



**METHODOLOGY
AND ASSUMPTIONS USED IN ARRIVING AT THE
CONCLUSION THAT THE PLANNED WITHIN DAY
OBLIGATION MEETS CRITERIA SET OUT IN
ARTICLE 26.2 OF BAL NC**

**Based on
Commission Regulation (EU) No. 312/2014 of 26
March 2014 establishing a Network Code on Gas
Balancing of Transmission Networks**

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1. INTRODUCTION

Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks (hereinafter "Regulation" or "BAL NC") came into force on 16 April 2014. The Regulation sets out, among other things, the guidelines with respect to rules on gas balancing and settlements with Shippers in respect of their individual imbalance. Transmission System Operators in the European Union (hereinafter: "EU"), among them Gas Transmission Operator GAZ-SYSTEM S.A. (hereinafter "GAZ-SYSTEM" or the "TSO") are obliged to apply the Regulation as of 1 October 2015.

Chapter VI of the Regulation governs the implementation and application of within day obligations by the TSO. According to Article 24 of BAL NC, the within day obligations can be imposed on network users in order to incentivise them to manage their within day position so as to ensure the integrity of the transmission network and minimise the need for balancing actions undertaken by the TSO.

This document describes the compliance analysis methods and assumptions for the implementation of within day obligation under Article 26.2 of BAL NC (hereinafter the "Methods and Assumptions") and has been prepared by the TSO to implement the within day obligation in the grade E high-methane gas (KSP_E) balancing area. The Methods and Assumptions are consulted with all stakeholders, including network users, the President of the Energy Regulatory Office (hereinafter the "President of ERO"), distribution system operators and transmission system operators operating in the neighbouring balancing areas. This document presents the planned within day obligation mechanism, and the methods and assumptions underlying the compliance analysis which demonstrated that the planned within day obligation complies with the criteria set forth in Article 26.2 of the Regulation.

Once the Methods and Assumptions are consulted, the TSO will present the proposed within day obligation mechanism and its implementation guidelines, including the suggested changes of the Transmission Network Code (hereinafter the "TNC") to the President of ERO for approval. At the time of submitting the above to the President of ERO, the TSO will also have conducted the analysis referred to in Article 26.5 of the Regulation. Both documents are to be published by the TSO.

This document includes terms and expressions as defined by the TSO in the current version of the TNC.

2. TYPES OF WITHIN DAY OBLIGATIONS

NC BAL provides for three types of within day obligations to be used by transmission systems operators: system-wide, balancing portfolio, and entry-exit point obligation.

2.1. System-wide within day obligation

This type of the within day obligation is designed to provide incentives for network users to keep the transmission network within its operational limits and sets out the following:

- a) the operational limits of the transmission network within which it has to remain;
- b) the actions network users can undertake to keep the transmission network within the operational limits;
- c) the balancing actions undertaken by the transmission system operator when the operational limits of the transmission network are approached or reached;
- d) the attribution of costs and/or revenues to the network users and/or the impact on the within day position of these network users resulting from balancing actions undertaken by the transmission system operator;
- e) the related charge which shall be based on the individual within day position of the network user.

2.2. Balancing portfolio within day obligation

This type of the within day obligation is designed to provide incentives for network users to keep their individual position during the gas day within a pre-defined range, and sets out the following:

- a) for each balancing portfolio – the range within which this balancing portfolio has to stay;
- b) how the range referred to above is determined;
- c) the consequences for network users not staying within the defined range and, where appropriate, details of how any corresponding charge is derived;
- d) the related charge which shall be based on the individual within day position of the network user.

2.3. Entry-exit point within day obligation

This type of the within day obligation is designed to provide incentives for network users to limit the gas flow or the gas flow variation under specific conditions at specific entry-exit points and sets out the following:

- a) the limits in the gas flow and/or the gas flow variation;
- b) the entry and/or exit point or groups of entry and/or exit points to which such limits

apply;

- c) the conditions under which such limits shall apply;
- d) the consequences of not complying with such limits.

3. WITHIN DAY OBLIGATION TO BE IMPLEMENTED BY THE TSO

3.1. Within day obligation for group of entry/exit points

In order to incentivise network users to change the gas flow under specific conditions at specific groups of entry-exit points, the TSO will implement the within day obligation in the high-methane gas balancing area. Below are the respective elements of the within day obligation mechanism.

3.1.1. Gas flow variation limit:

The TSO is planning to limit the gas flow in the physical point of entry to the transmission network at the border with non-EU countries In case when such entry point exclusively and directly supplies the interconnection physical exit point found at the connection with the distribution system. Confirmed nominations, which predetermine the gas flow in such point, cannot be lower than the transportation forecast submitted by the distribution system operator in line with the TNC concerning the interconnection physical exit point at the connection with the distribution system which is supplied exclusively and directly by the physical point of entry to the transmission network covered with the limit.

