



- Department 6 -

Ref: 8615-NDP Gas 2018-2028 Consultation NDP Gas

16 April 2018

Gas Network Development Plan (NDP) 2018-2028 drafted by the transmission system operators

Consultation on the draft Gas NDP 2018-2028 presented by the transmission system operators (as at 29 March 2018)

The transmission system operators (TSOs) submitted the draft of a joint national NDP to the Bundesnetzagentur on 29 March 2018 in accordance with section 15a of the Energy Industry Act (EnWG). The Bundesnetzagentur is now seeking views on the draft NDP from all current and potential network users, as provided for by section 15a(3) EnWG.

The TSOs' draft Gas NDP 2018-2028 is available on the Bundesnetzagentur's website at www.bundesnetzagentur.de/NEPGas2018. The Bundesnetzagentur invites you to structure your comments and views as set out below. Respondents are free to comment on some or all of the following points or on any other issues:

1. Introduction (draft Gas NDP 2018-2028 section 1)

1.1. Market area merger

1.1.1. According to section 21(1) of the Gas Network Access Ordinance (GasNZV), the TSOs must merge the two existing market areas to form one joint area no later than 1 April 2022. In the draft Gas NDP 2018-2028, the TSOs state that a joint capacity model must first be developed in order for this decision to be implemented in network planning. The modelling underlying the Gas NDP 2018-2028, therefore, is based on the existing capacity models for the two market areas. How do you believe the future merger of market areas should be included in the upcoming scenario framework for the Gas NDP 2020-2030? What do you believe should be the main points of focus in the development of the capacity model for the joint market area?

1.1.2. In the scenario framework for the Gas NDP 2020-2030, should the TSOs use multiple modelling variants that focus more on the market area merger in order, for example, to examine the network expansion costs in relation to various levels of firm capacity aimed at in the long term? What approaches might be used for such modelling variants? Please give reasons for your answer.

1.2. Gas NDP database

1.2.1. How do you rate the clarity and comprehensibility of the database for the Gas NDP? Does it contain all necessary data, and is the data that is relevant to you easy to access? Please give, for instance, specific suggestions for changes or information to improve transparency.

1.2.2. Please comment on specific input parameters and indicate any errors requiring correction.

2. Scenario framework (section 2)

2.1. Assumptions about German gas demand

Do you consider the methodology used to determine gas demand to be appropriate? Should the same methodology be used in the scenario framework for the Gas NDP 2020-2030? What alternative approaches could be advantageous?

2.2. Modelling variants

2.2.1. Where do you generally see potential to further develop modelling specifications? What is the basis for this assessment?

2.2.2. Which other modelling variants would be relevant to future network development planning in your opinion and why?

2.3. Key input parameters used for modelling

How do you rate the modelling of the capacity of the different network users? Have capacity requirements been sufficiently taken into account? Please answer according to the following categories:

2.3.1. Distribution networks

What do you think of how the DSO demand is taken into account in the modelling?

2.3.2. **Gas power plants**

Do you consider the assignment of new gas power plants to the storage facilities/cross-border interconnection points for the purpose of modelling with firm dynamically allocable capacities to be comprehensible? Do you think the assigned storage facilities/cross-border interconnection points have sufficient liquidity? What alternative storage facilities/cross-border interconnection points could be assigned to individual power plants?

How do you rate the cluster approach to take account of requested capacity for new power plants in southern Germany? Do you think this approach is appropriate?

2.3.3. **Industry**

What do you think of how industrial demand is taken into account in the NDP modelling?

2.3.4. **Gas storage facilities**

The capacity requests of the storage facilities included in the scenario framework for the Gas NDP 2018-2028 were taken into account in the modelling as shown in the database. In addition, the requirements of the Bundesnetzagentur in the confirmation of the scenario framework also apply, in particular operative part 3 with regard to the capacity modelling of the existing storage facility Inzenham West with temperature-dependent capacity. Do you believe there are other existing facilities that should be modelled with a different type of capacity to the one used this time? Please give reasons for your answer.

