

Public consultation

21 July 2010

Public consultation by the Energy Regulation Commission regarding the tariffs and access conditions to the natural gas transmission networks

The organisation of access to the gas transmission networks has changed significantly over these last few years, which has contributed to the better working of the French gas market.

In the infrastructures field, gas transmission network reinforcements were carried out or launched, making it possible in particular to create a marketplace in the North of France and to develop entry-exit capacities in the South-West of France. The French transmission network operators (TSO) are classified among the best in Europe in terms of transparency and non-discrimination. Lastly, the commitment by GDF Suez to limit its share of the long-term entry capacities in France to 50% as from 2014 constitutes a positive signal for the development of competition.

Liquidity has increased strongly in the French wholesale market over the last two years. GRTgaz is now obtaining part of its balancing needs on this market.

On the retail market, most large-scale consumers have left the regulated sale tariffs and have benefited from attractive gas prices. Moreover, the announced start-up of power plants for the production of electricity from natural gas will stimulate the French market.

However, the situation of the French gas market is not yet completely satisfactory.

Several gas infrastructure development projects were recently deferred or scaled down: the Dunkirk and Fos Tonkin terminals, the interconnection with Belgium at Taisnières and the interconnection with Spain (MidCat project).

Liquidity at the French Gas Exchange Points (PEG) is growing more slowly than that observed on some markets close by, the German and Dutch markets in particular. The French gas market still includes three marketplaces for H gas and one marketplace for L gas, which harms the liquidity of the wholesale market. To date, stakeholders have been given no plans for development concerning the future organisation of the French market by the timelines of 2013 and 2015.

Lastly, competition is only developing slowly on the mass market.

At the request of the main new entrant suppliers, the *Concertation Gaz*¹ held thorough discussions during the first half of 2010, on the following three subjects:

- the overall structure of the market and the number of PEG by 2013,
- the balancing system by 2013,
- the access conditions to the transmission network for electric power plants.

The purpose of this public consultation is to gather the opinions of stakeholders about the work of the *Concertation Gaz* with a view to the next CRE tariff proposal, planned for October 2010, which will deal with the target market model for 2013, as well as the tariffs of GRTgaz and TIGF applicable on the 1st of April 2011.

The replies to this consultation are expected at the latest for the 6th of September 2010.

¹ Consultation process with shippers relating to gas transmission networks operated by the TSOs, as requested through a decision of CRE on 18 September 2008.

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1. Context

1.1. Work of the *Concertation Gaz* on the medium term gas transmission organisation in France

Announced by CRE in 2005, the changes in the contractual structure of the French gas transmission network that came into force on the 1st of January 2009 were a major step forward in improving access to the networks and contributed to liquidity and competition in the French natural gas market. They led to an organisation of the French transmission network based on:

- 3 balancing zones in series for H gas: two zones, North and South H, operated by GRTgaz and one zone operated by TIGF in the south-west;
- 1 zone for L gas, North L, operated by GRTgaz.

Since then, the shippers have expressed themselves on several occasions in favour of continuing with the simplification of the gas transmission contract organisation in France, following the example of Germany where 2 balancing zones are announced for the beginning of 2013.

For more than a year, the *Concertation Gaz* has been working on the three topics listed below, in particular, in order to define the target gas market organisation in France:

- the changes to the contractual structure of the natural gas transmission networks by 2013,
- the changes to the balancing systems by 2013,
- the definition of the rules applicable to the power plants producing electricity from natural gas.

The proposals and discussions resulting from this work will require decisions by CRE and the Ministers for Economy and Energy, in order to allow for their implementation.

Moreover, several infrastructure projects should soon be the subject of an investment decision for implementation by 2013-2015 (development of the interconnections with Spain and Belgium and connection of the methane terminals). Given the stakes related to these new infrastructures, it is important that a view of the gas transmission network tariff structure is given as from today.

Finally, the 3rd European legislative package will have effects on access to the gas transmission networks. Its translation into operational terms is underway, in particular through the framework guidelines defined by the European Regulators Group for Electricity and Gas (EREG) to establish the framework for the network codes that must be written by the European Network of Transmission System Operators for Gas (ENTSO-G). Structural guidelines have been already given on essential points such as the sale of transmission capacity or the balancing of the gas transmission networks.

1.2. Changes in the gas transmission tariffs on the 1st of April 2011

The GRTgaz and TIGF tariffs for the use of the public natural gas transmission networks, proposed by CRE on the 10th of July 2008², came into force on the 1st of January 2009, pursuant to the decree of the 6th of October 2008.

The main provisions of this decree are the following:

- for the two operators, the principles of remuneration of assets and investment incentives are fixed for four years,
- for GRTgaz, the tariff period is four years, with a fixed authorized revenue trajectory over the period and a productivity incentive regulation. The GRTgaz tariff scale changes on the 1st of April of each year as from 2010, according to the update of the capacity subscription forecasts, inflation and possible significant variations in the price of energy,
- for TIGF, the tariff is fixed for a two year period.

² <http://www.cre.fr/fr/content/download/7669/138788/file/080710PropositionTarifsATRT4.pdf>

In accordance with the conditions provided for by the decree of the 6th of October 2008, a new yearly change in the GRTgaz tariff, as well as a new tariff for TIGF for the 2011-2012 period, must be proposed by CRE to the ministers in charge of economy and energy to come into effect on the 1st of April 2011.

2. Information about the factors in the change of gas transmission tariffs on the 1st of April 2011

The purpose of this part is to inform shippers about the requests of GRTgaz and TIGF regarding the changes in the gas transmission tariffs on the 1st of April 2011. All of these requests are being analyzed by CRE.

2.1. Changes in the GRTgaz tariff

2.1.1. Context

In accordance with the conditions provided for by the decree of the 6th of October 2008, the authorised revenue trajectory is defined, except for the effect of the costs and products regularization account (CRCP), by:

- the following capital costs trajectory, calculated according to the GRTgaz investment forecasts :

| | 2009 | 2010 | 2011 | 2012 |
|-------------------------------------|-------|-------|-------|-------|
| Total Capital Costs (Millions of €) | 756.1 | 800.8 | 861.9 | 890.4 |

- the net operating costs trajectory calculated:
 - for 2009, from the cost level retained by CRE:

| | 2009 |
|--|-------|
| Total net operating costs (OPEX) (Millions of €) | 601.9 |

- for each year of the period 2010 to 2012, except for significant variations of the price of energy, from the level of costs of the previous year to which a coefficient is applied, corresponding to the sum of inflation (consumer price index excluding tobacco calculated by the INSEE) and a factor equal to + 1.1 %.

Based on the inflation assumption retained in July 2008, it was expected that these factors would result in an increase of 4.6 % per year in current Euros in the authorized revenue of GRTgaz over the 2009-2012 period. Taking into account the subscription assumptions made simultaneously over this same period, the average yearly increase of the unit tariff envisaged was of approximately 2.8% per year, in current Euros.

2.1.2. GRTgaz request

The GRTgaz forecasts of energy costs, inflation and the CRCP would lead to an increase in its authorized revenue for 2011 of 4.2 % compared to the authorized revenue for the year 2010.

Over and above the trajectory envisaged by the decree of the 6th of October 2008, GRTgaz made the following supplementary requests:

- coverage, via the CRCP, of the stranded costs noted for the year 2009, that is, €6 Million related essentially to the dismantling of three compressor plants, and for the year 2010, that is, €6 Million related to studies that did not lead to investment decisions,
- coverage of €3.6 Million for additional costs related to the intra-day flexibility needs of the electric power plants, corresponding to the franchise of 0.8 GWh/day of modulated volume offered by GRTgaz,
- coverage of the extra costs related to the basic conversion service of H gas into L gas, for an amount estimated at €7.4 Million for 2011,
- taking into account at 100 % in the CRCP of the revenue and costs related to the use of the basic conversion service for H gas into L gas by the shippers as from the 1st of April 2011, in order to prevent the changes in the subscriptions from generating undue losses or profits for GRTgaz.