The proposed gas flow variation limit will provide incentive for network users to ensure the appropriate gas flow in a given point so that the distribution network will be supplied with the gas volume notified by the distribution system operator.

3.1.2. Group of entry/exit points covered with the within day obligation:

The within day obligation will apply to those physical entry points to the transmission network at the border with non-EU countries, which supply exclusively and directly interconnection physical exit points at the interconnection with the distribution system. The obligation applies to those points only for which the TSO is not able to undertake balancing actions on market terms.

The within day obligation will be proportionately imposed on network users who apply a capacity allocation (contracted capacity) in any physical point entry to the transmission network at the national border where the physical point of entry to the transmission network is subject to the limit referred to in 3.1.1.

Such solution will ensure the necessary gas flow so that any isolated gas area can be appropriately supplied with gas in case a physical delivery of gas is not possible there (i.e. gas fuel purchased on market terms at a virtual point, such as a trading facility). The within day obligation will apply to entities which use the capacity in physical entry points to the transmission network at the border with the same country as the physical entry point which is covered with the within day obligation.

3.1.3. Conditions for the application of the limit referred to in 3.1.1:

The limit referred to in 3.1.1 will apply on such condition that all network users using the entry point covered with the within day obligation submit aggregate nominations for a total quantity smaller than the transportation forecast submitted by the distribution system operator in line with the TNC for an interconnection physical exit point to the distribution system which is directly and exclusively supplied by the physical entry point covered with the limit at the connection with non-EU countries.

If the sum of the nominations for the entry point covered with the obligation is higher than or equal to the transportation forecast of that distribution system operator, the limit referred to in 3.1.1 will not apply and the network users will not be incentivised to provide the extra gas flow.

Notably, if the transportation forecast is not provided for such point, during such gas day the distribution system operator will not require any supply from the entry point covered with the within day obligation in order to ensure deliveries to customers who are connected to the distribution network supplied by such point.

3.1.4. Consequences of non-compliance with the limits:

If the limit referred to in 3.1.1 is not complied with, the TSO will apply an incentive charge payable by the network users. The amount of the incentive charge shall be calculated based on the difference between the current gas flow limit and the nomination confirmed for a given network user. The resulting difference is multiplied by quadruple value of the Average Balancing Settlement Price (CSRB) for a given gas day when the limit was not complied with.

The above charge will not be applied even when the limit referred to in 3.1.1 is not complied with, if the sum of allocations in a physical entry point to the transmission network and covered with the limit is, for a given gas day, higher than or equal to the actual volume of gas fuel off-taken at the respective interconnection physical exit point to the distribution system. Such solution helps avoid a situation when the charge is collected from the network users even though the required gas flow was ensured allowing for the physical balance to be maintained at the physical exit point to the transmission network.

4. METHODOLOGY AND ASSUMPTIONS USED IN ARRIVING AT THE CONCLUSION THAT THE PLANNED WITHIN DAY OBLIGATION MEETS THE CRITERIA SET OUT IN ARTICLE 26.2 OF BAL NC

4.1. The within day obligation and related within day charge, if any, do not pose any undue barriers on cross-border trade and new network users entering the relevant market.

One of the evaluation criteria in this analysis is whether the within day obligation creates a market growth barrier – it concerns the analysis of negative effects of within day obligation for equal access to mechanisms functioning on a given market.

After analysing the impact on the new user entry to the relevant market (including the potential excessively negative influence on such entry), the results show that the proposed within day obligation will not create any barriers for the cross-border trade or for market entry of new network users. As the within day obligation concerns only the areas of the transmission network

that are supplied from non-EU countries (i.e. Belarus), it should be noted that the entry by entities from those markets to the Polish gas market is very unlikely. Nevertheless, the planned within day obligation concerns the introduction of gas to the Polish transmission system and as such will not restrict potential market entry by new entities on the Polish gas market.

When examining the consequences of the within day obligation, the TSO analysed whether its implementation will restrict gas flow between countries (cross-border trade restriction). The analysis demonstrated that the planned within day obligation involving the minimum gas flow limit will not restrict the cross-border flows in any way.

4.2. The within day obligation applies only where the network users are provided with adequate information before a potential within day charge will be applied regarding their inputs and/or off-takes and have reasonable means to respond to manage their exposure.

As regards access to the information for network users to timely manage their within day positions, the TSO plans to provide the network users with the necessary information concerning the confirmed transportation forecast of the distribution network operator for an interconnection physical point of exit to the distribution system which is directly and exclusively supplied by the physical point of entry covered with the within day obligation at an interconnection with non-EU countries. If the point of entry covered with the within day obligation is used by only one network user, the user will be required to adapt its nominations accordingly, without any additional request from the TSO. However, if the entry point covered with the within day obligation is used by more than one network user, then (in addition to the information concerning the transportation forecast of the distribution system operator), as long as the condition for the application of the limit referred to in 3.1.3 has been satisfied, the TSO will request such network users to adjust the gas flow accordingly by modifying their nominations. In such request, the TSO will specify the value to be re-nominated by the respective network users in order to modify the gas flow while being proportionate as referred to in 3.1.2.

