

## **ARTICLE 4: BUSINESS RULES**

### **4.1. Capacity**

4.1.1. The Capacity is expressed in MWh/Day.

### **4.2. Calculation of nominated / confirmed Natural Gas quantity**

The nominated / confirmed Natural Gas quantities are expressed in MWh (reference combustion temperature 0° and 25°C).

The nominated and confirmed Natural Gas quantities shall be converted in Normal Cubic Meters and Standard Cubic Meters, for reference purposes only, by using the Forecast GCV, as appropriate.

### **4.3. Matching process**

4.3.1. Bulgartransgaz shall be the Initiating Transmission System Operator.

4.3.2. DESFA shall be the Matching Transmission System Operator.

4.3.3. Not later than 17.30 local time of the Day immediately preceding the Day concerned (D), the Network Users shall send to the respective TSO their nominations on the Natural Gas quantity scheduled for delivery/offtake, during the Day D.

The Network Users shall specify, as a minimum, in their nominations to the respective TSOs, their company's name and Identification Code, the Day the nomination's concerned, the name and the Identification Code of their counterparty at the other side of the IP and per each counterparty the Natural Gas quantity to be delivered / offtaken through the IP and the respective Natural Gas flow direction. The nominations shall be in accordance with the standard nomination notice form, published in the respective TSO's website.

4.3.4. Not later than 17.40 local time of the Day immediately preceding the Day concerned (D), the Initiating Transmission System Operator shall send to the Matching Transmission System Operator information on the Processed Quantity that has been scheduled for delivery/offtake, per each Pair of Network Users, during the Day D. Said information shall be communicated in the form of Annexes 2A, 2B.

4.3.4.1. The following rules shall be applied by DESFA for the calculation of the Processed Quantities at the Greek side of the IP:

In case of valid nomination, the Processed Quantity will be equal to the nominated Quantity, in both gas flow directions.

The Processed Quantity will be equal to zero in case:

i. no nomination is submitted for the Day concerned or

ii. the nomination submitted is not valid; i.e.:

(a) The nominated quantity is not in accordance with the relevant transportation contract(s) (e.g. nominated quantity is greater than the capacity booked by the Network User at the IP for that Day) and / or

(b) The nomination is erroneous and / or incomplete (i.e. it is not in accordance with the standard nomination's form published in

DESFA's website and / or certain data among the ones specified in paragraph 4.3.3 above, is missing).

- 4.3.4.2. The following rules shall be applied by Bulgartransgaz for the calculation of the Processed Quantities at the Bulgarian side of the IP:

In case of valid nomination, the Processed Quantity will be equal to the nominated Quantity, in both gas flow directions.

In case the nominated Quantity is exceeding the booked capacity for the Gas Day D, the Processed Quantity will be equal to the maximum booked capacity for the Gas day D.

The nomination is not valid if it is erroneous and / or incomplete (i.e. it is not in accordance with the standard nomination's form published at Bulgartransgaz's website and / or certain data among the ones specified in paragraph 4.3.3 above, is missing).

In case the nomination is not valid the Processed Quantity will be equal to the last confirmed quantity, up to the maximum booked capacity for the Gas day D.

- 4.3.4.3. In cases of not valid nomination both Parties, respecting the time framework specified in par. 4.3.4. and 4.3.6, shall make their best efforts to immediately contact and inform the respective Network User accordingly, in order for the Network User to correct its nomination and submit a valid one.

- 4.3.5. Per each Pair of Network Users, the Matching Transmission System Operator shall compare the Processed Quantity that has been scheduled for delivery/offtake, at each side of the IP. In case of different Processed Quantities at either side of the IP, the lesser rule will be applied. Following the lesser rule application the confirmed quantity per each Pair of Network Users will be calculated as follows:

(a) In the Forward Flow Direction the confirmed quantity per each Pair of Network Users will be equal to the result of the lesser rule applying to the Processed Quantities of this Pair of Network Users.

(b) In the Reverse Flow Direction the confirmed quantity per each Pair of Network Users will be equal to the result of the lesser rule, applying to the Processed Quantities of this Pair of Network Users, in case the sum of confirmed quantities in the Forward Flow Direction is equal or greater than the sum of the results of lesser rule applying to the Processed Quantities of all Pairs of Network Users active in the Reverse Flow Direction. In any other case the confirmed quantity per each Pair of Network Users in the Reverse Flow Direction will be calculated as the product of the result of the lesser rule applying to Processed Quantities of this Pair of Network Users by the sum of the confirmed quantities in the Forward Flow Direction, divided by the sum of the results of lesser rule applying to the Processed Quantities of all Pairs of Network Users in the Reverse Flow Direction.

- 4.3.6. Not later than 18:20 local time of the Day immediately preceding the Day concerned (D), the Matching Transmission System Operator shall inform the Initiating Transmission System Operator on the Natural Gas quantity confirmed for transmission

at the IP, per each Pair of Network Users, during the Day D. Said information shall be communicated to BULGARTRNSGAZ in the form of Annexes 2C, 2D.

