

Annex 3 to the Storage Service Agreement

# **Storage Specification**

# **Erdgasspeicher Peissen GmbH**

(hereinafter referred to as the "Storage Service Provider")

Date: 17/07/2019

Version: 8.0



## **Contents**

1.	INTRODUCTION	3
	STORAGE SERVICES	
	STORAGE PRODUCTS	
	STORAGE FEE (FIXED AND VARIABLE STORAGE FEE)	
	ADJUSTMENT OF STORAGE FEE	
	TIME RESTRICTIONS	
7.	INJECTION AND WITHDRAWAL PARAMETERS	10
8.	DELIVERY POINT/ALLOCATION	. 13



#### 1. Introduction

1.1. This Storage Specification shall form an integral part of the Storage Service Agreement as its Annex 3 and as amended from time to time.

The definitions and terms set out in Article 1 of the Storage Access Conditions (Annex 1 of the Storage Service Agreement) shall apply accordingly if not otherwise defined herein or unless the context requires otherwise.

1.2. The Storage Specification specifies and defines the operational parameters applicable to the Storage Facility, in particular, the details and requirements for the provision of Storage Services in view of Bundled Products related to the Storage Facility by the Storage Service Provider. For the purpose of clarification the term Storage Capacities and Storage Facility shall include Working Gas Volume or Working Gas for injection and withdrawal that is stored in caverns outside the Katharina Natural Gas Storage Facility within caverns (Caverns 130 and 132) leased by Erdgasspeicher Peissen GmbH within UGS Bernburg of VNG Gasspeicher GmbH which are connected to Katharina Natural Gas Storage Facility and operated by the surface facilities of the Storage Facility.

The Storage Facility is located on the territory of the Federal Republic of Germany and is currently connected to the German pipeline system of GASCADE Gastransport GmbH at the network connection point Bobbau EIC-Code 21Z000000000372I.

- 1.3. The pipeline to the grid connection point Bobbau with a length of 37 km which connects the UGS Katharina Natural Gas Storage Facility with the JAGAL pipeline system of GASCADE Gastransport GmbH in the Bobbau Region is also integral part of the Storage Facility.
- 1.4. To round the calculations of this Storage Specification up or down the intermediate calculations shall be rounded up or down to four (4) decimal places and the final results to two (2) decimal places. If the fifth (5th) or third (3rd) decimal place respectively should be five (5) or more, the sum shall be rounded up, if it is less than five (5), it shall be rounded down.



## 2. Storage Services

- 2.1. In view of concluding Storage Service Agreements, the Storage Service Provider offers the Storage Services pursuant to the provisions of the Storage Service Agreement (including its Annexes).
- 2.2. The Storage Customer shall be entitled to inject the Natural Gas and withdraw the Natural Gas at any time during the entire term of the Storage Service Agreement.
- 2.3. The Storage Service Provider offers all types of Storage Services as Bundled and Unbundled Products on a firm and interruptible basis.
- 2.4. The Storage Services offered by the Storage Service Provider shall be subject to the technical restrictions imposed by the operation of the Storage Facility and, in particular, subject to both the Injection and Withdrawal Parameters pursuant to the applicable provisions of this Storage Specification as amended.
- 2.5. The Storage Service Provider provides the Storage Customer with both graphic and tabular surveys on freely available, reserved or firmly booked Storage Capacities through its website www.ugs-katharina.de.

## 3. Storage Products

- 3.1. Subject to the availability there shall be Bundled and Unbundled Products bookable on a firm and interruptible basis.
- 3.2. Subject to the completion and operability of the caverns of the Storage Facility still under construction the Storage Service Provider aims to provide a Bundled Product that shall be composed of the following parameters in the following relation:

from 01.04.2017, 06:00 hours (CET)

Injection Capacity (maximum): 827 m³/h
Withdrawal Capacity (maximum): 1,654 m³/h
Working Gas Volume: 1,000,000 m³

subject to further clarification in Article 7 hereof.



One bundle shall have 1,000,000 m<sup>3</sup> ("Bundle").

