Public consultation of the French Energy Regulation Commission of 6 February 2014 on the evolution of the balancing rules for the transmission networks of GRTgaz and TIGF as at 1 May 2014

The present public consultation falls within the framework of the evolution of the balancing rules for the natural gas transmission systems towards the target balancing system defined by the French Energy Regulation Commission (CRE) in its deliberation of 1 December 2011. This target balancing system aims to ensure the implementation of homogenous balancing rules across the entire French territory that are compliant with the ENTSOG network code, adopted via a comitology procedure on 2 October 2013. Its application will become compulsory on 1 October 2015, after publication in the Official Journal of the European Union.

In addition, the implementation of homogenous balancing rules on the GRTgaz and TIGF systems is necessary in view of the creation of a common marketplace for the TIGF and GRTgaz South zones as at 1 April 2015.

Following the work carried out within the framework of Concertation Gaz, GRTgaz and TIGF forwarded to CRE in January 2014 proposals to complete and detail the balancing rules applicable to their systems and to make the shift towards the target balancing system through the early application of certain provisions set out in the European network code. These proposals, which are contained in the Annex to the present consultation, cover:

- information made available to shippers by the transmission system operators (TSOs);
- the charging of shippers' imbalances;
- the TSOs' interventions on the market to ensure physical balancing of their systems.

The present consultation aims to collect the opinions of stakeholders on the proposals of the two TSOs, in order to prepare the following deliberation of CRE, which will define the changes in the balancing rules for each TSO's system as at 1 May 2014.

Interested parties are invited to answer the questions in the consultation note by 6 March 2014 at the latest.



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1. Background

Article L.134-3 of the French Energy Code states that "the French Energy Regulation Commission approves the technical and financial rules drafted by the operators on the balancing of natural gas systems and the coverage of needs mentioned in Articles L.431-40, L.431-5 and L.431-8".

In its deliberation of 1 December 2011, CRE requested GRTgaz and TIGF to define intermediary milestones in order to gradually move towards the target balancing system. Therefore, each year the TSOs forward to CRE their proposals for changing the balancing rules, following work carried out within the framework of Concertation Gaz.

CRE's deliberations of 21 June 2012, 20 September 2012 and 5 February 2013 on the decision concerning the approval of the balancing rules for the GRTgaz and TIGF transmission systems, changed:

- the level and frequency of information made available to shippers by the TSOs;
- the methods for charging shippers' imbalances by gradually reducing the level of tolerance for imbalances;
- the TSOs' methods of intervening on the market to cover their balancing needs, in order to encourage shippers to balance their volumes of gas by means of a price for imbalances reflecting actual tension in the system.

The present public consultation covers the detailed rules proposed by the TSOs to implement the last intermediary milestone in the evolution of the balancing system as at 1 May 2014, prior to the entry into force of the target system as at 1 April 2015.

The TSOs will have to continue their work under Concertation Gaz during the year 2014, in order to propose detailed terms for the implementation of this target system. CRE will consult the market on these proposals, which should enable certain points still open to be dealt with definitively, such as the suitability of maintaining during a transitory period certain tolerances and the compatibility of TIGF's daily balancing service with the European network code and the creation of a single marketplace in the south of France.

2. Information made available to shippers by the transmission system operators

2.1. Proposals of the TSOs

GRTgaz and TIGF intend to complete the information made available to shippers so that they may improve the forecasts of their clients' consumption and intervene during the gas day to minimise imbalances. The improvements proposed concern, in particular, clients' consumption data, regardless of whether they are connected to the transmission systems or to the distribution systems.

a) Clients connected to the transmission systems

The consumption of clients connected to the transmission systems represents approximately 40% and 18% of the total annual consumption on the GRTgaz and TIGF networks respectively.

Since 1 June 2013, every hour GRTgaz makes available to shippers the hourly consumptions telemetered for these clients.

