

# **Annex: Operation and Nomination**

to the General Terms and Conditions for access to the hydrogen storage facilities operated by RWE Gas Storage West GmbH (RGSW)

#### Preamble

This Annex "Operation and Nomination" of RWE Gas Storage West GmbH (RGSW) describes the operating interfaces, mutual business roles and business processes between the storage customer and RGSW to process the hydrogen storage facility access.

# § 1 Availability

- (1) RGSW and the storage customer hereby agree to be available 24 hours on every gas day. Availability must be assured at least by telephone and, if feasible, via a further communication medium.
- (2) The storage customer and RGSW hereby agree to be able to receive, sent and process the data necessary for operation (nomination, renomination und allocation) via the agreed communication media according to § 4.

#### § 2 Identification

RGSW shall allocate the following to the storage customer in due time before the start of the agreed storage utilisation:

- at least one shipper code for clear identification within the framework of the nomination; and
- the link to the web portal and the access data for the web portal via in which the relevant data for the operation and the allocation data are provided by RGSW;
  and
- a specific code for the usable *storage injection* and *withdrawal points* in the form of an ID code (identification of the affected network point).

### § 3 Storage Contract Account

(1) RGSW shall set up a storage contract account for each storage customer for each storage contract.



- (2) The storage customer may request several shipper codes for the use of a storage contract account. RGSW shall allocate the additionally requested shipper codes to the storage customer in due time before the start of the agreed storage utilisation.
- (3) RGSW shall provide the storage customer with the storage contract accounts via the web portal of RGSW. RGSW shall set up for the storage customer upon request up to 20 access authorisations for the web portal.
- (4) The setting up of the storage contract account shall be made by RGSW within seven (7) working days after signature of the storage contract.

### § 4 Communication media for nomination and allocation procedure

- (1) All data necessary for the execution of the storage contract (Nomination procedure pursuant §7 and Matching procedure pursuant §12) shall be exchanged via the following communication medium:
  - Edig@s über AS4

The data necessary for processing shall be specified in SI units.

- (2) If the communication medium pursuant to Paragraph (1) is not available, the contractual partners hereby agree to take all adequate measures without undue delay to reactivate and use the communication medium pursuant to Paragraph (1). The communications (file in Edig@s xml) for this transition period shall be made by email or via the web portal.
- (3) The storage customer and RGSW shall inform each other in text form (e.g. using a contact form) in due time before the start of the agreed storage facility utilisation of the addresses, telephone numbers and e-mail addresses necessary for communication. An e-mail shall be sufficient.
- (4) If the addresses, telephone numbers and e-mail addresses necessary for communication change during the execution of a storage contract, the storage customer as well as RGSW, as the case may be, must communicate this without undue delay in text form to the other contractual partner. An e-mail shall be sufficient.

### § 5 Communication test

(1) Prior to the start of the storage facility utilisation, RGSW will perform a communication test with the storage customer. In such communication test, RGSW shall check whether the communication requirements have been fulfilled and whether the storage customer is able to send notices and messages relating to the operative execution of the storage contract and to receive and process such notices and messages from RGSW.



- (2) RGSW shall be entitled to repeat the communication test throughout the term of the storage contract if RGSW has legitimate doubt as to whether the storage customer is still able to meet the communication requirements.
- (3) If the storage customer does not pass the communication test, RGSW shall be entitled to reduce all nominations to zero for the following gas days after the date of the failure to pass the communication test. In such event, nominations shall only be accepted again after the communication test is passed.
- (4) In the case of paragraph (3), the storage customer and RGSW shall endeavour to take all necessary measures within their respective areas of responsibility to fulfil the communication requirements without delay and to carry out the communication test again.
- (5) If RGSW has reduced nominations pursuant to Paragraph (3) to zero and the storage customer has passed a new communication test, the nominations reduced to zero for storage facility utilisation must be sent again by the storage customer as a new nomination.
- (6) The period for a communication test shall normally amount to at least 7 working days.

