

fast cycle gas storage

Exhibit A Operating Manual TTF

EnergyStock B.V.



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1. GENERAL PROVISIONS

Terms written in italic in this *Operating Manual TTF* shall have the same meaning as defined in the *General Terms and Conditions Flexibility Services TTF*.

1.1 For the purposes of this *Operating Manual TTF*, except where it expressly provides otherwise, the following expressions shall have the meaning ascribed to them in this article 1.1 and shall include the plural as well as the singular:

"Connection Point" means the TTF

"D"

shall mean the *Gas Day* on which the *Contracted Send In Capacity* and/or *Contracted Send Out Capacity* which is/are nominated is/are meant to be performed by *EnergyStock B.V.*, and *D-1* means the *Gas Day* preceding *D. D* starts at 6.00 hours *LET* and ends at 6.00 hours *LET* the next *Gas Day*.

"Day" and "Daily"

shall have the same meaning as *Gas Day* in the *General Terms and Conditions Flexibility Services TTF*.

"Daily Nomination"

means the set of twenty four (24) *Nominations* (twenty three (23) & twenty five (25) during the switches to respectively from the daylight saving periods) as further described in article 2.2.

- 1.2 EnergyStock B.V. and TTF Customer shall conduct their respective operations in a prudent and efficient manner. Parties will inform each other as soon as reasonably possible of any foreseeable condition or occurrence that could affect the Quantity of Gas, quality of Gas or pressure of Gas Storage Entry Gas at the Gas Storage Entry Point or Gas Storage Exit Gas at the Gas Storage Exit Point.
- 1.3 For operational purposes, both *Parties* shall be reachable twenty-four (24) hours a day and every day of the year by phone and any mutually agreed other communication system.
- 1.4 Parties shall use messages according to Edig@s, as the protocol for exchanging dispatching information, where Edig@s is a subset of 'EDI/EDIFACT' (Electronic Data Interchange/Electronic Data Interchange for Administration Commerce and Transport) as described in detail at http://www.edigas.org.
- 1.5 A communication test will be performed by *EnergyStock B.V.* to check whether the potential *TTF Customer* (or a qualified third party acting on behalf of the *TTF Customer*) has the means of handling messages with *EnergyStock B.V.* according

- to the Edig@s protocol. Such a communication test can take up to five (5) *Business Days*.
- 1.6 In case *Parties* are temporarily not able to use Edig@s messages, because of e.g. system malfunction, *Parties* shall temporarily exchange messages via email or through mutually agreed other means of communication. *Parties* will take appropriate action to restore the Edig@s communication, as soon as possible,.
- 1.7 Any (Re)Nomination and (Re)Confirmation under this Operating Manual TTF shall relate to LET and shall be expressed in kWh (rounded to the nearest kWh) unless agreed otherwise in writing.
- 1.8 In accordance with the Edig@s Message Implementation Guidelines (MIG) Version 4.0 dated 31-12-2007, the *Quantities of Gas* transmitted in the Edig@s messages can have a Z02 code or a Z03 code. In order to avoid any misunderstanding in the meaning of those codes the following explanation can be used:
 - 202 Qualifies a *Quantity of Gas* as delivered into the *Gas Storage Facility* at the *Connection Point* by a *Delivering Party*
 - Qualifies a *Quantity of Gas* as retrieved from the *Gas Storage Facility* at the *Connection Point* by a *Receiving Party*.

Parties agree to adhere to the latest Edig@s Message Implementation Guidelines (MIG) available.

- 1.9 Whenever *Parties* agree to be necessary, documents, notices or other information, other than *(Re)Nominations* and *(Re)Confirmations*, required to be supplied under this *Operating Manual TTF* shall be exchanged by a secure data communication system.
- 1.10 For the purpose of viewing portfolio management information *TTF Customer* will be granted access to *EnergyStock B.V.* Storage Information Services on the *EnergyStock B.V.* Portal. Secure log on will be facilitated by a communication mechanism using a mobile device of *TTF Customer*.
- 1.11 EnergyStock B.V. is allowed to use an external service provider (e.g. GMSL) to facilitate the operational handling of message exchange.



