

Storage Specification Haidach SY 22/23+23/24

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hereinafter referred to as "**astora**"

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Introduction

1. This **Storage Specification** completes the **Storage Services Agreement** and defines all the details required to enable **astora** to provide **Storage Services** in the Haidach **Storage Location** based on the **Storage Services Agreement** which will be concluded with regards to the Keyed Procedure held by **astora** on the PRISMA Capacity Platform.
2. For storage of **Gas** the **General Terms and Conditions for Storage Access**, the definitions for the storage of **Gas** contained in the **General Terms and Conditions for Storage Access** and the conditions of the **Storage Services Agreement** shall apply, unless this storage specification contains different arrangements. The terms used in the singular also include the plural and vice versa, assuming this has not been expressly agreed otherwise or is obvious from the respective situation.
3. Upon the conclusion of a **Storage Services Agreement** this **Storage Specification** shall be an integral part of the **Storage Services Agreement**. For this product the **General Terms and Conditions for Storage Access** shall apply with the exclusion of part four, part five and part six.

Storage Service

Name of product:	Haidach SY 22/23+23/24
Kind of product:	Bundle
Allocation:	Pay-as-Bid in keyed procedure
Term:	01.04.2022 until 01.04.2024 (6:00 a.m.)
Number of bundles:	100

Scope of (1) bundle		
From 1 st April 2022:	firm	interruptible
Working Gas Volume	20,000.0 MWh	0.0 MWh
Injection Capacity	6.5 MWh/h	3.0 MWh/h
Withdrawal Capacity	7.1 MWh/h	2.4 MWh/h
From 1 st April 2023:	firm	interruptible
Working Gas Volume	20,000.0 MWh	0.0 MWh
Injection Capacity	6.5 MWh/h	3.0 MWh/h
Withdrawal Capacity	7.1 MWh/h	2.4 MWh/h

Storage Services Fee

The **Storage Services Fee** shall be determined by the offer within the Keyed Procedure. The **Storage Customer** shall be obliged to pay the **Storage Services Fee** for the **Storage Capacities** made available by **astora** independent of the use. The invoicing will occur as defined under § 33 Section 1 until 6 of the **General Terms and Conditions for Storage Access**.

Exceeding of Storage Capacities

1. **astora** – going beyond its obligation pursuant to Article 7 until further notice – will endeavor to enable the **Storage Customer** to make use of additional injection or withdrawal rate, in case the contractual **Storage Capacity** is restricted by Article 7 due to the storage curve. This capacity is made available free of charge and on an interruptible basis (subordinated to booked interruptible service) up to the amount of capacity which the storage customer is entitled to use in the non-storage curve restricted area.
2. In the event of interruption, still available capacities will be divided pro rata based on the nominated quantity among those customers whose **Storage Capacity** is exceeded.
3. For nominations exceeding the booked **storage capacities** and the capacity specified under number 1, the **Fee for Exceeding the Storage Capacities** applies.
4. The **Fee for Exceeding the Storage Capacities** will be calculated daily by using the **Tariff for Exceeding the Storage Capacities** according to the following article 5 on the basis of the maximum hourly volume.

Tariff for Exceeding the Storage Capacities

1. The **Tariff for Exceeding the Storage Capacities** shall be:
 - a) **Injection rate:** 2.8 ct/(kWh/h)/d
 - b) **Withdrawal rate:** 3.9 ct/(kWh/h)/d

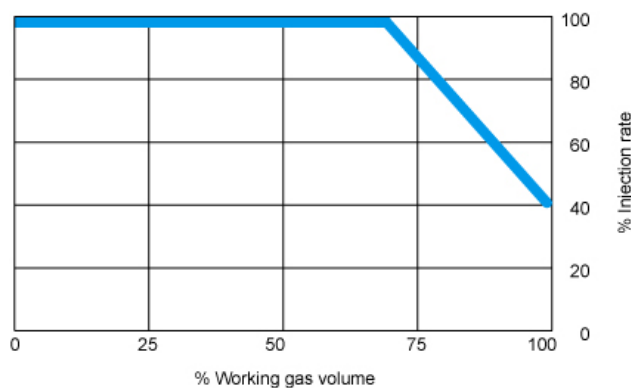
Operations

In the Haidach **Storage Location** the time required to process a **Renomination** shall be two (2) hours.

