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MEMO

INFORMATION ABOUT GAS SUPPLY AND DEMAND 2023-2024

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1. Background

This memo is an update on the possible supply and demand situation during the Tyra redevelopment phase focused on the gas year 2023-2024. This memo follows up on the memos and supplementary graphics published on Energinet's webpage since September 2019¹.

2. Summary

The European gas supply situation is still affected by the war in Ukraine and the reduction in gas supply from Russia. The European situation dominates the Danish supply situation with strong connections to Germany, Norway, and Poland.

Most of the Danish gas production in the North Sea is closed until March 2024, as announced in September 2023. This leaves the Danish gas transmission system less flexible and more vulnerable to potential incidents. On the other hand, commissioning of the Baltic Pipe (hereafter BP) and the connection to Norway via Europipe II (hereafter EPII) in Autumn 2022 provide additional import capacity to the Danish gas transmission system. It is, therefore, Energinet's assessment that the Danish and Swedish consumers will continue to experience a robust Danish gas transmission infrastructure until and after the reopening of the Tyra platform.

Nevertheless, the European gas supply situation as well as volatile gas prices call for increased attention for all actors on the European gas market. This statement is in line with the declaration of the crisis level Early Warning on June 20, 2022, by the Danish Energy Authorities (hereafter DEA)².

Several parameters will influence the actual situation until Tyra's expected recommissioning. Based on the now known prerequisites the market players must continue to:

- prepare themselves by sufficient storage reservations to ensure safe supply during a winter with possible gas deficit in Europe,
- keep gas in storage to secure own obligations with special attention to the period from February to April where storage filling can be critical,
- consider uncertainties related to variation in demand, supply, and potential other incidents affecting the gas infrastructure.

These actions will reduce the risk of severe imbalances in the transmission system which could lead to crisis level Emergency and possibly even interruption of non-protected customers.

3. Possible supply and demand situation in 2023-2024

In Autumn 2022, import from Norway via the connection to EPII and export to/import from Poland via BP were introduced into the Danish gas transmission system. This along with gas supply from South Arne, biogas, Germany, and gas storage facilities in Lille Torup and Stenlille deliver a robust flexibility to supply the Danish gas consumers as well as maintain gas export to neighbouring countries.

The actual supply and demand situation for 2023-2024 will depend on several important parameters including capacity utilization, storage filling, actual weather, and consumption, but most important the overall European supply situation. These factors should be considered by the commercial players.

¹ <https://en.energinet.dk/Gas/Tyra/Supply-situation>

² <https://ens.dk/presse/energistyrelsen-erklarer-early-warning>

4. Development since November 2022

Since the memo published in November 2022, the main developments are the following:

- The general European energy market and supply situation are still affected by e.g., the war in Ukraine.
- The Tyra platform has been announced to restart on March 31, 2024³.
- The absolute storage filling in the Danish gas storage facilities is 9.043 GWh on October 1st, 2023. This is comparable to the storage filling on October 1st, 2022 (approx. 9.018 GWh). The total storage filling can be followed on the Energinet Webpage⁴.
- A 90 % filling of the Danish gas storages relative to the technical storage capacity is required on November 1st, 2023, by the EU filling targets⁵. Subsequent filling targets are introduced in February, May, July, and September.
- The European Commission has amended regulation 2022/1369⁶ as regards to prolonging the demand-reduction period for demand-reduction measures for gas and reinforcing the reporting and monitoring of their implementation⁷.
- New tariffs for 2023/2024 have been published⁸.
- In August 2023, the share of upgraded biomethane production compared to pipeline gas consumption in Denmark seen over the past 12 months reached 39,3 %⁹.

5. What happens in case of Emergency?

According to the EU Regulation concerning security of gas supply¹⁰, three crisis levels exist: Early warning, Alert and Emergency.

If the Danish gas transmission system reaches a critical imbalance it will be necessary to declare Emergency. The declaration of Emergency allows access to the Emergency storage volumes and other non-market-based instruments such as possible interruption of non-protected customers.

If crisis level Emergency is declared, it might lead to different consequences depending on the actual incident:

- Emergency for shorter periods and use of Energinet's emergency storage. No interruption of customers.
- Emergency for 30 days or more with full or partial interruption of non-protected customers¹¹ in Denmark.

Energinet will adapt actions to the level required by the actual incident.

Energinet's stored volume reservation (emergency gas) is reserved for emergency purposes. According to the regulation it must be secured that the protected customers can be supplied with gas for a period of at least 30 days in long term incidents. In 2023/2024, Energinet System Operator has reserved 1.700 GWh in Emergency storage filling from Gas Storage Denmark and

³ <https://www.gashub.at/remitt/details.xhtml?id=48894-2-2023>

⁴ <https://en.energinet.dk/Gas/Security-of-Supply/Storage-level>

⁵ [EUR-Lex - 32022R1032 - EN - EUR-Lex \(europa.eu\)](#)

⁶ [EUR-Lex - 32022R1369 - EN - EUR-Lex \(europa.eu\)](#)

⁷ [EUR-Lex - 32023R0706 - EN - EUR-Lex \(europa.eu\)](#)

⁸ <https://energinet.dk/Gas/Tariffer-for-gastransport/Gaeldende-tariffer>

⁹ <https://en.energinet.dk/Gas/Biomethane#Info>

¹⁰ <https://eur-lex.europa.eu/eli/reg/2017/1938/oj>

¹¹ <https://energinet.dk/Gas/Forsyningssikkerhed/Ikke-beskyttede-kunder>

bought additional filling requirements from storage customers. The reserved storage volumes can secure sufficient storage withdrawal capacity to handle short term technical incidents on a day with extraordinary high demand occurring with a statistical probability of once in 20 years (“hydraulic incidents”).

6. Final remarks

Based on the now known prerequisites it is up to the commercial players to prepare themselves through sufficient capacity bookings, supply contracts and storage reservations. The commercial players must consider a broad variety of uncertainties to fulfil their obligations regarding security of supply. The development in the gas demand and supply situation on a European level should be closely followed by all commercial players.