

V. MANAGEMENT AND SUPERVISION OF THE GAS STORAGE SYSTEM

The control centre of the Gas Storage System

Article 13.

(1) For the purpose of efficient and reliable management and maintenance of the Storage the Operator is obliged to supervise the operation of the Storage, the measurement of input and output flows, gas quality parameters and also reliability of gas delivery.

(2) Supervision of operation and the Storage management is performed constantly from the control centre of the Operator, as well as by systematic operational system supervision.

(3) The Operator will manage the system in such a manner as to meet the conditions prescribed by verified project documentation while adhering to technical and operating limitations of the system.

(4) Technical and operational limitations of the Storage are based on the maximum allowed pressure of the reservoir and the surface facility and on the minimal pressure of the reservoir as well as pressure of the system to which it is connected.

(5) The Operator's control centre will cooperate and exchange information with the Transmission System Operator and Users in matters concerning nominations, balancing of the transmission system, cooperation during disruption of storage activities or transmission and also during crisis, and in accordance with applicable legislation.

(6) In order to maintain contact with the Operator the User needs to manage the following communication tools and constantly keep them in function during each gas day:

- a computer connected to the internet 0-24, which is able to send and receive e-mails;
- telephone connection 0-24;
- a device for receiving and sending fax messages.

Article 14.

In order to manage the Storage, for the purposes of ensuring safety and reliability of its operation and supervision of Storage plant, the control centre of the Operator has to have access to the measurement, information and telecommunication system which enables him to:

- keep continuous supervision of the technological parameters and management of key facilities; of the Storage in real time;
- notice disruptions in the technological gas storage process;
- measuring, recording and centralised data gathering on the achieved gas flow and gas quality at the entry into the Storage and exit from the Storage;
- communicate with the Transmission System Operators' dispatcher centre for the purpose of exchanging operational data;
- exchange data and operational communication with the connected Distribution System Operator's dispatcher centre and the Gas Market Operator;
- achieve operational communication with Users;
- report on the Storage usage.

Article 15.

For the purpose of ensuring the safety and reliability of Gas Storage System operations, aside from what has been mentioned in Article 14 of this Storage Code, the Operator is obliged to organise permanent readiness for the emergency repair of defects or faults in the Storage, or rather to undertake measures to lessen their impact on the Storage operations.

Determining the technical storage capacity

Article 16.

- (1) The procedure for determining the technical storage capacity guarantees that the nominations of the Users do not exceed the technical capabilities of the Storage. The technical storage capacity is defined by the Operator and it is defined as the maximum firm capacity which the Operator can offer to the Users, taking into account the integrity and the operational demands of the storage system, and it relates to the working volume, maximum injection and maximum withdrawal capacity.
- (2) Storage is also limited by the minimal and maximal withdrawal capacity and the minimal and maximal injection capacity, which are conditional upon the technical characteristics of the Storage, fill-up level at a certain moment and they are established by the Operator.
- (3) Minimal hourly gas withdraw capacity (MinQph) is 200 000 kWh/h and the minimal daily gas withdraw capacity (MinQpd) is 2 000 000 kWh/day.
- (4) The Operator during the transitional mode in the withdraw cycle shall operate only if the withdraw with MinQph lasts continuously for at least 10 hours during a gas day.
- (5) The minimal hourly gas injection capacity (MinQuh) amounts to 300 000 kWh/h and the minimal daily gas injection capacity (MinQud) amounts to 2 400 000 kWh/day. The Operator shall operate only if the injection with a MinQuh lasts continuously for at least 8 hours during a gas day during the transitional mode in the injection cycle.
- (6) In order to ensure safety and reliability of the Storage operation the Operator may refuse User's nominations if the nominated withdraw capacity of all Users is less than MinQpd or if the nominated injection capacity of all Users is less than MinQud respectively.

Managing the capacities of the Gas Storage System

Article 17.

