positive, the project will subsequently be included in the process of preparing the German Gas Network Development Plan (NEP Gas 2022 - 2032) and will be taken into account in the scenario framework and in the (national) modelling.

The following illustration shows the further steps and represents a rough schedule of technical measures based on past projects with current planning status. Experience with past projects shows that this planning already contains time buffers to avoid delays in the provision of capacity.

Project steps	**Connecting Pipeline (expansion) Wertingen-Kötz to Hittistetten**	**Connecting pipeline from existing grid of tnbw to Lake Constanze connection point**	**Compressor station terranets bw**
Project Concept	2021	2021	2021
Basic evaluation/feasibility review	2021	2021	2021
Design Planning	2021	2021	2021
Detail Planning	2022	2022	2022
Preparation of general planning procedure	2023	2023	2023
Preparation of plan approval procedure	2022	2022	irrelevant
Implementation of plan approval procedure	2023	2023	irrelevant
Preparation of Federal Emission Control Act (BImSchG)	irrelevant	irrelevant	2022
Execution of Federal Emission Control Act (BImSchG)	irrelevant	irrelevant	2023
Preparation of plan approval procedure	2024	2024	irrelevant
Implementation of plan approval procedure	2025/2026	2025	irrelevant
Acquisition of right of way	2025/2026	2025	Irrelevant
Property acquisition	2024	2024	2024
Material and service procurement	2025/2026	2025	2025
Preparation and start of construction	2026 for special construction measures	2026	2026
Assembly/construction	2026/2027	2026	2026
Commissioning	2027	2027	2027
Project conclusion/completion	2028	2028	2028

Table 4: Further steps for technical measures

The above dates are provisional and may therefore be subject to change. If the results of the economic test are positive, the measures of the presented expansion variant will be initiated. Further details of the schedule will be given after the performance audit has been passed. In comparison to the consultation document of the technical study, the provision of capacity was postponed by 2 years to the GWY 2028/29, as new findings on the realistic progress of the project have come to light in the meantime. The economic efficiency tool in Annex I was adjusted accordingly.

2.5.4 Defined parameters according to Article 22(1) NC CAM (Article 28(1)(d) NC CAM)

According to Article 27 (3) NC CAM the consultation shall cover the level of user commitments, expressed as an estimate of the f-factor in accordance with Article 23, which, after having consulted with the transmission system operators, is proposed and subsequently approved by the concerned national regulatory authorities.

The f-factor for each offer level shall be set by the national regulatory authority, taking into account the following (Article 23 (1) NC CAM):

a) the amount of technical capacity set aside in accordance with Article 8(8) and (9);
b) positive effects of the incremental capacity project on the market or the transmission network, or both;
c) the duration of binding commitments of network users for contracting capacity compared to the economic lifetime of the asset;
d) the extent to which the demand for the capacity established in the incremental capacity project can be expected to continue after the end of the time horizon used in the economic test.

For the sake of transparency and for the purposes of economic test according to Article 22 NC CAM, the BNetzA created and published a calculation tool (hereinafter BNetzA Tool):

https://www.bundesnetzagentur.de/EN/Areas/Energy/Companies/GridDevelopment/Gas/IncrementalCapacities/IncrementalCap_node.html;jsessionid=087EDAE9AA71BFF001A8CEC95F8CDCD8

The BNetzA Tool filled out for the assessed offer level is attached to this consultation document as Appendix II.

The BNetzA Tool includes mathematical assessment of a possible f-factor according to points a), c) and d). The f-factor is calculated as rate of the present value of binding commitments of network users for contracting capacity within the time horizon of the first yearly capacity auction, in which the incremental capacity has been offered, according to Article 22 (1) (a), compared to the present value of all expected commitments of network users for contracting respective capacity. The BNetzA Tool uses the latest known reference price inflated to the respective year as a respective estimated reference price according to the Article 22 (1) (a) (i) NC CAM. Since the calculation of the increase in the allowed revenue of the transmission system operator associated with the incremental capacity included in the respective offer level does not take inflation into account, the inflation index of the reference prices was also set at 0%.

