

Storage Specification Haidach SY 24/25 (2) – 2.4 TWh

astora GmbH Karthäuserstraße 4 34117 Kassel, Germany

hereinafter referred to as "astora"



Contents

Article 1	Introduction	3
Article 2	Storage Services	3
Article 3	Storage Services Fee	3
Article 4	Exceeding of Storage Capacities	4
Article 5	Tariff for Exceeding the Storage Capacities	4
Article 6	Operations	4
Article 7	Implementation Section 104 (3) and (4) 2 nd Variant GWG 2011	4
Article 8	Injection and Withdrawal Curves	5
Article 9	Delivery Points	6
Article 10	Natural Gas Quality Specifications	6
Article 11	Modification of the Storage Specification	6
Annex	Provisions for REGENT	



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 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.

Article 2 Storage Services

Name of product: Haidach SY 24/25 (2) – 2.4 TWh
Allocation: Pay-as-bid in keyed procedure

Term: 01.04.2024 until 01.04.2025 (6:00 a.m.)

Scope of (1) bundle

firm

Working Gas Volume 32,797,619 kWh

Injection Rate 11,874 kWh/h

Withdrawal Rate 13,119 kWh/h

Article 3 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.**

In amendment of Article 33 Section 1 of the *General Terms and Conditions for Storage Access*, the monthly invoice amount shall be determined on the



basis of the number of calendar days of each month (example: **Storage Fee** / number of calendar days in the storage year * number of calendar days of the relevant month).

Article 4 Exceeding of Storage Capacities

- 1. astora going beyond its obligation pursuant to Article 8 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 8 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 among those customers whose **Storage Capacity** is exceeded.
- For nominations exceeding the booked storage capacities and the capacity specified under Section 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.

Article 5 Tariff for Exceeding the Storage Capacities

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

Article 6 Operations

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

Article 7 Implementation Section 104 (3) and (4) 2nd Variant GWG 2011

Unused and committed **Storage Capacities** shall be offered to the market in a non-discriminatory auction for booking until the end of the **Storage Year**.

The **Storage Fee** obtained in the event of a booking by a third party shall be offset against the **Storage Fee** payable by the **Storage Customer** less the following handling fee:



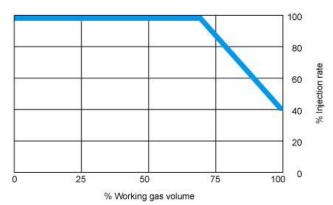
Processing fee = €10,000 (lump sum per auction conducted).

+ max {10,000 €;10,000 € * x}, where

x =quantity successfully marketed to third parties in TWh.

Article 8 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 Sections 4 and 5 should be reached, **astora** may lower the **Injection** or **Withdrawal Rate** to the percentage specified according to 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.

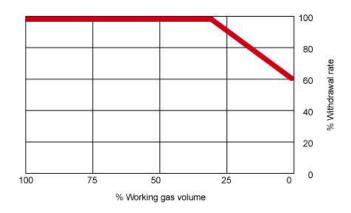


The available *Injection Rates* of the *Storage Customer* (IR) in case a *Customer's Storage Level* of *Working Gas Volume* (WGV) exceeds 70% shall be calculated as follows:

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

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:

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

Article 9 Delivery Points

- 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.

Article 10 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 $(CO_2) \le 2 \text{ mol}\%$

Article 11 Modification of the Storage Specification

astora is entitled to change the **Storage Specification** at any time. With regard to the modification of the **Storage Specification**, § 44 of the **Terms and Conditions for Storage Access** shall apply accordingly.



astora is entitled at any time to unilaterally adjust the **Storage Specification** with regard to any minimum filling levels required by law and any associated provision of **Storage Capacities** to the market area manager, to the extent this is necessary as a result of legal and/or regulatory requirements. In addition to legally binding requirements, guidelines and/or interpretation aids issued by the regulatory authority shall also be deemed to be regulatory requirements within the meaning of the preceding sentence. Section 44 of the **Terms and Conditions for Storage Access** shall apply to such an adjustment with the provison that the **Storage Customer** shall not be entitled to terminate its **Storage Contracts** as a result thereof. The amendment shall become effective upon entry into force of the provisions and/or guidelines.