3.3. The following individual types of Bundled Products may be booked:

## **Tzarina Pack Long-Term**

means a Bundled Product with fixed Working Gas Volume, Injection Capacity and Withdrawal Capacity as defined in Article 3.2 hereof with the fixed Storage Period of seventeen (17) Storage Years.

### **Royal Pack Medium-Term**

means a Bundled Product with fixed Working Gas Volume, Injection Capacity and Withdrawal Capacity as defined in Article 3.2 hereof with the fixed Storage Period of full years from six (6) to sixteen (16) Storage Years.

#### **Prince Pack Short-Term**

means a Bundled Product with fixed Working Gas Volume, Injection Capacity and Withdrawal Capacity as defined in Article 3.2 hereof with the fixed Storage Period of one (1) to five (5) Storage Years.

- 3.4. The minimum quantity of the Tzarina Pack Long-Term and Royal Pack Medium-Term shall be one (1) bundle. In case Tzarina Pack Long-term and Royal Pack Medium-Term is only available for a quantity less than one Bundle, the Storage Service Provider shall be entitled to deviate from this minimum quantity.
- 3.4.1. If it turns out after conclusion of the relevant Storage Service Agreement that the Storage Service Provider will be unable to provide the Storage Capacity initially agreed by the Parties due to circumstances of the cavern's construction process, i.e. unforeseeable geological difficulties, the Storage Capacity should be adjusted on a pro-rata allocation mechanism as further described in the example of the table below.

	Contracted		Commissioning	
Storage Capacity	25 mill m³	100 %	23 mill. m³	92 %
Customer 1	5 mill m³	20 %	4.6 mill m³	18.4 %
Customer 2	10 mill m³	40 %	9.2 mill m³	36.8 %
Customer 3	3 mill m³	12 %	2.8 mill m³	11.2 %
Customer 4	2 mill m³	8 %	1.8 mill m³	7.2 %
Customer 5	5 mill m³	20 %	4.6 mill m³	18.4 %



The adjustment mechanism as described above is only applicable on Storage Service Agreements of which the service period has not yet begun and shall be applied separately for each type of Bundled Products. The Storage Service Provider shall notify the reduction as soon as possible to the Storage Customer in writing.

- 3.4.2 If it turns out after application of the above mentioned pro-rata allocation mechanism that the adjusted Storage Capacity of the relevant Storage Customer will be less than 90% of the Storage Customer's initially booked Storage Capacity, the Storage Customer shall have the right to withdraw from the respective Storage Service Agreement within one (1) Month after receipt of the notification of the reduction by the Storage Service Provider. The withdrawal declaration shall be in writing.
- 3.4.3 Storage Capacities that become free again according to the aforementioned right to withdraw shall be unbindingly offered by the Storage Service Provider (Storage Service Provider-offer) in the following order:
  - At first to other Storage Customers who have already concluded a a) Storage Service Agreement with respect to the freeing up type of Bundled Product (Medium-Term or Long-Term Capacity) applying the pro-rata allocation mechanism, whereby the Storage Service Provider gives priority to those of the other Storage Customers who have submitted their respective Binding Request during the Open Season Procedure at the earliest point in time. In this subsequent nonbinding offer the Storage Service Provider shall only offer a quantity of additional Storage Capacity up to the difference between the quantity of the respective Storage Capacity agreed in the concluded Storage Service Agreement and the notified Storage Capacity reduced by application of the aforementioned pro-rata allocation mechanism for the term of the concluded Storage Service Agreement. Storage Customers who are interested in these unbindingly offered additional Storage Capacities shall submit a Binding Request in writing at the latest within fourteen (14) Days after receipt of the Storage Service Provider-offer. The Storage Customer shall not request Storage Capacities deviating from the Storage Service Provider-offer. After receipt of the Storage Customer's Binding Request the Storage Service Provider shall notify the Storage Customer without undue delay about the acceptance or rejection of the request.