The taking into account of these requests would involve an increase in the authorized revenue of GRTgaz in 2011 of 5.2 % compared to 2010. Taking into account the subscription assumptions retained

by GRTgaz (low drop compared to 2010), this increase would result in an increase of 5.9 % on the 1st of April 2011.

| In Millions of € | 2010 | 2011 |
|--|---------------|---------------|
| Capital costs | 800.8 | 861.9 |
| Net operating costs | 610.9 | 625* |
| CRCP | - 23.1 | - 30.7 |
| Revision of the energy costs | - 21.9 | - 32.4 |
| Requests related to the stranded costs | | 3.5 |
| Costs related to the needs for intra-day flexibility | | 3.6 |
| Extra costs related to the service of conversion of H to L | | 7.4 |
| Total authorized revenue | 1366.7 | 1438.3 |
| Change in the authorized revenue | | +5.2 % |

*estimated inflation for 2010³: +1.2 %

2.1.3. CRE works

The GRTgaz forecasts of energy costs, capacity subscriptions and the CRCP are being analyzed, as are the GRTgaz supplementary requests.

Moreover, taking into account the capitalization of certain costs that had been classified as operating costs when the tariff was established, an audit of the GRTgaz fixed asset accounting rules is underway.

2.2. New tariff for TIGF

2.2.1. Context

Taking into account the uncertainties related to the trajectory of the TIGF estimated operating costs for the years 2011 and 2012, the tariff for routing on the TIGF network was set for a period limited to two years, 2009 and 2010. A new tariff for the use of the TIGF transmission network must thus be worked out for the 2011-2012 period to come into effect on the 1st of April 2011.

2.2.2. Statements of the 2009 and 2010 tariff financial year

a) Final statement for the 2009 tariff financial year

The tariff in force for 2009 provided for net operating costs, excluding energy, of €58 Million. The effective amount for 2009 amounted to €54.8 Million, i.e. a difference of - €3.2 Million.

Taking into account a consumption of energy lower than that forecast and the decrease in the price of gas compared to the tariff forecast, the effective 2009 energy costs amount to €1.8 Million, instead of €11 Million in the tariff forecast. As these costs are 80% covered by the costs and products regularization account (CRCP), €7.4 Million will be refunded to the users for the 2009 financial year.

The effective capital costs in 2009 amount to €104.7 Million, i.e. a difference of - €6.2 Million compared to the tariff forecast. This difference will be completely taken from the CRCP.

Lastly, the revenue related to the subscriptions amounted to €180.6 Million in 2009, i.e. an amount higher than the tariff forecasts of €2.2 Million. For this item, €0.7 Million will be refunded to the users.

³ Source: <http://www.imf.org/external/pubs/ft/weo/2010/01/pdf/tables.pdf>

b) Provisional statement for the 2010 tariff financial year

The tariff in force provided for forecast net operating costs, excluding energy, of €44.3 Million⁴ for 2010. The amount estimated by TIGF for 2010 amounts to €53.9 Million, i.e. a variation of + €9.6 Million.

Taking into account lower energy consumption than that forecast and the decrease in the price of gas compared to the tariff forecast, the 2010 energy costs estimated by the TIGF amount to €4.8 Million, i.e. a variation of - €7.4 Million compared to the tariff forecast. As these energy costs are 80% covered by the CRCP, €5.9 Million should be refunded to the users for 2010.

The capital costs estimated for 2010 amount to €122.1 Million, i.e. a variation of - €12.3 Million compared to the tariff forecast. This variation will be completely taken from the CRCP.

Lastly, the revenue related to the subscriptions would increase in 2010 to €180.8 Million, i.e. an amount almost identical to the tariff forecasts for 2010. Nevertheless, taking into account the differences between subscriptions on the main network and subscriptions on the regional network, €1.4 Million should be refunded to the TIGF via the CRCP.

c) CRCP 2009-2010

The CRCP estimated by the TIGF for the 2009-2010 period amounts to €29.2 Million (€16,7 Million for 2009, €12.5 Million estimated for 2010) to which €3.6 Million are added related to the difference between the final CRCP of 2008 and the forecast retained at the time of the tariff proposal. After updating these amounts and taking into account the annual amount related to the CRCP for 2007-2008, the amount of the CRCP to be refunded in 2011 and 2012 to the users is estimated at €15.2 Million / year.

2.2.3. TIGF request for the 2011-2012 period

The operating costs except for energy forecast by TIGF are on average €59.6 Million/year for 2011-2012. This amount has increased by €8.8 Million/year compared to the 2009-2010 tariff. This increase is mainly explained by a more than 11 % per year increase in the TIGF wage bill (increase in workforce and wages).

Moreover, TIGF is asking for the revision of the accounting distribution rules used to distribute the common costs between its transmission activity and its storage activity, to translate a more significant increase in its transmission activity. This request would lead to an increase of €1.5 Million per year for the costs to be covered by the transmission tariff in 2011-2012.

The estimated TIGF operating costs related to energy for 2011-2012 are decreasing by €7.1 Million per year compared to the 2009-2010 tariff. This decrease is explained by the change in the natural gas price as well as by less significant gas needs.

In regard to the capital costs, TIGF envisages an average yearly amount of €134.2 Million for 2011-2012, that is to say, an increase of €11.5 Million compared to the 2009-2010 tariff.

In total, TIGF estimates that, for 2011-2012, its costs to be covered will increase by €13.2 Million/year on average, compared to the tariff in force, i.e a variation of + 7.1%.

| In €Million/year | Effective in 2009 Estimated for 2010 | CRE 2009-2010 Tariff | TIGF Request 2011- 2012 |
|---------------------------|--|----------------------|----------------------------|
| Capital costs | 113.4 | 122.7 | 134.2 |
| Net operating costs | 57.6 | 62.4 | 64.1 |
| - Except energy | 54.3 | 50.8 | 59.6 |
| - Energy | 3.3 | 11.6 | 4.5 |
| Total costs to be covered | 171 | 185.1 | 198.3 |
| Variation | | - | +7.1% |

⁴ The revenue of TIGF relating the interoperator contract has increased by €12.6 Million in 2010 compared to 2009

However, after taking into account the CRCP, the change in the TIGF 2011-2012 authorised revenue would increase by €3.5 Million/year on average, i.e a variation of + 1.9 %.

| In €Million/year | CRE 2009-2010 Tariff | TIGF Request 2011-2012 |
|--------------------------------|----------------------|------------------------|
| Total costs to be covered | 185.1 | 198.3 |
| CRCP | - 5.5 | - 15.2 |
| Costs to be covered after CRCP | 179.6 | 183.1 |
| Change | - | +1.9% |

The subscription assumptions provided by TIGF for 2011-2012 are increasing slightly.

Taking into account all the factors submitted, the TIGF request for 2011-2012 would lead to a stable tariff on average on the 1st of April 2011

2.2.4. CRE works

All of the estimated operating and capital costs presented by TIGF are being analyzed.

Moreover, taking into account the increase in the costs of the Guyenne Artery project, an audit of the costs related to this project is underway.