TIGF has done the same since end 2013.

b) Non-profiled or daily metered clients connected to the distribution systems

The consumption of daily metered_clients connected to the distribution systems represents 10% and 12% of the total annual consumption on the GRTgaz and TIGF networks respectively.

The two TSOs intend to make available to shippers as at 1 May 2014 (for GRTgaz) and by the end of 2014 at the latest (for TIGF) twice per day, the aggregated intraday consumption of these clients per balancing zone and per shipper, forwarded by GrDF, Régaz-Bordeaux and Réseau GDS:

- telemetered consumption from 6:00 a.m. to 10:00 a.m. published at 1:00 p.m.;
- telemetered consumption from 6:00 a.m. to 2:00 p.m. published at 5:00 p.m.



The telemetered consumption on the networks of the other distribution system operators is being addressed in a study carried out jointly by the TSOs and the trade association of non-nationalised gas companies (SPEGNN), to assess the level of information that may be transmitted given the costs that it might generate for local distribution system operators.

c) Profiled or non-daily metered clients connected to the distribution systems

The consumption of non-daily metered connected to the distribution systems represents 50% and 70% of the total annual consumption on the GRTgaz and TIGF networks respectively.

Since mid-2013, GRTgaz publishes a coefficient k_0 per balancing zone (similar to the k_1 and k_2 coefficients already used to allocate gas quantities among suppliers at the transmission/distribution interface points (PITDs)). The k_0 coefficients are used by shippers to estimate consumption of their non-daily metered clients. To enable GRTgaz to calculate these k_0 coefficients, each shipper communicates, by balancing zone, the forecast consumption of its daily metered clients connected to the distribution systems.

TIGF proposes to publish a k₀ coefficient for its balancing zone as of May 2014.

Moreover, GRTgaz and TIGF, in collaboration with the three main distribution system operators (GrDF, Régaz Bordeaux and Réseau GDS) will publish, from May 2014, per balancing zone and per shipper, these clients' consumption forecasts. These forecasts will be forwarded the day before at 1:00 p.m. and updated at each nomination cycle for GRTgaz and twice per day for TIGF. These forecasts will take into account, for each shipper, its portfolio of non-daily metered clients connected to the systems of the other DSOs, but the composition of this portfolio will be updated only once per month.

d) End-of-day system imbalance indicator

Since October 2012, GRTgaz publishes each hour for each balancing zone, the estimated end-of-day imbalance in its system for the current day and the following day. This imbalance forecast is determined based on the TSO's consumption estimate and shippers' nominations.

TIGF has published the same indicator since 6 November 2013.

These indicators are aimed at giving shippers visibility into the state of tension of the system, in order to encourage them to reduce their imbalances. They also enable the TSOs to optimise their interventions on the market to ensure physical balancing of their system, if the shippers' adjustments are not sufficient.

e) Balancing notice

GRTgaz and TIGF intend to make available to shippers on a daily basis as from 1 May 2014 (for GRTgaz) and by the latest at the end of 2014 (for TIGF) a balancing notice on day D-1 at 1:00 p.m. for the following day. This will recapitulate, for each shipper, the information below within the perimeter of its portfolio and per balancing zone. It will be updated hourly until the end of the gas day in question. This notice will enable shippers to have an overall view, hour by hour, of their situation and the situation of the gas system in terms of balancing.

Global aggregated data per balancing zone: GRTgaz and TIGF

- k₀ (North H, North B, South, TIGF);
- indicators of forecast end-of-day imbalance (North H, North B, South, TIGF);
- consumption forecasts (all consumers);
- average prices and marginal prices;
- aggregated hourly measurements of telemetered consumption at PITDs and telemetered consumption for sites connected to the transmission system for TIGF¹

Data specific to each shipper's portfolio:

- hourly consumption of sites directly connected to the transmission systems;
- intraday measurements of daily metered_distribution clients;

¹ GRTgaz is unable to provide this data, since approximately 27% of delivery stations towards public distributions in its system are not telemetered.



- nominated consumption forecasts for its daily metered clients connected to the distribution systems;
- consumption forecasts for non-daily metered distribution clients.