2. NOMINATION PROCEDURE

2.1 General

(Re) Nomination Request, (Re)Nomination and Confirmation

This procedure describes how to (re)nominate.

2.2 Daily Nomination Requests

TTF Customer shall provide EnergyStock B.V. with a Nomination Request for each Hour of each Gas Day. This set of twenty four (24) Nominations is defined as a Daily Nomination. During the switches to and from the daylight saving periods, a Daily Nomination consists of a set of twenty three (23) respectively twenty five (25) Nominations. TTF Customer is bound to send a Nomination Request for each Hour of each Gas Day D, even when the desired Send In Flow Rate and or Send Out Flow Rate is zero.

Any Nomination Request or, with respect to each Hour for which a (Re)Nomination Request is issued, a (Re)Nomination Request shall contain for each Hour the Pair of Customer Codes of the relevant Delivering Parties and/or Receiving Parties, the Quantities of Gas to be off taken by TTF Customer from each Delivering Party (in total this will be the Quantity of Gas to be sent in by TTF Customer) and/or Quantities of Gas to made available by TTF Customer to each Receiving Party (in total this will be the Quantity of Gas to be sent out by TTF Customer).

EnergyStock B.V. will, equal to the received Nomination Request of TTF Customer, (re)nominate each Hour of each Gas Day D and shall:

- Send *NNO* a corresponding *Nomination* for the transfer of *Gas* at the *Connection Point;*
- Send NNO corresponding Nominations for the transfer of Gas at the Gas Storage Facility.

TTF Customer (or a qualified third party acting on behalf of TTF Customer) may send a Nomination Request up to 179 Gas Days in advance of Gas Day D. Any Nomination Request will remain valid until it is replaced by a (Re)Nomination Request.

A *Nomination Request* for *Gas Day D* must be received by *EnergyStock B.V* at the latest at 13:40 hours *LET* on *Gas Day D-*1.

In case *TTF Customer* exceeds the *Nomination Request* deadline for *Gas Day D*, the nominated *Hourly Quantities of Gas* shall be deemed to be zero, unless (re)nominated in accordance within the *(Re)Nomination Request* deadline.



2.3 (Re)Nomination Requests

(Re)Nomination Requests before or within Gas Day D regarding Hour H, received by EnergyStock B.V. at least one hundred forty (140) minutes (standard leadtime capacity) or thirty five (35) minutes (reduced leadtime capacity) in advance of that Hour H, will be processed by EnergyStock B.V. in accordance with this Operating Manual TTF prior to that Hour H. If applicable, the amount of Renominations allowed within the reduced leadtime of 35 minutes will be stipulated in the Flexibility Services Contract TTF.

In case a (Re)nomination Request has been sent to EnergyStock B.V. for Gas Day D and a (Re)Nomination Request has already been sent for Gas Day D+1 and TTF Customer renominates within Gas Day D, EnergyStock B.V. will check if the Renomination for Gas Day D will influence the previously send (Re)Nomination Request for Gas Day D+1, because of possible consequences of Renomination within Gas Day D on the level of TTF Customer's Actual Available Working Gas for Gas Day D+1.

If the Renomination Request for Gas Day D causes the Nomination for Gas Day D+1 not to be met, EnergyStock B.V. shall reject the Renomination Request for Gas Day D+1 by sending a Reconfirmation for Gas Day D+1.

2.4 Rejection of a (Re)Nomination Request

In case *TTF Customer's* (*Re*)*Nomination request* for one (1) or more *Hours* meets one (1) or more conditions of this Article 2.4 for said *Hour(s)*, this (*Re*)*Nomination Request* for all *Hour(s)* shall be rejected by *EnergyStock B.V.* whereby the reason of this rejection will be mentioned in the *Confirmation*.

