

Deliberation of the French Energy Regulatory Commission (CRE) dated 17 March 2011 deciding on changes to the balancing rules on the GRTgaz and TIGF gas transmission networks

Attending the session were: Philippe de LADOUCKETTE, Chairman, Olivier CHALLAN BELVAL, Frédéric GONAND, Jean-Christophe LE DUIGOU et Michel THIOILLIÈRE, commissioners.

In accordance with the deliberations of the French Energy Regulatory Commission (CRE) dated 7 December 2006 and 24 April 2008, GRTgaz and TIGF submitted to CRE for approval on 15 February 2011 a proposal on the changes of balancing rules applicable on their gas transmission networks, as of 1 April 2011 for TIGF and 1 May 2011 for GRTgaz. These proposals result from work conducted in the Concertation Gaz working groups.

1. Background

1.1. *The current balancing system in France*

1.1.1. *On the GRTgaz network:*

The balancing rules on the GRTgaz transmission network have evolved progressively towards a market based mechanism since 2007.

Since 1 December 2009, GRTgaz has met part of its balancing requirements by intervening on the *Powernext Gas Spot*¹ exchange. A daily balancing price (P_1) is established based on GRTgaz's transactions and is used to bill a share of the daily imbalances of each shipper.

For each shipper, the daily balancing price is applied to the volume of its imbalances exceeding the mid-range of cumulative imbalance, expressed as a portion of the daily tolerance from which it benefits:


- 40% for the North H zone, 70% for the North B zone and 55% for the South zone, for the period from 1 May 2010 to 31 October 2010,
- 70% for the 3 zones, since 1 November 2010.

1.1.2. *On the TIGF network:*

Given the difference in market maturity in the TIGF zone and the dominant role of underground gas storage in the balancing of the transmission network, TIGF's balancing system has not undergone the same changes as GRTgaz's system.

On the TIGF network, the balancing rules are based on the use of underground storage. Shippers in the TIGF zone can subscribe to a daily balancing service with TIGF Stockage which automatically cancels a large percentage of their imbalances.

¹ Marketplace for trading products to be delivered during the current day, the following working day or the weekend.



To settle shipper imbalances, TIGF uses the price reference of the *Zeebrugge* market (Belgian marketplace) increased by an amount representing the cost of transmission from Zeebrugge to the TIGF zone.

1.2. Regulatory framework

The third European legislative package adopted in 2009 provides for the application of market-based balancing rules for the gas transmission networks and balancing charges reflecting, where possible, the balancing costs incurred by the operator, while encouraging network users to take part in network balancing. The gas transmission system operator (TSO) must provide reliable information on the balancing situation of shippers. This information is defined in Regulation EC 715/2009.

The ERGEG² has begun to draw up the balancing framework guidelines which will be adapted into a binding network code by ENTSOG³.

In order to anticipate the provisions of the third package, CRE approved in its deliberation dated 30 September 2010 the principles of the target balancing system to be implemented by 2013 for the GRTgaz network. It also asked the TSOs to continue work as part of the Concertation Gaz groups, and submit to CRE by 30 June 2011:

- for GRTgaz, an implementation plan for this target balancing system,
- for TIGF, a study on the changes to the balancing system required in compliance with new European provisions.

With a view to the gradual upgrading of their balancing systems towards a market-based mechanism, the two TSOs submitted a proposal on the changes of balancing rules applicable on the gas transmission network as of 1 April 2011 for TIGF and 1 May 2011 for GRTgaz to CRE for approval.

To prepare its decision, CRE consulted market players from 15 to 28 February 2011.

2. GRTgaz's proposal on the changes to balancing rules applicable on its network

2.1. Settlement conditions for shipper imbalances

Increase in the volume of imbalances settled at market price as of 1 May 2011

In order to encourage shippers to contribute further to the formation of the P1 balancing price, GRTgaz proposes to increase their daily exposure to this price as follows:

- a) A reduction in the mid-range of cumulative imbalance for the three zones :
 - from 1 May to 30 September 2011, to 20% in the North H zone and 35% for the North B and South zones,
 - from 1 October 2011 to 30 April 2012, to 40% for all balancing zones.
- b) A decrease in the standard daily tolerance for delivery capacities over 50 GWh/d, from +/- 4.5% to +/- 3.5% for the North H and B zones and from +/- 5% to +/- 4% for the South zone.