2.2. CRE's preliminary analysis

CRE observes that GRTgaz's and TIGF's proposals plan for the early implementation of the provisions of the European network code, with regard to making information available to shippers. These proposals even exceed the provisions of the network code for clients connected to distribution networks. The TSOs and DSOs worked together to publish a k_0 coefficient that would improve the consumption forecast for non-daily metered clients and to publish intraday consumption for daily metered_clients.

Nevertheless, CRE observes that TIGF intends to make available to shippers end 2014 the intraday measurements for daily metered clients connected to the distribution network. However, this information will be forwarded to TIGF by GrDF and Régaz-Bordeaux as early as 1 May 2014. Therefore, CRE considers that TIGF must accelerate the developments in its information system or implement a degraded mode for transmitting this information to shippers. This information should enable shippers to better manage their balancing during the day and better forecast consumption for this category of clients, which is used to calculate the k_0 coefficients.

The quality of data published by the TSOs is essential for the proper functioning of the balancing system. CRE recalls that it decided, as part of the updating of the ATRT5 tariff as at 1 April 2014, to strengthen the incentive regulation mechanism pertaining to the quality of this data:

- development of the financial incentive related to the quality of intraday consumption metering for clients connected to the TSOs' systems;
- strengthening of financial incentives bearing on daily metering, transmitted the following day, of the consumption of clients connected to the transmission systems and quantities of gas delivered at PITDs;
- introduction of a financial incentive for the quality of TSOs' consumption forecasts.

Question 1: Are you in favour of the TSOs' proposals concerning the information made available to shippers?

3. Charging shippers' imbalances

3.1. GRTgaz's proposal

Currently, every day GRTgaz calculates for each North and South balancing zone and for each shipper, the imbalance between the inputs and off-takes (including client consumptions) of gas in its system:

- the portion of daily imbalance that is higher than the mid-range (portion of the imbalance that is lower than a percentage of the daily imbalance tolerance) is billed at the balancing price for the day (called P1 price corresponding to the weighted average price of GRTgaz's interventions in the gas market for its balancing needs). This price is increased (or decreased according to the case) by 30% (called P2 price) for the portion of the imbalance that is higher than the daily tolerance;
- the portion of the daily imbalance that is lower than the mid-range is cumulated in a cumulative imbalance account, with the possibility of cumulating up to five times the mid-range. Above this limit, a penalty equal to 10% of the P1 balancing price of the day (called P3 penalty) is applied to the excess quantities.

For the period from 1 May 2014 to 31 March 2015, and in compliance with CRE's deliberation of 5 February 2013, the changes proposed are:

• the reduction of the daily tolerance by portion of delivery capacity subscribed according to the following terms:



Delivery capacity subscribed (GWh/d 0°C)	Current daily imbalance tolerance (% of the delivery capacity subscribed)	
until 31 April 2014	GRTgaz North zone	GRTgaz South zone
Up to 0.5 GWh/d	+/- 30%	+/- 30%
Over 0.5 and up to 2 GWh/d	+/- 20%	+/- 20%
Over 2 and up to 50 GWh/d	+/- 5%	+/- 5.5%
Over 50 GWh/d	+/- 4.5%	+/- 5%

Delivery capacity subscribed (GWh/d 0°C)	Daily imbalance tolerance (% of the delivery capacity subscribed)	
As from 1 May 2014	GRTgaz North zone	GRTgaz South zone
Up to 0.5 GWh/d	+/- 15%	+/- 18%
Over 0.5 and up to 2 GWh/d	+/- 10%	+/- 14%
Over 2 and up to 50 GWh/d	+/- 2%	+/- 2.5%
Over 50 GWh/d	+/- 1%	+/- 1.5%