- (a) A (Re)Nomination of Quantity of Gas to be sent in higher than the Contracted Send In Capacity specified in the Flexibility Services Contract TTF.
- (b) A (Re)Nomination of Quantity of Gas to be sent in which cannot be sent into the Gas Storage Facility because of the level of TTF Customer's Actual Available Working Gas.
- (c) A (Re)Nomination of Quantity of Gas to be sent out higher than the Contracted Send Out Capacity as specified in the Flexibility Services Contract TTF.
- (d) A (Re)Nomination of Quantity of Gas to be sent out which cannot be sent out of the Gas Storage Facility because of the level of TTF Customer's Actual Available Working Gas.
- (e) A (Re)Nomination above the withdrawal or injection curve, as given in the Flexibility Services Contract TTF.



- (f) A (Re)Nomination not in line with the technical specifications of the Gas Storage Facility for said Hour(s)
- (g) A (Re)Nomination that does not meet the conditions specified in the Flexibility Services Contract TTF.
- (h) A (Re)Nomination not in line with the (Re)nomination deadline of one hundred forty (140) minutes (standard leadtime capacity) or thirty five (35) minutes (reduced leadtime capacity).



3. MATCHING AND CONFIRMATION

- 3.1 Any (Re)Nomination Request received by EnergyStock B.V. will be validated against the conditions of the Flexibility Services Contract TTF and be matched with the data from the NNO.
- 3.2 EnergyStock B.V. will apply the following matching rules to each (Re)Nomination Request made for any Hour:
 - a) if the Pair of Customer Codes does not match, the Quantity of Gas
 (re)nominated for TTF Customer for that Hour shall be deemed to be zero (0)
 kWh with respect to such Pair of Customer Codes (Zero Rule);
 - b) if the (re)nominated code (Z02 or Z03) (for TTF Customer) with respect to a Pair of Customer Codes is equal to the (re)nominated code (Z02 or Z03) of the Delivering Shipping Party or Receiving Shipping Party, the (re)nominated Quantity of Gas (for TTF Customer) for that Hour shall be deemed to be zero (0) kWh with respect to such Pair of Customer Codes (Zero Rule);
 - c) if the (re)nominated *Quantity of Gas* (for *TTF Customer*) with respect to a *Pair of Customer Codes* is not equal to the (re)nominated *Quantity of Gas* of the *Delivering Shipping Party* or *Receiving Shipping Party*, the *Quantity* of *Gas* (re)nominated (for *TTF Customer*) shall be deemed to be equal for that *Hour* to the lower of *Quantities of Gas* mentioned in such (*Re*)Nominations with respect to such *Pair of Customer Codes* (*Lesser Rule*).
 - d) Where none of (a) to (c) above applies, there is a "match" and the *Quantity* of *Gas* (re)nominated for the relevant *Pair of Customer Codes* for that *Hour* shall be accepted by *EnergyStock B.V.*
- 3.3 After validation and matching in accordance with article 3.2 of this *Operating Manual TTF*, *EnergyStock B.V.* shall issue a *Confirmation*. Any *Confirmation* shall contain for each *Hour* of *Gas Day D* the customer codes of the relevant *Delivering Parties* and/or *Receiving Parties*, the *Quantities of Gas* to be off taken by *TTF Customer* from such *Delivering Parties* (in total this will be the *Quantity of Gas* to be sent in for *TTF Customer*) and/or the *Quantities of Gas* to made available by *TTF Customer* to such *Receiving Parties* (in total this will be the *Quantity of Gas* to be sent out for *TTF Customer*).

EnergyStock B.V. shall send a new Confirmation due to any changes resulting from any validation and/or matching according to article 3.2 of this Operating Manual TTF.

3.4 EnergyStock B.V. shall send a Confirmation for Gas Day D to TTF Customer as soon as reasonably possible between 14:00 hours LET and 18:00 hours LET on Gas Day D-1.

In case of a (Re)Nomination Request EnergyStock B.V. shall send a Confirmation as soon as reasonably possible, in any case before the beginning of the Hour to which the (Re)Nomination Request refers if such (Re)Nomination has been

provided in accordance with the lead time as provided for in article 3.2 of this *Operating Manual TTF*.

