

Storage Specification Interruptible Storage Capacity Haidach 22/23

astora GmbH Karthäuserstraße 4 34117 Kassel, Germany

hereinafter referred to as "astora"



Contents

Article 1	Introduction	3
Article 2	Storage Services	3
Article 3	(Pre-) Booking Requirements	4
Article 4	Operational Handling of Interruptible Working Gas Volume	4
Article 5	Storage Services Fee	6
Article 6	Invoicing and Payment	6
Article 7	Relation to Existing Storage Services Agreements	6
Article 8	Injection and Withdrawal Curves	6
Article 9	Exceeding of Storage Capacities	6
Article 10	Operations	7
Article 11	Delivery Points	7
Article 12	Natural Gas Quality Specifications	8
Annex	Provisions for REGENT	9



Article 1 Introduction

- 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 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. Name of product:	WGV (interruptible)
Storage Location:	Haidach
Kind of product:	Unbundled <i>Working Gas Volume</i> interruptible
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.

2. The herein described *Storage Services* are unbundled.

The additional booking of *Injection and Withdrawal Capacity* falls within *Storage Customer's* sole responsibility, whereas *astora* warrants to offer *Injection Capacity* (interruptible) and *Withdrawal Capacity* (interruptible) for the period 1st April 2022 to 1st April, 2023, at a price of 0.00168



€/kWh/h/d (0.07 €/MWh if utilised to a full extent) and 0.00240 €/kWh/h (0.10 €/MWh if utilised to a full extent), respectively.

Article 3 (Pre-) Booking Requirements

1. The minimum booking period for interruptible *Working Gas Volume* is

a. 90 *Gas Days*, if the party has no existing bundled *Storage Services* booked with astora in the *Storage Location* Haidach.

b. 30 *Gas Days,* if there are bundled *Storage Services* with astora in place in the *Storage Location* Haidach [in order to promote late withdrawal/early injection]

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 4 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 97% in the contracted Storage Location. 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 97% 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 97%. The Storage Customer is therefore obliged to perform one of the following measures, once the overall storage level reaches 97%:
 - a. Nominate gas quantities towards astora and one of the relevant **Neighbouring Network Operator**, starting with the first hour of the following gas day. The daily quantity thus nominated must be at least 20% of the 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 97%.

- 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 Location*, whereas such firm *Working Gas Volume* at no point substitutes the interruptible *Working Gas Volumes* booked hereunder.
- 2. **Storage Customer**'s interruptible capacities will be available again once the published overall **Storage Level** is less than 97%.
- 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 92% astora will notify the Storage Customer via e-mail. If the Storage Level ("d-1", end-of-day) exceeds 97% astora will submit a "Call for immediate Clearing" on day "d" via e-mail to Storage Customer.
- 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**.
- Storage Customer's obligation to clear its Working Gas Volume according to this Art. 3 No. 1 is deemed to be fulfilled, if Storage Customer places a nomination for withdrawal once the Working Gas Volume has been interrupted pursuant to Art. 3 No. 1 and astora interrupts the respective withdrawal nomination.
- 7. In case of a termination according to this Article 3 No. 5 astora is entitled to sell the gas quantities that *Storage Customer* failed to withdraw according to this article 3 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 5 Storage Services Fee

The **Storage Services Fee** is fixed and is determined by **Storage Customer's** offer for the specific product via PRISMA and **astora's** corresponding booking confirmation. The **Storage Customer** shall be obliged to pay the **Storage Services Fee** for the **Storage Capacities** made available by **astora** independent of the use.

Article 6 Invoicing and Payment

The fixed **Storage Services Fee** according to article 5 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.

Article 7 Relation to Existing Storage Services Agreements

- A combination of Storage Products under this Storage Specification at the Storage Location is only admissible, if the Storage Services Agreements to be combined all feature a variable fee. Storage Services Agreements without a variable 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 and 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 8 Injection and Withdrawal Curves

- 1. Storage Services under this Storage Specification are not restricted by Injection and Withdrawal Curves.
- 2. In case *Storage Services* under this *Storage Specification* are combined with other *Storage Services* the *Injection and Withdrawal Curve* restrictions as stipulated for the respective other *Storage Services Agreement* continue to be applicable for the respective other product.

Article 9 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 Capacities* 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:

- a) *Injection rate*: 2.8 ct/(kWh/h)/d
- b) *Withdrawal rate*: 3.9 ct/(kWh/h)/d

Article 10 Operations

- 1. In the Haidach **Storage Location** the time required to process a **Renomination** shall be two (2) hours.
- 2. Contrary to article 3, para 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 the 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 ASXcommunication 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 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 12 Natural Gas Quality Specifications

For the Haidach **Storage Facility** at the **Delivery Points** listed in Article 11 hereunder the values of DVGW G 260; 2nd gas family shall apply with the exception of the following parameters: Carbon dioxide $(CO_2) \le 2 \mod \%$



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 and 3 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**") apply.

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 from Austria using the **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:

Section1 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

- 1. 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 "B_{discounted}"),
 - b. can only place **undiscounted capacity** into a specially marked balancing group/sub-balancing account for non-discounted capacity (hereinafter referred to as "**B**non-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 **B**non-discounted
 - ii. or be transferred to a **B**non-discounted **TTF**,
 - 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.
- 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.

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

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
 - d. 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
 - e. are injected/withdrawn into/from the **Storage** by using exit or entry capacity of the network operators at the storage connection points which are <u>not</u> priced with a discounted tariff (hereinafter referred to as "**nondiscounted capacity**") or by using <u>limited allocable</u> 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/subbalancing accounts and allocation of gas quantities to discounted and nondiscounted 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/subbalancing 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/subbalancing 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 **nondiscounted 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.