- (1) The gas injection cycle lasts from the gas day 1st of April until the gas day 30th of September \pm 30 days, while the withdraw cycle lasts from the gas day 1st of October until the gas day 31st of March \pm 30 days.
- (2) The Operator decides on the operation mode and the planned or extraordinary change of storage operation mode cycle.
- (3) The Operator notifies the Users on the planned date for the regular storage operation mode cycle change from Paragraph 1 of this Article by posting a notification on his website seven days in advance. After determining the final date for the regular cycle change, the Operator will deliver via e-mail the final confirmation on the change of operating cycle mode at least 44 hours in advance to the User's authorized person.
- (4) As an exception from Paragraph 1 of this Article, with the condition that the storage operation cycle mode change is acceptable with regards to the technical and operational framework of the Storage, the Operator can implement or approve the extraordinary cycle change in the event of:

- 1 extraordinary situation at the Storage System,
 - 2 extraordinary situations on connected systems on the basis of a request by the
connected system operator with the statement on the extraordinary situation on the
connected system, which is delivered to the Operator via e-mail to the addresses from
paragraph 9 of this Article,
 - 3 request for extraordinary change of storage operation mode cycle, delivered by the
User or storage capacity Buyer on the secondary market with the condition that it is
approved by all other Users, storage capacity Buyers on the secondary market and the
connected system operator.
- (5) The request from paragraph 4 subparagraph 3 of this Article has to contain the time period
for which the extraordinary operation mode cycle change is requested, and the User or the
storage capacity Buyer on the secondary market delivers it to the Operator via e-mail
through an authorized person of the Operators Information platform.
 - (6) If the Operator agrees with the request for the change of storage operation mode cycle, the
Operator will deliver to the connected system operator, Users and storage capacity Buyers
on the secondary market a request for approval of the application in question.
 - (7) If the connected system operator, User or storage capacity Buyer on the secondary market
from paragraph 4 subparagraph 3 of this Article doesn't deliver his approval regarding the
request for the change of storage operation mode cycle, within the deadline established by
the Operator, it is deemed that he does not approve of the request for the extraordinary
change of storage operation mode cycle.
 - (8) On the basis of paragraph 2 of this Article, the Operator has the right to shorten or extend
the period of extraordinary change of storage operation mode cycle, and he will inform the
Users and connected system operator of it at least 24 hours in advance.
 - (9) The authorized person of the Operators Information platform and the connected system
operator deliver via email the request and approvals for the change of storage operation
mode cycle from paragraph 4, subparagraphs 2 and 3 of this Article to the address:
sala.kontrol@psp.hr and prodaja@psp.hr.
 - (10) In the event of extraordinary change of storage operation mode cycle, the Operator
notifies the authorized persons of the Operators Information platform and the connected
system operator about the change of storage operation mode cycle.
 - (11) During each change of the storage operation mode cycle, all nominations/renominations
are erased which were received through the Operator's information platform, of which fact
the authorized persons are notified and are requested to enter new nominations.
 - (12) In the event of a storage operation cycle mode change during gas da D, the gas day is
divided into two parts in accordance with the periods in which the storage was operating
during an individual operation cycle.
 - (13) In the event from paragraph 4 subparagraph 3 of this Article, the User who sold the leased
storage capacities on the secondary market in their entirety, does not participate in the
activities regarding the extraordinary change of storage operation mode cycle.

Storage System operation mode

Article 18.

- (1) The Operator determines the Storage's operation mode, depending on the Storage's cycle
mode and received nominations as well as the effect the change of operation mode has on the
deposit and facility characteristics.
- (2) Storage can be in one of the following operation modes:

- withdraw;
- injection;
- standby;
- transitional operating mode.

(3) Storage is out of service when it is not in one of the previously listed operating modes.

Article 19.

(1) Due to the technical-technological characteristics of the Storage System the minimal time required in the event of change from the injection operation mode to withdraw operation mode is 8 hours, and in the event of change from the withdraw operation mode to injection operation mode it amounts to 16 hours, during which the start of a new storage operating cycle is harmonized with the beginning of a gas day or at the beginning of a nomination/renomination period which is decided by the Operator.

Change of operating mode

Article 20.

