

CRE's tariff proposal of 10 November 2006 for use of natural gas transmission networks

Explanatory statement

The current tariffs for use of natural gas transmission networks, proposed by CRE on 27 October 2004, have been applied by the transmission system operators (TSO) GRTgaz and TIGF since 1 January 2005. The current tariffs came into force officially on 27 May 2005 through the publication of the following texts in the Official Journal:

- decree no. 2005-607 of 27 May 2005 relating to applicable tariff rules for use of natural gas transmission networks;
- order of 27 May 2005 relating to the definition of balancing zones for natural gas transmission networks;
- opinion of 27 May 2005 relating to tariffs for use of natural gas transmission networks.

Under the provisions of article 7 of the amended law of 3 January 2003, CRE is now proposing new tariffs for use of natural gas transmission networks. The legislative framework for valuating the level of costs to be covered by the tariffs is as follows:

- Article 7 of the law of 3 January 2003 stipulates that tariffs for access to gas infrastructure “*are set on the basis of public, objective and non-discriminatory criteria taking into account the characteristics of the service provided and related costs. These costs include particularly the operating, research and development expenses necessary for the safety of the network and control of the quality of natural gas injected or withdrawn as well as [...] expenses for conducting public service missions*”.
- Article 1 of decree 2005-607 of 27 May 2005 stipulates that “*tariffs for use of natural gas transmission networks are determined [...] on the basis of all operating and investment expenses. [...] Depreciation of capital assets and return on invested capital are included in the investment costs.*”;
- Article 3 of regulation (EC) no. 1775/2005 of 28 September 2005 requires that “*tariffs, or their calculation methods, applied by the TSOs and approved by the regulation authorities (...) reflect the real costs borne, in so far as these costs correspond to those of an efficient network operator having a comparable structure*”.

While maintaining the tariff principles currently in force, this pricing proposal takes into account changes in the regulatory, economic and financial environment in which TSOs operate and introduces new measures aiming to encourage the development of competition.

In order to draw up its proposal, CRE worked closely with the TSOs. It organised a public consultation from 12 July 2006 to 8 September 2006 and held hearings, including TSO hearings on 27 September 2006 and 18 October 2006, to collect the opinion of the players concerned. These tariffs, like the previous ones, were drawn up taking into consideration both the operating costs required to guarantee proper operation and safety of networks and facilities, and also the capital costs (depreciation and return on assets used for transmission activities).

Over the coming years Europe will face a reduction in natural gas production and an increase in consumption. These changes require very large investments in gas infrastructure in order to transport gas from new production sources to the end-consumers.

Some projects have already been announced or started in France. They include the Fos Cavaou LNG terminal, the first phase of the Euskadour pipeline, the reinforcement of the Guyenne trunk main, the reinforcement of the entry capacities at Obergailbach and a programme to solve congestion in the North of France. In addition, three LNG terminal projects were recently announced for France. The creation of new entry capacities from Spain is also being studied as part of the South regional initiative coordinated by the European regulators.

Over recent years, current allowed regulated return and investment incentives have made it possible to complete or launch the investments needed to reinforce security of supply and improve the operation of the French gas market.

CRE proposes to maintain this mode of return and incentives as part of the present tariff proposal. The premium of 125 base points above the base rate for new investments is maintained. Likewise, the additional premium of 300 base points applied for 5 or 10 years for the part of investments improving market operation will also be maintained. The base rate to which these premiums are added is set at 7.25%, real pre-tax.

In addition, the present proposal introduces a mechanism to correct variance between forecasts and actual figures for certain expense and income items whose trend is difficult to predict. This is intended to reduce the level of risk for the TSOs. The exact terms of application are described in section II.1 of this document. In particular, this mechanism concerns capital costs, which provides greater incentive for investment and assures TSOs that costs relating to their future investments will be covered.

Finally, the TSOs have proposed a productivity drive concerning operating costs that they are able to control.