Annex

Provisions for REGENT

Preamble

For **Storage Services Agreements** concluded at the **Storage Location** Haidach (hereinafter referred to as "**Storage**") the implementation of No. 2 sentence 2 of the operative part of the Federal Network Agency's decision 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 (determinations BK9-19/610 of 11.09.2020, hereinafter referred to as "**REGENT 2021**").

According to section 2 of the operative part of **REGENT 2021**, 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 which is connected to more than one transmission or distribution system directly or, to avoid the threat of direct line construction, indirectly, is not used as an alternative to a grid connection point.

The network operator must have the storage operator prove the non-usability of the storage facility with discounted capacities as an alternative to a grid connection point in accordance with section 2 of the operative part of **REGENT 2021**.

Moreover, at the **Storage**, as the case may be, a reduced tariff may be applied according to section 3 lit. b) (2) and (4) of the operative part of **REGENT 2021** with respect to working gas quantities that are injected into or withdrawn from the **Storage** (hereinafter referred to as "reduced tariff"). Pursuant to section 3 lit. b (5) of **REGENT 2021**, quantities that have been priced with the **reduced tariff** may not be used to circumvent regular tariffs for the crossing of market areas. Working gas quantities injected at a discount may not be transported to Austria using the **reduced tariff** and working gas quantities injected from Austria at a **reduced tariff** may not be withdrawn at a discount.

With effect from 01.10.2021 **REGENT 2021** replaces the decision of the Federal Network Agency dated 29.03.2019, ref. no. BK9-18/610-NCG and BK9-18/611-GP (hereinafter referred to as **REGENT**) due to the merger of the previous market areas Net Connect Germany and GASPOOL into the joint market area "Trading Hub Europe" (hereinafter referred to as "**THE**") with effect from 01.10.2021.

Therefore, astora and Storage Customer agree to the following:



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

- 1. **astora** undertakes to keep a separate account for each **Storage Customer** to which the working gas quantities are booked, which are
 - a. injected and withdrawn from the **Storage** using exit or injection capacity of the network operator at the storage connection point, which is priced with a discounted tariff in accordance with the provisions of section 2 sentence 1 of the operative part of **REGENT 2021** (hereinafter referred to as "discounted capacity") (hereinafter referred to as "discount account THE"),
 - b. injected into and withdrawn from the **Storage** using exit or entry capacity of the network operator at the storage connection point which is not priced with a discounted tariff according to the provisions of Number 2 Sentence 1 of the operative part of **REGENT 2021** (hereinafter referred to as "non-discounted capacity") (hereinafter referred to as "non-discounted account THE"), and
 - c. are injected and withdrawn from **Storage** using dynamically allocable exit or entry capacity (DZK) of the network operator at the storage connection point which can be priced with a **reduced tariff** (hereinafter referred to as "reduced capacity") (hereinafter referred to as "non-discount account THE reduced").

The provisions of section 2 number 2 lit. d) and e) remain unaffected.

- 2. **astora** shall initially ensure that a reclassification of gas volumes
 - a. between the **discount account THE** and a **non-discount account THE** as well as
 - b. between the **discount account THE** and a **non-discount account TTF**, is not possible in either direction.

