Demand assessment report for the incremental capacity process starting 2021 between the BeLux market area (ZTP) and the German market area Trading Hub Europe (THE)

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Market demand assessment report for Incremental capacity 2021

This report is a joint assessment of the potential for incremental capacity projects conducted by

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Table of contents

| Α. | No | n-binding Demand indications5 |
|---------|------|--|
| Β. | Der | nand assessment7 |
| i. S | | istorical usage pattern at interconnection points between the concerning entry-exit ns |
| | | Exit BeLux market area – aggregated9 |
| | b. | Entry THE market area – aggregated10 |
| ii | . R | elations to GRIPs, TYNDP, NDPs10 |
| ii | i. | Expected amount, direction and duration of demand for incremental capacity11 |
| | a. | Exit BeLux market area12 |
| | b. | Entry THE market area12 |
| C. | Cor | nclusion for the (non)-initiation of an incremental capacity project/process |
| | a. | Exit BeLux market area13 |
| | b. | Entry Trading Hub Europe13 |
| D. | Pro | visional timeline14 |
| E. | Inte | erim arrangements for the auction of existing capacity on the concerned IP(s)15 |
| F. | Fee | s15 |

A. Non-binding Demand indications

All inquiries received in the course of the demand period comply with the terms and conditions of participation and can be taken into account in the subsequent analysis.

| 0000 | | • | | | | |
|----------------------|----------------------|-----------|-------------------------|-------------------------------------|------------------------------------|--|
| From | То | Gas year | Amount | Request is sub- mitted to other | Period when De- mand Indication | Additional Information |
| [entry-exit | [entry-exit sys- | [yyyy/yy] | [Please indi- | TSOs | was received* | (e.g. type of capacity, if different |
| system name] | tem name] | | cate unit: (kWh/h)/y | [yes, TSO] or [no] | [please include | from bundled firm freely alloca- ble) |
| "EXIT CAPAC- | "ENTRY CAPAC- | | or (kWh/d)/y] | (detailed infor- mation shall be | the period ac- cording to the | |
| ITY" | ITY" | | (| provided below) | numbers A) - C)] | |
| Belgium ¹ | Germany | 2023/24 – | 4,200,000 | [no] | В | |
| | | 2026/27 | kWh/h/y | | | |
| Belgium ² | Germany | 2027/28 – | 16,800,000 | [no] | В | |
| | | 2043/44 | kWh/h/y | | | |

The following aggregated non-binding demand indications for firm capacity have been used as a basis for this demand assessment:

* The following standardised period shall be used for indicating the receiving date of the demand indication:

- A. later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- B. within eight weeks after this year's yearly capacity auction (0 8 weeks after yearly auction in year);
- C. later than eight weeks after this year's yearly capacity auction, but that will be considered in this incremental capacity cycle (9 16 weeks after yearly auction in year).

¹ The non-binding demand indication was only submitted to the German TSOs addressing the German side of the border between the market areas BeLux and THE. Nevertheless, on the Belgium side of the border sufficient free technical capacity is available currently to satisfy the demand indication.

² The non-binding demand indication was only submitted to the German TSOs addressing the German side of the border between the market areas BeLux and THE. Nevertheless, on the Belgium side of the border sufficient free technical capacity is available currently to satisfy the demand indication.

| From [entry-exit system name] "EXIT CA- PACITY" | To [entry-exit sys- tem name] "ENTRY CAPAC- ITY" | Gas year [yyyy/yy] | Amount [Please indi- cate unit: (kWh/h)/y or (kWh/d)/y] | Request is sub- mitted to other TSOs [yes, TSO] or [no] (detailed infor- mation shall be provided below) | Conditions** [please in- clude the let- ter(s) a) to d) and describe the conditions in more detail below] | Period when Demand Indica- tion was re- ceived* [please include the period ac- cording to the numbers A) - C)] | Additional Infor- mation (e.g. type of capac- ity, if different from bundled firm freely allocable) |
|--|--|-----------------------|---|--|--|---|--|
| | No non-binding demand indication was received. | | | | | | |