3. Change in the tariff structure

The creation of liquid and deep gas marketplaces is a general movement in Europe, which contributes to security in the supply and strengthens competition for the benefit of consumers. With the exception of Germany and France, the main Western Europe countries have a single marketplace for natural gas. Moreover, since the 1st of July 2009, the Dutch transmission network operator GTS has united the contractual management of the two qualities of L gas (low calorific value) and H gas (high calorific value) on its network and the German government has just announced that it will go from six to two market zones by 2013.

France has followed the same trend as the rest of Europe, going from eight balancing zones in 2003 to four in 2009, of which three were for H gas. The creation of the great North Zone, in January 2009, by regrouping the former East, North and West zones is a success, which contributed to the liquidity development at the North H PEG and the development of competition between supply sources and suppliers, for the benefit of the consumers. Thus, the great industrial sites that are mainly involved in market offers (on the 31st of March 2010, 93% of the consumption on the transmission networks is on market offer)⁵ were able to benefit from competitive commercial conditions.

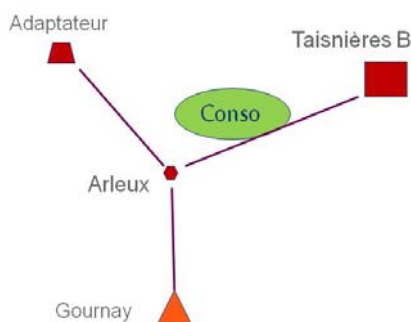
The discussions about continuing this movement on the French market are being carried out by the *Concertation Gaz* working group on the change of the contractual structure of the gas transmission networks. Two topics were studied during the 1st half of 2010:

- access to the GRTgaz North L Zone ;
- access to the South of France.

The *Concertation Gaz* Working Group will study in the second half of 2010 the benefits of a merger of the North and South zones in the GRTgaz network and the change towards a single marketplace in France for natural gas by 2015.

3.1. Change in the tariff structure in the north of the country

3.1.1. Tariff structure in force for L gas



The L gas network is a non-reticular network, with a central node in Arleux. This network can supply a consumption zone of 47.4 TWh in 2009, of which the greatest concentration is located in Lille. The needs of the zone can only be covered by flows coming from the Taisnières B entry point and the Gournay storage facility operated by Storengy. The L gas sources upstream from France are limited and are not easily accessible to all of the shippers. Moreover, an adapter, located in Loon Plage, makes it possible for GRTgaz to physically produce L gas from H gas, in small quantities and in an interruptible way.

To facilitate all of the active suppliers in France access to L gas, the access tariff to the GRTgaz transmission network includes two H gas into L gas conversion services:

- a firm “basic” service, accessible to shippers holding less 15 % of the entry capacity at Taisnières B and with H gas in the North Zone, within the limit of their needs to supply L gas to end customers,
- an interruptible “peak” service, accessible to all shippers with H gas in the North Zone. The price of this service corresponds to the costs of the adapter.

The “basic” service offered by GRTgaz is ensured thanks to a *swap* contract for H gas to L gas signed with GDF Suez, which has a long-term L gas procurement agreement. The cost of this *swap* service is re-invoiced at 50% to shippers active in the North L Zone through the “basic” conversion service; the remainder is mutualised in the access tariff to the GRTgaz network.

⁵ Source: CRE Electricity and Gas Market Observatory

In addition, the balancing rules allow the shippers that benefit from the “basic” conversion service of H gas into L gas to later mutualise their imbalances between the North H and North L perimeters, within the limit of the conversion capacities to which they subscribed. Thus, for these shippers, balancing is optimised by means of a global network uniting the North H and North L perimeters.

These provisions have enabled competition to develop normally in the North L zone. Indeed, the new entrant supplier market share for the North L zone (18.3% on the 31st of March 2010⁶) is comparable to that of the North H zone (21.1% on the 31st of March 2010).

3.1.2. Concertation Gaz works

A vast majority of the shippers are asking for the merging of the North L and North H zones, in order to:

- simplify the access to the network for the shippers (elimination of subscription and nomination management, single balancing, etc.),
- improve the attractiveness of the North zone (access to a larger consumption zone, concentration of wholesale market liquidity, etc.).

Preliminary analyses carried out by GRTgaz show that a merging of the North H and North L zones could be feasible. It would involve the total mutualisation of the costs of provision of L gas by GRTgaz. Moreover, given the effect that this merger will have on its information system, GRTgaz estimates that this change could not be made until April 2013.

Taking into account the peak consumption level (around 425 GWh/day noted for the 2008-2009 period), the L gas balance in winter can only be ensured by an arrival of L gas in Taisnières B combined with a withdrawal of L gas at the Gournay storage facility. Under these conditions, the merging of the North H and North L zones would require a good level of coordination between GRTgaz and Storengy.

In the short term, GRTgaz estimates that the part of the tariff for the “basic” conversion service of H gas into L gas can be fixed at 0 as from the 1st of April 2011. This change could be accompanied by the elimination of the subscriptions, subject to feasibility for the information system. It would lead to maintaining the nominations related to this service and two distinct balancing perimeters, with imbalance mutualisation. GRTgaz indicates that it would be necessary to introduce an operational rule instead of elimination of the subscriptions. It would also imply, as of this date, a total mutualisation of the GRTgaz tariff for the cost of the swap contract with GDF Suez.

3.1.1. CRE analysis

For the benefit of the French gas end consumers, CRE considers that it is important to continue with the simplification of the contractual structure for transmission network access, in order to ensure the competitiveness and attractiveness of the French market.

Moreover, within the framework of the commitments to the European Commission on the 7th of December 2009, GDF Suez must “*continue the H gas to L gas swap service provided to GRTgaz under financial conditions virtually identical to the conditions in force on the effective Date, so that the latter can perpetuate the regulated H Gas to L gas conversion*”, which makes considering the merging of the North H and North L zones a possibility.

CRE plans to propose to the Ministers for Economy and Energy the merging of the North H and North L zones on the 1st of April 2013, which would have the following consequences for the shippers:

- the integration of the North H and North L zones within the same balancing perimeter,
- the disappearance of the H gas to L gas conversion service,
- the disappearance of the North L Gas Exchange Point (PEG), all exchanges being concentrated on a single North PEG.

In order to prepare this merger, CRE intends to propose to the ministers that the part of the tariff for the “basic” H gas to L gas conversion service should be set to zero on the 1st of April 2011. Taking into account the a posteriori imbalance mutualisation system between the North H and North L zones, this

⁶ Source : CRE Electricity and Gas Market Observatory

change must be accompanied by an adjustment of the balancing rules for the North L zone to those of the North H zone (mid-range size, price of balancing, etc.).

This mutualisation would result in transferring an amount of approximately €10.8 Million / year⁷ to the whole of the GRTgaz tariff charges, that is to say, an increase of approximately 0.8%.

Within the works of the *Concertation Gaz*, GRTgaz and Storengy should let the shippers share in definition of contract and operational rules, in order to balance gas L network.

1. Do you agree with the merging of the North H and North L zones on the 1st of April 2013?
2. Do you agree with the total mutualisation of the costs for the conversion of H gas into L gas (basic service only) as from the 1st of April 2011?

3.2. Changes in the tariff structure in the south of the territory

3.2.1. Study of the French gas transmission networks conducted by GRTgaz and TIGF

Since the 1st of January 2009, there have been three marketplaces for H gas in France. At the end of 2008, the main new entrant suppliers asked for the simplification of the organisation of the gas market in France to be continued. They advocate “*the merging of the North and South balancing zones at the earliest*”. The *Concertation Gaz* launched discussions on this subject, at the beginning of 2009, which led to a report submitted to CRE in April 2009.

