



**PROPOSAL FOR CHANGES TO THE BALANCING  
SYSTEM ON GRTGAZ'S TRANSMISSION  
NETWORK ON MAY 1, 2014, UNDER THE  
ROADMAP APPROVED BY THE CRE RULING OF  
FEBRUARY 5, 2013.**

## 1. Object

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In accordance with the CRE ruling of February 5, 2013 on changes to the balancing rules under the future European Balancing Network Code, this document contains GRTgaz's proposal for changes to the balancing system, which it wishes to introduce on May 1, 2014.

This document ends with a reminder of the other changes planned for May 1, 2014 which have already been decided upon.

## 2. Methods for cashing out imbalances – Proposal on discount and premium levels

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In its ruling of February 5, 2013, CRE asked GRTgaz to work on discount and premium levels in the Concertation Gaz consultation process so that CRE could reach a decision before the end of 2013. This section constitutes GRTgaz's proposal on this issue.

In accordance with the European Network Code, the discount and premium may not exceed 10% of the Average Price, unless decided otherwise by the National Regulatory Authority.

In the light of the cash-out prices set for application from May 1, 2014, as laid out in paragraph 4.20 below, the proportion of imbalances exceeding any tolerance will be cashed out on the basis of a price that differs from the Average Price (deemed to represent the market price for the day in question) at least by the amount of the discount or premium (and more in the event that GRTgaz's interventions should result in even larger price differences).

The discount/premium therefore constitutes a minimum for imbalance cash-outs outside the tolerance, and significantly contributes to the incentive aspect of the system.

There were then discussions on the subject between the shippers, CRE and the transmission operators, in particular at the Concertation Gaz meeting of June 27, 2013.

At these discussions, it was agreed to approach the issue from the perspective of two separate periods: the first running from May 1, 2014 to March 31, 2015, and the second from April 1, 2015 onwards.

The beginning of the first period is marked by the removal of the current imbalance cash-out prices P1 and P2 on May 1, 2014, and their replacement by respectively the Average Price and the Marginal Price.

On that day, although the imbalance tolerances will be reduced, simulations based on past imbalances have shown that a very large proportion of the imbalances will continue to fall within the tolerances, and will be cashed out at the Average Price.<sup>1</sup>

In addition, by that date GRTgaz will not have sufficient flexibility to intervene on the Exchange to guarantee, if necessary, a marginal price level that reflects stress on the system.

In these circumstances, and in order to maintain sufficient incentive to restrain daily imbalances, GRTgaz proposes to set a discount/premium level of +/-10% during this first period.

This level should be seen in the context of the level currently applicable for the handling of imbalances above the tolerance level (via price P2), which is 30%.

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<sup>1</sup> Results presented at the Concertation Gaz meeting of November 21, 2012.

From April 1, 2015, imbalance tolerances are expected to fall further, and perhaps disappear. On this date, the proportion of imbalances cashed out at the Marginal Price will increase, and possibly cover total shipper imbalances if tolerances are removed. However, a proportion of these imbalances are inherent in the uncertainty of consumption forecasts, and this proportion cannot be reduced, whatever the financial incentive provided through the Marginal Price.

Moreover, with the gradual improvement in GRTgaz’s ability to intervene on the Exchange, the marginal intervention prices will increasingly reflect the level of imbalance on the transmission system, which will reduce the need to provide strong incentives through discount/premium levels.

For these reasons, in this second period, the rates applied to determine the discount and premium will need to be reduced. The new rates will be established in consultation with the different parties concerned, on the basis of feedback from the first phase.

### 3. Methods for cashing out imbalances – Proposal for the reduction in tolerances

The introduction of the marginal price assumes that shippers will have sufficient incentive to do their own balancing and will therefore require a significant reduction in the volume of tolerances available. Moreover, under ENTSOG’s balancing network code, which comes into force in the spring of 2014, tolerances are not intended to continue beyond the introduction of the target system, unless the regulator decides on transitional arrangements for a maximum of 5 years.