EnergyStock B.V. shall use the Quantities of Gas indicated on the last sent Confirmation referring to Gas Day D as the basis for allocation calculations regarding Gas Day D.

For the avoidance of doubt:

- confirmed *Quantity of Gas* may be lower than the corresponding (re)nominated *Quantity of Gas*; and
- confirmed *Quantity of Gas* shall never exceed the corresponding (re)nominated *Quantity of Gas*; and
- it is *TTF Customer's* responsibility to check for the receipt of the *Confirmation*, to take notice of the content of the *Confirmation* and to decide if further actions by *TTF Customer* are required; and
- EnergyStock B.V. is not allowed to change or withdraw any issued Confirmation.



4. MEASUREMENT OF QUANTITIES

4.1 Introduction

In the case that measurement of quantities is necessary, the conditions of this chapter will apply.

EnergyStock B.V. can maintain a measuring station at the Gas Storage Entry Point and the Gas Storage Exit Point. The measuring station can be equipped with the instruments needed for accurate measurement of Gas Storage Entry Gas and Gas Storage Exit Gas respectively consistent with industry standards and in accordance with the relevant regulations. Furthermore EnergyStock B.V. will comply with the standards for measurement as set forth by the NNO.

The flow of *Gas* is measured at the *Gas Storage Entry Point* and *Gas Storage Exit Point*. The flow of *Gas* at the *Gas Storage Entry Point* and *Gas Storage Exit Point* is measured by facilities owned by *EnergyStock B.V.* and operated by *EnergyStock B.V.* and/or a qualified third party acting on behalf of *EnergyStock B.V.*

Any disputes regarding measurement will be settled by an *Expert* as provided for in *Article* 9.

4.2 Measurement differences

In the event that incorrect operation of the measuring equipment is ascertained at the *Gas Storage Entry Point* and/or the *Gas Storage Exit Point*, *TTF Customer* shall not be required to accept any retroactive allocation with regard to the *Gas Storage Entry Point* and the *Gas Storage Exit Point* where a balancing customer or an *OBA* is in place.

In case no balancing customer or *OBA* is in place at the *Gas Storage Entry Point* and the *Gas Storage Exit Point* and the *Storage Operator* ascertains incorrect operation of the metering equipment which measures the flow to or from the *Gas Storage Facility* operated by the *Storage Operator*, but the date of such incorrect operation cannot be determined, then such incorrect operation shall be deemed to have commenced on a date halfway between the date on which such incorrect operation is ascertained and the date of the last preceding uncontested check of metering equipment. The *Quantities of Gas* delivered under the *Flexibility Services Contract TTF* during the period of incorrect operation of the metering equipment will be adjusted according to the reasonable estimate of *EnergyStock B.V.* The period in which delivered *Quantities of Gas* will be readjusted shall be limited to the period from the date of the last preceding uncontested check of metering equipment. The date incorrect operation is ascertained will be deemed to be the



date the check was performed which showed the incorrect operation of the metering equipment. Reallocation during that period will be performed pursuant to the provisions of the *Allocation Rules*. Readjustment of delivered *Quantities of Gas* will be settled via the *Actual Available Working Gas*. In case the amount of *Actual Available Working Gas* is insufficient, the settlement will be executed following the procedure as described in *Article* 14.4.3.



5. OPERATIONAL CONTROL

5.1 General

In the case that operational control is necessary, the conditions of this chapter will apply.

After having completed the matching procedure at the *Connection Point*, *Gas Storage Entry Point* and *Gas Storage Exit Point* the resulting flow can be set to the aggregate flow rate for the relevant *Hour*.

Storage Operator can control the flow at the Gas Storage Entry Point and Gas Storage Exit Point in such a way that the physical flow will equal as far as possible the sum of the confirmed Quantities of Gas of all customers for each Hour.