- 4.3.7. Not later than 18:30 local time of the Day immediately preceding the Day concerned (D), the Parties shall inform their Network Users on the Natural Gas quantity confirmed for transmission at the IP, on their behalf, during the Day D.
- 4.3.8. Not later than 00:15 local time of the Day immediately preceding the Day concerned (D), the Initiating Transmission System Operator and the Matching Transmission System Operator shall exchange information on the Processed Quantity that has been scheduled for delivery/offtake, from Bulgaria to Greece on an interruptible basis, per each Pair of Network Users, during the Day D. Said information shall be communicated in the form of Annexes 2A, 2B.
- 4.3.9. Per each Pair of Network Users, the Matching Transmission System Operator shall compare the Processed Quantity that has been scheduled for delivery/offtake, from Bulgaria to Greece, on an interruptible basis, at each side of the IP. In case of different Processed Quantities at either side of the IP, the lesser rule will be applied.
- 4.3.10. Not later than 01:00 local time of the Day immediately preceding the Day concerned (D), the Matching Transmission System Operator shall inform the Initiating Transmission System Operator on the Natural Gas quantity confirmed for transmission at the IP, from Bulgaria to Greece, on an interruptible basis, per each Pair of Network Users, during the Day D. Said information shall be communicated to BULGARTRNSGAZ in the form of Annexes 2C, 2D.
- 4.3.11. In case a nomination has not been submitted by a Network User or the submitted nomination is not valid, the Parties shall use the Network User's last valid nomination (as applicable for each TSO as specified in par. 4.3.4) in the matching process.
- 4.3.12. The final confirmed quantities scheduled for transmission at the IP, per each Pair of Network Users, during the Day D shall be the quantities according to paragraph 4.3.6 on firm basis and according to paragraph 4.3.10 on interruptible basis.
- 4.3.13. The matching processes under paragraphs 4.3.4 through 4.3.10 shall be carried out using a mutually accepted communication channel.

#### **4.4. Network Users update**

The Parties shall exchange the lists of their Network Users IC, as soon as possible, and in any case not later than two (2) working days before the Day a new Network User could start Natural Gas transmission at the IP.

#### **4.5. Rules for the allocation of the transmitted gas quantities**

- 4.5.1. In respect of the allocation of gas quantities, DESFA and BULGARTRNSGAZ establish allocation procedure ensuring consistency between the allocated quantities at both sides of the IP. This allocation procedure shall be based on the Operation Balancing Account (OBA), specified below.
- 4.5.2. Under the OBA allocation procedure the Natural Gas quantity allocated for a Day D to a pair of Network Users at the IP shall be equal to the Natural Gas quantity confirmed for delivery/off-take, for that Day D, to the said pair of Network Users, according to article 4.3.

$$Q_{Al,F,i}^D = Q_{C,F,i}^D$$

and

$$Q_{AL,R,j}^D = Q_{C,R,j}^D,$$

where:

$Q_{C,F,i}^D$  is the confirmed quantity, for a given Pair of Network Users in the Forward Flow Direction, during the Day D;

$Q_{C,R,j}^D$  is the confirmed quantity, for a given Pair of Network Users in the Reverse Flow Direction, during the Day D;

$Q_{AL,F,i}^D$  is the allocated quantity, to a given pair of Network Users in the Forward Flow Direction, during the Day D;

$Q_{AL,R,j}^D$  is the allocated quantity, to a given pair of Network Users in the Reverse Flow Direction, during the Day D.

$i$ , is the pair of Network Users active in the Forward Flow Direction during the Day D; and

$j$ , is the Pair of Network Users active in the Reverse Flow Direction during the Day D;

4.5.3. The OBA allocation procedure shall not be applied in the event that:

4.5.3.1. The conditions of paragraph 4.6.3 (i) and / or 4.6.4 (i) are met;

4.5.3.2. The gas quality parameters are not in accordance with Art. 5.7 of the Agreement and the Parties are not able to perform their daily nominations;

4.5.3.3. The pressure is not according to the specifications in Art. 5.7 of the Agreement and the Parties are not able to perform their daily nominations.

4.5.4. For each Day D, when any of the conditions in paragraph 4.5.3 is in effect, the steering difference for the Day D is allocated to the pairs of NUs proportionally to their confirmed Natural Gas quantities in both directions of the IP. Pro-rata allocated quantities shall be calculated by using the following formulas:

In the Forward Flow Direction:

$$Q_{AL,F,i}^D = Q_{C,F,i}^D + Q_{SD}^D * \frac{Q_{C,F,i}^D}{\sum_i Q_{C,F,i}^D + \sum_j Q_{C,R,j}^D}$$

In the Reverse Flow Direction:

$$Q_{AL,R,j}^D = Q_{C,R,j}^D - Q_{SD}^D * \frac{Q_{C,R,j}^D}{\sum_i Q_{C,F,i}^D + \sum_j Q_{C,R,j}^D}$$

Where:

$Q_{SD}^D$  is the steering difference during the Day D:

$$Q_{SD}^D = Q_M^D - \sum_i Q_{C,F,i}^D + \sum_j Q_{C,R,j}^D$$

Each Day for which the pro-rata allocation procedure applies, the OBA is updated by calculating the TBP, considering DBP that equals to zero (0).