In its deliberation of the 2nd of July 2009, following a public consultation, CRE considered that the merger of the North and South GRTgaz zones in 2011 would be premature and could not be entered into force before 2015. CRE recommended that a single marketplace for the South of France should be created on the 1st of April 2011 by setting the part of the tariff for the connection between the South TIGF and GRTgaz zones to zero, maintaining two balancing zones.

The services of the Minister for Energy, while indicating that they were in favour in principle to CRE recommendations, asked GRTgaz and TIGF to jointly carry out a study of the congestions on the French network, as a preliminary, before mid-2010, in order to check that the implementation of CRE recommendations would not cause problems for the management of the networks.

This study, carried out under the control of a Steering Committee made up of the General Directorate for Energy and Climate (DGEC), CRE, the two transmission network operators (GRTgaz and TIGF) and Storengy, has been completed⁸. Its final report, available as an appendix to this public consultation, was presented at the Closing Steering Committee meeting on the 10th of June 2010. Its main conclusions are the following:

- the joint model of the French transmission network developed by the two operators makes it possible to better take into account interactions between the two networks and thus leads to the relaxation of some constraints since 2010 (for example, the “minimum Obergailbach” flow),
- there is no structural congestion at the interface between the GRTgaz and TIGF networks at the beginning of 2013, just a restricted number of scenarios whose occurrence would be low, for which physical flows could be constrained,
- an operational rule is proposed by GRTgaz in order to respond to these problems.

3.2.2. Concertation Gaz works

The results of the network study carried out by GRTgaz and TIGF were presented in the *Concertation Gaz* on the 12th of May and the 15th of June 2010⁹.

⁷ This amount would replace €7.4 Million required by GRTgaz

⁸ This study has been completed for 2009, 2011 and 2013 with investments known until 2009

⁹ The minutes of the meetings of 12th of May and the 15th of June 2010 are available on the site www.concertationgaz.com

The operational rule suggested by GRTgaz envisages the retaining of shipper nominations at the interface between the two networks, with peak shaving of shipper nominations if the sum of these nominations is higher than the physical operational capacity available at this point.

At this meeting, TIGF indicated that it *“is opposed to the elimination of the capacity subscriptions at the interface between the TIGF network and that of GRTgaz because:*

- *the advantage for the market has not been proven, the lightening of the subscription constraint being replaced by the reinforcement of the gas flow allocation constraints, as well as a loss of visibility of these allocations,*
- *TIGF estimates that this measure is a first step towards a forced merging of the balancing zones, weakening the company by a loss of its autonomy.*

The shippers estimated that the constrained flow scenarios identified were extreme and had a very low probability of occurrence. They considered that this study could not lead to a statu quo on the organisation of the French market and requested almost unanimously the creation of a single marketplace for the South of France at the latest in April 2013, which is the date of arrival of the Spanish gas. According to them, such a change is necessary to increase the liquidity of the wholesale market in the South of France, an essential condition for end customers to benefit from competitive offers or to optimize the gas supply for electric power plants in the south.

In addition, they estimated that the existence of two TSO could not justify the statu quo, insofar as, *“the French market is in competition with the other European markets, in particular Germany [and] these markets have become attractive than the French market because they are moving towards larger balancing zones and thus increasing liquidity”¹⁰*. Therefore, they thus asked the French TSO to follow the example of Germany, where the reduction of the number of marketplaces was carried out by creating common structures for the various operators concerned or Spain, where a single operator is in charge of coordinating the whole of the system.

Lastly, some of them considered that the operational rule suggested by GRTgaz could be used only as a transitional phase towards the creation of a single marketplace; they asked that this rule be applied only in an exceptional way (in the constrained flow scenarios identified by the study) and not generalized to the maintenance periods.

3.2.3. CRE analysis

CRE considers that the technical requirements for implementing the recommendations set out in its deliberation of the 2nd of July 2009 have been met. Taking into account the implementation times, this change could only be made in April 2013. It is thus necessary that a decision be made before the end of 2010.

However, CRE notes that one of the operators however disagrees with any change in this direction.

The study final report was submitted to the department of the Minister for Energy, which to date has not make its conclusions known.

The responses to the public consultation will be taken into account by CRE in working out its tariff proposal.

| |
|---|
| 3. What lessons do you draw from the results of the network study carried out by GRTgaz and TIGF? |
|---|

3.3. Various subjects

3.3.1. Tariff for the connection between the GRTgaz South zone and the TIGF zone

The network study conducted jointly by GRTgaz and TIGF concluded that there was no structural congestion at the interface between these two networks in 2013. If the creation of a single marketplace in the south of the territory on the 1st of April 2013 is decided, it seems logical to decrease the value of

¹⁰ Source : Structure Work Group Report of the 15th of June 2010, see www.concertationgaz.com

the tariff for the connection between TIGF and South GRTgaz as from the 1st of April 2011. This change would go with:

- the charge of the TIGF tariff for the exit towards Spain would be increased identically, in order for the gas transmission tariff from the North of France to Spain to continue to reflect the costs,
- charges of the TIGF and GRTgaz tariffs would be increased, in order to cover the authorized revenue of each operator.

3.3.2. Equalising tariff applicable to entry at interconnection points with others transmission networks

As at January 1st, 2009, TIGF would like the charge of the TIGF tariff for entry at Biriadou and Larrau to be equal to the charge of the GRTgaz tariff for entry at interconnection points.

CRE plans to maintain, on the 1st of April 2011, the principle of equalizing tariff for entry at French interconnection points.

3.3.3. Tariff and tariff rules applicable to the interface with the storage facilities

Storage capacity developments lead to transmission network development costs. In addition, new offers that modify the standard conditions of use of the storage facilities are appearing, such as the Storengy “multicycling” offer.

The analysis of the impact of the storage capacity development and the diversification of storage offers on the gas transmission networks is underway.

Depending on the results of this analysis, CRE may propose an increase in the PITS charge of the GRTgaz network tariff as from April 2011.

3.3.4. Tariff rules applicable to the interface with the LNG terminals

CRE plans to complete the tariff rules applicable to the interface between the gas transmission networks and the LNG terminals.

Thus, for any development project related to the entry capacities on the transmission networks from a LNG terminal, the terminal operator must compensate TSO financially if all of the entry capacities developed at its request are not subscribed to by the shippers using the LNG terminal.

The purpose of this change is to make sure that all of the network users will not be financing the development costs of the capacities created specifically for the needs of the users of a particular infrastructure, via the transmission tariffs.

4. Are you in favour of decreasing the value of the tariff for the connection between TIGF and South GRTgaz as from the 1st of April 2011, if the creation of a single marketplace in the south of the territory on the 1st of April 2013 is decided?
5. Are you in favour of the other changes suggested in the tariff structure?

4. Access rules for power plants generating electricity from natural gas

4.1. Works conducted within the *Concertation Gaz*

4.1.1. Context

Many connection contracts have been signed with GRTgaz concerning projects of power plants generating electricity from natural gas planned to enter into force between 2009 and 2015.

These electric power plants play an important role in the proper running of the electricity system insofar as they contribute to balancing supply and demand (semi base-load and peak-load) and to reducing CO₂ emissions from the production installations. These power plants constitute also a boosting factor for the gas market. However, owing to their gas consumption level and their need for intraday flexibility, some limitations have been identified by TSO concerning the gas transmission operation network.

In its 30th of April 2009 deliberation, following a public consultation, CRE:

- confirmed maintaining of daily balancing on gas transmission networks in France,
- requested that GRTgaz and TIGF carry out a technical-economical study of the overall capacity of the gas infrastructures to meet the needs in terms of the intraday flexibility of the projected electricity power plants,
- requested that the *Concertation Gaz* taskforce propose, if necessary, new transmission and balancing rules, as well as day-ahead declaration procedures and, possibly, intraday re-declarations of the gas consumption schedule of the electric power plants.