On basis of the regulatory requirements of the BNetzA (decisions REGENT (BK9-18/611-GP) / AMELIE (BK9-18/607), reference prices have been formed as a so-called uniform stamp fee since 1st of January 2020.

The current forecast of the reference price is the reference price of the market area THE published in the draft of the BNetzA decision REGENT 2021 for the year 2023 in the amount of 3.73 €/(kWh/h)/year, including a discount of 10% for dynamically allocable capacities (DZK). This reference price is only used for the profitability test and will not be part of the contract.

Indicative reference price THE for 2023	3.73 €/(kWh/h)/a
Rebate for DZK (10 %)	3.357 €/(kWh/h)/a

Table 5: Calculation Reference price

The reference price was used in the calculation of the present values of all expected commitments by network users to contract the respective capacities in the period 2028-2043 in a non-inflationary manner. Thus, a possible future increase in the reference price was not taken into account.

The deviations of the reference price from the publications of the consulted technical study, result from the meanwhile published determination REGENT 2021 of 11.09.2020.

Since a new IP to be created is planned, there are no existing capacities and the assumptions regarding the booking of the incremental capacities are explained below.

The f-factor proposed as follows:

a) According to Art. 8 (8) NC CAM as well as according to BNetzA regulation BK7-15-001 (KARLA Gas), the technically available capacity to be retained amounts to 20% of the new technical capacity to be created in the respective supply level and amounts to 400,000 kWh/h.
   In the consultation of the technical study it was not assumed that all reserved capacities towards Switzerland will be fully booked every year, as there is no certainty regarding possible short-term bookings (NC CAM Article 23 (1) a)). This assessment was based in particular on the fact that, to the knowledge of the FNB, there is so far no possibility of reaching the Oltingue (FR) / Rodersdorf (CH) and Griespass (CH) / Passo Gries (IT) interconnection points from the new IP to be created in the Lake Constance region, which connect the market areas THE, Switzerland, France and Italy via the TRANSITGAS pipeline.
   The IP could therefore not be used to represent transit, but would be used to supply the adjacent distribution network on the Swiss side, according to the participating TSOs. For this reason, it seemed probable from the point of view of the participating TSOs that only during peak load periods would short-term bookings be made in the distribution network of the adjacent Swiss network operator to cover the additional demand that cannot be met via the connection in the direction of the TRANSITGAS system. Since extensive bookings

will already be necessary to pass the economic efficiency test, the TSOs assessed this additional demand in peak load periods in the technical study as largely covered by the existing bookings. For this reason, the TSOS did not consider any further short-term bookings of the reserved capacity.

This point was taken up in the comments and answered by the TSOs in Section 2.2 under point 5. On this basis, the TSOs maintain their assessment of this point from the technical study.

b) The TSOs could not identify any other positive effects under NC CAM Article 23(1)(b)

This point was taken up in the comments and answered by the TSOs in section 2.2 under point 3. On this basis, the TSOs maintain their assessment of this point from the technical study.

c) According to Art. 11 (3) NC CAM, bidding levels for incremental capacities may be offered in the context of annual auctions for a maximum period of 15 years from the beginning of operational use.
For the period from 2028/29 to 2042/43, the technical study assumed that the newly created capacities offered in the 2021 annual auctions would be fully booked. The economic life of the assets has been estimated in accordance with the regulatory and normal depreciation periods. The investment described refers, among other things, to the compressor station. In accordance with Annex I to Section 6 (5) of the Gas Network Access Ordinance (GasNZV), the regulatory and normal useful life for compressors is 25 years. The start of operational use is scheduled for 2028, the last depreciation for the compressor will therefore be in 2053. For the period from 2042/43 to 2052/53, it was assumed that the entire new technical capacities to be created will not be booked (NC CAM Article 23(1) c)). As already described, to the knowledge of the TSOs, the IP cannot be used to represent transits, but would essentially be used to supply the adjacent distribution network on the Swiss side. For this reason, it seems probable from the point of view of the TSOs involved that only during peak load periods would short-term bookings be made in the distribution network of the adjacent Swiss distribution network to cover this additional demand, which cannot be represented via the connection to the TRANSITGAS system. It therefore seems unlikely that significant bookings will be made, especially since the capacities for the period from 2042/43 to 2052/53 will only be marketed in annual auctions after July 2021 and are therefore not relevant for the economic viability test. This removes a major incentive for network users to make long-term bookings.
For these reasons, the FNB came to the conclusion within the framework of the technical studies consulted that no significant bookings in the period from 2042/43 onwards are to be expected and that accordingly no booking of the incremental capacities can be assumed for the economic test.