2.3.5. **LNG facilities**

The 8,700 MW/h of capacity requested for the LNG facility in Brunsbüttel in accordance with the expansion request under section 39 GasNZV was modelled with a firm, dynamically allocable capacity, as shown in the NDP database. Do you consider this approach to be appropriate?

2.3.6. **Exchange capacity at market area interconnection points**

What do you think of how demand at market area interconnection points is taken into account in the NDP modelling?

2.3.7. **Capacity at cross-border interconnection points**

What do you think of how demand at cross-border interconnection points is taken into account in the modelling?

2.3.8. Distribution of H-gas sources

What do you think of how the distribution of H-gas sources is taken into account in the modelling?

3. Transmission network modelling (section 3)

3.1. Premises of storage variant

3.1.1. How do you rate the premises and major assumptions used for the storage variant?

3.1.2. How do you rate the basic approach of the TSOs? Do you consider this methodological approach to be appropriate?

3.2. Premises of the supply security variant TENP

How do you rate the relevance of this modelling variant? Are the assumptions and adjustments made for the input parameters in comparison to the basic variant appropriate and do you consider them to be sufficient?

4. Current transmission network and status quo of grid expansion (section 4)

4.1. How do you rate the assignment of measures to the "start network"? Does the "start network" contain all the measures that it should? If not, which ones are missing?

4.2. How do you rate the transparency of the information provided about the current state of implementation of the Gas NDP 2016-2026? How do you rate the presentation in table 17 of the state of implementation of NDP measures as at 31 December 2017, which is different to the presentation in the previous NDP? Do you see any particular problems arising for you from individual measures whose implementation is delayed?

4.3. How do you rate the analysis of interruptions carried out in the NDP Gas 2018-2028 (section 4.5)? Which conclusions are to be drawn from the results of the analysis?

5. Development of L-gas supply (section 5)

5.1. Do you consider the L-gas capacity and volume balance to be reasonably presented and correct in its assumptions? In your answer, please differentiate as far as possible between "domestic production", "imports from the Netherlands", "storage facilities", "conversion" and "L-gas demand".

- 5.2. How do you rate the identifying and ordering of areas for conversion? Do any changes need to be made here?
- 5.3. The TSOs have announced that they will develop conversion plans for L-gas storage. What information do you believe should be included in these conversion plans? What other information is needed for the conversion process of L-gas storage?
- 5.4. Have all other important aspects of market conversion that could affect the transmission networks directly or indirectly been taken into account? This could include challenges resulting from fluctuations in calorific value, for example.
- 5.5. Do you believe other measures are possible, suitable and necessary to take account of ongoing developments in the Netherlands, such as the construction or expansion of conversion plants or h/L-gas mixing plants or bringing forward the conversion of major final consumers? Please give reasons for your answer that are as specific as possible.

6. Development of H-gas supply (section 6)

6.1. H-gas capacity balance

- 6.1.1. Is the capacity balance comprehensible? How do you rate the assumptions made about the capacity balance? Please give alternative suggestions, if applicable.
- 6.1.2. What do you think of how cross-border interconnection points and LNG facilities are taken into account in the H-gas balance?
- 6.1.3. What do you think of how storage facilities are taken into account in the H-gas balance, especially with regard to the facilities that have to be converted from L-gas to H-gas?
- 6.1.4. What do you think of how German production is taken into account?
- 6.1.5. What do you think of how demand is taken into account?

6.2. Distribution of H-gas sources

- 6.2.1. How do you rate the attribution of the additional gas feed-in volumes resulting from the forecast distribution of H-gas sources to the cross-border interconnection points? Is it transparent and comprehensible? Is proper account taken of adjacent infrastructure in neighbouring countries?