With the receipt of the declaration of acceptance of the Binding Request by the Storage Service Provider in writing, the respective Storage Service Agreement initially agreed between the Parties shall be modified automatically with regard to these additional of Storage Capacities. The Storage Customer's Binding Request and the Storage Service Provider's declaration of acceptance shall form an integral part of the Storage Service Agreement and shall be attached to it. The Storage Customers are aware that additional Medium-Term Capacities may have terms of six (6) to sixteen (16) years and may have in this regard not have the same term as the respective already concluded Medium-Term Storage Service Agreement. This may lead to yearly different Storage Capacities within the term of the amended Medium-Term Storage Service Agreement.

Afterwards, as far as yearly tranches of freeing up Storage Capacities b) could not or not be fully marketed pursuant lit. a), to the other Storage Customers who have already withdrawn from their concluded Storage Service Agreement due to the application of the pro-rata allocation mechanism with respect of the type of the freeing up Storage Capacity (Long-Term or Medium-Term Capacity), whereby the Storage Service Provider gives priority to those of the other Storage Customers who have submitted the respective Binding Request during the Open Season Procedure at the earliest point in time. In this subsequent non-binding offer the Storage Service Provider shall only offer a quantity of Storage Capacities up to the quantity of Storage Capacities up to the same term as bindingly requested by the respective other Storage Customer. Storage Customers who are interested in the receipt of these unbendingly offered additional Storage Capacities shall submit a Binding Request in writing at the latest within fourteen (14) Days after receipt of the Storage Service Provider-offer. The Storage Customer shall not request Storage Capacities deviating from the Storage Service Provider-offer. After receipt of the Storage Customer's Binding Request the Storage Service Provider shall notify the Storage Customer without undue delay about the acceptance or rejection of the request. The acceptance to the Binding Request shall constitute a binding agreement between Storage Service Provider and the Storage Customer for the respective Storage Capacity. The Storage Customer will receive a Storage Service Agreement on pro-rata basis allocated Storage Capacity by the Storage Service Provider.



To the extent freeing up Storage Capacity cannot or not entirely be marketed pursuant the aforementioned regulations, the Storage Service Provider is free to offer and award the respective Storage Capacity otherwise.

- 3.5. The availability of any Storage Service shall be subject to the limitations of the applicable Injection and Withdrawal curves according to Article 7 hereof.
- 3.6. In relation to Unbundled Products if available any Storage Customer may book Injection Capacities, Withdrawal Capacities and Working Gas Volumes in a ratio or a combination at the Storage Customer's sole discretion upon approval by the Storage Service Provider.
- 3.7. With respect to Interruptible Storage Services the Storage Service Provider may interrupt the Injection and/or Withdrawal Capacities of the Storage Customer completely or partially with at least three (2) Hours' notice. In case of interruption the Storage Customer shall be refunded the Fixed Storage Fee for the interrupted usage time on a pro rata basis; however, the refund shall be limited to 50% of the Fixed Storage Fee. This may be offset against the monthly payments.

## 4. Storage Fee (Fixed and Variable Storage Fee)

- 4.1. By entering into the Storage Service Agreement, the Storage Customer agrees to pay the stipulated Storage Fee (Fixed and Variable Storage Fee) to the Storage Service Provider pursuant to the provisions of the respective Storage Service Agreement (Fixed Storage Fee) and the General Determination Procedure for Variable Storage Fee published on EPG's website (Variable Storage Fee).
- 4.2. The Fixed Storage Fee for the Bundled Products according to Article 3.3 hereof shall depend on the fee agreed in EUR per 1000 m³ based on the result of the respective Auction Procedure or, in case of an unsuccessful Auction the minimum bid price as clarified in the respective auction procedure as long as applicable.
- 4.3. All fees and prices mentioned in any applicable document are net fees and prices; any statutory turnover tax that is due shall be charged separately at the applicable tax rate.



## 5. Adjustment of Storage Fee

- 5.1 For a contract duration of less than two years no Adjustment of the Fixed Storage Fee should take place.
- 5.2 The Variable Storage Fee shall be adjusted as defined in Article 24.5 of the Storage Access Conditions (Annex 1 to the Storage Service Agreement).
- 5.3 Any adjusted Storage Fee shall be mathematically rounded to two decimal places.

