Draft project proposal of the incremental capacity project on the border between Poland and *GASPOOL*

– External document for publication –

2017-10-19

This document is a joint draft project proposal of the incremental capacity project on the border between Poland and GASPOOL commonly conducted by:

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This analysis concerns the draft project proposal on the incremental capacity project for the interconnection point (IP) GCP GAZ-SYSTEM/ONTRAS. This IP exists since 1 April 2016 and summarizes commercially the physical IPs Kamminke, Lasów and Gubin.

The Market Demand Assessment Report (MDAR) assessed the non-binding demand indication received in the demand assessment phase from 6 April 2017 until 1 June 2017. Based on the outcome of the MDAR for the incremental capacity process starting in 2017 between Poland and GASPOOL and published on both TSOs websites on 27 July 2017, concerned TSOs have begun the design phase based on Article 27 of NC CAM. This document is the result of the technical studies and calculations held by ONTRAS and GAZ-SYSTEM.

Assumptions presented in the following document might be adjusted based on this market consultation. The consultation will be a two months public consultation starting on 19 October 2017 and ending on 19 December 2017.

In this document the following abbreviations are used: NC CAM = Commission Regulation (EU) 2017/459; NC TAR = Commission Regulation (EU) 2017/460.

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1. Description of the incremental capacity project

This section describes the common draft project proposal for incremental capacity on the border between Poland and GASPOOL based on the relevant technical studies conducted by GAZ-SYSTEM and ONTRAS. The description includes also a cost estimate.

The incremental capacity project is being held for the IP GCP GAZ-SYSTEM/ONTRAS. The demand for incremental capacity has been indicated in the direction Poland to GASPOOL.

To meet the indicated demand for incremental capacity at this IP, GAZ-SYSTEM and ONTRAS conducted analyses related to the technical development of the Lasów gas station. However, the incremental capacity will be auctioned together with already existing capacity for this IP.

1.1. Description of the project on GASPOOL side (ONTRAS)

Prepended to this project description, ONTRAS would like to highlight the following: The Federal Council of Germany accepted the new amendment to the German Network Access Regulation (GasNZV) in its meeting on 7 July 2017. § 21 Para. 1 (2) of the amended regulation obliges German TSOs to merge two existing entry-exit zones (GASPOOL and NetConnectGermany) into one single entry-exit zone until 1 April 2022. The entry into force of this amended regulation was in August 2017.

In the course of this incremental capacity process, the new rules and obligations stemming from this regulation have to be analyzed and these changes might have an influence on the decision of the final offer-levels and its conditions for the marketing in 2019, as until now different capacity calculating methodologies are applied in the market areas GASPOOL and NetConnectGermany. To implement the German market area merger it will be necessary to develop a joint capacity model valid for the merged German market areas. Due to its complexity, the development of the required joint capacity model will not be finished in time to be used during the current incremental capacity cycle. Despite this, the project description for the demanded incremental capacity on ONTRAS side is as follows.

<u>Expansion required within the ONTRAS grid</u>

Corresponding to arrangements with the Polish grid operator GAZ-SYSTEM pressure greater than 55 bar and as circumstances require even up to 84 bar shall be provided in the event of gas flow from Poland to Germany with a quantity of up to 2,025,676 kWh/h/y from the Polish gas system. This capacity quantity was indicated by the market for the TSO ONTRAS and was published ONTRAS's Market Demand Assessment Report.

On German side the pipeline FGL 218.01 with a design pressure of 84 bar was constructed in the year 1992; however, since commissioning it has only been operated with a maximum operating pressure of 55 bar. The operating pressure in recent years was 40 bar on the average.

If, in contrast to the main direction of flow in recent years, there is a gas flow from Poland to Germany in future, then future pressure relief for the following ONTRAS system shall take place here through installation of a pressure security system [DÜG] in Zodel directly at the German-Polish border.

The pressure security system is required as security for connecting a gas system having a lower maximum permissible operating pressure (ONTRAS) with a gas system having a higher maximum permissible operating pressure (GAZ-SYSTEM) and is implemented on the basis of DVGW Worksheet G 491 (German Technical and Scientific Association for Gas and Water).

Thus, pressure safety for FGL 218.01 in future shall take place at the Zodel pressure security system with MOP 55 bar in the case of gas flow from Poland to Germany.

Development measure at the Zodel pressure security system:

Construction of a pressure security system [DÜG] in Zodel is required in order to provide pressure safety for FGL 218.01 with MOP 55 bar at Lasów. The specification of the pressure security system [DÜG] at Zodel takes remote-controlled design of the valves of the active compression stage (surface) and manually-controlled design of the valves of the passive compression stage (underground) into consideration.

Execution of the active pressure security system (bi-directional operation), among other things, with:

- branch with T-piece DN 500/400 with pig guide bar as lacing from FGL 218.01 DN 500 DP 84
- shut-off valve, underground valve, manual control (shaft extension with valve box),
- shut-off device [SAE], underground valve
- quantity measurement (ultrasound measurement) with upstream and downstream DN 400 (measuring space)
- controller, surface valve, bi-directional operation, with double-sided protective sieve
- measuring points/relief lines
- shut-off device [SAE] as underground valve
- output valve as underground valve
- connection to FGL 218.01 with T-piece DN 500/400 with pig guide bar
- Execution of the passive compression stage, among other things with:
- shut-off valve as underground valve,
- valve for starting manual control (shaft extension with valve box)
- measuring points/relief lines

Execution of the passive pressure security system, among other things with:

- shut-off valve as underground valve,
- valve for starting manual control (shaft extension with valve box)
- measuring points/relief lines

Schedule

Co-ordination, planning, approval, construction and commissioning for new building of Zodel pressure security system at least three years.