5.2 Operational margin

The result of the latest matched *Hourly Quantity of Gas* will be the basis for the set point for the *Send In Flow Rate* or *Send Out Flow Rate*. The control of the *Send In Flow Rate* or *Send Out Flow Rate* will be performed in such a manner that at any time the difference between the set point and measured *Send In Flow Rate* or *Send Out Flow Rate* will be as close as possible to zero (0), and at the end of the *Hour the Hourly volume* will be as close as possible to the matched *Hourly Quantity of Gas*. The maximum deviation at the end of the *Hour* has to be less than 1% of the flow rate, in accordance with the provisions of the *NNO*.

5.3 Minimum flow control

Due to minimum flow requirements a situation can occur in which for Hour(t) the aggregate Nominations of Customers are lower than the minimum flow requirements.

If the aggregate of all *TTF Customer's* confirmed *Hourly Quantities of Gas* would require a flow below the minimum rate of the measurement facilities at the *Gas Storage Entry Point* and the *Gas Storage Exit Point*, then *EnergyStock B.V.* will use reasonable endeavors to send in or send out intermittently at an instantaneous rate at, or above, the minimum rate of the measurement facilities at that *Gas Storage Entry Point* and that *Gas Storage Exit Point*, subject to *Gas* being sent in or being sent out by *TTF Customers* at the same instantaneous rate. If *EnergyStock B.V.* is unable to arrange to send in or send out *Gas* intermittently on or above the required minimum rate, then *EnergyStock B.V.* will, in accordance with agreement with the *NNO*, add the difference between the flow set point and the net result of the matching to the Minimum Metering Buffer (MMB) as maintained by the *NNO*.

This procedure is applicable if a balancing customer or an *OBA* is in place at the *Gas Storage Entry Point* and the *Gas Storage Exit Point*. If there is no *OBA* or no

balancing customer in place, *EnergyStock B.V.* will not let the flow drop below the minimum flow rate unless agreed with the *TTF Customers*.

If EnergyStock B.V. is forced to maintain the flow rate at the minimum level or to bring the flow rate down to zero (0), EnergyStock B.V. will send a revised Confirmation with recalculated confirmed Quantities of Gas.

5.4 Minimum flow requirements

The procedure of this article 5.4 is only applicable if a balancing customer and/or an *OBA* is not in place at the *Gas Storage Entry Point* and the *Gas Storage Exit Point*.

Due to minimum flow requirements a situation can occur in which for *Hour (t)* the aggregate *Nominations* of *Customers* are lower than the minimum flow requirements. In such a situation *Parties* will aim to achieve an acceptable solution. If such a solution cannot be reached the overall flow will be zero.

The Gas Storage Facility is designed in such a way that the minimum Send In Flow Rate will be 341,931 kWh per Hour.

The Gas Storage Facility is designed in such a way that the minimum Send Out Flow Rate will be 293,084 kWh per Hour.

EnergyStock B.V. shall use reasonable endeavours to allow lower Send In Flow Rates and Send Out Flow Rates than as referred to in this article 5.4.

5.5 Flow variation restrictions

Flow variations are amongst others restricted by:

- a) The contractual arrangements with the NNO at the Gas Storage Entry Point and the Gas Storage Exit Point; and
- b) The technical limitations of the Gas Storage Facility; and
- c) The possibility of customer(s) having the balancing role and contractual arrangements resulting thereof.

5.6 Planned Maintenance

For a maximum of twenty-one (21) days per year *EnergyStock B.V.* has the right to perform planned maintenance on the *Gas Storage Facility* which might reduce the reliability of *Contracted TTF Flexibility Services*.

For a maximum of ten (10) days per year *EnergyStock B.V.* has the right to perform planned maintenance on the *Gas Storage Facility* which might reduce the availability of *Contracted TTF Flexibility Services*.



5.7 Maintenance plan

Notifications will take place at least six (6) months in advance for fixed planned maintenance operations.

When establishing the dates for planned maintenance *EnergyStock B.V.* will take into account the historical and foreseeable use of the *Gas Storage Facility* so as to minimize consequences of the unreliability and/or unavailability of the *Gas Storage Facility*.