The following table shows the non-binding demand indications, where a condition was attached by the network users:

- * The following standardised period shall be used for indicating the receiving date of the demand indication:
- A. later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- B. within eight weeks after this year's yearly capacity auction (0 8 weeks after yearly auction in year);
- C. later than eight weeks after this year's yearly capacity auction, but that will be considered in this incremental capacity cycle (9 16 weeks after yearly auction in year).
- ** The following standardised terminology shall be used for describing the conditions:
 - a) commitments linking or excluding commitments at other interconnection points;
 - b) commitments across a number of different yearly standard capacity products at an interconnection point;
 - c) commitments conditional on the allocation of a specific or minimum amount of capacity;
 - d) other.

B. Demand assessment

Merger of the German entry-exit-systems

Since 1st October 2021 the single nationwide German gas market area Trading Hub Europe is operative. The merger of the two German entry-exit-systems was triggered on 7th July 2017, when the German Bundesrat (Federal Council) approved the revision of the German Gas Grid Access Ordinance (GasNZV) which in §21 (1) s.2 obliged TSOs to merge the existing two entry-exit-systems within Germany until 1st April 2022. The merger implied that interconnection points between the entry-exit-systems to be transformed to inter-TSO exchange points and due to the fact that capacities eventually will not be bookable for transports, TSOs stopped marketing the respective capacities as of the date of the entry-into-force of the revised GasNZV for transports taking place after the merger.

Implementation of virtual interconnection points

Article 19 (9) of the Regulation (EU) 2017/459 (CAM NC) foresees the establishment of virtual interconnection points (VIP). Due to the merger of the two German market areas conducted 1st October 2021 the currently existing VIP Belgium – NCG and IP Eynatten (GASCADE) will probably be merged to the VIP THE-ZTP the 1st April 2022.

| Interconnection | | | |
|-----------------------|------------------|---------------------|-----------------------|
| Point: | VIP THE-ZTP | | |
| Energy Identification | | | |
| Code: | 21Z102938475601E | | |
| | | | |
| Entry-exit-system: | BeLux | Entry-exit-system | THE |
| | | | Fluxys TENP, GASCADE, |
| Transmission System | | Transmission System | Open Grid Europe, |
| Operator: | Fluxys Belgium | Operator: | Thyssengas |

Specifics regarding the interconnection point Remich

With the creation of an integrated Belgian/Luxembourg market, the interconnection point Remich connecting Germany and Luxembourg is part of the new integrated market BeLux as of 1st October 2015. According to Article 2 (3) CAM NC, the regulation shall not apply to interconnection point Remich as Luxembourg holds a derogation according to Article 49 of Directive 2009/73/EC. Therefore, the interconnection point Remich does not have to be considered in this demand assessment report for the incremental capacity process. In addition, no technical capacity is available at Remich from BeLux to Germany on the BeLux side of the border.

Specifics of the assessed demand indication

i. Historical usage pattern at interconnection points between the concerning entry-exit systems

For the incremental capacity cycle addressed by this report non-binding market demand indications were received. Therefore, an analysis of the historical capacity utilization between the entry-exit systems ZTP and THE is given to support the assessment of a future demand for incremental capacity.

This analysis is performed separately for each side of the following interconnection points which connect the aforementioned entry-exits systems and for each direction, for which non-binding demand indications were received, in the current report the direction from the Belux market area to the market area Trading Hub Europe.

To support the assessment of incremental capacity, demand the interconnection point specific analysis is aggregated to entry-exit-system level by the addition of the respective parameters of the single (virtual) interconnection points. The analysis is also performed separately for each side of the border, as technical and commercial parameters can differ significantly for a number of reasons.