1.2. Description of the project on Polish side (GAZ-SYSTEM)

Expansion required within the GAZ-SYSTEM grid

In order to ensure the possibility of transporting gas in direction from Poland to Germany with maximum capacity on the level of 2,025,676 kWh/h, the extension of the Kiełczów gas node is required.

This extension will include in particular installation of:
- two control valves
- one meter run equipped with an ultrasonic gas meter

Schedule

Estimated time of the investment - 30 months.

1.3. Cost estimation on GASPOOL side (ONTRAS)

Approximately EUR 2.6 million (rough cost estimate +/- 30 per cent) in costs are required for construction of the Zodel pressure security system.

1.4. Cost estimation on Polish side (GAZ-SYSTEM)

Approximately EUR 1 million (rough cost estimate +/- 30 per cent) is required for extension of Kiełczów node.

2. Offer level for bundled capacity products

The table below shows the common bundled offer-level for marketing in the yearly capacity auction in 2019 for GAZ-SYSTEM and ONTRAS taking into account the obligations of set aside capacity of NC CAM. For the application of set aside capacity, ONTRAS follows the currently valid decision of the BNetzA (BK7-15-001 (KARLA Gas)) and considers a 20% reservation quota for existing and incremental capacity as of gas year 2024. For the gas years before, a 10% reservation quota is applied for existing and incremental capacity. For application of set aside capacity, GAZ-SYSTEM follows the same approach in order to offer joint amount of bundled capacity.

The amount of capacity to be offered during yearly auction in 2019 may differ due to the network users right to capacity surrender. The amount to be offered will be calculated based on the calculation methodology described in Article 11 (6) NC CAM.

Year	From 2022/2023 To 2023/2024	From 2024/2025 To 2033/2034	From 2034/2035 To 2036/2037
Offer Level [kWh/h]	1,826,370	1,623,440	1,620,541
Incremental Capacity [kWh/h]	1,823,108	1,620,541	1,620,541
Existing Capacity [kWh/h]	3,262	2,899	0

3. Alternative allocation mechanism for incremental capacity

Both TSOs have commonly decided to use the standard auction allocation process for allocating the incremental capacity based on the outcome of this consultation.

4. Provisional timeline

The incremental capacity project will generally follow this timeline. However, the construction phase will only start if there is a commitment of the market to acquire the respective incremental capacities in the yearly auction 2019 and if there is a positive result in the economic test afterwards for each of the concerned TSO. Showed times might change.

Start Date	**End Date**	**Description**
19.12.2017	19.03.2018 – 01.09.2018	Planning of offer-levels by the TSO in close cooperation with NRAs
19.03.2018 – 01.09.2018	19.09.2018 – 01.03.2019	Approval and publication of the necessary parameters acc. to Art. 28 (1) NC CAM by NRAs
19.09.2018 – 01.03.2019	01.05.2019	Adjustment of the offer levels according to NRA decision by the TSOs
01.05.2019		Publication of the approved parameters and of a template of the contract(s) related to the capacity to be offered for the incremental project
01.07.2019		Yearly capacity auction and economic test

5. General rules and conditions for participating in the capacity auctions

For each TSO general rules and conditions have been developed for the participation in the capacity auctions for incremental capacities in 2019. These are attached to this consultation document. Legally binding for the transport customer is always the version of the general terms and conditions in the national language of the respective TSO.

6. Information on the fixed price approach for the allocation of incremental capacity

Neither GAZ-SYSTEM nor ONTRAS will follow a fixed price approach for the incremental capacity project.

7. Estimation of the f-factor

7.1. f-factor of ONTRAS

ONTRAS expects a continuous booking of capacity of 100,000 (kWh/h)/a on average in all years of the expected lifetime. For the first 15 gas years where incremental capacity will be offered, ONTRAS expects a split of bookings: (1) as a result of the auction of incremental capacity long-term annual bookings of 50,000 (kWh/h)/a and (2) later short-term bookings of 50,000 (kWh/h)/a. In addition, ONTRAS sees no positive externalities of the project.

Based on of the above considerations, ONTRAS proposes to set the f-factor on the level of 0.24. The calculation is presented in the separate document "Kalkulationstool_Wirtschaftlichkeits-prüfung_Gas_BNETZA_PL-GP" attached to this consultation document. The tariffs used to calculate the net present value of the bookings are not binding and calculated using the current tariff of the entry point GCP GAZ-SYSTEM/ONTRAS and an estimated inflation rate. Please take note, that the floating payable price according to Article 24 (a) NC TAR will be calculated using the price for a standard capacity product applicable at the time when this product may be used and can be different from the tariffs used to calculate the f-factor.

7.2. f-factor of GAZ-SYSTEM

Proposed by GAZ-SYSTEM estimated level of the f-factor on GAZ-SYSTEM side shall be determined as 1. The project has no relevance to the Polish security of supply situation, neither is considered as PCI project. Therefore, GAZ-SYSTEM estimated the f-factor with the assumption that the given incremental capacity project is a market project and its costs shall be covered by the market.

8. Information on additional demand indications

Neither GAZ-SYSTEM nor ONTRAS have received any additional demand indications in accordance with Article 26 (7) NC CAM.

9. Information on a possible impact on other non-depreciated gas infrastructure in the same and adjacent entry-exit systems

The realization of this incremental capacity project will not lead in a sustained and significant decrease in the utilization of other existing gas infrastructures in the two entry-exit systems.

10. Contact information

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