- 4.5.5. For each Pair of Network Users, the allocated quantities in energy will be converted to volume values, for reference purposes only, using the flow weighted average GCV (not the Forecast GCV used in the nomination process) calculated in the BMS Sidirokastron during the Day D.
- 4.5.6. The indicative allocation of Natural Gas quantities shall be carried out for each Pair of Network Users, on a daily basis, in accordance with paragraph 4.6.3, until 11.00 a.m. local time for the previous Day. The final allocation of Natural Gas quantities for each Day of the Month M, and for each Pair of Network Users, based on validated measurements, shall be carried out, in accordance with paragraph 4.6.4, until 15:00 of the third calendar day of the Month immediately succeeding the Month M
- 4.5.7. **In line with the above procedures, Daily and Monthly quantity allocation protocols shall be issued by DESFA and signed by BULGARTRANGAZ. The Daily and Monthly allocation protocols shall be in accordance with the preliminarily approved forms as in Annexes 2E, 2F. The Natural Gas quantities, expressed in volume units, are registered in the allocation protocols for reference purposes only.** The quantity allocation protocols shall be accompanied with the respective measurement protocols for gas quantity and quality.
- 4.5.8. The data in the quantity allocation protocols shall be used by DESFA and BULGARTRANGAZ for commercial purposes.

#### 4.6. Operational Balancing Account

- 4.6.1. The Parties undertake to put effort so as to maintain TBP as close as possible to zero, in order to ensure that the LR specified in paragraph 4.6.2 is not violated.
- 4.6.2. The LR is specified by its lower limit value ( $LR_{low}$ ), which is set to -8,500 MWh and its upper limit value ( $LR_{up}$ ) which is set to 8,500 MWh. The lower and / or upper value of the LR may be changed upon mutual agreement of DESFA and BULGARTRANGAZ, in case of justified operational needs, including but not limited to:
- (a) Exceptional events
  - (b) Unplanned maintenance works
  - (c) Scheduled flow below the BMS Sidirokastron minimum measurement and / or flow control limits.
  - (d) Increase or decrease of the IP's technical capacity.

Upon written request issued by one of the Parties, the Parties may agree to expand the limits of the LR, prior to the execution of the indicative and / or the final allocation of the Natural Gas quantities for a Day D or for a certain number of Days.

- 4.6.3. In order to carry out the indicative allocation of the Natural Gas quantities to each Pair of Network Users, for a Day D, the Parties shall check whether the LR, applicable for that Day D, is violated.

- (i) If for the Day D

$$TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D > LR_{up}$$

or

$$TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D < LR_{low}$$

the Parties shall carry out the indicative allocation of Natural Gas quantities in accordance with the provisions of paragraph 4.5.4.

(ii) If for the Day D

$$LR_{low} \leq TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D \leq LR_{up}$$

the Parties shall carry out the indicative allocation of Natural Gas quantities in accordance with the provisions of paragraph 4.5.2.

4.6.4. In order to carry out the final allocation of the Natural Gas quantities to each Pair of Network Users, for each Day D of the Month M, the Parties shall check, based on validated measurements, whether the LR, applicable for that Day D, is violated.

(i) If for the Day D

$$TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D > LR_{up}$$

or

$$TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D < LR_{low}$$

the Parties shall carry out the final allocation of Natural Gas quantities in accordance with the provisions of paragraph 4.5.4.

(ii) If for the Day D

$$LR_{low} \leq TBP_{D-1} + \sum_i Q_{C,F,i}^D - \sum_j Q_{C,R,j}^D - Q_M^D \leq LR_{up}$$

the Parties shall carry out the final allocation of Natural Gas quantities in accordance with the provisions of paragraph 4.5.2.

4.6.5. Prior to the termination of the Interconnection Agreement, the Parties shall endeavour to settle in kind the TBP by adjusting the flow through the IP appropriately. If the TBP, that will be calculated at the last Day of implementation of the Interconnection Agreement is different than zero (0), then the Parties shall settle the TBP financially, within 30 days upon the Day of termination of the Interconnection Agreement, using as TBP unit price the arithmetic average of the marginal buy and marginal sell unit prices of balancing gas, without adjustments (if such adjustments are applicable), valid for the natural gas market of the creditor, for the Day of termination of the Interconnection Agreement. In case there are no applicable marginal prices of the balancing gas valid for natural gas market of the creditor, then the applicable daily price of balancing gas without adjustments will be used as a TBP unit price. The daily price of the balancing gas will be published on the internet site of the creditor. The balancing gas unit price, published and calculated by the creditor shall be in accordance with the methodology approved by the competent National Regulatory Authority.

4.6.6. DESFA shall issue and forward to BULGARTRANGAZ daily the OBA protocol for day D, until 11:00 local time on the Day D+1. The OBA Protocol shall be in accordance with the standard form of Annexes 9A, 9B of the Interconnection Agreement.