

Storage Specification Interruptible Storage Capacity Rehden 22/23

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(hereinafter referred to as "**astora**")

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Article 1 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 **Storage Facility** based on any **Storage Services Agreement** be concluded for unbundled interruptible Working Gas Volume via 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. This **Storage Specification** forms 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.

The product described hereinafter represents a special product according to **astora's General Terms and Conditions for Storage Access**, Article 3, Section 2 and is only offered by **astora** under certain commercial conditions.

Article 2 Storage Services

1. Unbundled interruptible **Working Gas Volume**

Allocation: First-come-first-served

Term: According to **Storage Customer's** offer via PRISMA and **astora's** corresponding confirmation

Capacity: According to **Storage Customer's** offer via PRISMA and **astora's** corresponding confirmation

2. Unbundled interruptible **Injection and Withdrawal Capacity**

The additional booking of interruptible **Injection and Withdrawal Capacity** falls within **Storage Customer's** sole responsibility.

Allocation: First-come-first-served

Term: According to **Storage Customer's** offer via PRISMA and **astora's** corresponding confirmation

Capacity: According to **Storage Customer's** offer via PRISMA and **astora's** corresponding confirmation offer

It shall be taken into account that the amount of the interruptible injection and withdrawal capacities offered on PRISMA is independent from the maximum usable injection and withdrawal quantity of the **Storage Customer** pursuant to Article 9.

Article 3 Storage Services Fee

- | | |
|--|---|
| 1. unbundled interruptible working gas volume: | 1.65 €/GWh/d |
| 2. unbundled interruptible injection capacity: | 0.0006 €/(kWh/h)/d (0.025 €/MWh if utilised to a full extent) |
| unbundled interruptible withdrawal capacity: | 0.0006 €/(kWh/h)/d (0.025 €/MWh if utilised to a full extent) |
| 3. Injection volume: | 1.10 €/MWh for each allocated injection quantity |

The **Storage Services Fee** according to Section 1 of Article 3 shall be invoiced to **Storage Customer** in total before the **Start Day** of the **Storage Period** and shall be paid by **Storage Customer** before the **Start Date** of the **Storage Contract**.

The **Storage Services Fee** according to Section 2 and Section 3 of Article 3 shall be invoiced to **Storage Customer** as defined under § 33 Section 2 of the **General Terms and Conditions for Storage Access**.

Article 4 Exceeding of Storage Capacities

For nominations exceeding the booked **Storage Capacities**, the **Fee for Exceeding the Storage Capacities** applies.

The **Fee for Exceeding the Storage Capacities** will be calculated daily by using the **Tariff for Exceeding the Storage** on the basis of the maximum hourly volume which exceeds 100% of the **Storage Capacities** per **Storage Day**.

The **Tariff for Exceeding the Storage Capacities** shall be:

Injection rate:	0.028 €/(kWh/h)/d
Withdrawal rate:	0.042 €/(kWh/h)/d

Article 5 (Pre-) Booking Requirements

1. The minimum booking period for interruptible **Working Gas Volume** is 90 **Gas Days**,
2. The lead time between booking date and **Start Day** of the **Storage Services Agreement** must at least amount to
 - a. two working days, if there is no existing communication connection between the **Storage Customer** and **astora** and if the **Storage Portal** is used as main communication path.
 - b. two working days, if there is an existing communication path, as ASX or via **Storage Portal**, or if a former connection can be reactivated within two working days. In case of doubts this can be requested at **astora** prior to booking this product.

Article 6 Operational Handling of Interruptible Working Gas Volume

1. The **Storage Customer** is entitled to use its interruptible **Working Gas Volume** up to an overall storage level of 95% in the contracted **Storage Facility**. Relevant is the end-of-day level published by **astora** daily for “d-1” on <https://www.astora.de/en/transparency/dynamic-data/astora-storage-facilities>. If the storage level reaches 95% **astora** will interrupt **Storage Customer's** interruptible capacity and the **Storage Customer** is no longer entitled to any **Working Gas Volume** under this agreement until the overall storage level is less than 95%.

astora checks the **Storage Level** on a daily basis at 09:00 a.m. CET. If the **Storage Level** (“d-1”, end-of-day) exceeds 90% **astora** will notify the **Storage Customer** via e-mail. If the **Storage Level** (“d-1”, end-of-day) exceeds 95% **astora** will submit a “Call for immediate Clearing” on day “d” via e-mail to **Storage Customer**.