With regard to the tariff structure, the general principle of entry-exit tariffs with 5 balancing zones is maintained.

The proposed changes, based especially on feedback on current tariffs and consultations with the market players, are aimed primarily at:

- facilitating the use of natural gas transmission networks via:
 - the equalisation of the main network exit charges and harmonisation of GRTgaz and TIGF tariffs;
 - better coordination between gas infrastructure operators in France;
 - an increase in the flexibility offered by the TSOs;
- preparing for the forthcoming deadlines:
 - the total opening of the markets on 1 July 2007, by improving the tariff rules at interfaces between transmission networks and distribution networks;
 - the merger of the North, East and West zones, by reducing link capacity charges between these zones.

In total, the effects of this pricing proposal are:

- for GRTgaz, an average tariff reduction of 2.1% in current Euros, i.e. 5.8% in constant Euros¹;
- for TIGF, an average tariff increase of 9.2% in current Euros, i.e. 5.2% in constant Euros.

The average price of gas transmission over the entire country is reduced by roughly 1% in current Euros, i.e. 4.7% in constant Euros, taking into account the respective weight of each TSO.

¹ Based on an inflation hypothesis of 1.9% per year for two years.

The tariff increase for TIGF is due essentially to:

- the operator's new investments (Guyenne trunk main, Euskadour pipeline, etc.), which will not be fully used before the end of the period covered by the tariff;
- and the new regulation concerning the safety of combustible gas transmission pipes (order of 4 August 2006) which has heavy financial consequences for TIGF, whose network is older than the GRTgaz network.

These tariff movements result in reducing the difference between GRTgaz and TIGF unit tariffs. All the above-mentioned elements – investment incentives, inclusion of outlay on safety-related work, improvement of the TSOs' service offers and the average reduction in the transmission price– assist in achieving security of supply and efficient operation of the natural gas market for the benefit of end consumers.

The tariffs in the present proposal have been calculated for application over two years from 1 January 2007. The creation of a large balancing zone in Northern France, eventually leading to two gas hubs in France, will come into effect by 1 January 2009 at the latest and will require a revision of the tariff structure.

I - Tariff structure

The present tariff proposal includes separate tariffs for GRTgaz and TIGF. The transmission network of each TSO is made up of the main network and the regional network.

1. Continued application of general tariff principles

Feedback from the TSOs, transmission network users ("shippers") and other market players has confirmed that the current tariff principles for transmission networks can be maintained, i.e.:

- a 100% capacity-based tariff;
- an entry-exit tariff on the main network, whose overall arrangement (link capacity charges between the 5 balancing zones, access to storage groups) has not been changed;
- a distance tariff on the regional network.

2. Simplification of tariffs and coordination between gas infrastructure operators

2.1. Equalisation of the main network exit charge

For each TSO, the current tariffs define different main network exit charges depending on the exit zone. The present tariff proposal provides for a single exit charge for each TSO regardless of the main network exit zone..

This equalisation simplifies and stabilises the tariffs as the main network exit charges will no longer depend on complex calculations taking into account trends in the dominant gas flows on the network. Given that the main network has a highly meshed structure, the tariffs continue to reflect the corresponding costs in a satisfactory manner.

Equalisation of the main network exit charge will not be applied until 1 January 2008, to give the market players time to adjust to this change.

Finally, the proximity tariff, which provides a better reflection of transmission costs towards consumers in the vicinity of land-based entry points, is maintained.

2.2. Termination of fixed charge capping for delivery to transmission-distribution interconnection points (PITD)

The tariffs in force allow for capping of the fixed charge for delivery to *transmission-distribution interconnection points*. The present tariff proposal provides for termination of this capping, which gave an advantage to incumbent suppliers. The fixed delivery charge, now set on an entirely proportional basis, has been combined with the delivery capacity charge.

2.3. Simplification of fines for exceeding daily and hourly capacities

In the present tariff proposal, fines for exceeding daily and hourly capacities are calculated on the basis of the daily or hourly subscription price and no longer on the basis of the monthly subscription price as is currently the case.