The results of the study requested by CRE were forwarded as part of the *Concertation Gaz* in March 2010. The GRTgaz and TIGF report is appended to this consultation.

4.1.2. Results of the GRTgaz and TIGF study concerning the capacity of the gas infrastructures to meet the market's flexibility needs

The study conducted by the TSOs covered the known day-ahead flexibility needs. In fact, insofar as it can be used to predict the demand on the sources of flexibility and for network preparation, day-ahead knowledge of needs authorizes recourse to sources of flexibility potentially remote from the location where the need is manifested and, hence, sharing of the sources of flexibility. This study was limited to the H gas network since there is no L gas network power plant project.

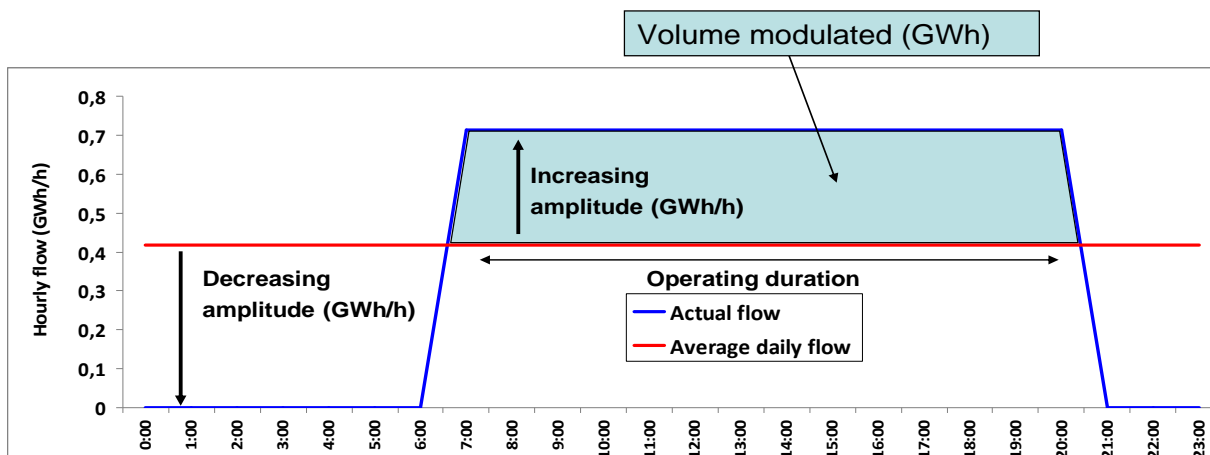
a) Specific features of the electricity power plant consumption

In France, in the current and foreseeable gas and electricity market contexts, the economic optimum for operating gas fuelled electric power plants consists in semi base-load operation for a gas combined cycle (GCC) power plant, i.e. 2,000 to 5,000 hours/year, and peak-load operation for a gas combustion turbine, i.e. less than 2,000 hours/year.

Consequently, electric power plants running on natural gas often feature an intraday profile matching the variations in power demand (night low and morning peak). Furthermore, the operating period of these facilities correlates well with the gap between the price of electricity on the one hand, and that of CO₂, on the other hand, known as the clean spark spread which can only be definitely known by the power producer on a day-ahead basis.

Therefore, a power plant's consumption can be characterized by a strong need for intraday flexibility, as defined by the two following criteria:

- a gap between the observed hourly flow and the average hourly flow over the day (rising and falling flow amplitude),
- modulation during the day corresponding for the TSO to transmission, storage and out-stock gas volumes according to the operating period² over the day.



b) Intraday flexibility needs of the current market and the power plants

The study shows that present consumption³ (excluding electric power plants) fluctuates over the day depending on the temperature and time. The daily consumption profile shows an 11% decrease in the hourly flow compared to the average daily flow during the night, and a 13% increase compared to the average daily flow during the day.

During the winter, the intraday flexibility required for current consumption rates on the GRTgaz network is covered up to 85%, on the average, by the line pack and up to 15% through tapping the Storengy storage facilities. In the summer, the GRTgaz line pack is sufficient to meet the modulation needs for these consumptions.

In view of the consumption development forecasts, the intraday flexibility needs of the conventional market show very little evolution over the period spanning through 2015.

This study also confirms the high demand for intraday flexibility of the electric power plants.

| | 2010 | 2011 | 2012 | 2013 | 2015 |
|---|--------------------|---------------|---------------|---------------|---------------|
| Modulated volume required by the conventional market | 13 TWh / an | | | | |
| Modulated volume required by the power plants | 5 TWh | 11 TWh | 14 TWh | 18 TWh | 21 TWh |
| Number of 440 MWe generating units | 6 | 9 | 12 | 15 | 18 |

The modulated volume required by the power plants is calculated based on the hypothetical operating procedures that were communicated by the electricity suppliers to GRTgaz as part of this study, i.e. on average, power plant operating periods of about 16 hours a day for 310 days.

c) Conclusions of the study

- On the GRTgaz network, the study indicates that the infrastructures in service or those which are scheduled for development can meet the intraday flexibility needs of the market until 2013. This balance will be ensured by increased use of the line pack during the summer, and by enhanced use of the other infrastructures (terminals, storage facilities and TIFGF), especially in the winter.

On the other hand, in 2015, the frequency of coverage of the whole of the intraday flexibility needs could be about 80% on average over the year, and 60% during the October-November period. Development of new transmission infrastructures, as planned for 2014, would provide the additional intraday flexibility needed to meet the needs of the new power plants. To date, however, no decision has been made about such investments.

Moreover, owing to the concentration of the power plants in the Fos area, the study concludes that given the lack of any significant gas emission from the Fos LNG terminals in the short term, and due to the doubling of the Rhône pipeline in the medium term, transmission flexibility toward this zone might be limited.

- On the TIGF network, the required modulation of the current network consumptions is covered mainly by storage facilities.

Due to the absence of any power plant project before 2013 on the TIGF network, a capacity for flexibility transfer from TIGF to the benefit of GRTgaz network from 2010 to 2013 has been identified in order to contribute to covering the intraday flexibility needs when the latter is insufficient in the Fos area.

TIGF considers that its transmission network will allow operation of the first power plant project that is expected to be implemented in the south-west region, at the very earliest, in 2013 thanks to a contribution from the south-west storage facilities. Starting from 2015, coverage of the needs of two additional power plants may be ensured through using the TIGF zone storage facilities, provided the developments planned for this deadline are validated (Guyenne pipeline, Lussagnet compression unit and Gascony pipeline).

4.2. GRTgaz proposal for an intraday flexibility service for highly modulated consumers connected to its transmission network

The study shows that the needs of the power plants on the GRTgaz network cannot be covered solely by the line pack available on its transmission network.

Under such conditions, GRTgaz proposes to cover any additional intraday flexibility needs generated by the power plants by first using the line pack available on its network (particularly in the summer). Should the line pack prove insufficient, GRTgaz would next call on LNG terminals and TIGF, primarily for the Fos area, and then the underground storage facilities for any remaining needs.