(1) the following rules apply during the withdraw cycle:

- If the sum of nominated hourly gas quantities from all the delivered nominations for withdraw is greater than the MinQph:
 - o the Operator will accept all of the nominations which are delivered in accordance with contracted capacities and continue with the withdraw operating mode.
- If the sum of nominated daily gas quantities from all the delivered nominations for withdraw is greater than the MinQpd, and the sum of nominated hourly gas quantities from all the delivered nominations for withdraw is less than MinQph:
 - o the Operator will accept all of the nominations which are delivered in accordance with the contracted capacities and will operate in the transitional operating mode
- If the sum of nominated daily gas quantities from all the delivered nominations for withdraw is less than MinQpd, and the sum of nominated daily gas quantities from the delivered nominations for injection is greater than MinQpd:
 - o the Operator will accept all of the nominations for withdraw which are delivered in accordance with contracted capacities.
 - o the Operator will proportionally reduce the virtual nominations for injection in such a way that the result of the total accepted withdraw and injection nominations don't require change of storage operating direction, during which the storage will switch to standby operating mode.
- If the sum of nominated daily gas quantities from all the delivered nominations for withdraw is less than the MinQpd and the sum of nominated daily gas quantities from all the delivered nominations for injection is also less than the MinQpd:
 - o the Operator may refuse all received nominations and will change the operation mode to standby.

(2) During the injection cycle the following rules apply:

- If the sum of nominated hourly gas quantities from all the delivered nominations for injection is greater than the MinQph:
 - o the Operator will accept all of the nominations which are delivered in accordance with the contracted capacities and will continue with the injection operating mode.

- If the sum of nominated daily gas quantities from all of the delivered nominations for injection is greater than MinQud, and the sum of nominated hourly gas quantities from all of the delivered nominations for injection is less than MinQuh:
 - o the Operator will accept all of the nominations which are delivered in accordance with contracted capacities and will operate in the transitional operating mode.
 - If the sum of nominated daily gas quantities from all the delivered nominations for injection is less than the MinQud, and the sum of all nominated daily gas quantities from delivered nominations for withdraw is greater than the MinQud:
 - o the Operator will accept all of the injection nominations which are delivered in accordance with the contracted capacities
 - o the Operator will proportionally reduce the virtual nominations for withdraw in such a way that the result of the total accepted withdraw and injection nominations don't require change of storage operating direction, during which the storage will switch to standby operating mode.
 - If the sum of nominated daily gas quantities from all the delivered nominations for injection is less than the MinQud and the sum of nominated daily gas quantities from the delivered nominations for injection is also less than the MinQud:
 - o the Operator may refuse all received nominations and will switch to standby operation mode.
- (3) During each change of storage operating cycle the received User's nominations will be deleted in accordance with provision of Article 17. paragraph 11. of this Storage Code.

Own gas consumption and losses

Article 21.

- (1) The measurement of gas consumption for the needs of the Operator will be performed with the measuring device which is owned by the Operator for which he possesses all of the required documentation in accordance with the metrological requirements (certificates, test reports).
- (2) The Operator is obliged to ensure sufficient gas quantities required to feed the compressor, technological consumption, to cover the losses and to supplement the gas cushion.
- (3) The gas intended for the purposes described in Paragraph 2 of this Article is acquired by the Operator based on market principles while also defining the dynamic and location of delivery.
- (4) The Operator acquires the gas at the storage entry or in the storage itself.
- (5) The Operator is obliged to publish the tender for the procurement of gas for the purposes described in Paragraph 2 of this Article on his website and in at least one public newspaper.
- (6) The basic criteria for choosing the most favourable tender is the lowest unit gas price.
- (7) On the basis of the most favourable tender, the Operator and the chosen supplier conclude a Gas Supply Agreement.
- (8) In case of dissatisfaction with the conduct of the Operator in the gas procurement proceedings, the supplier has the right to lodge an appeal to the Croatian Energy Regulatory Agency (hereinafter: Agency).

Temporary restriction and termination of service

Article 22.

- (1) The Operator has the right to temporarily restrict or terminate the injection or withdraw of gas for regular maintenance of the facility and installations, performing necessary

hydrodynamic measurements, inspections, system tests, system upgrades or reconstructions, technical and technological disruptions and for other reasons as prescribed by this Storage Code, the Law and by other current legal and sublegal regulations.