This simpler calculation mechanism reduces the level of fines for isolated capacity overshoot, but increases it if capacities are repeatedly exceeded.

In return, the TSOs will give shippers the possibility, subject to network availability, of quickly adjusting their capacity subscriptions when an overshoot is observed.

Finally, on the GRTgaz network, where fines for exceeding hourly capacities are not implemented, the hourly fines are not applied if the shipper adjusts the capacity subscription when an excess is observed, in order to give shippers the time to adjust.

2.4. Coordination between French gas infrastructure operators

The present tariff proposal provides for improved coordination between natural gas infrastructure operators (transmission and distribution networks, LNG terminals, storage facilities) to enable shippers to use all this infrastructure under optimal conditions.

a) Interface between transmission and distribution networks

The proposed system of standardised subscriptions guarantees that the transmission capacities required for supplying distribution networks in the event of a cold spell are subscribed. It requires the TSOs to automatically allocate delivery capacities at PITDs according to the portfolio of customers supplied by each shipper downstream of each PITD. The proposed system's detailed operation is described in the document "*System of standardised transmission capacity subscriptions to PITDs*" published on the website <http://www.gtg2007.com>

b) Interface between the transmission networks and the LNG terminals

The tariff rules at interface points between transmission networks and LNG terminals are adapted to guarantee any shipper the availability of transmission capacities corresponding to the regasification capacities that it holds at an LNG terminal, within the limit of network capacities.

c) Interface between transmission networks and storage facilities

The tariff rules at interface points between storage facilities and transmission networks are adapted to guarantee any shipper the availability of transmission capacities corresponding to the injection and withdrawal capacities that it holds at a storage group, within the limit of network capacities.

d) Harmonisation of tariffs between GRTgaz and TIGF

This pricing proposal harmonises the various aspects of the tariff rules at interconnections between the GRTgaz transmission network and the TIGF transmission network to facilitate gas movements between the two networks.

- Annualisation of TIGF main network exit charges and storage facility entry and exit charges:

As is the case on the GRTgaz network, the main network exit charge and storage facility entry and exit charges will also be annualised for TIGF.

- Seasonalisation of entry and exit charges at interconnection points between GRTgaz and TIGF:

To simplify the use of the transmission network, the two TSOs must market the same types of capacity either side of the interconnections between the two transmission networks. This pricing proposal requires that GRTgaz, like TIGF, market seasonal capacities at interconnections between GRTgaz and TIGF, given the predominant role of underground storage facilities in the South-West.

Tariffs for interruptible seasonal capacities for the summer season marketed by GRTgaz for exit to the TIGF network are set at 90% of the corresponding fixed charge since the probability of interrupting these capacities is low.

- Improving the operation of interconnections between GRTgaz and TIGF:

GRTgaz and TIGF have defined the following action plan to reinforce their coordination at interconnections between their transmission networks:

- definition of common rules for capacity allocation;
- publication, in a single format, of data relating to capacity subscriptions;
- definition and publication of work programmes.

The TSOs will report on the implementation of these actions to CRE.

2.5. Border points with adjacent networks

a) Jura Network Interconnection Point (PIR)

A new interconnection point, the Jura PIR, is defined between the main GRTgaz transmission network and the GAZNAT transmission network in Switzerland.

The charge applied at this network interconnection point takes into account GAZNAT's contribution to the financing of transmission structures connecting the Etrez storage facility to the GAZNAT network.

b) Pontarlier, Morteau and Gex transmission-distribution interconnection points (PITD)

The Pontarlier, Morteau and Gex PITDs, which are supplied from Switzerland and have no connection to the French gas transmission network, are made available to shippers directly from the gas exchange point of the South balancing zone (PEG Sud) like the other PITDs in this zone. A regional tariff level (NTR), including the cost borne by GRTgaz to transport the gas to Switzerland, is defined for these three PITDs in the appendix of this pricing proposal.

c) Regional Network Interconnection Points (PIRR)

Tariffs are set for six new delivery points on the GRTgaz regional network at the interface with adjacent operators' networks located outside France.