Against this background, and in the light of the Concertation Gaz meetings on the subject, GRTgaz proposes to make a uniform reduction in the volume of the standard daily imbalance tolerance from 200 to around 65 GWh/d for all balancing zones, distributed as follows:

<b>NORTH ZONE</b>	
<i>Subscribed delivery capacity (GWh/d 0°C)</i>	<i>Daily Imbalance Tolerance (% of subscribed delivery capacity)</i>
Up to 0.5 GWh/d	+/- 15%
Above 0.5 and up to 2 GWh/d	+/- 10%
Above 2 and up to 50 GWh/d	+/- 2%
Beyond 50 GWh/d	+/- 1%
<b>SOUTH ZONE</b>	
<i>Subscribed delivery capacity (GWh/d 0°C)</i>	<i>Daily Imbalance Tolerance (% of subscribed delivery capacity)</i>
Up to 0.5 GWh/d	+/- 18%
Above 0.5 and up to 2 GWh/d	+/- 14%
Above 2 and up to 50 GWh/d	+/- 2,5%
Beyond 50 GWh/d	+/- 1,5%

By way of reminder, the current volume of standard daily imbalance tolerance is distributed as follows on the basis of subscribed delivery capacity:

<i>Subscribed delivery capacity (GWh/d 0°C)</i>	<i>Daily Imbalance Tolerance (% of subscribed delivery capacity)</i>
Up to 0.5 GWh/d	+/- 30%
Above 0.5 and up to 2 GWh/d	+/- 20%
Above 2 and up to 50 GWh/d	+/- 5% in North Zone or +/- 5.5% in South Zone
Beyond 50 GWh/d	+/- 4.5% in North Zone or +/- 5% in South Zone

In order to enable shippers to acquire additional flexibility, GRTgaz proposes to maintain the optional tolerance service unchanged. Through this service, any shipper may subscribe for up to 3% of its subscribed delivery capacity on top of its automatic standard tolerance allocation.

## 4. Reminder of other changes that will come into force on May 1, 2014

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The CRE ruling of February 5, 2013 confirmed the introduction of the following changes:

- Supply of information
  - per shipper on non-profiled distribution customers
  - per shipper on profiled distribution customers
  - supply of information to shippers in a format that allows exchanges to be automated
  
- Imbalance cash-out procedures:
  - Reduction in mid-range values in accordance with the roadmap provided in the appendix
  - Introduction of the average and marginal prices to replace prices P1 and P2
  - Financial neutrality mechanism for monthly balancing
  
- Interventions by GRTgaz – Residual balancing:
  - Changes in the intervention algorithm

The total cost of IT developments required for these changes is around €3.3 million, of which 57% goes to information supply, 30% to imbalance cash-out methods and 30% for GRTgaz's interventions. These costs are already incorporated into the tariffs for use of GRTgaz's transmission system.

### 4.1. Supply of information for transmission system users

#### a) Provision of information for each shipper on non-profiled distribution customers

Currently, consumption by these customers on the two balancing zones represents around 10% of total consumption on GRTgaz's transmission system.

CRE had approved this proposal in its June 21, 2012 ruling and confirmed it in its February 5, 2013 ruling. It asked for this system to be introduced in 2014. GrDF and Réseau GDS plan to implement it no later than May 1, 2014.

Under the proposed system, the DSOs (GrDF and GDS) will send GRTgaz on a daily basis:

- At 12 noon, the consumption readings for non-profiled customers in the period between 6 am and 10 am,
  - At 4 pm, the consumption readings for non-profiled customers in the period between 6 am and 2 pm.
- These readings are aggregated per PITD for every shipper on the distribution system.

Provided that it has this information by the above times, GRTgaz will pass it on to its shipping customers respectively at 1pm and then 5pm. This information will be aggregated per PITD for every shipper on GRTgaz's transmission system, and a total per balancing zone (for each shipper) will be included.

For the other Distribution System Operators present on GRTgaz's network, discussions are still underway with SPEGNN, which represents them, to see how this information on consumption by non-profiled customers can be supplied to shippers.

## **b) Provision of information for each shipper on profiled distribution customers**

Currently, consumption by these customers on the two balancing zones represents slightly more than 50% of total consumption on GRTgaz's transmission system.

Since July 2013, GRTgaz has published two k0 coefficients (one for the North Zone, one for the South Zone). These are published once the day before from 3:30 pm and twice in the current gas day (at 12 noon then 4 pm).

From May 1, 2014 (at the latest):

- GRTgaz will publish three k0 coefficients (one for H-gas on the North Zone ["North H" zone], one for L-gas on the North Zone ["North B" zone], and one for the South Zone). This change will establish consistency with the publication of coefficients k1 and k2.
- GRTgaz will calculate and publish the forecasts for each shipper's profiled distribution customers based on the 3 divisions of k0 coefficients. GRTgaz's ability to supply information specific to each shipper depends on GrDF and GDS sending a daily report on the composition of each shipper's profiled customer portfolio, which they are expected to do by May 1, 2014 (the other DSOs present on GRTgaz's transmission system will continue to send each shipper's profiled customer portfolio on a monthly basis).
- The k0 coefficients and the forecasts for each shipper's profiled distribution customers will be published and updated at each nomination cycle.