2. The **Storage Customer** is therefore obliged to perform one of the following measures, once the overall storage level reaches 95%:
 - a. Nominate gas quantities towards **astora** and the relevant **Neighbouring Network Operator**, starting with the first hour of the following gas day. The daily quantity thus nominated must be at least 12.5 % of the interruptible volume booked by the **Storage Customer** on an interruptible basis on d+1, 06:00.

The **Storage Customer** is responsible to book the necessary transport capacity with the **Neighbouring Network Operator** to perform its duties towards **astora**. In case capacities are interrupted either from **astora** or the network operator, the aforementioned obligations of the



Storage Customer are suspended until the end of such interruption. The rate is to be maintained for the following gas days as long as the storage level does not fall below 95%.

- b. A (delivering) transfer of gas-in-store in the **Storage Facility** in accordance with article 21 of the **General Terms and Condition for Storage Access** at a level that meets one of the above criteria.
 - c. A purchase of firm **Working Gas Volume** in the **Storage Facility** either on primary or secondary (in accordance with article 20 of the **General Terms and Condition for Storage Access**) market that covers the contracted interruptible **Working Gas Volume**, provided that firm **Working Gas Volume** is available in the **Storage Facility**, whereas such firm **Working Gas Volume** at no point substitutes the interruptible **Working Gas Volumes** booked hereunder.
3. **Storage Customer's** interruptible capacities will be available again once the published overall **Storage Level** is less than 95%.
 4. In case it is evident that **Storage Customer** has not taken any reasonable endeavors to clear the interrupted **Working Gas Volume**, **astora** will submit a "Clearing Reminder" via e-mail to the **Storage Customer**. Subsequently, the **Storage Customer's** withdrawal is monitored on a continuous basis.
 5. If **Storage Customer** has not undertaken any reasonable endeavor to clear its interruptible **Working Gas Volume** **astora** has the right to terminate this **Storage Services Agreement** with immediate effect via e-mail to the **Storage Customer**.
 6. **Storage Customer's** obligation to clear its **Working Gas Volume** according to Section 2 is deemed to be fulfilled, if **Storage Customer** places a nomination for withdrawal once the **Working Gas Volume** has been interrupted pursuant to Section 2 and **astora** interrupts the respective withdrawal nomination.
 7. In case of a termination according to this Section 5 **astora** is entitled to sell the gas quantities that **Storage Customer** failed to withdraw according to this Article in order to minimize its damages, whereas 50% of the sale proceeds are considered to be **astora's** typical damage without further proof of actual damage ("penalty sale"). **astora** will pay to the **Storage Customer** 50% of the price for which **astora** sold the gas quantities according in line with the penalty sale.

Article 7 Technical Limitations

1. All **Storage Capacities** of the **Storage Services** described in Article 2 shall be subject to the technical limitations listed in this Article.

2. Injection

Up to an overall storage level of working gas in the **Storage Facility** of 31.8 billion kWh a minimum volume flow of 1,680,000 kWh/h shall be required.

Beyond an overall storage level of working gas in the **Storage Facility** of 31.8 billion kWh a minimum volume flow of 3,920,000 kWh/h shall be required.

During the time period November 1st until April 1st physical injection can only be provided on a best effort basis.

3. Withdrawal

Regardless of the overall storage level of working gas in the **Storage Facility**, a minimum volume flow of 896,000 kWh/h shall be required.

During the time period April 1st until October 1st physical withdrawal can only be provided on a best effort basis.

4. In the operation of the **Storage Facility** the following times have to be considered:

Change from withdrawal to injection up to 2.0 h

Change from zero flow to injection up to 2.0 h

Change from injection to withdrawal up to 6.0 h

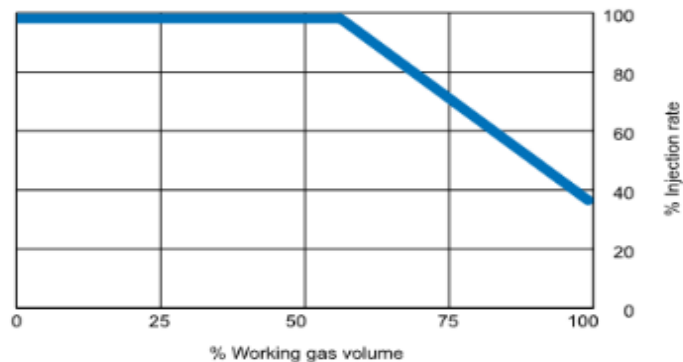
Change from zero flow to withdrawal up to 6.0 h