They are as follows:

- Luxemburg PIRR at the interconnection with Luxemburg's SOTEG network
- Ohain PIRR at the interconnection with the Belgian Fluxys network;
- Sarre PIRR at the interconnection with the German SaarFerngas network;
- Schönenbuch PIRR at the interconnection with the Swiss GVM network;
- Savoie PIRR at the interconnection with the Swiss GAZNAT network;
- Monaco PIRR at the interconnection with Monaco's SMEG network.

3. Changes made to reflect the spread of costs

3.1. Division of tariff revenue between the main and regional networks

For GRTgaz, the current tariffs lead to a revenue distribution of 55% for the main network and 45% for the regional network, whereas the costs are spread 50-50 between the main and regional network.

The present tariff proposal divides GRTgaz forecast revenue for 2007 and 2008 in the proportions of 52% for the main network and 48% for the regional network. This division complies with the future spread of costs for GRTgaz, which is planning major investment on its main network.

For TIGF, the division of revenue between the main network [and the regional network] has not been changed as it is planning to make considerable investment on its main network.

3.2. Changes to the various charges

Readjusting the balance between the regional and main network leads to an increase of roughly 7% in the transmission charge on the GRTgaz regional network.

This increase is compensated by a reduction in certain charges on the main GRTgaz network:

- entry charges at Dunkirk, Taisnières H, Taisnières L, Obergailbach are reduced by 15%;
- link capacity charges between the North and West zones and between the North and East zones are reduced by 30% to prepare for the creation of an enlarged North zone in 2009;
- interconnection charges with the TIGF network are reduced by 30% to encourage gas transportation between the GRTgaz and TIGF gas transmission networks.
- main network exit charges are reduced by 4.4%.

In addition the exit charges at the PIRs of Oltingue (GRTgaz) and Larrau (TIGF), used almost entirely for transit contracts, have been increased, given the reduction in certain entry and connection charges on the GRTgaz network.

3.3. Annual redistribution of fines for exceeding capacities

This pricing proposal provides for the introduction of an annual redistribution of fines for exceeding capacities, to ensure that the fine system is financially neutral for each TSO.

This redistribution will be carried out by each TSO once a year. The division between the shippers will be proportional to the consumption of their customers connected to the transmission network.

4. Development of the service offer to shippers

4.1. Short-notice interruptible transportation

A short-notice interruptible transportation offer is introduced into the GRTgaz tariff for the supply of new sites with high gas consumption (threshold of 10 GWh/day) located in the immediate vicinity (less than 50 km as the crow flies) of an entry point on the H gas network, such as natural gas combined-cycle power plants.

The supply to these sites can be interrupted at 2 hours' notice if the entry points concerned are shut down or reduce their output and the network is operating under strain (cold spell, etc.). The exact conditions for interruption are defined by GRTgaz and published on its website.

This type of operation avoids the need for GRTgaz to make the large investments that would be required to supply these sites under all conditions. Shippers can subscribe to this offer regardless of the entry point they use since the investment saving is independent of the entry point actually used by the shipper concerned. It entitles them to a 50% tariff reduction on the main network.

4.2. Conversion of H gas to L gas

This pricing proposal makes provision for GRTgaz to market two services for converting H gas to L gas:

- an interruptible "peak" service, accessible to all shippers with H gas available in the North H zone. The price of this service corresponds to the costs of an H gas to L gas converter;
- a firm "basic" service, available to shippers holding less than 15% of the entry capacity at Taisnières L and with H gas available in the North zone, within the limit of the needs for supplying end-customers with L gas. The annual price of this service is roughly half that of the "peak" service.

The "basic" service is also available on a monthly basis.

4.3. Conversion of L gas to H gas

A service for converting L gas to H gas is introduced in the GRTgaz tariff. This service is interruptible.