² European Regulator's Group for Electricity and Gas

³ European Network of Transmission System Operators for Gas



Transitional procedure to reduce the imbalance mid-range

In order to enable shippers to better manage the reduction in the mid-range of cumulative imbalance, GRTgaz proposes to apply the former mid-ranges for the calculation of penalties for a transition period of 12 days.

Reduction of the P2 imbalance price

Without changing the behaviour of shippers, the modification of the tolerance level leads to an increase in the quantity of imbalanced gas exposed to the P2 price, which represents the price at which GRTgaz sells or purchases the imbalanced gas to or from the shipper in excess of the tolerance level.

In order to soften the impact on shippers, GRTgaz proposes to modify the calculation of the P2 price as of 1 May 2011 as follows:

- $P2 = 120\%P1$ (instead of 130%), if GRTgaz sells gas to the shipper,
- $P2 = 80\%P1$ (instead of 70%), if GRTgaz purchases gas from the shipper.

2.2. Changes of intervention volumes for Within-Day transactions on the Powernext Gas Spot exchange

In order to obtain a balancing price that is representative of the real tensions on the network, GRTgaz proposes a modification of its intervention volumes on the *Powernext Gas Spot* exchange, as follows:

- For sessions for *Within Day*⁴ transactions, an increase from 4250 MWh to 5750 MWh in the North zone and from 2750 MWh to 4000 MWh in the South zone,
- For sessions for *Day Ahead and Week End*⁵ transactions, a decrease from 3500 MWh to 2000 MWh for the North zone and from 2250 MWh to 1500 MWh in the South zone.

2.3. Control of the GRTgaz intervention price on the exchange for Within Day transactions

In order to prevent some players from making bids at price levels outside the market during its interventions, GRTgaz proposes that the price of its interventions on *Powernext Gas Spot* for *Within Day* sessions be controlled as follows:

- the purchase price is at most equal to X times the last Day Ahead “End Of Day” price reference,
- the sales price is at least equal to Y times the last Day Ahead “End Of Day” price reference,

where X and Y are decimal values between 0 and 1.

The X and Y values are proposed by GRTgaz to CRE, but are not disclosed to the market. These parameters may be modified by GRTgaz as necessary and without notice, following agreement from CRE.


2.4. Changes to the P1 balancing price calculation

Currently, the P1 price for a given balancing zone is equal to the arithmetic mean of P1 prices for *Within Day* and *Day Ahead* transactions.

Given the changes to GRTgaz’s intervention volumes between the *Day Ahead* and *Within Day* sessions, GRTgaz proposes to calculate the P1 price for a given balancing zone based on the weighted mean

⁴ Purchase or sale of gas for delivery during the current day

⁵ Purchase or sale of gas for delivery the following day / the weekend



between the *Within Day* and *Day Ahead* price components. The weighting uses maximum *Day Ahead* and *Within Day* intervention volumes.

3. TIGF's proposal for changes to balancing rules

To determine the imbalance settlement price for shippers active on its network, TIGF proposes to move from a *Zeebrugge* reference price to a South Gas Exchange Point (PEG Sud) *Powernext Gas Spot End of Day* reference price.

This implies that:

- the price used to settle daily imbalances in excess of the tolerance level shall be made up of, according to whether TIGF is purchasing or selling, 50% or 150% respectively of the South Gas Exchange Point (PEG Sud) *Powernext Gas Spot End of Day* reference price, for *Day Ahead* and *Weekend* products, plus an increase of €0.39/MWh representing the cost of transmission from the South Gas Exchange Point to the TIGF zone,
- the price used to reset the cumulated imbalance difference at the end of the month will be determined by the arithmetic mean of the South Gas Exchange Point (PEG Sud) *Powernext Gas Spot End of Day* prices, for *Day Ahead* and *Weekend* products, of the last seven days of the month, plus an increase of €0.39/MWh.

4. CRE's observations

4.1. Market players' positions

Nineteen companies, including the main suppliers in France present as part of the Concertation Gaz groups, contributed to the consultation conducted by CRE, from 15 to 28 February 2011, on the proposals of GRTgaz and TIGF.

4.1.1. Positions with regard to GRTgaz's proposals


Principles

Most market players find GRTgaz's balancing system satisfactory. However, they stress the need to upgrade the system so it is more market-based, in compliance with European guidelines. They believe that these developments must be made in conjunction with sufficient market liquidity and with improved quality of the information made available by the TSO to facilitate shippers' balancing (particularly for distribution customers). Some of the market players highlighted dysfunction in the mechanism currently in force on the GRTgaz network.