6. ALLOCATION

6.1 Introduction

To the degree that allocations are applicable, the conditions of this chapter will apply.

EnergyStock B.V. shall use the Quantities of Gas indicated on the last sent Confirmation referring to Gas Day D as the basis for allocation calculations regarding Gas Day D.

EnergyStock B.V. will provide or cause to be provided to TTF Customer and EnergyStock B.V. by electronic transmission all allocation data, relevant to TTF Customer, used for invoicing.

EnergyStock B.V. shall with regard to allocations keep auditable record of all underlying data on an *Hourly* basis which are used for the determination of the invoices and allocations, for the period legally required.

Any dispute regarding allocations shall be resolved by an *Expert* as provided for in *Article* 9.

Allocation is the process by which *Gas* is apportioned on an *Hourly* basis to the *TTF Customer*. Allocation calculations are performed separately at the *Gas Storage Entry Point* and the *Gas Storage Exit Point*.

Allocation in general consists of:

- Measuring physical deliveries of *Quantities of Gas*; and
- Identifying confirmed Quantities of Gas for entry flow and exit flow; and
- Deeming confirmed Quantities of Gas in the counter flow direction to be met;
 and
- Adding the confirmed Quantities of Gas in the counter flow direction to the physical flow; and
- Allocating this calculated flow pro rata to the Confirmations.

Where *TTF Customer* has been confirmed *Quantities of Gas* in both flow directions at the same time, they are treated separately for allocation purposes.



6.2 Allocation role

TTF Customers can have one of the following possible allocation roles at the Gas Storage Entry Point and Gas Storage Exit Point:

Balancing

The difference between the measured volume and the sum of the *Confirmations* to the individual *TTF Customers* is allocated to the balancing customer.

Proportional

The confirmed capacity will in principle be allocated proportionally to the *TTF Customers*. In case the difference between the measured volume and the sum of the *Confirmations* to the proportional *TTF Customers* has not been allocated to one or more balancing customers, this difference will also be allocated to proportional *TTF Customers*.

No allocation

No capacities will be allocated to *TTF Customer*. This allocation role will be applied if a *TTF Customer* informs *EnergyStock B.V.* that the existing (non-zero) *Contracted Send In* or *Contracted Send Out Capacity* will not be used during a specified period, under the condition that *EnergyStock B.V.* can allocate the measured quantities to another party.

- 6.3 *TTF Customer's* allocation role is described in the *Flexibility Services Contract(s) TTF*.
- 6.4 Allocation rules at the Gas Storage Entry Point and Gas Storage Exit Point

The following allocation rules apply at the *Gas Storage Entry Point* and *Gas Storage Exit Point*:

- Allocations of the measured volume will be performed on the basis of the allocation role assigned to *TTF Customer*.
- In principle, volumes will be allocated to proportional *TTF Customers* on the basis of the *Confirmations*. Any differences between the measured *Quantities of Gas* and the sum of the confirmations of *TTF Customers* will be allocated to *TTF Customers* in proportion to the *Confirmations* of *TTF Customer* and the *Confirmations* of other *TTF Customers*.
- In case there is a balancing customer a positive or negative difference between the measured volume and the sum of the *Confirmations* of the proportional *TTF Customers* will, except in case of unavailability, be allocated to the balancing customer, unless this is not feasible under the agreed role of the balancing customer. If there is more than one balancing customer, the difference will be allocated to such balancing customers in proportion to their *Confirmations*.
- In case there is an *OBA* a positive or negative difference between the measured volume and the sum of the *Confirmations* of the proportional *Customers* will be allocated to a balancing account between the *NNO's*, unless it is not feasible under the *OBA*.



6.5 Reallocation

Reallocation is only allowed in exceptional circumstances and will be agreed upon between *Parties* in good faith.

6.6 Publication of allocations

The (provisional) allocations on the *Gas Storage Entry Point* and the *Gas Storage Exit Point* will be calculated every *Hour* in accordance with the applicable *Allocation Rules* and made available by on-line electronic transmission to *TTF Customers* and *EnergyStock B.V.*

If the allocations are based on provisional measured quantities, final allocations shall be made available at the beginning of the following *Month*.