Injection and Withdrawal Curves

1. The usage of the firm portion of **Storage Services** as per Article 2 is limited by the **Injection and Withdrawal Curves**.

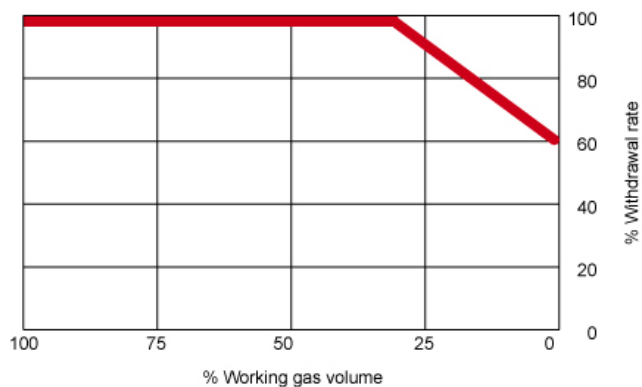
2. The below described **Injection and Withdrawal Curves** of the Haidach **Storage Facility** shall apply with respect to the **Storage Services** as per Article 2 and also to the respective **Storage Services Agreement**.
3. If a percentage of the stored **Working Gas Volume** as per Article 6 Sections 4 and 5 should be reached, **astora** may lower the **Injection** or **Withdrawal Rate** to the percentage specified according to Article 6 Sections 4 and 5.
4. The **Injection Curve** shows the **Injection Rates** as a function of the **Storage Customer's Working Gas Volume** which it shall be entitled to use.



The available **Injection Rates** of the **Storage Customer** (IR) in case a **Customer's Storage Level** of **Working Gas Volume** (WGV) exceeds 70% shall be calculated as follows:

$$IR [\%] = WGV [\%] \times (-2) + 240$$

5. The **Withdrawal Curve** shows the **Withdrawal Rates** as a function of the **Storage Customer's Working Gas Volume** which it shall be entitled to use.



The available **Withdrawal Rates** of the **Storage Customer** (WR) in case a **Customer's Storage Level** of **Working Gas Volume** (WGV) falls below 30% shall be calculated as follows:

$$\text{WR [\%]} = \text{WGV [\%]} \times 1.3333 + 60$$

Delivery Points

1. The **Points of Withdrawal and Injection** of the **Storage Location** correspond to the points at which the Haidach **Storage Location** is connected to the **Neighbouring Natural Gas Networks**. The **Neighbouring Natural Gas Networks** of the Haidach **Storage Location** are the natural gas networks operated by Bayernets GmbH, Munich (D) (Bayernets) and Open Grid Europe GmbH, Essen (D) (OGE).
2. **Delivery Point** to Bayernets is defined as: “USP Haidach” (Netpoint-ID entry: BAY-700069-8021-1, Netpoint-ID exit: BAY-700069-8021-2).
3. **Delivery Point** to OGE is defined as: “Speicher Haiming 3-Haidach” (Netpoint-ID entry: 3433P, Netpoint-ID exit: 3433I).
4. The **Allocation Procedure** in Haidach shall be declaratory.

Natural Gas Quality Specifications

For the Haidach **Storage Facility** at the **Delivery Points** listed in Article 9 hereunder the values of DVGW G 260; 2nd gas family shall apply with the exception of the following parameters: Carbon dioxide (CO₂) ≤ 2 mol%

Annex Provisions for REGENT

Will be updated as soon as possible according to the provisions of REGENT 2021.

Preamble

For **Storage Services Agreements** concluded at the **Storage Location** Haidach (hereinafter referred to as "**Storage**") the implementation of No. 2 and 3 of the operative part of the Federal Network Agency's determination concerning the periodic decision-making regarding the reference price methodology and the other points listed in Article 26 (1) Regulation (EC) No 2017/460 regarding all transmission system operators active in the entry and exit system of NetConnect Germany (hereinafter referred to as "**NCG**") (determinations BK9-18/610NCG of 29.03.2019, hereinafter referred to as "**REGENT**") apply.