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

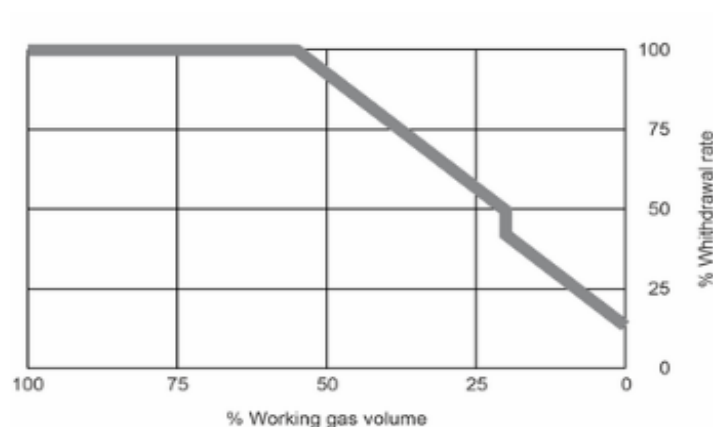
Article 8 Injection and Withdrawal Curves

The usage of the **Storage Facility** is limited by the curves for firm **Injection Capacity** and firm **Withdrawal Capacity**. The following curves apply:

Injection characteristic:



Withdrawal characteristic:



In **addition** to the reduction according to the characteristic curves, **astora** has the right to

- reduce the firm **Injection Capacity** by up to 15% if the outside temperature at the **Storage Facility** exceeds 30°C,
- provided the firm **Withdrawal Capacity** on best effort basis if the outdoor temperature at the **Storage Facility** is 20 °C or higher,

The actual temperature measured by the metering station of MeteoGroup in Diepholz for the respective hour, serves as a reference for the outdoor temperature at the **Storage Facility**.

Article 9 Restriction of the Maximum Usage

The following limits apply to the sum of the utilization of all **Storage Customers** who have booked the product of this specification.

	01.04. – 01.10.		01.10.- 01.04.	
	WGV < 95 %	WGV > 95 %	WGV < 95 %	WGV > 95 %
injection	max. injection curve	not allowed	minimum of <ul style="list-style-type: none"> injection curve withdrawal curve 	not allowed
withdrawal	minimum of <ul style="list-style-type: none"> injection curve withdrawal curve 	5,000,000 kWh/h	max. withdrawal curve	5,000,000 kWh/h

Article 10 Operational Communications

Contrary to Article 3 Section 1, of the **Operating Agreement** (Annex to the General Terms and Conditions for Storage Access), **Storage Customer** shall use the **Storage Portal** as primary communication path. In case of a technical shortfall, nominations shall be submitted via e-mail to operations@astora.de. This does not apply, if

- a. an ASX-communication between the parties already exists or can be easily reactivated. In this case the **Storage Customer** is entitled to use the existing communication path; or
- b. **Storage Customer** holds valid **Storage Services Agreements** with **astora** that were concluded within the last storage year and the current storage year before/in which **Storage Customer** booked interruptible working gas volume via PRISMA with a total contract value of €50,000. In this case the parties take best efforts to setup an ASX-communication without any additional costs for **Storage Customer**. If the setup takes longer than the **Start Day** of the **Storage Services Agreement** for interruptible **Working Gas Volume**, **Storage Customer** provisionally uses the Storage portal as main communication path until the ASX-communication is set up; or
- c. Storage Customer separately books an ASX-communication from **astora** for a price of €2,000. Such booking can be requested from astora via e-mail.

Article 11 Relation to Existing Storage Services Agreements

1. A combination of Storage Products under this **Storage Specification** at the **Storage Facility** is only admissible if the **Storage Services Agreements** to be combined all feature a fixed fee. **Storage Services**

Agreements with a fixed fee cannot be combined with any **Storage Services** booked in line with this **Storage Specification**.

2. For transfers of gas according to Article 21 **General Terms and Conditions for Storage Access** from **Storage Customer's** accounts with a fixed fee only to such accounts with variable fee, an additional transfer fee equal to the variable fee which the receiving party has to pay will be charged to the receiving **Storage Customer**.

Article 12 Delivery Point and Quality Specification

The **Point of Withdrawal and Injection** shall correspond to the point at which the **Storage Facility** is connected to the **Neighbouring Natural Gas Network**. The **Neighbouring Natural Gas Network** of the **Storage Facility** is the natural gas network operated by GASCADE Gastransport GmbH, Kassel (D) (GASCADE).

Delivery Point to GASCADE is defined as: „Sp. Rehden“; Netzkpunkt-ID: 1BMA (allocation procedure: declaratory).

For the **Storage Facility** the quality parameters published by the **Neighbouring Network Operator** shall apply at the **Delivery Point**.