GRTgaz has assessed the additional cost related to the supplying of intraday flexibility based on its own costs, as well as on offers made by Storengy and Elengy.

| | 2011 | 2012 | 2013 |
|--|--------|--------|--------|
| Additional modulated volume | 11 TWh | 14 TWh | 18 TWh |
| GRTgaz' own costs (€M) | 4 | 9 | 10 |
| Costs related to Storengy's and Elengy's offering (€M) | 11 | 14 | 20 |
| TOTAL (€M) | 15 | 23 | 30 |

GRTgaz considers that the costs above are not covered by the transmission tariff schedule in effect. They propose to cover any additional costs by providing a specific intraday flexibility service for the highly modulated sites. This regulated service would be mandatory for all sites presenting, on average over the preceding year, a daily load balanced volume greater than 0.8 GWh. For newly connected sites, GRTgaz proposes to estimate this criterion based on quarterly appraisal, based on which the offer might apply retroactively.

The supply of intraday flexibility by GRTgaz is based on a site's day-ahead hourly consumption profile declaration so as to allow GRTgaz to configure its network and call on external intraday flexibility sources (Elengy, Storengy and TIGF), as needed. GRTgaz would confirm the feasibility of the declared operating schedule to the site operator on the preceding day, as well as supplying the schedule modification conditions for site operation (namely the courtesy period).

For any modification considered regarding the sites' hourly consumption that is less than $\pm 10\%$ of its subscribed hourly capacity, the site would benefit from a tolerance that would excuse it from having to notify GRTgaz of its new hourly consumption profile.

The tariff components for the flexibility service proposed by GRTgaz are as follows:

- a fixed component of €600,000 / year applicable to every site,
- a variable component depending on the amplitude of the site's flow and on the load-balanced volume over a gas day:
 - €0.14 / MWh of load-balanced volume over the course of a day,
 - €5 / MWh/h hourly amplitude of peak flow observed during the day (difference between the lowest hourly flow and the peak hourly flow, as observed over the course of a day).

The invoicing for this service to the operator's site would be carried out based on the amplitude and modulated volume noted every day in terms of the site's reported hourly consumption.

A franchise corresponding to a free-of-charge modulated volume of 0.8 GWh per day would apply, in order to take into account the intraday flexibility covered by the access fee to the GRTgaz' transmission network in effect. The cost of this franchise, assessed by GRTgaz at €3.6 M per year, would be mutualised in the forthcoming GRTgaz network access fee.

Overall, the service proposed by GRTgaz would amount, for a given power plant (440 MWe unit) operating on average 16hrs per day for 310 days, to a cost close to €1.7 M per year.

The proposal forwarded to CRE by GRTgaz is appended to this consultation.

4.3. Proposal submitted by TIGF for an intraday flexibility service for GRTgaz and the power plants connected to its transmission network

Upon a request from GRTgaz, TIGF has studied the intraday flexibility which could be set up at the disposal of GRTgaz, as well as the possibilities of transferring this flexibility up to Cruzy. GRTgaz would then have an additional source of flexibility to meet the needs of the power plants installed in the Fos area.

During the *Concertation Gaz* meeting on the 30th of June 2010, TIGF presented its proposal for an intraday flexibility service for GRTgaz starting from 2010, as well as for the power plants planned on its network as of 2013.

The flexibility service proposed to GRTgaz is interruptible and valid until the implementation of the power plant project planned on the TIGF network in 2013.

The flexibility service proposed by TIGF for the power plants to be connected on its network is firm.

The proposal presented by TIGF to the *Concertation Gaz* is appended to this consultation.

4.4. CRE analysis

4.4.1. Feedback on the running of the power plants currently operating

Four power plants are currently operating and two are being tested. Their running profiles from January to June 2010 has required less intraday flexibility than allowed for in the hypotheses retained within the scope of this study.

CRE notes a difference of 5 to 10 % on average between the hourly schedule sent by the electricity producer to GRTgaz and the consumption observed in the data of January to June.

In view of this feedback and the works remaining to be done on implementing the intraday re-declaration process, CRE considers it not necessary for the time being to resort to financial penalties in the case of non compliance to the hourly schedule declared to GRTgaz. Should any significant and lasting imbalances be observed between the hourly operating schedules forwarded to GRTgaz and the hourly consumptions recorded, CRE would propose introducing a penalty scheme.

4.4.2. Analysis of the costs presented by GRTgaz

Considering the overall costs presented by GRTgaz (internal and external costs associated with the Storengy and Elengy offers), the average cost for supplying intraday flexibility to cover the needs of a 440 MWe power plant would reach about €2 M/year.

Note that if the electricity producer subscribed directly to either of the offers proposed by the gas infrastructure operators, it would entail a cost equivalent to that of the GRTgaz offer for a power plant. The integration by the TSO of all of the sources of flexibility available at the gas system level therefore optimizes the supply of the intraday flexibility available, both in terms of availability (geographically and time-wise) and in terms of the costs involved for the power plant. Furthermore, the Storengy and Elengy offers are interruptible, whereas a combination of these offers should enable most of the time GRTgaz to propose a firm service, especially for the schedule submitted on D-1 by the power plants.

CRE has asked the infrastructure operators concerned to forward the detailed items of information justifying the costs related to the offers made to GRTgaz. As the analyses conducted on the items forwarded by the operators stand, it appears that this amount cannot be retained in its entirety.

a) Flexibility management and transmission costs, presented by GRTgaz

GRTgaz has presented to CRE a justification for the fixed and variable costs it would have to bear for the supply of the intraday flexibility of the power plants from 2010 to 2015.

CRE considers that part of these costs is not specifically related to the supplying of the intraday flexibility required to meet the needs of the power plants, but is related to the normal development of GRTgaz activities: TSO obligations provided for within the framework of the 3rd European legislative package adopted in 2009, publication of the network voltage level, grid piloting tools, monitoring of the line pack, etc.

CRE plans to only retain in the framework of the GRTgaz flexibility service additional costs strictly related to the arrival of the power plants.

b) Costs related to the Storengy intraday flexibility offer

Storengy has given CRE no cost details whatsoever to justify the level or structure of its offer. The current regulations provide for priority access to the underground storage facilities for the TSOs, without any guidelines concerning the economic conditions for such access. Neither has GRTgaz been able to give CRE any explanation regarding the costs of the Storengy offer, which are directly taken into account in its offering.

CRE cannot therefore validate the level of the service offer proposed by Storengy to GRTgaz.

However, the intraday flexibility of the consumption of a power plant is characterized by demands for a flow rate that increases and then decreases over the course of a single day, as compared to its hourly supply flow. But, the storage facilities are subject to withdrawals in the winter and injections during the summer. Only the inter-seasonal periods may feature demands both directions.

CRE considers that no costs can be billed by Storengy to GRTgaz when the effect of the power plants is to reduce the level of demand on the storage facilities. Consequently, it plans to retain a cost for supplying intraday flexibility by Storengy differentiated according to the season and the direction of storage facility demand.

c) Costs related to the Elengy intraday flexibility offer

The TSOs priority access to the intraday flexibility available at LNG terminals is not provided by the regulations in force. Nonetheless, the role played by the LNG terminals in supplying intraday flexibility is substantial insofar as one third of the power plants are installed close to these infrastructures (at less than 50 km). Furthermore, the study conducted by GRTgaz and TIGF has concluded that the TSOs' access to these infrastructures is indispensable for meeting intraday flexibility needs in the Fos area.

Elengy has responded to the demand of GRTgaz by proposing an offer for supplying intraday flexibility based on the Fos Tonkin LNG terminal and has provided CRE with the detailed items justifying the costs associated with this offering.

The STMFC does not wish to propose a flexibility bid to GRTgaz until the Fos Cavaou terminal is being operated at 100 % of its emission capacity.