## **c) Supply of information to shippers in a format that allows automated exchanges**

This request arose from the ruling of February 5, 2013. In the Concertation Gaz consultation process, GRTgaz and TIGF offered to create a Balancing Notice containing across-the-board information and information for each shipper:

- Across-the-board information per balancing zone:
  - k0 (North H, North B, South),
  - imbalance indicators,
  - consumption forecasts (regardless of consumer type),
  - average price and marginal prices.
- Information per shipper:
  - consumption forecasts for profiled distribution customers (North H, North B, South),
  - consumption forecasts for non-profiled distribution customers (North H, North B, South),
  - intraday measurements of non-profiled distribution customers (aggregated: North H, North B, South – specified per PITD),
  - intraday measurements of consumers directly connected to the transmission system (aggregated per North H, North B, South– specified per contractual point "LI" [Consumer Delivery Point])

This Balancing Notice will be available by May 1, 2014 on the TRANS@ctions portal and on the file exchange platform in xml and csv formats.

A version of this Balancing Notice in Edig@s format is being studied.

## **4.2. Imbalance cash-out procedures**

### **a) Cut in mid-ranges**

In accordance with the ruling of February 5, 2013, from May 1, 2014 the mid-ranges will fall to 10% of the tolerances in the North Zone and to 25% of the tolerances in the South Zone.

The levels of tolerances retained are covered in a proposal above.

### **b) Introduction of average and marginal prices**

The new balancing rules, laid down by the European Balancing network code, which was adopted by the European Commission on November 2, 2013, notably provide that shipper imbalances should be cashed out on the basis of a Marginal Cash-Out Price defined as follows:

- Marginal Selling Price = min (Average Price minus discount; GRTgaz's minimum intervention price on the Exchange)
- Marginal Buying Price = max (Average Price plus premium; GRTgaz's maximum intervention price on the Exchange)

where the terms "Buying" and "Selling" are taken from the point of view of the shippers.

Average Price = weighted average of transactions by all parties on the day in question (as calculated by Powernext). On a working day, this means transactions on the Within-Day spot product, on Saturdays and Sundays transactions on the Week-End spot product and on public holidays (in the Powernext calendar), transactions on the Bank Holiday spot product concerned.

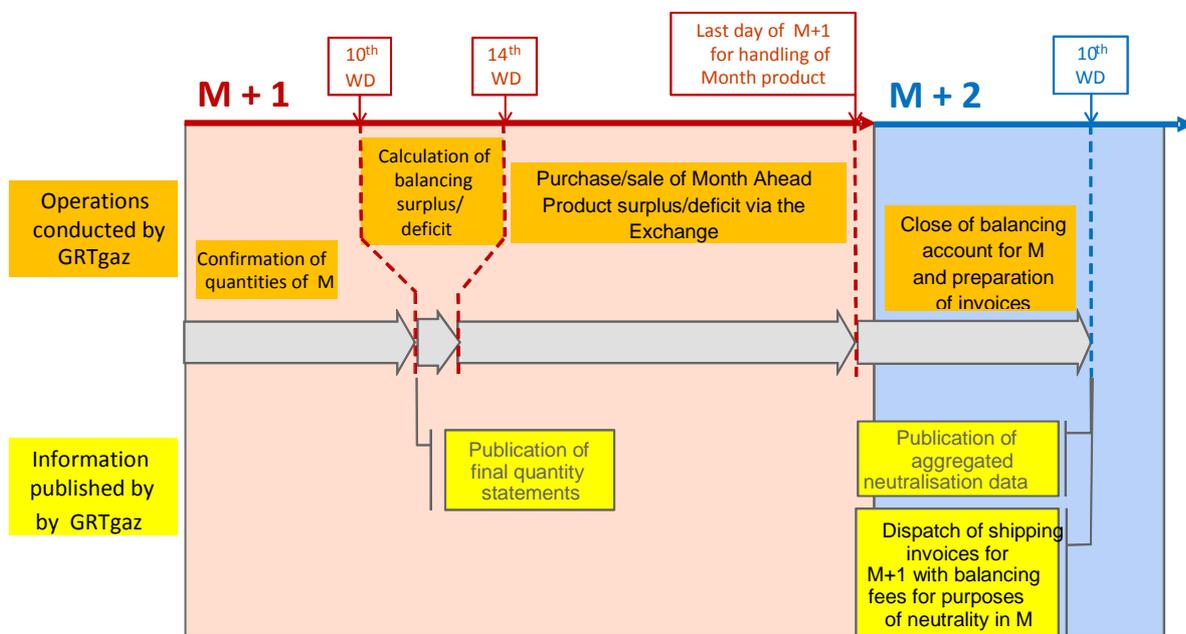
In accordance with the ruling of February 5, 2013, from May 1, 2014 the current P1 and P2 imbalance cash-out prices will be eliminated, and replaced respectively by the Average Price and Marginal Cash-Out Prices. The price P3 will become 10% of the Average Price.