4.4. Changes in GRTgaz's releasable capacity offer

This pricing proposal provides for the possibility of allocating releasable capacity to the shippers concerned, for a period of one, two, three or four years.

Furthermore, the maximum quantity of releasable capacity at the points concerned is raised from 15% to 20% of the capacity fraction subscribed by a shipper above 20% of the total available capacity.

4.5. Short-term "use it or lose it" service

An interruptible short-term "use it or lose it" service is introduced in GRTgaz and TIGF tariffs in order to optimise the use of the transmission network in the event of congestion. Each TSO markets on a daily basis the capacities subscribed but not used by their holder.

4.6. Offer of interruptible monthly and daily capacities at Larrau and Biriadou

TIGF tariffs include an offer of interruptible monthly and daily entry capacities at Larrau and Biriadou to facilitate transportation of gas from Spain.

4.7. Auction of daily capacities

The TSOs are authorised to auction firm daily capacities remaining available after the period of sale at the regulated tariff in order to optimise the use of the transmission network.

4.8. Injection of gas on the transmission network

The pricing proposal introduces a charge for injection of limited quantities of gas (less than 5 GWh/day) on the transmission network, .

5. Tariff rules

5.1. Capacity allocation and subscription rules

The tariffs in force include general rules concerning the allocation and subscription of transmission capacities. Given the rapid growth in the number of shippers on French transmission networks, and the progress made by the TSOs in terms of transparency and consultation with shippers, it is no longer necessary to include such rules in the tariffs.

The changes to these rules will be defined by the TSOs after consulting network users and informing CRE. If the insertion of article 37-1 of the law of 10 February 2000 is confirmed, CRE will, if necessary, specify the rules relating to the conditions of use of natural gas transmission networks in a decision published in the Official Journal,.

5.2. Balancing

The current tariff rules include methods for calculating and pricing shippers' imbalances.

CRE's decision of 21 June 2006 concerning balancing rules stipulates that:

- balancing rules should gradually develop into market mechanisms;
- changes to balancing rules are set by CRE, at the proposal of the TSOs, after consulting transmission network users.

Under this framework, the operation of the balancing system is under the aegis of CRE, which checks the absence of transfer of revenues and expenses to the TSO's actual transmission activities. The present tariff proposal only defines the general principles of balancing.

II - Level of tariffs

The regulatory framework must encourage infrastructure operators to invest, innovate and control their costs, in order to provide services at a price corresponding to that of an efficient operator. It must also allow them to maintain their operation and the financing of their activities over the long term.

The measures allowing these objectives to be attained must be adapted to the operational and regulatory context within which the infrastructure operators work.

Eventually, CRE plans to introduce pluri-annual incentive mechanisms such as "*price capping*" or "*revenue capping*" for transmission tariffs. These types of regulatory systems have several advantages which emerge fully when the tariff structure is no longer subject to major modifications and the regulator has a sufficiently exact assessment of the cost level of an efficient network operator. When this is not the case, these systems present considerable risk which may invalidate the anticipated positive effects.

1. Expense and Revenue Clawback Account (CRCP)

CRE proposes to set up a mechanism similar to the one applied for electricity grid operators – the Expense and Revenue Clawback Account (CRCP).

Tariff charges are calculated on the basis of capacity subscription and cost hypotheses set for the tariff validity period. If variance arise for reasons that are unforeseeable when the tariffs are drawn up and that are beyond the TSOs' control, it seems reasonable to correct hypotheses at a later date. CRE therefore deems that it is necessary to set up a mechanism for pre-defined items to correct differences between actual revenues and expenses and those used as a basis for its tariff proposals.

The CRCP is an extra-accounting trustee account funded at regular intervals by all or part of the cost or revenue variance observed on pre-defined items. The balance of this account is reconciled by reducing or increasing the revenues collected through tariffs during the following tariff periods. To ensure the financial neutrality of the mechanism, an interest rate is applied to the account balance.