Elengy is able to meet the flexibility needs of two highly modulated power plants in the Fos area. The costs presented by Elengy for supplying GRTgaz with the flexibility needs related to two 440 MWE power plants and taken into account by GRTgaz in its offer represent €4.15 M/year on average over the 2011-2013 period and are based on:

- an investment assessed at approximately €2.5 M, amortized over 5 years taking into account the uncertainties concerning the Fos Tonkin terminal after 2014,
- operating costs specific to the supply of intraday flexibility,
- a share of the costs covered by the Fos Tonkin LNG terminal use tariff, on grounds of the mutualisation of some of the terminal installations without which the intraday flexibility service would not be feasible. Elengy proposes to pay back, via the CRCP, 80 % of the cash inflows associated with its intraday flexibility offer to the users of the Fos Tonkin terminal, which may induce a decrease in the Fos Tonkin use tariff,
- a 20 % risk and service bonus applying to the whole of the costs except investments. This bonus should cover overruns in operating costs and possible loss of capacities sold to the terminal's shippers, owing to failings caused by the demand of the installations associated with the intraday flexibility.

CRE considers that Elengy's offer does not reflect the costs generated by the flexibility service. The share of costs is set at too high a level and the 20 % premium does not seem justified at this stage.

d) Conclusion regarding the level of costs presented by GRTgaz

Taking into account the items provided by the operators, CRE considers at this stage of its analyses that about 50 % of the costs presented by GRTgaz (see table at § 3.2) are directly imputable to the bringing into service of the power plants on its network.

Based on the above, the mean cost of intraday flexibility supply for a 440 MWe power plant would be in the order of €1 M per year.

e) Conclusion concerning the level of costs presented by TIGF

The items provided by TIGF to CRE, in order to justify the level or structure of the intraday flexibility services to GRTgaz and to the power plants likely to be installed on its network are currently being analyzed.

4.4.3. Structure of the intraday flexibility service

a) Methods of allocating the additional costs related to intraday flexibility between consumers

The conventional market bears an incumbent costs related to the intraday flexibility, as assessed by GRTgaz at €5.7 M per year on its network. These costs are shared out within the access tariff to the natural gas transmission networks. Electric power plants needs for intraday flexibility differ from those of other consumers on two counts:

- The needs are very large at the scale of each site, thereby leading to a substantial, geographically-concentrated demand on the network, whereas such intraday flexibility needs of the other users are lower individually and relatively well-distributed over the territory, overall.
- The needs vary from day to day, if not hourly, depending on the gas and electricity price situation. This requires the TSO to anticipate on the needs for these sites and to prepare its day-ahead network based on the hourly operating schedules dispatched to these installations. During the day, the TSO must demonstrate reactivity in the management of its grid and the demand on the sources of flexibility to meet the demands for operating schedule modifications on the sites of concern.

Hence, it seems legitimate to earmark the costs induced by their specific intraday flexibility needs for those highly modulated sites.

In such a setting, any additional costs related to the flexibility needs of the power plants would not be mutualised. The gas transmission tariff would remain unchanged for the other consumers. In order not to make the highly modulated sites pay for the intraday flexibility costs of the other consumers, assessed at approximately €1.5 /MWh/d per year, the said cost would be deduced from the delivery capacity term applying to those sites.

b) Structure of the intraday flexibility offer

The service proposed by GRTgaz was defined to best cover its cost structure. CRE plans keeping in the next transport network tariff proposal the general principles in terms of structure and access of the GRTgaz intraday flexibility offer. However, this offer presents two drawbacks:

- The tariff is poorly differentiated according to the site's number of operating hours. However, CRE considers it would be advisable to incite the highly modulated sites to curtail their intraday flexibility needs. To this end, CRE plans to increase the weight of the term associated with the load-balanced volume in comparison to the term associated with the amplitude.
- The franchise, as proposed by GRTgaz, results in other network users having to bear part of the costs related to the bringing into service of the power plants.

In addition, the fixed tariff component should be considerably reduced, as the service offered by GRTgaz could be interrupted when the intraday flexibility sourced by Elengy or Storengy becomes insufficient.

Thus, based on the costs retained by CRE at this stage, the intraday flexibility service tariff could be as follows:

- one part fixed at €200,000 annually per site,
- one variable part consisting of:
 - one term related to the modulated volume demanded over the course of a day of €0.4 /MWh,
 - one term related to the hourly peak flow amplitude noted over the course of a day of €2 /MWh/amplitude hour.

Lastly, GRTgaz indicates that its IT only enables it to take into account the actual intraday flexibility and doesn't enable to scheduled flexibility for billing the service. CRE considers that it will be necessary, therefore, to reflect in the future on whether it would be better to divide this service by defining:

- an offer for day-ahead planning,
- an offer for intraday re-nominations, namely to reflect the costs related to a participation in the balancing scheme on the electricity market.

4.5. Summary

The study conducted by the TSOs shows that the gas infrastructures have the capacity to meet the power plants' needs up till 2013, and most probably up till 2015 and beyond, provided that decisions have been made about the infrastructures planned by then. It also shows that this will entail extra costs.

CRE intends to propose, for the GRTgaz network, a firm flexibility service for the power plants and other highly modulated consumers that would be applicable from the 1st of April 2011, and whose main characteristics would tend to be lasting ones.

It considers that the service presented by GRTgaz does not strictly reflect the costs generated by these new needs for flexibility on the GRTgaz network or the other infrastructures. It plans to only retain the costs directly related to bringing the power plants into service. These costs would not be subject to any mutualisation that would be born by the other network users. On the other hand, the highly modulated sites would not have to bear the conventional market's flexibility costs.

Given the lack of any power plant on the TIGF network until 2013 and owing to the analysis work that is still needed, a offer based on the same principles as the one retained for GRTgaz will also be proposed for TIGF, to be applicable on the 1st of April 2013.

6. What is your analysis of the intraday flexibility service proposed by GRTgaz?
7. Are you in favour of passing on the additional costs related to intraday flexibility to the highly modulated sites via a specific service?
8. What do you think of the 0.8 GWh average daily modulated volume threshold proposed by GRTgaz for application of the intraday flexibility service?
9. What is your analysis of the intraday flexibility service being considered by CRE?

10. Are you in favour of a definition of two distinct services, a firm intraday flexibility service for day-ahead planning and an intraday re-nomination service?

5. Upgrade of the balancing system on the gas transmission networks

5.1. Balancing system in effect on the GRTgaz network

5.1.1. *Resort to the market to cover part of the network's physical balancing needs*

The balancing rules on the GRTgaz transmission network have evolved progressively to form a mechanism based on market principles.

Since the 12th of April 2007, GRTgaz has been resorting to the market and, today, it meets about 20 % of its physical balancing needs by intervening directly, since December 2009, on the "Powernext Gas Spot" exchange. The remaining demand is covered through a resort to the Storengy storage facilities.

A daily balancing price (P_1) is established based on the GRTgaz transactions on *Powernext*, and used toward invoicing part of the imbalances of each shipper.

5.1.2. *Balancing rules binding the shippers*

Each shipper is subject to a daily balancing obligation regarding each of the balancing zones and, in the North area, regarding each type of gas quality.

Within each balancing zone the shipper is entitled to a daily balancing tolerance depending on its delivery capacities; a possibility of a complementary optional tolerance and a cumulative imbalance account in which imbalances may add up from one day to the next within a five times the cumulative imbalance mid-range¹¹ value limit.

The daily balancing price is applied for each shipper to the volume of any imbalances in excess of the cumulative imbalance mid-range, and any less than the tolerance to which it is entitled. Beyond this tolerance value, any imbalances are settled at a penalty price.

5.2. Balancing system in force on the TIGF transmission network

As on the GRTgaz network, each shipper on the TIGF network is subject to a daily balancing obligation. TIGF balances its network by a resort to the storage facility under contract with TIGF Storage.