- reduction of the mid-ranges to 10% and 25% of the daily tolerance in the North zone and South zone respectively (compared to 25% and 30% until 30 April 2014);
- the change in the price for imbalances:
 - for the portion of the imbalance, if it exists, between the cumulative mid-range and the tolerance, at the average price weighted by the trades of within-day products in the exchange for the day in question (Average Price),
 - o for the portion of the daily imbalance above the tolerance limit,
 - at the marginal sale price (if the shipper's daily imbalance is positive, i.e. if the shipper is selling this quantity to the TSO)
 - the marginal sale price is the lower of the two following prices:
 - \circ $\;$ the lowest price of all the TSO's sales on the exchange; or
 - the weighted average price of gas for the gas day in question, from which is subtracted an adjustment ;
 - at the marginal purchase price (if the shipper's daily imbalance is negative, i.e. if the shipper is buying this quantity from the TSO):
 - the marginal purchase price is the higher of the two following prices:
 - o the highest price of all the TSO's purchases on the exchange; or
 - the weighted average price of gas for the gas day in question, to which is added an adjustment.

The adjustment is provided for by the European network code to encourage shippers to balance their volumes. GRTgaz proposes to temporarily set the level of these parameters at 10%, this being the maximum provided for by the network code.

GRTgaz proposes that the maximum level of the cumulative imbalance be maintained at five times the mid-range until 31 March 2015.

The P3 penalty applied for the quantities exceeding the maximum level of the cumulative imbalance will be equal to 10% of the Average Price.

Lastly, GRTgaz proposes to maintain the volumes and pricing of the optional balancing tolerance.

Reconciliation of the financial neutrality account for balancing

Since 1 January 2014, GRTgaz physically reconciles the neutrality account on a monthly basis (this physical reconciliation was previously done once per year). It is done in month M+2, through the



purchase or sale of gas as a monthly contract M+1, when the total balance of the account for the month in question exceeds 8 GWh (minimum quantity required for gas exchange with monthly maturity). When the total balance of the account for the month in question is lower than or equal to 8 GWh, GRTgaz does not intervene on the market and this balance is valued at the average balancing price. Since 1 January 2014, financial reconciliation of this account is also done on a monthly basis. The key for redistribution among shippers, based on subscriptions of daily delivery capacity, remains unchanged. GRTgaz is currently studying a possible change in this redistribution key.

3.2. TIGF's proposal

TIGF's system for charging imbalances actually provides for:

- the cumulating of daily quantities of gas imbalances below the daily tolerance level in an imbalance account settled at the end of the month at a P2 price. This P2 price corresponds to the arithmetic average, for the last seven days of the reference month, of end-of-day prices at the South PEG, plus €0.28/MWh²:
- the balance of the quantities of gas imbalances above the daily tolerance level or above the cumulative tolerance (equal to twice the daily tolerance). Both of these quantities are settled at a P1 price equivalent to the average price of TIGF's intervention on the market for its balancing needs, or, if there is no intervention, to the reference end-of-day price at the South PEG plus or minus 20%, depending on the imbalance (positive or negative).

TIGF intends to shift its current system towards the target system by gradually reducing the tolerance granted to shippers:

Delivery capacity subscribed (GWh/d 0°C)	Daily imbalance tolerance (% of the delivery capacity subscribed)	
TIGF zone	until 31 April 2014	1 May 2014
Up to 1 GWh/d	+/- 20%	+/- 10%
Over 1 GWh/d	+/- 5%	+/- 2.5 %

• as at 1 May 2014, daily tolerance will change as follows:

- the cumulative imbalance tolerance will go from two times to one time the daily tolerance. It will be eliminated as of 1 April 2015;
- from 1 May 2014, the cumulative imbalance account will no longer be settled at the end of the month. It will be fully settled on 31 March 2015, at the weighted Average Price (P average) of all within-day trades on the exchange on 31 March 2015.

In parallel, TIGF proposes to change the prices for imbalances in order to be consistent with the European network code:

- the P1 price will change as follows:
 - as of 1 May 2014, it will be replaced by a marginal price (P marginal) defined similarly to that of the network code, with the adjustment set at +/-10%,
 - as of 1 April 2015, the adjustment will be set at a level that may be lower than +/-10%, depending on the work carried out under Concertation Gaz and CRE's decisions;
- a weighted average price (P average) is calculated according to the same conditions as the average price defined by the network code (equal to the weighted average of prices of all within-day trades in the exchange for the day in question for the balancing zone in which the intervention takes place).