- 6.2.2. Do any specific changes need to be made in certain entry regions? Please give reasons for your answer.
- 6.2.3. What alternative way of attributing the forecast additional gas feed-in volumes to specific cross-border interconnection points do you see within the distribution of sources? Please expand upon your opinion, if possible stating specific facts and numbers.
- 6.2.4. The incremental capacity process pursuant to the European Network Code on Capacity Allocation Mechanisms (NC CAM) will in future be used for incremental capacity at cross-border interconnection points. How do you believe the incremental capacity process should be included in future network development planning?

6.3. Consideration of other countries' NDPs and ENTSOG's TYNDP

Do the cross-border interconnection points take sufficient account of all the necessary factors such as demand in other countries/adjacent market areas, findings from the Community-wide network development plan (ENTSOG TYNDP), projects of common interest in Annex I of the trans-European energy infrastructure Regulation (Regulation (EU) No 347/2013) and future developments (eg expected changes in gas flow)? Are there contradictory approaches compared to other NDPs? Are there any important influencing factors from other countries that affect network expansion in Germany and that have been omitted?

7. Modelling results and network expansion measures (sections 7 and 8)

7.1. Modelling results – basic variant

The TSOs propose the network expansion measures from the basic variant. This includes the "start network" measures as per section 4.1. How do you rate the details of the network expansion proposal?

- 7.1.1. Are all the projects included that are necessary to ensure adequate network expansion to meet long-term capacity requirements, or are certain measures missing?
- 7.1.2. Conversely, are certain measures unnecessary?
- 7.1.3. What individual measures should be implemented sooner than planned in order to meet your capacity demand? Please give reasons for your answer.

Please give the identification number(s) when commenting on individual expansion measures.

7.2. Modelling results – storage variants

7.2.1. How do you rate the results of this modelling variant, both with regard to certain, regional/local storage requirements in the network areas under consideration and with regard to the discussion of the results by the TSOs?

7.3. Assessment of the criteria for the calculation of network expansion costs

7.3.1. How do you rate the approach used to determine network expansion costs? What is your opinion on the adjustment of rates?

7.4. Proposal of specific network expansion measures by TSOs for Gas NDP 2018-2028

7.4.1. How do you rate the clarity of presentation of the proposed network expansion measures and the reasons given for them?

7.4.2. How do you rate the transparency and comprehensibility of the Gas NDP 2018-2028 in general? Where is there need for more detailed explanations? Where would a different presentation be preferable?

7.4.3. How do you rate the division into sub-projects, carried out in accordance with the Bundesnetzagentur's requirements in the confirmation of the scenario framework for the Gas NDP 2018-2028? Do you think the presentation of the proposed projects has been improved? Do you think there is further room for improvement with regard to the transparency of content of the Gas NDP?

8. Implementation report for the Gas NDP 2018-2028

8.1. In your opinion, what specific content should be contained in the implementation report for the Gas NDP, which TSOs have to submit by 1 April 2019?

Market players are hereby invited to comment on the draft NDP Gas 2018-2028 (as at 29 March 2018) and on the above questions. Comments may be made jointly and should be submitted in electronic format (eg data stick or email) **by Friday, 25 May 2018** to:

Bundesnetzagentur

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The Bundesnetzagentur intends to publish the original responses on its website and so would ask respondents to give their consent to publication when they submit their comments. If your response contains confidential information, please send us an additional version with this information blacked out.

In addition to the written consultation process, the Bundesnetzagentur intends to hold a public workshop to provide all current and potential network users with the opportunity to comment in person on the draft Gas NDP 2018-2028. This workshop will take place at the Bundesnetzagentur's offices (Tulpenfeld 4, 53113 Bonn) on

Tuesday, 15 May 2018.

If you would like to attend this public workshop, please register online by **Friday, 4 May 2018** at the latest. You can find a provisional agenda and the online registration form on the Bundesnetzagentur's website by following the link below:

www.bundesnetzagentur.de/anmeldung-nep

Please note that for organisational reasons it is not possible to register by email.