The daily balance tolerance offered to the shipper on the TIGF network is proportional to its delivery capacity. The shipper is also entitled to a cumulative imbalance account in which the imbalances may add up from one day to the next up to three times the daily tolerance limit.

Moreover, TIGF proposes an optional daily balancing service (SEJ) providing for shippers to partly minimize their imbalances using their own gas, by way of an *a posteriori* correction of their injection and withdrawal nominations on their reserved capacities in the TIGF storage facility.

Beyond the tolerance, any imbalances are settled at a penalty price.

5.3. Works in progress at the European level

The 3rd legislative package adopted in 2009 aims to complete the integration of the European energy markets and their opening to competition. For balancing, the regulation No.715/2009 provides namely that:

- "balancing rules are based on the market" (1 of article 21),
- the network operator "provides [...] sufficient reliable information, sent at the appropriate time, concerning the balancing situation of the network users » (2 of item 21);
- "the balancing fees reflect the costs as far as possible, but provide incentive enough for the network users to balance their injections and withdrawals" (3 of item 21).

This regulation also provides for the drafting of the network codes by ENTSOG which are intended for compliance by European transmission network operators in the twelve domains, including balancing.

¹¹ The cumulative imbalance mid-range is expressed as a proportion of the daily tolerance: 40 % of the tolerance in the north H zone; 70% of the tolerance in the north L zone; 55 % of the tolerance of the south zone.

These network codes must respect the guidelines will be given in the framework-guidelines prepared by the Agency for the Cooperation of European Energy Regulators (ACER). Whilst awaiting the setting up of the ACER, the European regulators meeting within the ERGEG have started to draft the framework guideline related to balancing.

This framework guideline will specifically define the concept of market balancing, i.e., respective roles of shippers and network operators; data that needs to be provided by the network operators; methods for calculating imbalances and penalties; gas purchases and sales by the network operators and cooperation between the network operators with a view to merging balancing zones. A target model and the intermediate stages leading to it will be defined for all of these aspects.

The ERGEG intends to launch a public consultation about its draft framework-guideline shortly. The final version of this framework-guideline should be forwarded to the European Commission and to ENTSOG early in 2011.

5.4. Concertation Gaz works

The *Concertation Gaz* work in the first half of 2010 consisted of defining the target balancing system to be set up by 2012-2013, with the aim of, on the one hand, anticipating the obligations that will be imposed on the TSOs in the 3rd package framework and, on the other, improving the current balancing system.

The GRTgaz proposal, attached in the annexe of this consultation, includes a detailed list of the target balancing principles retained following this work.

For its network, GRTgaz proposes the balancing principle mainly based on resort to the market. This will be a strong incentive for shippers toward daily balancing by eliminating the cumulative imbalance mid-range and the induced elimination of cumulative imbalances account.

In compensation for which, GRTgaz will have to improve the data provided to the shippers, in quality as well as in quantity, about both the network situation on the whole and their own imbalances. Moreover, any interventions by GRTgaz on Powernext will have to be in keeping with the physical tension level of the network and be carried out more on the within-day market.

GRTgaz proposes that the development towards the target balancing system be carried out incrementally until 2013. Such increments would be defined within the context of the *Concertation Gaz* in the second half of 2010.

As for TIGF, it has stated that it does not want to upgrade its balancing system. It considers that the SEJ satisfies the active shippers on its network and its storage facility and that it enables each of them to balance accounts using its own gas.

5.5. CRE analysis

CRE is in favour of the GRTgaz proposal stemming from the *Concertation Gaz* work, as it seems that the proposal conforms to the provisions of the 3rd package, as well as to the draft framework-guideline being prepared by the ERGEG.

CRE thinks that the upgrade of the current balancing system toward the target balancing system must be gradual, in order to allow the shippers to adapt. In addition, the target system will lead to more refined monitoring and more dynamic managing of the network by GRTgaz, which will require adaptations of the GRTgaz information system and organisation. CRE will be checking that the upgrade stages defined by the *Concertation Gaz* during the second half of 2010 provide for a match between the constraints imposed on the shippers and the level of additional information supplied by GRTgaz.

CRE notes TIGF's wish not to upgrade balancing system. It considers this matter is related to that of the market structure. If there was a sound and liquid marketplace in the South of France, TIGF could upgrade its balancing system without difficulty and intervene on the market. In any case, TIGF will have to adapt its balancing system to conform to the provisions made by the European authorities.

11. What do you think of the GRTgaz proposal concerning the upgrade of the balancing system in force on its transmission network?

12. What do you think of TIGF's position concerning the balancing system in force on its transmission network?

Questions

CRE invites interested parties to send their contributions by the 3rd of September 2010 at the latest:

- by email to the following address: webmestre@cre.fr ;
- by contributing directly on-line on CRE website (www.cre.fr), under the heading "Documents / Public Consultation";
- by post: 15, rue Pasquier - F-75379 Paris Cedex 08 ;
- by contacting the Gas Network Infrastructure Directorate (Direction des infrastructures et réseaux de gaz) on: + 33.1.44.50.42.12 ;
- by asking to be heard by the Commission.

A summary of the contributions will be published by CRE, subject to confidentiality protected by law.

Please indicate in your reply whether you wish **guaranteed confidentiality and/or anonymity of the data**. Interested parties are asked to answer the following questions and to develop their points of view.

1. Are you in favour of the merging of the North H and North L zones by the 1st of April 2013?
2. Are you in favour of a total sharing of the cost of converting H gas into L gas (basic service only) on the 1st of April 2011?
3. What lessons do you draw from the results of the network study conducted by GRTgaz and TIGF?
4. Are you in favour of decreasing the value of the tariff for the connection between TIGF and South GRTgaz as from the 1st of April 2011, if the creation of a single marketplace in the south of the territory on the 1st of April 2013 is decided?
5. Are you in favour of the other changes purposed in the tariff structure?
6. What is your analysis of the intraday flexibility service proposed by GRTgaz?
7. Are you in favour of passing on the additional costs related to intraday flexibility to the highly modulated sites via a specific service?
8. What do you think of the 0.8 GWh average daily modulated volume threshold proposed by GRTgaz for application of the intraday flexibility service?
9. What is your analysis of the intraday flexibility service being considered by CRE?
10. Are you in favour of a definition of two distinct services, a firm intraday flexibility service for day-ahead planning and a intraday re-nomination service?
11. What do you think of the GRTgaz proposal concerning the upgrade of the balancing system in force on its transmission network?
12. What do you think of TIGF's position concerning the balancing system in force on its transmission network?
13. Would you like to make any other comments or proposals?

Appendices

- Appendix 1 : Report on the network study conducted by GRTgaz and TIGF
⇒ *Report forwarded by GRTgaz and TIGF on the 15th of July 2010*
- Appendix 2 : Report on the technical-economical study conducted by GRTgaz and TIGF on the capacity of the whole of the gas infrastructures to meet the intraday flexibility needs of the proposed power plants (French only)
⇒ *Report submitted by GRTgaz and TIGF at Concertation Gaz in March 2010*
- Appendix 3 : The GRTgaz proposal for a flexibility service for highly modulated sites
⇒ *Proposal forwarded by GRTgaz to CRE on the 2nd of July 2010*
- Appendix 4 : The TIGF proposal for a flexibility service for power plants producing electricity from natural gas (French only)
⇒ *Proposal submitted by TIGF at Gaz Consultation on the 30th of June 2010*
- Appendix 5 : The GRTgaz proposal for a target balancing system for its network
⇒ *Proposal forwarded by GRTgaz to CRE on the 8th of July 2010*