#### 6. Time Restrictions

- 6.1. The Storage Services offered by the Storage Service Provider pursuant to Article 2 hereof shall be subject to the technical restrictions imposed by the operation of the Storage Facility in accordance with both the provisions of the following Article 7.2 hereof and any other technical and time restrictions in accordance with any information made available to the Storage customer by the Storage Service Provider on his website or otherwise.
- 6.2. The following changeover and start-up times shall be required for the operation of the Storage Facility by the Storage Service Provider:
- 6.2.1. Lead time for injection: up to 02:00 hours
- 6.2.2. Lead time for withdrawal: up to 02:00 hours
- 6.2.3. Flow reversal time for injection/withdrawal: normally up from 02:00 to 03:00 hours
- 6.2.4. Flow reversal time for withdrawal/injection: normally up from 02:00 to 03:00 hours
- 6.3. The Storage Service Provider allows the Storage Customer to submit a Renomination request which is required to be submitted two (2) hours ahead of the envisaged change. The Storage Service Provider, however, reserves the right to reject the Re-nomination request in exceptional cases for technical reasons. Nevertheless, the Storage Service Provider, is also entitled to accept a Renomination request submitted less than two (2) hours ahead of the envisaged change in case of technical availability.



## 7. Injection and Withdrawal Parameters

- 7.1. All Storage Services offered by the Storage Service Provider with regard to the Storage Facility are limited by the Injection and Withdrawal Parameters applicable to the Storage Facility.
- 7.2. The following Injection and Withdrawal Parameters applicable to the Storage Facility shall apply to all Bundled Products provided by the Storage Service Provider as of 01.04.2019:
  - a) Injection characteristic curve (logic)

The maximum useable Injection Capacity is subject to a characteristic curve restriction with the following curve logic (see table 1 and figure 1 below) and determined by technical reasons. In case the working gas level is below 8% the Injection Capacity shall be successively decreased from 24% at maximum of 9%. In case the working gas level is between 21% and 8% of the total working gas volume the Injection Capacity shall be successively decreased from 100% at maximum of 24% of the total Injection Capacity. From a working gas level of 21% up to 69% of the total working gas volume 100% of the Injection Capacity may be used. In case the working gas level is between 69% and 74% of the total working gas volume the Injection Capacity is 80%. In case the working gas level is above 74% of the total working gas volume the Injection Capacity shall be successively decreased from 80% down to Zero.

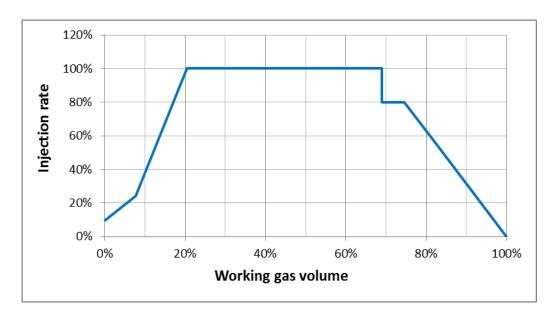
Due to technical reasons, at a working gas level of 95% and above only interrupted Injection Capacities are possible.

Table 1:

Working Gas level	Injection Capacity
0%	9%
8%	24%
21%	100%
69%	100%
69%	80%
74%	80%
100%	0%



Figure 1:



## b) Withdrawal characteristic curve (logic)

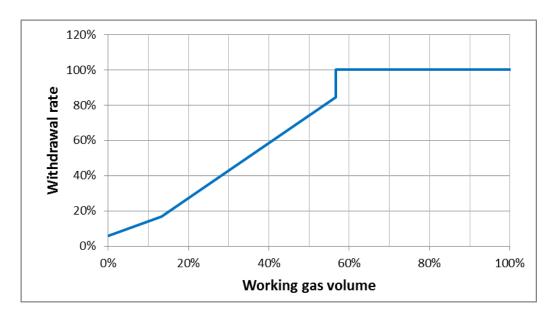
The maximum useable Withdrawal Capacity is subject to a characteristic curve restriction with the following curve logic (see table 2 and figure 2 below) and determined by technical reasons. In case the working gas level is below 14% of the total working gas volume the Withdrawal Capacity should decrease from 16% to 6%. In case the working gas level is between 57% and 14% of the total working gas volume the Withdrawal Capacity shall be successively decreased from 84% at maximum of 16% of the total Withdrawal Capacity. From a working gas level of 57% up to 100% of the total working gas volume 100% of the Withdrawal Capacity may be used.