Reconciliation of the balancing account

As for GRTgaz, the physical reconciliation of TIGF's global balancing account is carried out on a monthly basis since 1 January 2014. During the working days of the first two weeks of month M+2,

² This charge corresponds to the cost of transmission between the South PEG and the TIGF PEG.



TIGF carries out sales or purchase transactions with day-ahead maturities on the TIGF PEG. When the quantities to be bought or sold for the month in question are too low to be handled through a daily contract on the Powernext Gas Spot exchange, they are valued at the average balancing price.

However, financial reconciliation of the balancing account is done on a quarterly basis, using a key for redistribution among shippers based on subscriptions of daily delivery capacity. TIGF wishes to wait until the end of work in progress on the selection of the distribution key to be used in the target system before changing its IT system and enabling monthly automated billing of shippers.

3.3. CRE's preliminary analysis

The ENTSOG network code on balancing states that all imbalances observed each day must be billed at a market price reflecting tension in the network.

CRE observes that the drop in the mid-ranges proposed by GRTgaz is in line with the deliberation of 5 February 2013, and that the drop in tolerances proposed by the TSOs is consistent with European guidelines, which state that daily tolerances will be eliminated in the target system. It is part of the gradual trajectory defined in the deliberations of 1 December 2011 and 5 February 2013, which enables shippers to adapt and to take into account the new information made available by the TSOs. This drop will also result in strengthening shippers' financial incentive to optimise their flexibility tools and be active in the wholesale market to minimise their imbalances.

CRE is in favour of TIGF's proposal to eliminate the settling of the imbalance account at the end of the month, which will be definitively settled as at 1 April 2015, date at which imbalances can no longer be cumulated.

At this stage in its analysis, CRE considers that GRTgaz's and TIGF's proposals concerning the level of the adjustment and the terms for the physical and financial reconciliation of the balancing account do not seem to raise any difficulties. However, these parameters could be adjusted depending on the feedback from TSOs following the implementation of these new rules.

TIGF submitted its study to CRE (contained in the Annex to this consultation) on the compatibility of the daily balancing service with the balancing network code, which is currently proposed to shippers that subscribed storage capacity in that zone. The outcome of the daily balancing service will be studied at a later date, depending on the selections made by CRE on the terms for implementing the common South PEG/TIGF as of 1 April 2015.

Lastly, in order to ensure transparency for all market players, CRE deems it desirable for the TSOs to present in Concertation Gaz meetings, at least once per year, a review of their main tools and costs related to the physical balancing of the system.

Question 2: Are you in favour of GRTgaz's proposals concerning the development of the terms for charging shippers' imbalances?

Question 3: Are you in favour of TIGF's proposals concerning the development of the terms for charging shippers' imbalances?

4. TSOs' methods of intervening on the market to cover their balancing needs

4.1. GRTgaz's proposal

Pursuant to CRE's deliberation of 5 February 2013 deciding on the balancing rules for gas transmission systems, since 1 April 2013, GRTgaz intervenes on the market depending on the forecast end-of-day imbalance published on the Smart GRTgaz website, according to the following terms:

- in the South zone, GRTgaz intervenes on a within-day basis only when the end-of-day imbalance volume forecast is higher than 2.4 GWh. This intervention represents a gas volume equal to 10% of its forecast end-of-day imbalance, with a minimum intervention volume of 240 MWh limited to 7 GWh;
- in the North zone, GRTgaz intervenes on a within-day basis only when the end-of-day imbalance volume forecast is higher than 10 GWh. This intervention represents a gas volume equal to 10% of its forecast end-of-day imbalance, with the intervention volume limited to 10 GWh.