These prices (3 per balancing zone) will be published and updated (at least once an hour) on SMART GRTgaz and via the Balancing Notice throughout the opening hours of the Powernext Spot exchange.

The discount and premium values chosen are covered in a proposal above.

### **c) Monthly financial neutrality mechanism**

In 2014, GRTgaz will introduce the monthly financial neutrality mechanism for the balancing account, as described below:



This mechanism is based on:

- a monthly physical clearance (if possible) whereby the deficit or surplus for every month M is respectively purchased or sold during month M+1 in the form of a monthly product M+2 on Powernext Gas Futures;
- monthly billing of the outstanding financial balance of the balancing process: the invoice for each month M issued at the beginning of M+2.

The balance for the month of January 2014 will be physically cleared in February 2014. Monthly billing will only start in May 2014. The first invoice, issued in May 2014 will contain the financial balances for January, February and March 2014.

The possibility of carrying out a physical clearance as described above depends on the quantities in surplus or deficit for the month in question. If these quantities are too low to be handled through a monthly contract on Powernext Gas Futures, they will be handled through the inventory held by GRTgaz at the average balancing price<sup>2</sup>.

#### **4.3. Interventions by GRTgaz – Residual balancing**

Following the presentations made during the Concertation Gaz meetings of March 26 and June 27, 2013, GRTgaz is changing the computer transaction algorithm at the beginning of January 2014, so that:

- it meets the constraints arising from market conditions on the current rather than the previous day;
- it trades as an initiator (in addition to being an aggressor);
- the algorithm can be easily adjusted if necessary.

From May 1, 2014, the computer transaction algorithm will also use an auction mechanism similar to that employed by the coupling algorithm.

<sup>2</sup> Sum of [revenues from sales on the Gas Exchange and sales to the shippers, (except price supplements for Cumulative Imbalance paid by the shippers)] and [expenses of purchases on the Gas Exchange and purchases from the shippers] divided by sum sum of quantities linked to these sales and purchases.

In parallel, GRTgaz is overhauling the system of exchanges between GRTgaz and Powernext in order to have greater room for manoeuvre in deciding upon the number and timing of interventions, and also overhauling its intervention database in order to be able to assess the outcome of interventions more effectively on the same day.

## **APPENDIX: ROADMAP TO GRTGAZ'S TARGET BALANCING SYSTEM**

		April 1, 2013 to September 30, 2013	October 1, 2013 to April 30, 2014	May 1, 2014 to September 30, 2014	October 1, 2014 to March 31, 2014	From April 1, 2015
Imbalance cash-outs	Mid-Ranges North Zone	15%	25%	10%	10%	<b>No mid-ranges</b>
	Mid-ranges South	30%	30%	25%	25%	
	Daily tolerances			Significant reduction in total tolerance volume		No tolerances apart from transitional arrangements decided by the regulator
				P2 replaced by the Marginal Price P1 replaced by the Average Price		Marginal Price
		EBC exceeded to P3 = 10% of P1		P3 = 10% of Average Price		
TSO's interventions		Interventions proportional to imbalances			Interventions under the target system	
		Monthly clearing of financial neutrality account from January 1, 2014				
Information provided to market players		Publication of the quantitative imbalance indicator Publication of forecasts per customer category (LI [Consumer Delivery Points], PITDs, Highly-Modulated Sites)				
		Publication of k0				
		Publication of forecasts per shipper of profiled customers estimates Publication of intraday measurements of remote-metered sites on the distribution network Publication of balancing notice per shipper				
		More frequent publication of hourly consumption of sites connected to the transmission network				