For the purposes of the present tariff proposal, the expense and revenue items on which this mechanism will operate are:

- Revenue linked to transportation on the transmission network. Given that a standardised subscription system has been set up for transmission capacities at transmission-distribution interconnection points, revenue linked to transportation on the downstream transmission network (exit from main network, regional network and delivery) is covered fully by the CRCP. The same applies for revenue from entries and exits at storage facilities. Revenue linked to transportation on the upstream transmission network (other points of the main network) is covered:
 - at 50% if the variance between the actual revenue and the forecast is less than or equal to $\pm 10\%$;
 - at 100 % if the variance between the actual revenue and the forecast is more than $\pm 10\%$ of the forecast revenue;
- Capital costs incurred by the TSOs. The amount covered by the CRCP is the difference between the capital cost hypothesis included in the revenue to be recovered by the tariff and the amount of capital costs calculated *ex-post* on the basis of data concerning investment, disposal of assets from the RAB and inflation;
- The TSOs' driving power expenses (gas and electricity). These expenses are covered:
 - at 80 % if the variance between the actual expenses and the forecast is less than or equal to $\pm 20\%$ of the forecast expenses;
 - at 100 % if the variance between the actual expenses and the forecast is more than $\pm 20\%$ of the forecast expenses;
- Revenue from the connection of natural gas combined-cycle power plants. The variance between revenue achieved over the 2007-2008 period and the amount taken into account with reduction of operating costs will be entirely entered in the CRCP balance.

Where necessary the CRCP will be applied in conjunction with checks as to the effectiveness and prudence of expenses incurred. These checks may concern especially the investments incurred by the TSOs and their energy costs.

In addition, the findings of audits conducted by CRE will be automatically taken into account in the CRCP.

The main rules for operating the CRCP are as follows:

- for each eligible item, the variance posted to the CRCP is calculated by comparing the forecast and actual figures for each of the two years of the tariff period;
- an interest rate equivalent to the base rate of return on the RAB is applied annually to the corrected amounts;
- the balance of the corrected amounts identified at the end of a tariff period is amortised over the following tariff period on the basis of constant annuities;
- if the final amount of variance for certain items is not known exactly when the variance to be corrected is examined at the end of a tariff period, a "first approximation" correction is made on the basis of the best estimate available at that time. A definitive correction is made at the next tariff revision on the basis of the final values.

The scope of elements eligible for the corrective mechanisms and methods adopted for carrying out corrections reflect the state of the economic environment and regulation system when the tariffs are set. These elements are likely to have changed when subsequent tariff revisions are made.

The initial payments due under the CRCP are 31.6 M€ for GRTgaz and 4.4 M€ for TIGF. They arise mainly from sums received by the 2 operators during 2005 and 2006 under the fine systems for exceeding allocated capacities and imbalances above the balancing tolerance levels, rather than from charges for use of the network. In the case of TIGF, this amount also takes into account an audit of some of the operator's costs.

2. Setting the authorised revenue

2.1. Operating costs

a) Methods for calculating operating costs

Operating costs to be covered have been determined from all costs necessary for operating the transmission networks, as notified to CRE and recorded in the operator's accounting.

In order to set the level of these costs, CRE gave special consideration to:

- data from the GRTgaz' corporate financial statement and TIGF's unbundled accounts for financial year 2005;
- data from GRTgaz' corporate financial statement as of 30 June 2006;
- the spending trend hypotheses for 2006 to 2008 submitted by the operators;
- an audit of certain TIGF cost items conducted by an external firm.