Table 2:

Working Gas Level	Withdrawal Capacity
0%	6%
14%	16%
57%	84%
57%	100%
100%	100%



Figure 2:



- c) deleted
- d) Before April 1<sup>st</sup> 2019 the Storage Service Provider shall publish the adjusted Injection and Withdrawal characteristic curves (logic) on his website http://www.ugs-katharina.de. The same applies with regard to April 1<sup>st</sup> 2020 and the respective following Storage Years.
- 7.3. The Storage Service Provider shall be entitled to reduce the Injection Capacities in accordance with the Injection Parameters.
- 7.4. The Storage Service Provider shall be entitled to reduce the Withdrawal Capacities in accordance with the Withdrawal Parameters.
- 7.5. The Storage Service Provider agrees to publish any technical information that may have an adverse effect on both the Injection and Withdrawal Parameters.
- 7.6. EPG has completely commissioned its above ground facility but not completed all planned caverns. Due to the ongoing construction of the further caverns of the Katharina depending on the applicable pressure regime resulting from the amount of caverns in the whole system of the



UGS Katharina it may be that EPG can offer additional Injection and Withdrawal Rates subject to the UGS Katharina's technical abilities at the sole discretion of EPG depending on the operational necessities of the construction of the UGS. In case of technical availability and notwithstanding the foregoing provisions the Storage Provider shall temporarily increase Injection/Withdrawal Capacity pro rata to the contractual Working Gas Volume for all potential Storage Customers of the UGS Katharina on a non-discriminatory basis. The value and term of such increase shall be reported by Storage Service Provider to Storage Customer via agreed communication paths. No additional charge for such temporary increase is stipulated.

7.7. The cavity space of each cavern of the UGS Katharina is subject to natural convergence that is under usual circumstances approx. 0,3% of the respective cavity per year. EPG is entitled to reduce the contracted Working Gas Volume of the Storage Customer and the corresponding injection and withdrawal rate once per year before the start of the new storage year in the amount required to reflect the effects of natural convergence. The Storage Customer shall be informed about this reduction latest 4 weeks before the beginning of the subsequent storage year. In case of such a reduction the Fixed Storage Fee should be reduced accordingly.

## 8. Delivery Point/Allocation

- 8.1. Delivery Point means the network connection point Bobbau EIC-Code 21Z00000000372I connected to the market area Gaspool and operated by Gascade Gastransport GmbH.
- 8.2. During the injection period, the Storage Customer delivers to the Storage Service Provider the Natural Gas quantities to be injected at the Delivery Point of the Storage Facility.
- 8.3 During the withdrawal period, the Storage Service Provider delivers to the Storage Customer the Natural Gas quantities to be withdrawn at the Delivery Point of the Storage Facility.
- 8.4. The Allocation Procedure with regard to the Katharina Natural Gas Storage Facility shall be deemed allocated as nominated.



- 8.5. Upon explicit request of the Storage Costumer the Storage Service Provider has to provide via email a Gas Storage Protocol on a monthly basis as information on the current storage level.
- 8.6. In view of the Variable Storage Fee the quantity of power consumed for injection/withdrawal of Gas shall be stipulated in the monthly invoices and the cost of this power shall be itemized in the monthly invoices.
- 8.7. The Storage Service Provider shall transfer to Storage Customer, by the 5th Day of each Month in which invoicing is undertaken, an injection/withdrawal protocol related to the services rendered in connection with the injection and withdrawal of the Gas.
- 8.8. With regard to the gas quality specifications at the Delivery Points mentioned in this Article 8 hereof, the provisions of the respective network operator pursuant Article 8.1 shall apply accordingly.