

Storage Contract Kraak

between

(hereinafter referred to as the „Storage Customer“)
and

**HanseWerk AG,
Schleswag-HeinGas-Platz 1, 25450 Quickborn**

(hereinafter referred to as „HanseWerk“)

Article 1

General Terms and Conditions

1. Subject to the special provisions in Section 2, the „General Terms and Conditions for Storage Services“ (hereinafter referred to as „GTCS“) of HanseWerk AG (‘‘HanseWerk’’) are an integral part of this contract. The GTCS ruling at the time the contract is concluded can be consulted on the web site of HanseWerk (www.hansewerk.com/speichervermarktung) and a copy can be posted to the Storage Customer on request. Other general terms and conditions of the Storage Customer shall not apply even if HanseWerk does not expressly contradict those conditions.

2. The following provisions of the GTCS are amended or are not applicable:

a) The storage product „Kraak“ made available by HanseWerk is offered in lots (hereinafter referred to as ‘‘Lot’’). Each Lot contains bundled storage capacities. The bundled storage capacities consist of both firm and interruptible storage capacities.

Each Lot of the product Kraak therefore in total consists of the following storage capacities:

Bundled Capacities (‘‘Storage Bundle’’)

6.23 GWh firm working gas capacity

10.00 MWh/h firm withdrawal rate

3.30 MWh/h firm injection rate

0.27 GWh interruptible working gas capacity

1.20 MWh/h interruptible injection rate

b) In case of having booked two or more contracts referring Kraak Storage, the customer is allowed to combine injection rates according to his own strategy. This also applies to withdrawal rates.

c) Notwithstanding the Price Sheet (Annex IV of the GTCS), the annual storage fee for the storage capacities contracted by the Storage Customer (hereinafter referred to as the ‘‘Storage Capacities’’) shall be determined exclusively according to Article 3 of this contract.

d) For the determination of the fee reduction for the Storage Capacities owing to the exemption of payment obligations in accordance with Article 18, paragraph 1, letter e) of the GTCS, the following provisions shall apply: One hundred percent (100%) of the annual storage fee for the Storage Capacities in accordance with Article 3 of this contract shall be allotted to the Bundled Capacities. The share of the annual storage fee thus allotted to the Bundled Capacities shall be broken down into the fees for the individual storage capacities using the key mentioned in Annex IV of the GTCS (40 % of the fee relates to the withdrawal rate, 33 % to the working gas capacity and 27 % to the injection rate). The share in the annual storage fee thus allotted to each individual storage capacity (withdrawal rate, working gas capacity, injection rate) shall further be broken down into fees for the firm and the interruptible part of the respective individual storage capacity at the ratio of the firm and the interruptible part of the respective individual storage capacity contained in a Storage Bundle of the product Kraak; the interruptible part of the storage capacity is weighted by a factor of 0.6.

- e) For the purposes of Article 18, paragraph 1, letter c) of the GTCS any restriction of firm injection or withdrawal rates will primarily constitute an interruption of the interruptible part of the working gas capacity – to an extent corresponding to the ratio between the working gas capacity and the withdrawal or injection rate – of the Storage Bundle for the product Kraak.

In addition to the above, the provisions of Articles 2 et seq. of this storage contract shall take precedence over the GTCS.

Article 2

Object of the Contract

1. HanseWerk undertakes to make available to the Storage Customer the Storage Capacities listed in Annex I of this contract in the Kraak storage facility for the storage period named therein and to provide the associated storage services and system services. The scope and content of these obligations are set forth in this contract and in the related GTCS including the various respective Annexes.
2. The Storage Customer undertakes to use the Storage Capacities within the scope of the conditions set forth in this contract and in the GTCS including the conditions set forth in the various respective Annexes of this contract and the GTCS, and to pay the storage fee indicated in Article 3 of this contract for the storage capacities it has contracted. The Storage Customer undertakes in particular to use the injection and withdrawal rate contracted by him only in compliance with the Technical Framework Conditions (Annex III of the GTCS) and the individual injection and withdrawal curves shown in Annex I of this contract and explained, where appropriate, more fully in Annex III of the GTCS. The mining authority requirements and the demand factor for the Kraak storage facility, which are part of Annex III of the GTCS, are explained in more detail in Annex III of this contract.

Article 3 Fees

1. The total storage fee consists of:
 - a. the annual storage fee formed in accordance with the provisions of this Article 3.
 - b. the fee for variable costs according to Article 4 GTCS that is tied to the actual gas turnover;
 - c. The system service fee, consisting of an annual flat-rate amount according to Article 3 GTCS.
2. The basic fee for revision of the annual system service fee is EUR 10,000.
The basic fee for revision of the fee for variable costs is 42.00 EUR-Cents per MWh of injected working gas.
3. The annual storage fee ("P") in accordance with the above Article 3, Section 1, Letter a) is calculated by multiplying the Storage Customer's successful bid ("A", in € per Lot of the product Kraak) in the tender procedure taking place on 06 December 2017 by the number ("N") of Lots of the product Kraak which have been allocated to the Storage Customer:

$$P = A \times N$$

4. All prices are net.

Price per lot: _____

Number of lots: _____

Annual storage fee: _____

Article 4 Term of the Contract

The term of this contract is 1 April 2019, 06.00 hours, until 1 April 2021, 06.00 hours.