With regard to the changes proposed by GRTgaz, most market players are in favour in principle and believe the changes to be consistent with the target approved by CRE and with European guidelines.

Imbalance settlement conditions

Some contributors believe that the tools made available to shippers for balancing are insufficient with regard to the proposed changes to imbalance settlement conditions.



In particular, they stress that the proposed decrease in the imbalance mid-range is significant and would expose shippers to the P3 penalty more often. Under these circumstances, they propose either a decrease in the P3 penalty, or maintaining the current volume of the cumulative imbalance account (EBC).

With regard to the North B balancing zone, some players highlighted the zone's low liquidity and the difficulty of balancing with the underground storage in this zone. They request either freezing changes in this zone, or aligning the parameters of the North B zone with the level for the South zone.

Market players have mixed opinions on the decrease in the daily tolerance for the capacities for daily delivery subscribed in excess of 50 GWh/d. Some believe that this decrease will lead to more shippers concerned taking part in the *Within Day* balancing market. Others do not agree and stress that revising tolerance levels for a single category of consumers cannot be justified. They are therefore requesting an in-depth, comprehensive analysis before any changes are made to tolerance.

Lastly, a high majority of players are in favour of a decrease in the P2 price. Some contributors think that this measure is not incentive-based and encourage the more frequent supply of useful information for shippers' balancing or the reduction of the P3 penalty.

Conditions for GRTgaz's intervention on the Powernext Gas Spot exchange and formation of the balancing price

With regard to the conditions of GRTgaz's intervention, all market players are in favour of an increase in intervention volumes for *Within Day* sessions. A minority believes, however, that this increase must not lead to a drop in *Day Ahead* intervention volumes.

Most players request further work on the changes to GRTgaz's intervention strategy.

There are mixed opinions with regard to the P1 balancing price calculation method. Some market players are in favour of GRTgaz's proposal while others wish to stay with the current method.

Market players also have mixed positions with regard to the control of GRTgaz's *Within Day* intervention prices. Some players are in favour of this measure, while stressing its transitional nature, until sufficient market liquidity is achieved. Others are against this proposal and believe that the measure is not in line with market-based balancing and limits how network tensions are reflected in the balancing price.

4.1.2. Positions with regard to TIGF's proposals

Shippers who commented on the balancing system used on the TIGF network generally find the system satisfactory and highlight that it is comfortable. However, some believe that this mechanism does not reflect the actual balancing cost and does not encourage shippers to manage their balancing requirements.

In addition, some players stress that the current balancing system on the TIGF network does not comply with European guidelines and request standardisation of balancing rules between the two TSOs as soon as possible.

With regard to the change proposed by TIGF, market players believe it to be in line with the balancing system evolving towards a market-based mechanism.



5. CRE's observations

5.1. Analysis of GRTgaz's proposal

5.1.1. Increase of imbalance volumes settled at market prices

The analyses conducted by GRTgaz on the exposure of shippers to the daily balancing price show that only 3% of shipper imbalances are settled at the P1 market price. CRE has observed that this low proportion of gas exposed to the P1 balancing price does not sufficiently encourage shippers to take part in the balancing market and therefore to form a P1 price that is representative of overall tensions on the network.

This situation led to imbalances on the balancing market on 9 December 2010 and 4 January 2011. On these two days, GRTgaz purchased gas at prices 92% and 100% higher than market prices. These prices were not justified by the tensions on the network.

Furthermore, CRE has observed a considerable improvement in the quantity and quality of data made available to shippers to help them manage the balancing of their portfolios. The operator's service quality monitoring indicators, which are, for some, subject to financial incentives, have been set up to further support GRTgaz's efforts in this regard. The results of this system are available in the report published by CRE on the incentive-based regulation of gas network operators and ERDF⁶. CRE shall extend this system to encourage system operators to provide market players with reliable data, particularly during the current day.

Under these circumstances, CRE is in favour of GRTgaz's proposal to decrease the mid-range level. This change is consistent with the target defined for 2013 and with European guidelines.

Regarding the reduction of the standard daily tolerance for daily delivery capacities subscribed in excess of 50 GWh/d, CRE considers necessary, before any evolution, to carry out a global analysis on the tolerances level and on their integration on the target model.