(2) The Operator develops and implements planned annual works from Paragraph 1 of this Article in as short a time period as possible.

(3) The Operator publishes on his website the planned deadlines for the termination of service before the beginning of the storage year, and if necessary he revises them monthly and ultimately confirms it to the Users by delivering a notification at least 44 hours in advance.

(4) Due to carrying out hydrodynamic measurements, the Operator has the right to terminate the injection and withdraw service twice a year in the duration of 96 hours. The Operator will carry out the above mentioned measurements no later than 15 days after the completion of the injection or rather the withdraw cycle respectively and will notify the Users and connected system operator about the deadlines.

(5) In the event that the restriction or termination of storage service has lasted in accordance with the announced deadlines or was prolonged due to reasons which the Operator couldn't foresee and/or prevent, the Operator is not obliged to reimburse the Users for possible damages or expenses that may have occurred as the result of restriction or termination of the storage service.

Article 23.

After the announced operations from Article 22 of this Storage Code are completed the Operator will immediately notify the User and continue with the provision of contracted services.

Management and procedures during extraordinary circumstances

Article 24.

(1) An extraordinary situation with regards to managing the Storage is any event which is not avoidable or foreseeable, and whose consequences directly endanger the safety of people and property from uncontrolled gas discharge, cause restriction or termination of Storage capacity usage and endanger the reliability of gas supply.

(2) In terms of managing the Storage extraordinary situations described in Paragraph 1 of this Article also include extraordinary situations on connected systems if they endanger the security of gas supply in the Republic of Croatia.

(3) In the event of an extraordinary situation at the Storage the Operator will undertake measures without delay which will ensure the preservation of the storage system viability and will decrease the impact the disruption has on the possibility of Storage capacity usage and the reliability of gas supply. The abovementioned measures encompass the following:

- notification of competent public authorities and bodies;
- control of the Storage operation through the control centre in accordance with internal instructions, for the purpose of surmounting the arisen circumstances;
- elimination of the cause of danger for the safety of people and property;
- termination or restriction of the Storage capacity usage.

Article 25.

- (1) In the event of a malfunction or breakdown at the Storage which endangers the safety of people and property, the Operator has the right to immediately terminate or restrict the gas storage service, along with a telephone notice to the User and the operator of a connected system and a subsequent written notice.
- (2) In the event of a malfunction or breakdown at a connected system, the operator of the connected system sends a notice by telephone and subsequently in writing about the malfunction on the connected system to the Operator as well as a request for the termination or restriction of the storage system service. After receiving the notice, the Operator will notify the Users who are affected by the restriction or termination of service on the time of the gas storage service termination or restriction.
- (3) In the event of a malfunction or breakdown on the connected system, for which the Operator is aware could threaten people's lives or health or cause material property damage, the Operator will terminate or restrict the gas storage service without delay.
- (4) In the event that the termination or restriction of the gas storage service is caused by a malfunction at the Storage or at the connected system which would result in the endangerment of people's safety and property, the Operator is not obliged to reimburse Users the potential damages or expenses caused as a result of the restriction or termination of the gas storage service.
- (5) The Operator will request Users to deliver extraordinary nominations during the termination or restriction of the storage service in accordance with the provisions of this Article.

Management and procedures during crisis

Article 26.

- (1) During a crisis the Operator manages the Storage based on the measures prescribed by the Regulation (EC) 1938/2017 of the European Parliament and of the Council (hereinafter: Regulation on security of gas supply) and provisions adopted on the basis of Regulation on Gas Supply Security.
- (2) Depending on the technical possibilities and available capacities of the Storage the Operator will undertake measures to mitigate the resulting situation within the scope of his responsibilities.
- (3) On the basis of the Decision on the adoption of the intervention plan on measures to protect the security of gas supply in Croatia, the Operator prepares the Plan for crisis situations, and has an obligation to inform the Ministry in charge of Energy in the event of early warning crisis levels, alerting and state of emergency on the level of stored gas, and implement measures in accordance with the Crisis Team's order.