#### § 6 Nominations

- (1) Nominations are to be made by the storage customer for the hydrogen volumes to be taken over by RGSW for injection per storage injection point and for the hydrogen volumes to be made available by RGSW for withdrawal per storage withdrawal point.
- (2) Nominations may only be undertaken by the storage customer or with the approval of RGSW by a commissioned third party in the name of the storage customer. If the nominations are to be undertaken by a third party commissioned by the storage customer, RGSW shall perform the communication test pursuant to § 5 with the commissioned third party. Provided the commissioned third party agrees to comply with the provisions of this Annex and passes the communication test, the approval pursuant to Sentence 1 is to be granted by RGSW. If RGSW grants its approval, the provisions of this Annex applicable to the storage customer shall apply accordingly to the commissioned third party.
- (3) Nominations pursuant to Paragraph (1) shall only be valid if RGSW and the adjacent hydrogen network operator match these. The provisions pursuant to § 12 shall apply to the matching.
- (4) The storage customer shall be entitled to renominate the nominated hydrogen volumes. The nominations made pursuant to Paragraph (3) by the storage customer or the nominations declared valid after carrying out the matching procedure shall



- then be replaced by the renominations. Paragraph (3) shall apply accordingly to renominations.
- (5) The nominations and renominations submitted to RGSW by the storage customer shall be valid at the earliest 2 hours after receipt of the renomination by RGSW for the next full hour (Renominierungsfrist).

## § 7 Nomination procedure

- (1) Nominations and renominations are to be made by specifying the relevant shipper code and ID code.
- (2) Nominations and renominations must contain for each gas day the hourly hydrogen volumes to be taken over or made available based on CET or CEST in kWh/h. Nominations are to be undertaken for 24 hours and must result in a whole number in relation to each hour.
- (3) Nominations of the hourly hydrogen volumes to be taken over or made available shall be made as daily nominations. Daily nominations for the following gas day shall be made no later than two (2) hours before the start of the following gas day.

## § 8 Notice of shipper codes

- (1) The storage customer shall notify RGSW in text form at least ten (10) working days before the start of storage utilisation of the shipper code assigned to the storage customer by the hydrogen network operator. The notification shall be made by email to the e-mail address specified by RGSW. The storage customer shall inform RGSW of any change of the shipper code at least ten working days before its intended use. The information shall be sent by e-mail to the e-mail address specified by RGSW.
- (2) For nominations of hydrogen quantities to be injected or withdrawn from storage, shipper code pairs shall be specified in the order grid-side shipper code storage shipper code for all storage injection or withdrawal points.



# § 9 Time change

Notwithstanding § 7 (2), in the event of a change from CET to CEST and from CEST to CET the daily nominations pursuant to § 7 Paragraph (3) are to be made by the storage customer with due regard to the following provisions for the corresponding gas day:

(a) Change form CET to CEST:

The storage customer shall nominate for each storage injection and withdrawal point 23 consecutive hourly values.

(b) Change from CEST to CET:

The storage customer shall nominate for each storage injection and withdrawal point 25 consecutive hourly values.

### § 10 Amount of nomination

- (1) The amount of the nominations or renominations of the storage customer may not exceed the *storage capacities* agreed with RGSW pursuant to the storage contract. In order to enable the review of any exceeding of the agreed *storage capacities*, RGSW shall convert the nominations and renominations of the storage customer in units of m<sup>3</sup> per h.
- (2) According to § 10 Paragraph (1) the conversion of the injection nominations or renominations shall be the measured reference calorific value of the storage facility. The reference calorific value shall be settled every Thursday (D) and shall be applied beginning from the next Friday (D+1) until the end of next Thursday (D+7). The value of the reference calorific value is the last measured calorific value.
- (3) According to § 10 Paragraph (1) the conversion of the withdrawal nominations or renominations shall be the specific reference calorific value of the actual stored hydrogen regarding to the agreed working gas volume of the storage contract. The value of the specific reference calorific value shall be settled every Day (D) and shall be applied for the next Day (D+1). The settlement of specific reference calorific value shall be based on the actual stored hydrogen volume within the agreed working gas volume of the previous Day (D-1) and shall be calculated as follows:
  - Storage hydrogen volume in the unit kWh / Stored hydrogen volume in the unit m³ = specific reference calorific value.