In addition, considering the nature of such solution, the TSO will prevent changes to the DSO's transportation forecast confirmed for a given gas day and a given interconnection physical exit point to the distribution system. It means that a network user covered with the obligation will have both the information as well as sufficient time in order to use it and undertake the necessary actions leading to satisfaction of such obligation.

4.3. The main costs to be incurred by the network users in relation to their balancing obligations relate to their position at the end of the gas day.

The planned within day obligation includes a charge which will be applied in case when pre-defined limits are not complied with. The compliance with the within day obligation limits is verified based on the respective gas days – the charge will depend on the level of nominations submitted by network users for a given gas day. If the nomination submitted by a network user for a given gas day and a given physical point of entry covered with the obligation at the interconnection with non-EU countries at least equals the individual hours in such day as the DSO's transportation forecast for a given interconnection physical exit point to a distribution system, then the within day obligation will not apply and the charge will not be payable. In addition, the within day obligation includes a situation when the charges will not be payable in case when, despite the limit not being conformed to, the sum of allocations at the physical entry point to the transmission network covered with the limit is higher than the daily volume

measured for the relevant interconnection physical exit point to a distribution system.

4.4. To the extent possible, within day charges reflect the costs of the transmission system operator to undertake any associated balancing actions.

The charge for non-compliance with the limits under the within day obligation is calculated mainly based on potential cost of balancing actions that the TSO would need to undertake, if the within day obligations were not implemented or the limits under the within day obligation were not complied with. According to the analysis of the balancing service costs, capacity-related charges and the market liquidity (Belarus gas market), including the number of market players, the charge for non-compliance with within day obligation limits calculated as the quadruple value of the average balancing settlement price (CSRB) is an adequate formula reflecting the potential costs of the TSO.

4.5. Within day obligation does not result in network users being financially settled to a position of zero during the gas day.

According to the TSO's analysis, the planned within day obligation does not lead to network users being financially settled to a zero position during a given gas day. The TSO analysed whether the user could have an imbalanced position when the within day obligation will be in effect, if:

- The limits under the within day obligation are implemented; or
- The limits are not implemented.

In both cases, the TSO confirmed that the planned within day obligation would not impact the imbalance position of the network user. The compliance of the within day obligation is not linked to the imbalance position. According to the TSO analysis, it is possible that a network user can be imbalanced even though the within day obligation has been complied with (no charge for non-compliance with the limits).

4.6. Benefits of introducing a within day obligation in terms of economic and efficient operation of the transmission network outweigh any potential negative impacts thereof, including on liquidity of trade at the virtual trading point.

When analysing the need to implement the within day obligation, based on the nature of the transmission network and the flexibility available to the transmission system operator when buying and selling standard short-term products or when using balancing services (according to Chapter III of the Regulation), the TSO evaluated the opportunities for operation of market mechanisms and safety of supplies in terms of infrastructure, the structure of supply sources and the conditions of market mechanism operation.

The analysis included evaluation which of the solutions (lack of the within day obligation and remedies attempted at by the TSO versus the implemented within day obligation) will be more advantageous in terms of more economic and efficient operation of the transmission network.

Notably, the points covered with the within day obligation belong to a larger balancing area (high-methane gas balancing area). The planned within day obligation will be in effect in a single balancing area only, i.e. the high-methane gas balancing area). It should be underlined,

however, that the proposed within day obligation will apply only to isolated market areas i.e. such parts of the transmission network which are supplied only from one entry point. On such areas, the instruments available to the TSO are limited to physical balancing of the transmission system. According to the TSO, among the available regulatory mechanisms the within day obligation is currently the optimal solution from the perspective of economic and efficient operation of the transmission network.

An alternative to the within day obligation could be to isolate another balancing area, however it would require a new virtual point, dedicated tools of the trading platform and precise rules of balancing to be developed for such new balancing area. In the opinion of the TSO, the local nature (low supply/off-take volumes) as well as the supply provided from non-EU countries only make this area void of any conditions that would allow implementing safety mechanisms and solutions.

The analysis of impact which the within day obligation will have on spot market transactions on the wholesale gas market, including its liquidity, should include the evaluation of its impact from the perspective of the safety of network operation in the case of shortage of liquidity related to locational products. The proposed within day obligation has the advantage of ensured supply to customers who are supplied exclusively from a neighbouring area, regardless of the locational products available on the trading platform. This solution will protect the transmission and the distribution networks against uncontrolled pressure drops and air locks. Notwithstanding the above, the implemented obligation will not influence the liquidity of the wholesale market. The limits specified in the within day obligation have no impact whatsoever on the volume traded on the platform (see the above argument related to the local nature of the obligation and the low volume being traded) or on the type of products used to sell the gas on the platform.