6.7 Energy costs

The monthly payment for energy cost charges will consist of energy-related costs for all the *Hours* of the previous *Month*.

6.7.1 Calculation of the charge of consideration T2 will be:

TTF Customer allocated injection of all Hours * fixed energy fee per MWh injected Gas as specified in the Flexibility Services Contract TTF. The charge of T2 is based on actual usage of TTF Customer and the predetermined fixed energy fee per MWh as specified in the Flexibility Services Contract TTF.

6.7.2 If *Parties* have agreed to calculate a variable component T2 of the *FST TTF*, meaning the charge of T2 is based on actual costs and actual usage of *TTF Customer*, the following will apply:

For allocating energy costs, the energy consumption of the *Gas Storage Facility* at every *Hour* of the *Gas Day*, will be related to the allocations of *TTF Customer* for that *Hour* for the calendar day.

In this case, the energy fee per MWh can vary each month as it is based on the actual costs. The component T2 consists of energy costs for injection, as described in article 6.7.2.1 and for withdrawal, as described in article 6.7.2.2.

6.7.2.1 The calculation of the energy costs for injection will be divided into peak *Hours* and off-peak *Hours*. Peak *Hours* and Off-Peak *Hours* are the *Hours* as specified by the energy supplier of *EnergyStock B.V.*

Calculation of the charges for injection will be:

Peak

TTF Customer send in allocations during peak Hours / total send in allocations peak Hours * energy charge peak Hours.

Off-Peak



TTF Customer send in allocations during off-peak Hours / total send in allocations off-peak Hours * energy charge off-peak Hours.

- 6.7.2.2 Energy costs for withdrawal for the *Gas Storage Facility* consist of three categories, being:
 - 1. The usage of the heaters which produce warm water for the heating of the *Gas* during send out;
 - 2. the usage of the glycol regeneration units (GRU's) for the drying of the Gas;
 - 3. and the hot standby usage of the heaters.

The measurement, calculation and settlement of this fuel gas is described in article 6.8.

The GRU's show little difference in fuel gas usage during send in or send out situations. On the hours that there is no send out, the heaters are in a hot stand by mode.

- 6.8 Fuel gas for withdrawal
- 6.8.1 This article 6.8 is not applicable if the component T2 is agreed to be a fixed Consideration as described in article 6.7.1.
- 6.8.2 Measurement of fuel gas

The total amount of fuel gas is measured. The amount of fuel gas for the heaters is measured separately. The difference between these two measurements is the usage of the GRU's.

6.8.3 Calculation of *TTF Customer's* fuel gas amounts for settlement *TTF Customer's* share in the total amount of fuel gas shall be calculated as follows:

The Monthly total of the hot standby usage of the heaters during Hours of Send In (as described in article 6.7.2.2 category 3) will be allocated to TTF Customer in line with TTF Customer's share in the Send Out capacity. This share is calculated by dividing TTF Customer's Contracted Send Out Capacity by the Send Out Capacity. The total of the hot standby fuel gas usage of the heaters for TTF Customers is a deemed value in million kWh per Year announced to TTF Customer within the first quarter of each year. This amount will be deducted on a Monthly basis (1/12 per Month) from the measured amounts of fuel gas as described in article 6.8.2 of this Operational Manual TTF.

With regard to the usage of the heaters during send out and the usage of the GRU's (as described in article 6.7.2.2 in category 1 and 2), the following will apply. *TTF Customers* fuel gas share in *Month* X is equal to the share of *TTF Customers* send out allocation in the total send out allocation in *Month* X.



As soon as possible after the *Month*, *EnergyStock B.V.* will inform *TTF Customer* about the amount of fuel gas allocated to *TTF Customer* in that *Month*.

6.8.4 Settlement of fuel gas

In principle the amount of fuel gas allocated to *TTF Customer* (as calculated in article 6.8.3) shall be settled in kind via *TTF Customer's Working Gas*. Article 6.8.5 describes how this settlement in kind is executed.