5.1.2. Control of GRTgaz's Within Day intervention price

As highlighted by several market players replying to the public consultation, when market conditions are satisfactory, a control of the *Within Day* balancing price is not relevant. The balancing price must reflect the actual tensions on the network and, to do so, the daily price may be considerably different to the *End Of Day* price of the previous day.

However, CRE has observed that the level of *Within Day* market liquidity and GRTgaz's intervention conditions are not sufficiently satisfactory to ensure proper operations on the balancing market. As a result, CRE believes it is necessary to take measures to prevent any price distortion phenomena.

CRE agrees with the analysis of many market players on the transitional nature of these measures, pending the completion of work underway on:

- opening a new *Within Day* intervention window on the Powernext Gas Spot exchange,
- optimising GRTgaz's intervention strategy on the Powernext Gas Spot exchange, so that its interventions cannot be identified by other market players,
- setting up a *Within Day* reference price to define the parameters of the P1 balancing price during *Within Day* sessions.

⁶ www.cre.fr

5.1.3. Changes to GRTgaz's intervention volumes on the Powernext Gas Spot exchange

GRTgaz's proposal to transfer part of the intervention volume of the *Day Ahead* session to the *Within Day* session is consistent with the target approved by CRE and European guidelines providing for TSO interventions on the *Within Day* market for their balancing requirements. The *Within Day* market ensures that TSOs' interventions are consistent with actual tensions on the market (intervention, direction and price).

Moreover, the analysis of bids on the *Within Day* balancing market shows that this market has sufficient liquidity for an increase in GRTgaz's intervention volumes, particularly in the North zone.

Feedback has also demonstrated that previous increases in GRTgaz's intervention volumes for *Within Day* sessions have led to a highly proportional increase in shippers' interventions in this session.

Lastly, the change in the calculation of the P1 price by taking the weighted mean of the maximum volumes of GRTgaz's *Within Day* and *Day Ahead* interventions will enable the daily balancing price to provide a better reflection of the limitations weighing on the GRTgaz network each day.

5.1.4. Support measures proposed by GRTgaz

CRE approves the support measures proposed by GRTgaz, in that they will be used to:

- take account of the difficulties shippers have in predicting their customers' consumption during the mid-season months, by implementing the decrease in the mid-range and in tolerance levels on 1 May 2011,
- give shippers time to adapt to the new mid-range levels by exonerating them from penalties applied to cumulative imbalance accounts for 12 working days, as of 1 May 2011.

Furthermore, the decrease in mid-ranges increases the risk of shippers being exposed to the P3 penalty. In order to take this effect into account, CRE has asked GRTgaz to decrease the level of this penalty from 30% to 20% of the P1 price, as proposed by some market players.

5.2. Analysis of TIGF's proposal

The commissioning of the Fos Cavaou LNG terminal on 1 April 2010 and the decongestion of capacities on the North-South link have helped to develop liquidity on the South zone's wholesale market. The volumes exchanged have increased on average from 884 MWh/d in 2009 to 1400 MWh/d in early 2011.

Under these circumstances, the change proposed by TIGF is consistent with the development of market liquidity in the South zone.


6. Decision

6.1. Decision on the changes to balancing rules on GRTgaz's network

CRE approves the proposal to change the GRTgaz balancing system with the following modification:

- the P3 penalty level is reduced from 30% to 20% of the P1 price as of 1 May 2011 ;
- the level of the daily tolerance and the price P2 remain the same.

In accordance with the CRE deliberation dated 30 September 2010, GRTgaz must continue its work as part of the Concertation Gaz groups in order to submit to CRE by 30 June 2011 an implementation plan for this



target as of 2013. Furthermore, CRE has requested that GRTgaz continues its work underway as part of the Concertation Gaz groups in order to implement the following changes as early as possible:

- opening a new Within Day intervention window on the Powernext Gas Spot exchange,
- optimising GRTgaz's Within Day intervention strategy on the Powernext Gas Spot exchange,
- setting up a Within Day reference price to define the parameters of the P1 balancing price during Within Day sessions.

6.2. Decision on the changes to balancing rules on TIGF's network

CRE approves the proposal to change the TIGF balancing system.

In accordance with the CRE deliberation dated 30 September 2010, TIGF must present a study of the changes to its balancing system that are required in terms of compliance with European principles (Directive 2009/73/EC, Regulation (EC) No. 715/2009 and the draft framework guidelines proposed by ERGEG).

Executed in Paris, 17 March 2011,