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

- In accordance with REGENT 2021, the network operator shall ensure that a transport customer
 - a. can only place discounted capacity into a balancing group/sub-balancing account without a special designation for non-discounted capacity (hereinafter referred to as "Bdiscounted"),
 - b. can only place **undiscounted capacity** into a specially marked balancing group/sub-balancing account for non-discounted capacity (hereinafter referred to as "Bnon-discounted"), and



- c. can place GTS capacities in a balancing group/sub-balancing account of Gas Transport Services B.V., Groningen (NL) (hereinafter referred to as "Bnondiscounted TTF").
- 2. **astora** shall initially ensure that working gas quantities under the **Storage Service****Agreements* concluded between the **Contractual Counter Party** which
 - a. are injected from a **B**_{discounted} are exclusively allocated to a **discount account** THE.
 - b. are injected from a **B**non-discounted, are exclusively allocated to a **non-discounted** account THE,
 - c. are injected from a **B**_{non-discounted} **TTF**, are exclusively assigned to a **non-discounted account TTF**.
 - d. are withdrawn from a non-discounted account,
 - i. are either transferred to a Bnon-discounted
 - ii. or be transferred to a **B**non-discounted **TTF**,

10/11

- iii. or, if the injected working gas quantities can be proven to have been transferred back to the **THE** market area from which the working gas quantity in question was originally injected, to a **B**discounted, and
- e. are withdrawn from a **discount account THE**, are either transferred to a **B**_{discounted} or, if the injected working gas quantities can be proven to be withdrawn again into the market area **THE** from which the working gas quantity in question was originally injected, are transferred to a **B**_{non-discounted}.

The working gas quantities are allocated to the respective accounts of the **Storage Customer** by means of different balancing group codes. The **Storage Customer** shall inform **astora** of the balancing group codes to be used by the **Storage Customer** no later than five (5) calendar days before the start of the **Storage Service Agreement**.

3. If the Storage Customer and the network operator have agreed on invoicing in accordance with recital 558 of REGENT 2021, the Storage Customer shall be responsible to submit the written information of the respective network operator to astora in a timely manner. In this case, a transfer from the discount account THE to the non-discounted account THE or from the non-discounted account THE reduced to the discount account THE may be performed in deviation from section 1 number 2, sentence 1.



- 4. If an allocation or transfer of the working gas quantities cannot take place in accordance with number 2, **astora** will reduce the nominations concerned to zero in the context of matching and communicate this to the network operators.
- 5. According to **REGENT 2021** the network operator is obliged to review the balance of the respective balancing groups on a monthly basis or at the end of the term of the capacities used within the meaning of Tenor 3 b) (1) of **REGENT 2021** in order to determine the utilisation of the virtual trading point by means of the capacities used
 - a. If, in the case of section 2 number 1 lit. a. or lit. b., the balance for the respective balancing group is balanced in every hour of the booking period of the respective capacities upon proof of the shipper vis-à-vis the network operator, these capacities can be subsequently settled as reduced capacity in accordance with Tenor 3 b) (1) of REGENT 2021, provided that the working gas quantities fed into the balancing group from the beginning of the term of the respective capacities were present in the non-discounted account THE reduced at all times until the subsequent settlement. The working gas quantities withdrawn from the non-discounted account THE reduced in this context must be subsequently credited to the discount account THE in the case of section 2 number 1 lit. a. or to the non-discounted account THE in the case of section 2 number 1 lit. b.. According to REGENT 2021 the network operator shall inform astora of this after prior consultation with the transport customer.

In the event of injection, the **REGENT 2021** obliges the network operator to inform **astora**, after prior agreement with the transport customer, which working gas quantities are to be subsequently credited to the **non-discounted account THE reduced** and from which storage account these working gas quantities are to be withdrawn.

b. If in the case of section 2 number 1 lit. c. the balance is demonstrably not balanced in every hour, the capacities used for the unbalanced part of the balance must be subsequently settled as discounted capacity, provided that the working gas quantities fed into the balancing group from the beginning of the term of the respective capacity were available in the discount account THE or the non-discounted account THE (exclusively quantities which were stored from the market area THE) at any time until the subsequent settlement. The working gas quantities withdrawn from the corresponding accounts in this context must be credited to the non-discounted account THE reduced afterwards. Otherwise, the respective capacity is subsequently billed as non-discounted capacity for the entire booking period.

According to **REGENT 2021** the network operator is obliged inform **astora** of this after prior consultation with the transport customer.