It should be pointed out that extra earnings received independently of the tariff for utilisation of transmission networks are deducted from operating costs covered by tariffs.

b) Extra earnings deriving from end-consumer connections

GRTgaz' earnings take into account contributions for connection of natural gas combined-cycle power plants forecast for 2007 amounting to 13.9 M€ These contributions represent the cost of design and construction of connection and delivery facilities. As it is difficult to predict the commissioning date of these plants, this is an eligible item for the CRCP.

c) Audit of certain TIGF costs for financial year 2005

CRE requested an external firm to conduct an audit of certain expenses relating to TIGF's transmission activity. This concerned operating costs, recurrent expenditure, expenditure on major maintenance and repayment to the storage activity of costs incurred by the transmission activity. These expenses amounted to 45.6 M€ in 2005. The

audit identified a sum of 0.8 M€ borne incorrectly by the transmission activity to the benefit of the storage activity. As this is an audit result, this sum is included in the initial sum of the CRCP.

d) Analysis of central costs paid by GRTgaz to Gaz de France

A part of the central costs of Gaz de France is borne by GRTgaz. The central costs paid by GRTgaz include a quota for advertising and sponsorship costs incurred by the parent company. This amount is taken into account in this pricing proposal. However, CRE requires GRTgaz to bear its own communication expenses directly. It points out that in future pricing proposals, only communication expenses incurred directly by network operators will be included in the expenses to be covered by the tariffs.

In total the forecast amount of central costs assigned to GRTgaz taken into account in this pricing proposal is 67.2 M€

e) Safety expenditure

The TSOs plan to undertake network safety and reinforcement actions. This expenditure arises especially from the application of the order of 4 August 2006 relating to safety regulation of combustible gas transmission pipes. CRE has taken into account all network safety expenses forecast by the operators.

However, CRE points out that in previous years the budgets allocated to these expense categories were not fully used.

f) Productivity

The operating costs covered take into account productivity hypotheses proposed by the TSOs for the period 2007-2008:

- for GRTgaz, there is a global reduction in operating costs within the operator's control (excluding energy and expenditure on network safety and maintenance) and central costs, in current Euros for 2005 actual costs. This results in average annual productivity gains of 2.4%, in constant Euros for 2005 actual costs, over a cost assessment basis representing nearly 62% of the operator's operating costs;
- for TIGF, the operator proposes a normative productivity target of 4% in real terms for general resources with constant staffing ratios for the period 2007-2008. This item represents on average 16% of total operating costs over the period.

2.2. Capital costs

CRE has maintained the principles for calculating capital costs adopted for previous tariff periods. Two technical modifications are proposed:

- construction work in progress has been included in the RAB to give a better account of the financial cost of projects being developed over several financial years;
- starting from financial year 2006, the agreed date for entering assets in the RAB is 1 January of the year following their commissioning (rather than 1 July of the year of their commissioning for assets commissioned before this date). The method for calculating capital costs has been modified to take better account of the phasing of major project commissioning during the gas year.

a) The Regulated Assets Base

Capital costs include two parts: depreciation and financial return on fixed capital. The calculation of these two components is based on the valuation of the Regulated Asset Base (RAB), conducted on the basis of a “current economic costs” methodology, the key principles of which were set by the special commission established under Article 81 of the amending finance law of 28 December 2001, required to set the price of the State's transfer of its natural gas transmission networks.

The lifetimes adopted for the main categories of industrial assets are:

- 50 years for pipes;
- 30 years for compression systems.

The assets are revaluated in line with inflation on 1 January each year. The revaluation index used is the consumer price index excluding tobacco on a sliding basis from July to July, calculated by INSEE (National Institute for Statistics and Economic Studies) for all households residing in France.

As at 1 January 2007, the RAB value resulting from this calculation is shown in the table below.

The calculation of the RAB and capital costs for the tariff validity period incorporates all the investment predictions supplied by operators. These predictions have increased considerably in comparison with previous years, particularly for TIGF.

Investments made by operators mainly concern:

- projects for increasing the network capacity.
These projects represent 38% of the forecast investment volume of GRTgaz for the 2006-2008 period, and 41% of the forecast investment volume of TIGF.
- projects enabling compliance with public service obligations and regulatory restrictions relative to safety and the environment, as well as the modernisation and increased reliability of the operators' networks.

