

Daily Imbalance Charge Calculation Methodology for IGB

Chapter One GENERAL

- Art. 1.** This methodology determines the procedure, the terms and conditions for calculating the daily imbalance quantity and forming and applying the daily imbalance charge.
- Art. 2.** The methodology's objective is to guarantee cost reflective and non-discriminatory imbalance charges for the network users of the gas transmission network by creating incentives for the network users of IGB to balance efficiently their balancing portfolios.
- Art. 3.** The methodology is developed in line with Commission Regulation 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks
- Art. 4.** The methodology shall apply solely to IGB balancing zone
- Art. 5.** (1) The applicable balancing model shall be the daily balancing model with financial settlement of occurred daily imbalances.
- (2) The TSO shall purchase and sell natural gas for balancing to cover the residual imbalances of gas transmission networks subject to balancing.
- Art. 6.** The TSO shall keep separate accounting for the costs and assets, if applicable, used the balancing activity.

Chapter Two DAILY IMBALANCE QUANTITY CALCULATION

- Art. 7.** For each gas day D, the operator shall calculate the initial daily imbalance quantity, allocated to each network user on the next day D+1, by subtracting the initially allocated quantities, off-taken at exit points of the balancing zone by the user from the initially allocated quantities, delivered at entry points of the balancing zone for the gas day D by the same network user

$$E_{L,i} + E_{VTP,i} = E_{TO,i} + \Delta E_{IM,i}$$

where, for any Network User (“ith”):

E_{I,i}: Allocated Quantities at the Entry Point(s);

E_{VTP,i}: Allocated Quantities as per trading at the virtual trading point

E_{TO,i}: Allocated Quantities at the Exit Point(s);

ΔE_{IM,i} Energy Imbalance

Where the sum of a network user’s inputs for the gas day is not equal to the sum of its off-takes for this gas day, a network user is deemed imbalanced for this gas day and daily imbalance charges shall be applied

Art. 8. No later than 11:00 UTC winter time, respectively 10:00 UTC summer time of gas day D+1, ICGB shall provide each network user with an initial allocation for its inputs and off-takes on day D and an initial daily imbalance quantity

Art. 9. (1) At any time between gas day D+1 and the fifth day of the Month following that to which the initial network user allocation refers, the initially determined daily imbalance quantity of the user for each gas day of the month can be changed as a result of a change in the initially allocated daily quantities at entry and exit points from the balancing portfolio of the user for the respective gas day.

(2) The TSO shall determine to each network user final imbalance quantities for each gas day of the previous month, after the final allocations of inputs and off-takes for the balancing zone for the respective day are made.

Art. 10. For network points, where network user’s allocation does not equal its confirmed quantity, on gas day D, ICGB will provide the network user with two updates of intraday metered inputs and off-takes, at 13:00 UTC winter time (12:00 UTC – summer time) and at 17:00 UTC winter time (16:00 UTC – summer time), where each update covers gas flow from the beginning of this gas day D.

Art. 11. (1) The TSO provides the user with information on the final allocated daily imbalance quantities for the balancing zone no later than the fifth day of the gas month following the reporting month.

(2) If the initial daily imbalance quantities and the final daily imbalance quantities allocated to the user for each gas day are different, the calculated daily imbalance charges are recalculated and this recalculation is based on the determined final daily imbalance quantities.

Art. 12. All daily imbalances for IGB balancing zone are subject to financial settlement to the financial account of the respective network user, and for each day of the month the balance of the financial account is changed by the amounts calculated according to the formulae:

1. if the daily imbalance is positive:

$$DIC = DIQ \times MSP$$

2. if the imbalance is negative:

$$DIC = DIQ \times MBP$$

where

DIC – daily imbalance charge in EUR

DIQ - daily imbalance quantity in MWh

MSP – marginal sell price in EUR/MWh

MBP – marginal buy price in EUR/MWh

Chapter Three **DERIVATION OF THE APPLICABLE PRICE**

Art. 13. A marginal sell price and a marginal buy price shall be calculated for each gas day pursuant to the following:

(a) a marginal sell price is the lower of:

(i) the lowest price of any sales of title products in which ICGB is involved in respect of the gas day; or

(ii) the weighted average price of gas in respect of that gas day minus small adjustment, derived by the following formula

$$\frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i} - SA \frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i}$$

where:

P_i is the price of i-th transaction for the day, EUR/MWh

V_i is the volume of i-th transaction, MWh

SA is the small adjustment

(b) a marginal buy price is the higher of:

(i) the highest price of any purchases of title products in ICGB is involved in respect of the gas day; or

(ii) the weighted average price of gas in respect of that gas day plus small adjustment, derived by the following formula

$$\frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i} + SA \frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i}$$

where:

P_i is the price of i-th transaction for the day, EUR/MWh

V_i is the volume of i-th transaction, MWh

SA is the small adjustment

(2) ICGB AD has selected the Balkan Gas Hub Trading Platform, trading point ICGB VTP and participates on the platform in deals with short-term standardized products with the purpose of undertaking balancing actions, in accordance with the provisions of art. 6 and art. 9 of Regulation (EU) № 312/2014.

(3) When deriving the weighted average price of gas under (a) (ii) and (b) (ii), TSO shall consider transactions concluded on the platform of Balkan Gas Hub, trading point VTP Bulgaria.

(4) ICGB AD shall have the right to conclude transactions on the platform of Balkan Gas Hub, trading point VTP Bulgaria with short-term standardized products with the purpose of undertaking balancing actions

(5) Small adjustment shall be 20 %

Art. 14. In case ICGB does not participate in any purchase or sale of title products for the respective day,

(1) a marginal sell price is

$$\frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i} - SA \frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i}$$

where:

P_i is the price of i-th transaction for the day, EUR/MWh

V_i is the volume of i-th transaction, MWh
SA is the small adjustment

(2) a marginal buy price is

$$\frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i} + SA \frac{\sum_i^n P_i \cdot V_i}{\sum_i^n V_i}$$

where:

P_i is the price of i-th transaction for the day, EUR/MWh
 V_i is the volume of i-th transaction, MWh
SA is the small adjustment

in case of (1) and (2) the weighted average price of gas in respect of gas day shall be calculated based on transactions performed on Balkan Gas Hub Trading Platform, trading point VTP Bulgaria for the respective day.

Chapter Four **SETTLEMENT OF IMBALANCES**

Art. 15. (1) ICGB shall keep a financial balancing account (Balancing account) for each network user. Daily financial settlements of allocated imbalances are accumulated in this account. All imbalance charges subject to daily financial settlement are reflected in the balancing account.

(2) When calculating the final imbalance quantities, different from the initially determined for the gas day, the TSO re-calculates the value of the financial balancing account taking into consideration the final imbalance quantities.

Art. 16. (1) The aggregated imbalance charges on the financial balancing account shall be calculated monthly and will be identified separately on the monthly invoice issued by ICGB

(2) At the beginning of each month, the financial balancing shall be set to zero and daily imbalance charges for the new month start to accumulate therein.

Chapter Five
PROCEDURE DETERMINING THE PRICE SETTING ELEMENTS THAT FORM
THE IMBALANCE CHARGE

Art. 17. (1) Each day ICGB shall publish on its website the price for natural gas for balancing calculated using this methodology.

(2) ICGB shall update the information on its webpage regarding the parameters of daily imbalance charges, including the value of the small adjustment

Art. 18. The methodology may be amended on EWRC and/or RAE proposal or on a proposal of ICGB.

FINAL PROVISIONS

This methodology is adopted by EWRC and RAE and is based on articles 20(1) and 30(2) of Commission Regulation (EU) 312/2014 of 26.03.2014 establishing a Network Code on Gas Balancing of Transmission Networks.