Article 5

Contact Partners, Bank Data

1. The Storage Customer and HanseWerk shall nominate contact addresses to each other for the purpose of exchanging information. The Storage Customer shall guarantee the constant availability of a contact partner for issues of contract implementation such as nomination, matching and allocation.

2. The Storage Customer nominates the following person as its contact partner:

Name

First name

Position

Address

Tel.

Fax

E-mail

3. The contact persons named in Annex II are nominated on the part of HanseWerk.

4. The VAT-ID No. of the Storage Customer is:

5. The Storage Customer is kindly asked to name his bank details in order to issue a potential credit.

Bank

Account number

Bank code

IBAN

SwiftBIC

Place, date,

Quickborn,

Storage Customer

HanseWerk AG

Annex I:

Annex I-1: Storage booking
to contract dated:
Contract ID:

Storage site: Kraak
Customer name:
Duration: 2019-04-01 until 2021-04-01

Storage booking:

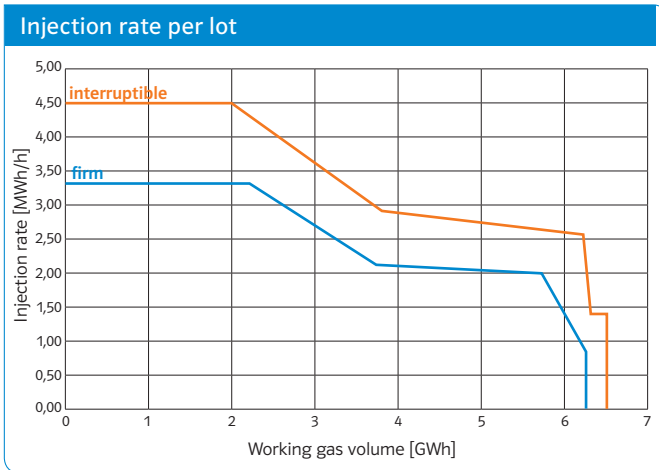
Number of Lots:	1	
Bundled Capacities („Storage Bundles“):		
= withdrawal rate (firm):	10.00	MWh/h
= injection rate (firm):	3.30	MWh/h
= working gas (firm):	6.23	GWh
= working gas (interruptible):	0.27	GWh
= injection rate (interruptible):	1.20	MWh/h

The annual storage fee will be calculated in accordance with Article 3 of this storage contract.

System service fee	10,000.00	€ *
Variable fee	0.42	€/MWh * injected working gas

* System service fee und variable fee are subject to annual revision according to HanseWerk GTCS (Annex IV, Price Sheet).

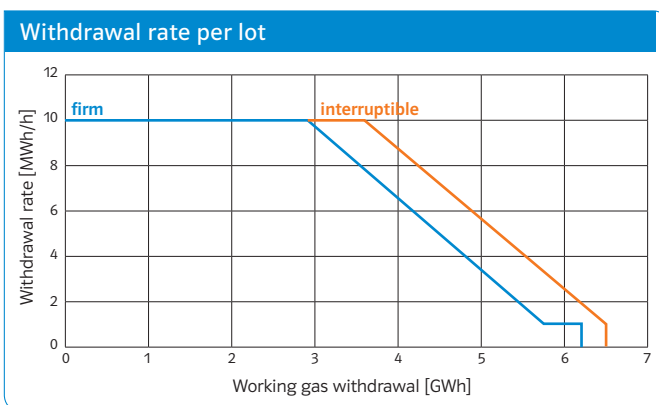
Annex I-2: Injection rate curve
to contract dated:
Contract ID:



Storage: Kraak
Total injection rate curve
Duration: 2019-04-01 until 2021-04-01

Bundled capacities:
Firm withdrawal rate: 10.00 MWh/h
Firm injection rate: 3.30 MWh/h
Firm working gas: 6.23 GWh
Interruptible working gas: 0.27 GWh
Interruptible injection rate: 1.20 MWh/h

Annex I-3: Withdrawal rate curve
to contract dated:
Contract ID:



Storage: Kraak
Total withdrawal rate curve
Duration: 2019-04-01 until 2021-04-01

Bundled capacities:
Firm withdrawal rate: 10.00 MWh/h
Firm injection rate: 3.30 MWh/h
Firm working gas: 6.23 GWh
Interruptible working gas: 0.27 GWh
Interruptible injection rate: 1.20 MWh/h

Annex I-4: Curve data
to contract dated:
Contract ID:

Storage site: Kraak
Duration: 2019-04-01 until 2021-04-01

Withdrawal rate curve

Firm Curve	
Working gas withdrawal GWh	Withdrawal rate MWh/h
0.00	10.00
2.90	10.00
5.69	1.00
6.23	1.00
6.23	0.00
3.57	7.84
6.50	0.00

Injection rate curve

Firm Curve	
Working gas volume GWh	Injection rate MWh/h
0.00	3.30
2.17	3.30
3.79	2.12
5.67	2.01
6.23	0.83
6.23	0.00
2.03	3.30
3.68	2.20
6.16	0.98
6.32	0.00
6.50	0.00

Interruptible Curve	
Working gas withdrawal GWh	Withdrawal rate MWh/h
0.00	10.00
3.57	10.00
6.50	0.77
6.50	0.00
2.90	10.00
5.69	3.32
6.23	1.62

Interruptible Curve	
Working gas volume GWh	Injection rate MWh/h
0.00	4.50
2.03	4.50
3.68	2.92
6.16	2.54
6.32	1.44
6.50	1.44
6.50	0.00
2.17	4.37
3.79	2.90
5.67	2.62
6.23	2.06

Further Information on general technical conditions:

- The demand factor is 0.3 according to Annex III of the HanseWerk GTCS.
- The demand factor has to be considered up to a working gas withdrawal of 2,595 GWh.

Annex II: Contact Data for HanseWerk

The following contact addresses are nominated for HanseWerk:

Queries about booking storage capacity:

Dr. Hannes Parbs

Telephone: +49 40 2366-8201

Mobile: +49 160 4045045

E-mail address: speichervermarktung@hansewerk.com

Queries about planning storage use:

Mr Marco Kainzinger

Telephone: +49 43 31 18-9217

Mobile: +49 160 4727827

Contract handling (nomination/matching):

Contract dispatching (available 24/7)

Telephone: +49 40 2366 3333

Fax: +49 40 2366 8530

E-mail address: dispatching@sh-netz.com

Annex III: Technical Restrictions

The following restrictions apply to the storage operations of the Kraak storage facility:

A – Restrictions due to requirements imposed by mining authorities – Minimum storage levels

To ensure long-term integrity of the Kraak cavern storage, the competent mining authority has formulated a number of technical requirements which have to be met for storage operation. They include binding stipulations on time periods during which a storage facility can be operated above or below defined pressure limits or storage pressure levels. As these pressure limits can only roughly be translated into working gas levels and mutual positive or negative effects of several customers using the facility in different ways can neither be predicted nor ruled out, the following details must be considered as approximated values referring to the storage facility as a whole.

Storage injections and withdrawals

The periods during which the technical requirements have to be met comprises a storage annual cycle. The storage annual cycle begins 1st April of a year and ends 31st March one year later. On 31st March, the relative medium filling level has to be equal to or higher than 50%. The relative medium filling level is the arithmetic average of 365 values (366 in case of a leap year) for the daily relative filling level at 6:00 hours. The relative filling level (%) is equal to the Storage Customer's working gas balance (in MWh) divided by the working gas capacity (firm plus interruptible, in MWh) booked by the Storage Customer.

Without prejudice to the relative medium filling level set forth above, the Storage Customer's relative filling level shall also not be lower than 15% for the entire period from three weeks after the beginning of the storage annual cycle (21st April, 6:00 hours) until three weeks before the end of the storage annual cycle (10th March, 6:00 hours).

As soon as the relative filling level of the entire storage facility drops below 15%, it furthermore must not exceed an 88% relative storage filling level during a subsequent period of six months. Consequently, the Storage Customer's relative filling level shall also not exceed 88% during such six-month period. As the six-month period may begin during the previous storage annual cycle, HanseWerk will determine the beginning of this six-month period, if necessary.

Generally, the Storage Customers' individual mode of storage operation can have a positive or negative impact on meeting the abovementioned restrictions for the storage facility as a whole. However, if the Storage Customer observes the abovementioned limits with regard to its booked working gas capacities, it will most probably not see further any restrictions against its individual operational mode.

Further details for instance about existing mining authority restrictions and possible obligations in respect of a particular mode of operation for the given storage facility may be obtained from HanseWerk at any time.

B - Restrictions to ensure the availability of firm withdrawal rates - Demand factor

With regard to the demand factor (DF), which is fully described in Annex III of the GTCS, the following applies:

The demand factor restriction is applied as long as the working gas withdrawal of the Storage Customer is below a certain working gas withdrawal indicated in Annex I of this storage contract (i.e. the working gas fill level of the Storage Customer is above a certain limit). When this working gas withdrawal indicated in Annex I is reached, the actual withdrawal rate, in accordance with the firm withdrawal rate curve, is at 30 % of the contracted maximum firm withdrawal rate.

For the Kraak storage facility the DF is 0.3, which means that up to 30 % of the possible maximum withdrawal quantity per calendar week (CW) can be withdrawn from storage.