If a settlement in kind is not possible or difficult to implement (e.g. when the *Contract Period* is too short), the amount of fuel gas allocated to *TTF Customer* (as calculated in article 6.8.3) shall be settled financially.

Article 6.8.6 describes how this financial settlement is executed.

6.8.5 Execution of settlements in kind

EnergyStock B.V. will withdraw TTF Customer's share of fuel gas from TTF Customer's level of Working Gas once every quarter. The quarterly amount to be withdrawn is the sum of the three Monthly amounts (as calculated under article 6.8.4) in the applicable quarter. The withdrawal is executed within the first ten Business Days of the Month after the applicable quarter. EnergyStock B.V. will inform TTF Customer about the timing of the withdrawal.

It is possible that, at the moment when *EnergyStock B.V.* intends to execute the withdrawal, *TTF Customer's* level of *Working Gas* is not sufficient, which means that the level is lower than *TTF Customer's* share of fuel gas of the past quarter. In that case, *TTF Customer* shall ensure that its level of *Working Gas* will be sufficient before the end of the *Month* after the applicable quarter, thus enabling *EnergyStock B.V.* to execute the withdrawal before the end of the *Month* after the applicable quarter. In case this is not facilitated (in time) by *TTF Customer*, the amount of fuel gas allocated to *TTF Customer* (as calculated in article 6.8.3) shall be settled financially as described in article 6.8.6.

6.8.6 Execution of financial settlements

If *Parties* have agreed to a variable component T2 of the *FST TTF* (as laid down in the *Flexibility Services Contract TTF*), the following will apply:

If the amount of fuel gas allocated to TTF Customer is settled financially, the price used for settlement will be the TTF + 1 (Euro/MWh) [day ahead index] as published by Heren Energy Ltd. in its issue European Spot Gas Markets on the relevant End Date.



7. BALANCE OF WORKING GAS, INJECTION CURVE AND WITHDRAWAL CURVE

- 7.1 The injection curve and or withdrawal curve as specified in the *Flexibility Services*Contract TTF and or, if applicable, presented in Annex I to the TTF Flexibility

 Service Contract(s,) will apply.
- 7.2 EnergyStock B.V. shall maintain for TTF Customer an administration from which can be derived (i) the Quantity of Gas available for send out (ii) the Quantity of Gas available for send in.

For any *Hour* during a *Gas Day* the *Actual Available Working Gas* (AAWG) will be calculated according to the following formula:

AAWG (t) = AAWG (t-1) + AQGSI - AQGSO

AAWG (t) = Actual Available Working Gas for Hour t, (in kWh)

AAWG (t-1) = Actual Available Working Gas at the beginning of the previous Hour (in kWh)

AQGSI = Allocated *Quantity of Gas* Send In during the previous *Hour* (in kWh)

AQGSO = Allocated *Quantity of Gas* Send Out during the previous *Hour* (in kWh)

The AAWG at 06.00 hour *LET* at the start of the *Gas Day* shall be used for calculation of the amount of *Working Gas* that can be injected or withdrawn according to the injection curve resp. withdrawal curve.

- 7.3 *Confirmations* will be used for calculating purposes as long as allocated quantities are not available yet.
- 7.4 In case of reallocations or corrections to the AAWG as a consequence of the application of article 7.3 that lead to changes in the AAWG, these changes will only have consequences for calculations of the AAWG after *Hour t* and will be agreed upon between *Parties* in good faith.
- 7.5 The terms that apply in case of unavailability of the *Gas Storage Facility* are stipulated in *Article* 4.9.



8. ENERGYSTOCK CONTACT DETAILS

8.1 EnergyStock

Address: EnergyStock B.V.

Concourslaan 17

9727 KC GRONINGEN

or

EnergyStock B.V. P.O. Box 364

9700 AJ GRONINGEN

Telephone: +44 845 164 5079 (Operational Notices GMSL)

E-mail tso@gmsl.co.uk