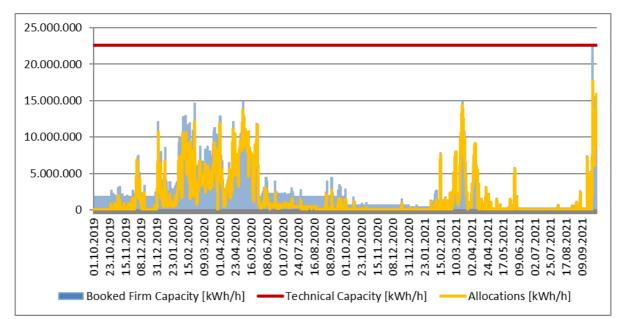
For the analysis the technical capacity, the booked firm capacity and the final confirmed quantities according to Article 3 (8) of Regulation (EU) Nr. 312/2014 (BAL NC) are presented on an hourly scale. For the confirmed quantities no distinction between transports in firm or interruptible capacities is performed. The analysis is performed for the time frame 01.10.2019 06:00 hrs – 01.10.2021 06:00 hrs.

The following interconnection Points connect the aforementioned entry-exit system and are suitable to fulfill the demand indications received:

| Interconnection | | | |
|---------------------------------------|-----------------|---------------------|------------------------|
| Point: Eynatten 2 / VIP Belgium - NCG | | | |
| Energy Identification | | | |
| Code: | 21Z00000000497Z | | |
| | | | |
| Entry-exit-system: | BeLux | Entry-exit-system | THE |
| Transmission System | | Transmission System | Fluxys TENP, Open Grid |
| Operator: | Fluxys Belgium | Operator: | Europe, Thyssengas |

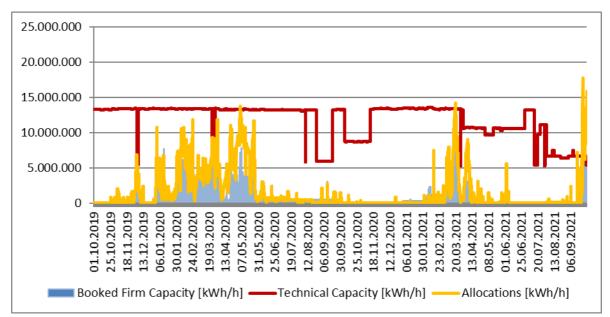
| Interconnection | | | |
|-----------------------|----------------------|---------------------|---------|
| Point: | Eynatten 1/ Eynatten | | |
| Energy Identification | | | |
| Code: | 21Z000000000155 | | |
| | | | |
| Entry-exit-system: | BeLux | Entry-exit-system | THE |
| Transmission System | | Transmission System | |
| Operator: | Fluxys Belgium | Operator: | GASCADE |

In addition, depending on the outcome of the analysis of the historical usage patterns an analysis of both the implementation and application of Congestion Management Procedures required by the CMP Guidelines and the possibility for and the actual use of capacity trading on the secondary market is performed. But as this analysis should not be an end in itself it is only performed if any sustained contractual congestion at the respective border is visible in the historic usage pattern.



a. Exit BeLux market area – aggregated

As a summary no sustained congestion is visible in the historic analysis that would indicate the need for additional firm capacity for the direction Exit German market area. Therefore, no further analysis in respect to congestion management procedures and secondary marketing is performed.



b. Entry THE market area – aggregated

Although the confirmed quantities exceeded the technical capacity for a number of times sufficient firm capacity is available in the future to meet all existing demand. For these reasons, no further analysis of congestion management procedures and secondary marketing is performed.

ii. Relations to GRIPs, TYNDP, NDPs

German side:

The last confirmed German national development plan for gas NDP 2020-2030 was published in May 2021 and is legally binding. The NDP 2020-2030 does not mention any specific measures with an impact on the coverage of demand in connection with the interconnection points stated above.

Neither the relevant Gas Regional Investment Plan (GRIP) nor the relevant Ten Year Network Development Plan (TYNDP) did identify a need for incremental capacity.