This point was taken up in the comments and answered by the TSOs in section 2.2 under point 4. On this basis, the TSOs maintain their assessment of this point from the technical study.

d) The relevant year for determining the time horizon of the economic lifetime and the economic test is 2053; for the period from 2053 onwards, no bookings were taken into account in the technical study either (NC CAM Article 23 (1) d)), as in the view of the FNB there is

no sufficient certainty that such bookings will actually be made, for the reasons stated above.
This point was taken up in the comments and answered by the FNB in section 2.2 under point 4. On this basis, the FNB maintains its assessment of this point from the technical study.

Offer level and corresponding booking status according to assumptions:

From	To	Offer Level 0, bookable existing capacity, KWh/h	Incremental capacity I, taking into account reservation quote of 20%, KWh/h	Total Offer Level I, KWh/h	Estimated bookings of incremental capacity, assumed for the economic test
01.10.2028	01.10.2043	0	1.600.000	1.600.000	1.600.000

Table 6: Estimated Bookings

After reviewing the comments received and re-examining the facts relevant to the f-factor, the f-factor determined by the TSOs under the assumptions described above remains 1.

Mandatory minimum premium according to. Art. 22 Abs. 1 lit. a Ziff. ii NC CAM:

Even after evaluating the comments and examining the assumptions made in the technical study, if all the incremental capacities were to be allocated at the reference price, there would still not be sufficient revenues to achieve a positive result in the performance audit. In such cases, Article 33 of "Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures" (NC TAR) provides that a mandatory minimum premium may be applied in the first auction or in the first alternative allocation mechanism in which the incremental capacity is offered. The mandatory minimum mark-up calculated under the assumptions described above for capacity reservations is 9,809€/kWh/h/a. Since the mandatory minimum premium may only be applied in the first annual auction and the f-factor is calculated as the ratio of the present value of the firm bookings in the first annual auction to the present value of all expected bookings of the respective capacities, an increase of the respective reference price by the mandatory minimum premium does not cause a mathematical adjustment of the f-factor of 1.

The calculations were made at an early stage of the procedure for incremental capacities and are based on assumptions that can be updated as the process progresses in accordance with the state of knowledge. In case of such an update of the assumptions, the calculated mandatory minimum premium may be adjusted accordingly.

Auction surcharge according to Art. 22 para. 1 lit. a NC CAM:

In the auctioning of incremental capacities pursuant to Art. 29 par. 1 NC CAM, the algorithm for multi-stage ascending price auctions pursuant to Art. 17 NC CAM shall be applied. This may result in an auction premium. This will only be known after the 2021 annual auctions. For this

reason it was not taken into account in the calculation of the f-factor, but must be included in the economic test.

2.5.5 Divergent marketing horizon (Art. 28(1)(e) NC CAM)

A different marketing horizon is not applied.

2.5.6 Alternative allocation mechanisms (Art. 28(1)(f) NC CAM)

An alternative allocation mechanism is not used.

2.5.7 Fixed price approach (Art. 28(1)(g) NC CAM)

Germany has a variable price system, so fixed prices are not applied.

3. Approval application

terranets bw GmbH, bayernets GmbH, Open Grid Europe GmbH and Fluxys TENP GmbH apply to the Federal Network Agency for approval of the contents listed in section 2. for the continuation of the procedure for incremental capacities according to NC CAM.

4. Contact Information

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