According to section 2 of the operative part of **REGENT**, network operators are obliged to offer a discounted network tariff at entry and exit points at storage facilities if and to the extent that a storage facility is not used as an alternative to grid connection point.

Section 1 Installation of discount and non-discounted accounts in the Storage facility by astora

1. **astora** is obliged to keep accounts for each **Storage Customer** as of 01.01.2020, to which gas volumes are allocated correspondingly, that
 - a. are injected/withdrawn into/from the **Storage** by using exit or entry capacity of the network operators at the storage connection points, which is priced with a discounted tariff (hereinafter referred to as "**discounted capacity**"), or
 - b. are injected/withdrawn into/from the **Storage** by using exit or entry capacity of the network operators at the storage connection points which are not priced with a discounted tariff (hereinafter referred to as "**nondiscounted capacity**") or by using limited allocable capacity which is priced with a reduced tariff (hereinafter referred to as "**limited allocable capacity**").

The provisions of sec. 2 number 2 lit. c) and d) remain unaffected.

2. **astora** ensures that a transfer between a **discounted account** and a **non-discounted account** in either direction is not possible.

Section 2 Inclusion of exit and entry capacities into balancing groups/sub-balancing accounts and allocation of gas quantities to discounted and non-discounted accounts in the storage facility

1. According to **REGENT**, network operators must ensure that a transport customer

- a. can only include **discounted capacity** in a discounted balancing group/sub-balancing account (hereinafter referred to as "**B_{discounted}**").
 - b. can only include **non-discounted capacity** in a non-discounted balancing group/sub-balancing (hereinafter referred to as "**B_{nondiscounted}**").
 - c. can only include **limited allocable capacity** in a balancing group/sub-balancing account for limited allocable capacities (hereinafter referred to as "**B_{limited}**").
2. **astora** accordingly ensures that gas volumes injected/withdrawn into/from the **Storage** according to the **Storage Contracts** concluded between the contracting parties, will be allocated as follows:
- a. Gas volumes injected from a **B_{discounted}** can only be allocated to a **discounted account**,
 - b. Gas volumes injected from a **B_{nondiscounted}** or a **B_{limited}** can only be allocated to a **non-discounted account**,
 - c. Gas volumes withdrawn from a **non-discounted account**, can either be allocated to a **B_{nondiscounted}** or to a **B_{limited}**.

According to **REGENT** (NCG point 394), it is possible that gas volumes for which **astora** has proven to the network operators that these volumes originate from the **NCG** market area may be withdrawn from a non-discounted account back to the **NCG** market area and transferred to a **B_{rabattiert}**. Such proof is to be based on the gas volumes that are injected from the **B_{nondiscounted} account** and/or **B_{limited} account** and allocated to the **non-discounted account**.

- d. Gas volumes withdrawn from a **discounted account**, may only be allocated to a **B_{discounted}** account.

The allocation of gas volumes to the **discounted account** and/or **non-discounted account** of the **Storage Customer** is carried out by using different balancing group codes. The **Storage Customer** shall inform **astora** five (5) calendar days before contract start at the latest of the balancing group codes to be used by the **Storage Customer** for the management of the **discounted accounts** and the **non-discounted accounts**.

If an allocation or transfer of gas volumes cannot take place within the framework of matching, **astora** will reduce the respective nominations to zero and communicate them to the network operators.

3. If the **Storage Customer** and the Network Operator have agreed on invoicing according to **REGENT** (NCG point 393), the **Storage Customer** shall be responsible to ensure that the respective Network Operator informs **astora** about the planned transfer from the **discounted account** to the **non-discounted account** in a timely manner.

Such information of the respective network operator will only be processed and implemented by **astora** if received during the following times: Monday to Friday (not including public holidays in the federal state of Hessen) between 09:00 am and 5:00 pm.

Section 4 Relation to the provisions in the Storage Contract; Prevailing Version

The provisions of this Annex supplement the respective **Storage Contracts** concluded between the **Storage Customers** and **astora** for the Haidach storage facility. The provisions of the **Storage Contracts** together with their essential parts shall remain unaffected and shall also apply to this Annex, unless this Annex expressly provides otherwise.

In case of any contradiction between the German language and the English language of this Annex the German version shall prevail.