BeLux side:

None of the relevant GRIPs, TYNDP or NDPs identified a need for incremental capacity. This conclusion was further confirmed by the market not submitting any non-binding market demand indications.

iii. Expected amount, direction and duration of demand for incremental capacity

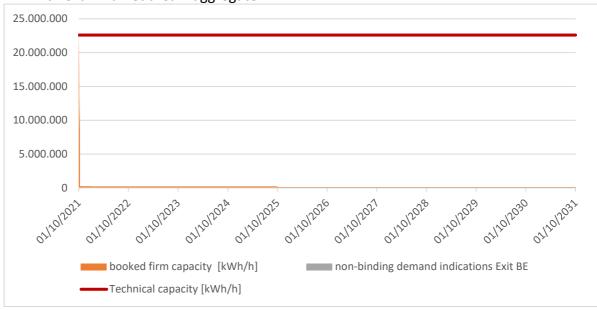
The assessment of the demand for incremental capacity will be conducted by analyzing the technical capacity, the booked firm capacity and the non-binding demand indications received for the relevant entry-exit-system border. The technical capacity relevant for the German side of the border is based on the last confirmed German national development plan for Gas (NDP 2020). The technical available capacity which has to be confirmed by the German regulator BNetzA on a yearly basis consists of the base capacity and additional capacity according to the tenor 3 lit. a) of the BNetzA decision regarding "the approval of a joint concept for an oversub-scription and buy-back scheme by German transmission system operators for additional capacity in the single German market area" (KAP+) from 25.03.2020 (BK7-19-037)³. Currently, German transmission system operators offer additional capacity in the annual auction of yearly capacity only for the following Gas Year.

Therefore, only technical freely allocable <u>base</u> capacity is taken into account in the following analysis and the additional capacity cannot be considered.

The technical capacity concerning the IPs of the BeLux market area is based on global simulations of the Belgian Grid, taking into account technical network limitations.

Projects currently under construction and planned projects are also taken into account according to ii. The booked firm capacity used for this analysis is based on the published data of the concerned transmission system operators.

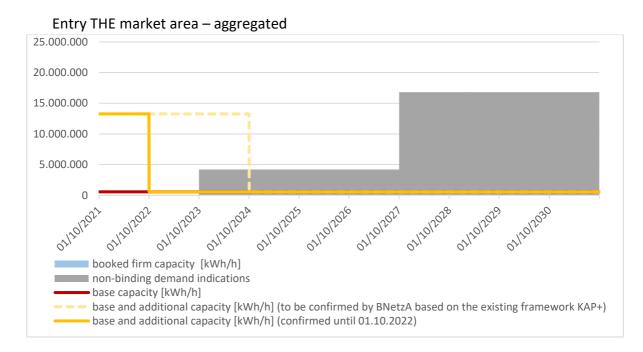
³ https://www.bundesnetzagentur.de/DE/Beschlusskammern/1_GZ/BK7-GZ/2019/BK7-19-0037/BK7-19-0037_Beschluss_EN_Download_Stand_28.04.20.pdf;jsessionid=0B35C306EDEEE1105C4821124A243B94?__blob=publication-File&v=3



a. Exit BeLux market area

Exit BeLux market area – aggregate

b. Entry THE market area



In order to determine whether a technical study is necessary, the criteria defined under Point C is checked. This check is carried out for each relevant entry-exit system. In conclusion, a statement is

made as to whether an incremental capacity project is initiated and whether technical studies need to be produced.

C. Conclusion for the (non)-initiation of an incremental capacity project/process

If a sustained expected demand for incremental capacity is identified on one side of the entry-exit system border the involved TSOs deem it necessary to conduct technical studies. Depending on whether a demand for incremental capacity is identified on one or both sides of the border of the entry-exit system an incremental capacity project will be started on one or both sides of the specific entry-exit system.

Deviations can occur only if there are justified individual instances.

If an incremental capacity project is initiated, then technical studies will be conducted for potentially all applicable IPs of the respective entry-exits system border for which the project was initiated. The specific IPs and TSOs for which technical studies will be conducted will be determined in the Design phase according to Article 27 of CAM NC. Thereby economical aspects and aspects of grid topology will be taken into account.