## § 11 Rejection or reduction of nominations

- (1) RGSW shall be entitled to reject the nominations or renominations made by the storage customer or to reduce the valid nominations of the storage customer pursuant to § 6 Paragraph (3) to zero in the following cases:
  - 1.1. With the nominations or renominations, the storage customer exceeds the availabilities notified to the storage customer pursuant to the Annex "Technical Framework Conditions".
  - 1.2. With the nominations or renominations, the storage customer does not comply with the minimum flow technically required as determined in the Annex "Technical Framework Conditions".
  - 1.3. With the nominations or renominations, the storage customer fails to comply with the changeover periods determined in the Annex "Technical Framework Conditions".
  - 1.4. With the nominations or renominations, the storage customer breaches the requirements determined in the Annex "Technical Framework Conditions" for the utilisation of the maintained *working gas volume*.
  - 1.5. The storage customer violates the nomination or renomination deadlines according to § 7 with the nominations or renominations.
  - 1.6. The nominations or renominations do not meet the formal requirements in accordance with this Annex, are substantively incomplete or are not made via the agreed communication media.
- (2) The nominations and renominations made by the storage customer exceeding the storage capacities agreed pursuant to the storage contract in relation to the injection and withdrawal capacity shall be reduced by RGSW until they correspond to the agreed storage capacities.
- (3) If the filling level of the working gas volume maintained for the storage customer plus the nomination or renomination made by the storage customer for the injection exceeds the working gas volume maintained for the storage customer, the nomination or renomination of the storage customer shall be reduced by RGSW. The reduction shall be made until the nomination or renomination made corresponds to the maintained working gas volume.
- (4) If, prior to the withdrawal, the corresponding hydrogen volumes have not been injected by the storage customer or transferred within the *storage facility* to the storage customer and thus the filling level of the *working gas volume* maintained for the storage customer is smaller than the storage customer's nomination or renomination for withdrawal, the nomination or renomination of the storage customer shall be reduced by RGSW. The reduction shall be made until the nomination or renomination corresponds to the filling level.
- (5) If interruptible *storage capacities* are agreed between the storage customer and RGSW, RGSW shall be entitled to reduce valid nominations or renominations or



- nominations or renominations made before or after carrying out the matching procedure.
- (6) If the nomination of the storage customer is rejected, a nomination at zero shall apply for the corresponding hour.
- (7) If the nomination of the storage customer is reduced by RGSW, RGSW shall send the value of the reduced nomination to the storage customer. At the same time the reduced nomination shall be sent to the adjacent hydrogen network operator by RGSW and the value of the reduced nomination shall be matched with the adjacent hydrogen network operator. The reduction may be made so that the nominated natural gas volume is zero and shall become valid at the earliest two hours after notice of the reduction as of the next full hour.
- (8) The reduction of Nomination pursuant to Paragraph (6) and Paragraph (7) shall be made by RGSW by electronic means via Edig@s (NOMRES).

## § 12 Matching procedure

- (1) The storage customer must assure that for all *storage injection* and *withdrawal points* identical nominations are made both in relation to RGSW and in relation to the upstream and downstream hydrogen network operators. RGSW shall be obliged to match the nominations and renominations made by the storage customer with the respective upstream and downstream hydrogen network operator, if the hydrogen network operator initiates the corresponding matching within the matching procedure. RGSW shall inform the storage customer electronically after receipt of the nomination or renomination by the storage customer and normally 30 minutes before the nomination or renomination received becomes effective pursuant to Paragraph (4), provided that matching has taken place by then.
- (2) If it is determined during the matching procedures between RGSW and the relevant hydrogen network operator that the nominations or renominations made by the storage customer with RGSW do not conform with those nominations or renominations of the storage customer made to the relevant hydrogen network operator, the "lesser off rule" shall apply. Within the framework of the "lesser off rule", the smaller nomination or renomination than the nomination made between the relevant adjacent hydrogen network operator and RGSW shall be matched and thus become valid pursuant to § 6 Paragraph (3). If the "lesser off rule" is applicable, RGSW shall confirm the reduced nomination to the storage customer.
- (3) After the matching pursuant to Paragraphs (1) and (2) is completed, RGSW shall send the storage customer a confirmation (NOMRES). The confirmation shall contain the hydrogen volumes to be taken over by RGSW from the storage customer or the hydrogen to be provided to the storage customer.
- (4) The nominations and renominations matched between RGSW and the respective adjacent hydrogen network operator are valid nominations pursuant to Article 6



Paragraph (3), in relation to the storage customer and shall be used by RGSW for the allocation in accordance with the Annex "Balancing".