Q&A LIST

Gas for Capacity Agreement
auction 16 June 2020
Gas Storage Denmark A/S

1. INTRODUCTION and BACKGROUND

This Q & A list comprises the typically asked questions concerning the planned Auction on 16 June 2020.

GSD plans to expand the aquifer reservoir of the storage facility in Stenlille with 1.8 TWh, which is including WGV and cushion gas. In fact, the auction will be for 2 TWh (1.2 TWh cushion gas) as a small amount of previously available storage capacity is included in the total capacity available. The expansion involves that Storage Customers generates the WGV won on the auction by injecting natural gas during the expansion period. In synchronization with the generation, the Storage Customers will be able to use the generated WGV. This means that the commercial product offered on the auction is tightly connected to the physical aspects of the storage expansion: each 100 MWh injected into the storage during the expansion period will generate WGV of 40 GWh for utilization by the Storage Customer and 60 GWh cushion gas for utilization by GSD.

Even though the full storage capacity won in the auction will technically be available from the 1st day of the expansion period, the intention (and the physical basis for the capacity) is that the capacity should not be used until it is physically generated by the injected cushiongas, hence the capacity is conditional on the injection of cushiongas, as mentioned in the contract. We *strongly recommend against filling the generated capacity faster than the bundled 120 days injection* even if we are not able to prevent this for technical reasons. This behavior would mean that the customer is using the capacity before it is physically generated.
If the costumer chooses to fill the won capacity at a faster pace than the 120 days injection rate in spite of this recommendation, GSD cannot guarantee that *any* of the injected gas in excess of the 120 days injection rate can be recovered. GSD will hold no liability in this case.

Example:
A costumer wins 300 GWh in the auction, of which 180 GWh is injected as cushiongas at a rate of 1.5 GWh/day and 120 GWh is generated as storage capacity, at a generation rate of 1 GWh/day. If the capacity (120 GWh) is filled at a rate of 1.5 GWh/day, then the utilization is in excess of the generated capacity by 0.5 GWh/day. After 30 days the utilization of the capacity is at 45 GWh, which is 15 GWh in excess of the

generated capacity at this point in time. If the expansion is cancelled at this time, the 15 GWh *will not be fully recoverable*. This is thus a risky usage and goes against the intention of this contract and the physical foundation of the capacity generation. In such case, GSD will hold no liability for the lost gas.

The expansion project involves at least two types of risks, which GSD needs to handle:

- The technical risk. This covers events such as (but not limited to) mechanical failure in critical equipment to an extent that GSD cannot maintain the necessary injection rates or unexpected behavior of the reservoir.
- The financial risk. The injection of gas may be stopped with 3 days' notice without any substantial financial risk for the Storage Customer and GSD. Therefore, the pricing method is a formula [0.4 * (Q1-DA) - 0.6* DA + K], where

  0.4 * (Q1-DA) is the price for the capacity payable by the Storage Customer; and
  0.6* DA is the price for the gas payable by GSD; and
  K is a constant.

If the auction and the expansion project are successful, GSD's storage inventory will change from the existing 10.16 TWh to 10.96 TWh at the end of the expansion period.

2. LIST Q & A

Q1: Why is base load injection required during the expansion period?

A1: This is how the reservoir works. The cushion gas must be injected in a steady flow to control how it flows in the underground formation.

In addition, all capacity is pooled in the operational system. GSD will not be able to keep track on the injection of the cushion gas/the new commercial gas (via the ratio 40:60) or the injection of commercial gas on the other existing contracts, unless GSD knows for sure that the cushion gas is injected as a constant baseload during the expansion period.

Q2: Why the ratio 40:60?

A2: This reflects the "recovery factor" of the reservoir that is being expanded, i.e. the ratio between cushiongas and WGV. As cushiongas is injected, capacity is generated. This physical process will continue during the entire expansion period, so the new storage capacity will be created and become available for utilization literally day by day.

This implies that even if GSD makes your new commercial capacity available in full starting from 1 July 2020 (clause 3 in APPENDIX I), you need to follow the baseload injection and the creation of the new WGV. By not doing so – e.g. you speed up the injection, you try to utilize WGV ahead of the creation of this WGV and should the project be interrupted, your commercial gas in excess of the generated capacity cannot be recovered in full, but only *up to* 40%. The remaining 60% (or more) commercial gas will be converted to cushion gas, and GSD will have no liability in this case, as such a usage is not respecting the fact that capacity is conditional on injection of cushion gas as mentioned in the contract as well as the auction rules.

Q3: How the facility curves will be affected by the injection of the cushion gas?

A3: The injection of the cushion gas is not subject to *restrictions due to high filling level*.

The facility curve shown in clause A in APPENDIX II applies to your commercial capacity only. When the global inventory level reaches 95% filling, the firm injecting capacity will be reduced to 75%. Depending on when this happens, it may create a misalignment between the pricing formula (120 days) and your physical injection period (>120 days). This means that the injection period for the commercial capacity may be extended due to high filing level.

GSD acknowledges the fact that this scenario creates a price risk for the Storage Customers, but GSD sees no other pragmatic solution.

Q4: How the 95%-limit in the injection curve is calculated?

A4: Whatever volume is traded in the auction (max 800 GWh) will be added to the current maximum capacity and used to calculate what 95% is in terms of GWh. For technical reasons, we might change the limits in the storage system to values other than these in order to accommodate the unrestricted injection of cushion gas included into both the volume and the injection rate. However, the generated new capacity will be affected by the reduction in injection rate to 75% at 95% filling.