Interventions for weekend sessions follow the same principles but are limited to 1.5 GWh/d in the South zone and 2 GWh/d in the North zone.

GRTgaz intervenes on a day-ahead basis optionally, if it anticipates a major imbalance for the following day.

GRTgaz proposes to maintain these intervention volumes as from 1 May 2014.

In addition, GRTgaz modified its automatic intervention parameters on the market to cover its balancing needs at the beginning of January 2014, in particular so that it could be the initiator of orders. It intends to change its automatic intervention process again as of 1 May 2014, to enable it to use a gradual offer mechanism.

4.2. TIGF's proposal

Since 1 January 2014, TIGF intervenes at the TIGF PEG:

- for weekend products from 5:15 p.m. to 5:45 p.m., if imbalance forecast exceeding 20 GWh is expected the day before at 5:00 p.m., intervening for a quantity of 250 MWh ;
- for day-ahead products from 5:15 p.m. to 5:45 p.m., if imbalance forecast exceeding 20 GWh is expected the previous day at 5:00 p.m., intervening for a quantity of 1 GWh;
- for within-ahead products from 3:45 p.m. to 4:15 p.m., if imbalance forecast exceeding 2.5 GWh is
 expected that same day at 3:00 p.m., intervening for a quantity equal to 10% of the imbalance and
 not exceeding 2 GWh;

TIGF proposes to study, in compliance with CRE's request, the possibility of intervening directly at the South PEG as early as 1 May 2014.

4.3. CRE's preliminary analysis

The TSOs' proposals will enable greater consistency between interventions on the market and their real needs for the physical balancing of their system. These proposals are in line with the objectives and provisions at European level.

CRE considers that GRTgaz's proposals are satisfactory. However, it believes that its intervention in weekend sessions should become optional as for day-ahead products to deal only with major imbalances forecasts.

As for TIGF, since 1 January 2014, coverage of imbalances is done mainly on an intraday basis at the TIGF PEG, thanks to the end-of-day forecast imbalance indicator published on its website. Therefore, as for GRTgaz, CRE is considering the suitability of making TIGF's interventions in day-ahead and weekend sessions optional.

In addition, given the greater liquidity in the adjacent South marketplace and the prospect of implementing a common marketplace in the south of France, CRE considers that TIGF should intervene as early as possible at the South PEG and no later than 1 May 2014. If any technical problem arises on this point, CRE considers that TIGF should bring the issue to it before end March 2014.

Lastly, CRE considers that the TSOs must continue to analyse and regularly submit the review of their respective interventions at the PEGs in Concertation Gaz meetings, with an assessment of:

- minimum and maximum volumes involved in the interventions;
- the level of intervention as a percentage of the end-of-day forecast imbalance;
- their market share at the PEGs.



Question 4: Are you in favour of the change in GRTgaz's terms for intervention on the market for its balancing needs?

Question 5: Are you in favour of the change in TIGF's terms for intervention on the market for its balancing needs? Do you agree with TIGF intervening at the South PEG as from 1 May 2014 at the latest?

5. Response to the public consultation

CRE invites all interested parties to submit their contributions by 6 March 2014 at the latest:

- by email, to the following address: <u>dirgaz.cp5@cre.fr</u>;
- by contributing directly on CRE's website (<u>www.cre.fr</u>), in the "Documents/Public Consultations" section;
- by directly contacting the Gas Infrastructure and Networks Department: + 33.1.44.50.49.99.

Individual non-confidential responses will be published on CRE's website.

Please state in your answer whether you wish for your contribution to **remain confidential**. Annexe:

- GRTgaz's proposal of 30/01/2014
- TIGF's proposal of 30/01/2014
- TIGF's study on maintaining the daily balancing service beyond 1 April 2015

Link to documents on the current balancing systems:

- GRTgaz: http://www.grtgaz.com/fr/accueil/acheminement/equilibrage/
- TIGF's intervention terms:

http://www.tigf.fr/fr/nos-publications/publications-transport/reglement-des-desequilibres.html