For the entry-exit systems addressed by this report the following conclusion for the (non)-initiation of an incremental capacity project/process is drawn:

a. Exit BeLux market area

The chart provided in B iii. a) confirms there is sufficient exit capacity from Belgium towards Germany (22,600 MWh/h) to match the request received on the German side of the border. This explains why Fluxys Belgium didn't receive any non-binding demand indication and justifies that no incremental capacity project/process nor technical studies needs to be initiated on the Belgian side of the border.

b. Entry Trading Hub Europe

The charts provided in B iii. b) indicate that the sum of both booked firm capacity and demanded incremental capacity are higher than the available base capacity. Based on the available technical capacity of 550.2 MWh/h (base capacity) the non-binding demand of 4,200 MWh/h (GY 2023/24 – GY 2026/27) and 16,800 MWh/h (GY 2027/28 – GY 2043/44) a demand for incremental capacity in the amount of 3,649.8 MWh/h (GY 2023/24 – GY 2026/27) and 16,249.8 MWh/h (GY 2027/28 – GY 2043/44) is identified. Therefore, Fluxys TENP, GASCADE, Open Grid Europe and Thyssengas do deem it necessary to start an incremental capacity project.

However, when the level of additional capacity for Gas Year 2021/22 according to tenor 3 lit. a) of KAP+ is considered, the technical capacity available at the market area border can fulfil the requested capacity to a high extent. Currently there is no regulatory framework for the additional capacity after 01.10.2024 due to timely limitation of KAP+. Depending on the possible decision of the BNetzA to extend KAP+ there might be additional capacity beyond 01.10.2024. During the design phase the transmission system operators will further investigate additional possibilities to meet the demand for incremental capacity also by taking into account the current level of additional capacity in order to optimize the potential network expansion. During the technical study, possible optimizations (for example potentials in course of the market conversion) will be investigated. Therefore, the identified demand for incremental capacity could change in the course of the project.

Furthermore, to the understanding of Fluxys Belgium some of previous investments were intended to connect the Zeebrugge area to the German market.

D. Provisional timeline

The involved TSOs have planned to conduct the technical studies and the consultation of the draft project proposal according to the following provisional timeline:

| Start Date End Date | | Description | | |
|---------------------|------------|--|--|--|
| 25.10.2021 | | Start of design phase | | |
| Calendar yea | r 2022 | Technical studies by TSOs | | |
| 18.01.2022 | | Publication of consultation documents | | |
| 18.01.2022 | 18.03.2022 | Public consultation | | |
| 18.03.2022 | 03.09.2022 | Planning of offer levels by TSOs in close coopera- | | |
| | | tion with NRAs | | |
| 05.09.2022 | 05.03.2023 | Approval and publication of the necessary pa- | | |
| | | rameters acc. to Art. 28 Para 1 NC CAM by NRAs | | |
| 05.03.2023 | 03.05.2023 | Adjustment of the offer levels according to NRA | | |
| | | decision by the TSOs | | |
| 03.05.2023 | | Publication of the approved parameters and of a | | |
| | | template of the contract(s) related to the capac- | | |
| | | ity to be offered for the incremental project | | |
| 03.07.2023 | | Yearly auction/economic test | | |

The stated dates have provisional character and are therefore subject to change.

If the economic test was positive, the project will feed into the national development process.

E. Interim arrangements for the auction of existing capacity on the concerned IP(s)

According to Article 26 (13) j) of NC CAM, the involved TSOs will offer capacities in compliance with Article 11 (3) of NC CAM. The total duration of the non-binding demand indications with relevance for this Demand Assessment Report spans from gas year 2023/24 to gas year 2043/44. Whether incremental capacity can be offered according to Article 11 (3) of NC CAM until the end of the requested timeframe will be clear when the transmission system operators identified necessary measures and the possible start of their operational usage.

F. Fees

For the incremental capacity cycle addressed in this report, none of the involved TSOs introduced a fee for the evaluation and processing of non-binding demand indications.

Demand assessment report for Incremental capacity

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