However, as stated in the Auction Rules clause 5.2 and in clause 3 in APPENDIX I, the capacity depends on the injection of cushion gas, so capacity is generated throughout the period, for as long as cushion gas is being injected. In case the price breaks GSD's reservation limit (-1 €/MWh, cf. clause 7 in APPENDIX I), the expansion is (possibly temporarily) halted, and the capacity that should have been generated during the interruption will not be generated. This means, that only in case the expansion continues uninterrupted for the full period, the final capacity increase will reach 800 GWh (or whatever was traded at the auction). The maximum capacity (used to calculate the 95%) will be reduced by the "missing" expansion in case of an interruption of the expansion. This reduction will take place prior to the resumption of the expansion.

Q5: How does GSD postpone or interrupt the work and how will the injection be resumed after an interruption?

A5: GSD will give 3 days' notice before interruption or resumption of injection. Injection will resume as soon as conditions are favorable again, with no other changes to the terms and conditions in the contract. The injection will continue until the end of the expansion period or until the conditions becomes unfavorable again, whichever comes first. Note, that during the interruption no cushiongas is injected, and consequently, no capacity is generated during this period. The capacity won in the auction will be reduced by the amount of capacity that should have been generated during the interruption. The pricing formula and the physical injection must follow each other in coordination.

Postponement/interruption will be confined to the expansion period. If the end of the period (29th of October) is reached before the expansion can be resumed, then the remainder of the expansion is cancelled.

A replacement version of the Gas for Capacity Agreement will be prepared in compliance with Clause 7 in the APPENDIX I.

Q6: **How am I to nominate for the injection of the cushion gas?**

A6: You are to send only one nomination to storage. All storage capacity is pooled in the storage system.

Q7: A comment with regards to the 1 Jul 20 – 29 Oct 20 period.

A7: The first price (Q1/DA) will be taken from the ICIS European Spot Gas Markets (ICIS ESGM) report published on the 30th June 2020 and the last price will be from the report 28th October 2020.

Q8: **appendix 1, 5.C). Is it correctly understood that the Storage Customer will have no fee associated to the injection of Cushion Gas sold to GSD?**

A8: GSD would like to give an incentive to inject the cushion gas physically as a base load during the expansion period. GSD will monitor that the Storage Customer injects an hourly amount of Natural Gas equal to or in excess of the base load (6. In APPENDIX I) and the Storage Customer will be compensated for the variable injection up to the base load.

If the Storage Customer's injection in limited periods is less than the base load, GSD assumes that the observed injection rate is the residual of the Storage Customer's commercial flow (in this case withdrawal) and the injection of the cushion gas. In this case, GSD will compensate for the actual net injection (5. c. in APPENDIX I).

The Storage Customers concluded a flat rate agreement for SY20 with GSD, have already paid a fixed amount for the variable injection and have the right to inject for zero marginal price. Therefor they will not receive a compensation for the injection of the cushion gas.

Finally, the Storage Customer will receive additional firm injection and firm volume capacity for free during the expansion period, corresponding to the injection of cushiongas.

Q9: In case I inject only cushion gas and the expansion is then interrupted/cancelled, what happens to the cushion gas and capacity?

A9: The cushion gas is transferred to GSD. As the cushiongas was injected, the capacity was generated. This capacity is available to you for the remainder of the storage year.

Q10: How is the cushiongas and the capacity billed?

A10: The pricing of the storage capacity and the cushiongas is combined in one formula: T = Q * (0.4 * S – 0.6 * DA + K).

"T" is the total amount payable either by GSD to the Storage Customer or vice versa. "Q" is the sum of the Storages Customer's purchased of Firm Storage Capacity (MWh) and the amount of Natural Gas sold to GSD (MWh).

The unit price expressed by (0.4 * S – 0.6 * DA + K) in €/MWh will be known at the end of the Pricing Period 1 July 2020 at 06:00 hours to 29 October 2020 at 06:00 hours as the final value will be the average of the daily prices calculated using the formula and based on Q1/DA published in the ICIS European Spot Gas Markets (ICIS ESGM) during the Pricing Period.

In respect to any cash flow considerations, the Storage Customer may decide the date(s) for transfer of the already stored cushion gas to GSD: at the end of a month or after ended expansion period. It is also possible to perform transfers on more frequent basis, but not on daily basis. The Storage Customer must inform GSD at least 3 business days in advance about requested transfer or the Storage Customer may suggest a transfer schedule to be notified in the Gas for Capacity Agreement.

After each transfer the Storage Customer must send an invoice to GSD with due date at least 14 days after the invoice date. In the invoice, the Storage Customer must state the Storage Customers' bank account and a GSD's Reference Number, which GSD shall submit to the Storage Customer in due time after the Auction 16 June 2020.

In case of many transfers during the expansion period, a reconciliation will be needed at the end of the Pricing Period. To settle any differences between any already executed payment(s) and "T" as calculated at the end of the Pricing Period, the Storage Customer and GSD shall agree on a correction payment (payable either by GSD to the Storage Customer, or from the Storage Customer to GSD) to be made at the latest 5 Business Days after end of the Pricing Period.

In case T is in favor of GSD, GSD shall forward a monthly invoice to the Storage Customer starting from November 2020, after end of the expansion period.