The RAB also includes construction work in progress. This amount is calculated for the agreed date of entry of assets into the RAB: for each year of application of the tariff, it is the average between the level of construction work in progress on 1 January and the level on 31 December, taking into account expenditure incurred during the financial year. The corresponding return is calculated by applying a base rate of return to this forecast amount.

M€	GRTgaz	TIGF
RAB as of 01/01/07 (excluding construction work in progress)	5426	644
2007-2008 forecast investment volume	705	300
Average annual volume of construction work in progress for 2007-2008	370	151

b) Rate of return

The method adopted for fixing the base rate is based on weighted average cost of capital (WACC) within a normative financial structure. The operator's rate of return should make it possible to finance interest charges on debt and provide return on equity capital comparable to that which could be obtained for investments with comparable levels of risk.

Equity capital cost is based on the methodology known as 'capital asset pricing model (CAPM or MEDAF)'.

For the purpose of the present tariff proposal, the base rate of return on the RAB is established using the weighted average cost of capital. For the present regulatory period a real pre-tax rate of 7.25% has been adopted.

The table below details values used to assess this rate. This result reflects CRE's decision on the basis of value brackets for each of the parameters taken into account in the WACC formula.

Risk free rate	2.4 %
Debt spread	0.3 %
Market premium	4.5 %
Equity capital beta	1
Gearing	40 %
Rate of corporate tax	33.33 %
Cost of debt	2.7 %
Equity capital costs	10.3 %
Weighted average cost of capital	7.25 %

The premium of 125 base points above the base rate is maintained for new investments. The additional premium of 300 base points (i.e. a total premium of 425 base points above the base rate) is also maintained. This increase in the rate of return can be assigned following decision by CRE for a period of 5 or 10 years to investments that are likely to contribute significantly to improving the operation of the market, especially by creating new entry points on the national network or by decongesting the network, on the basis of a justified request from the operator.

Thus, in its decision of 8 December 2005 concerning the assigning of an increased rate of return to the project for connecting the Fos Cavaou LNG terminal, CRE considered that *"only the part of the project, (...) offering excess capacity above that which is strictly necessary for connection of the Fos Cavaou LNG terminal, will contribute significantly to improving the operation of the market"*. It therefore decided that *"only this part of the project (...) can benefit from an increased rate of return"*.

Likewise, in its decision of 8 December 2005 concerning the assignment of an increased rate of return to the project for reinforcing the Guyenne trunk main, CRE decided that *"only the part of the project offering excess capacity above that which is strictly necessary for removal of gas from the Fos Cavaou LNG terminal, (...) can benefit from an increased rate of return"*.

2.3. Authorised revenue

The total authorised revenue amounts to 1235.6 M€year on average over the period 2007-2008 for GRTgaz and 149 M€year on average for the same period for TIGF. The table below lists the main items of the authorised revenue for 2007-2008 for the two operators.

2007-2008 average in M€	GRTgaz	TIGF
Net operating expenses	557.3	56.1
Depreciation of the RAB	258.6	34.0
Return on the RAB and on construction work in progress	435.4	61.1
Initialisation of the CRCP	-15.8	-2.2
Authorised revenue	1 235.6	149.0

III - Forecast transmission capacity subscriptions

1. Main network

The subscription hypotheses adopted for the main network are as follows:

- for exit from the main network they are based on those adopted on the regional network;
- for the other points on the main network, the hypotheses adopted are based on the capacities actually subscribed for 2005 and 2006 and trend forecasts for 2007 and 2008. These forecasts take into account the consumption trend across the country, new capacities put into service by the TSOs and new capacity subscriptions linked to the development of competition.

The capacity subscription trend adopted for 2007-2008 on the main network, excluding exit from the main network to the regional network, is as follows:

	Average trend between 2005 actual figure and 2007-2008 forecast
GRTgaz	+ 3 %
TIGF	+ 4 %

2. Regional network

The capacity subscriptions planned for the regional network take into account both the standardised capacity subscriptions at transmission-distribution interconnection points (PITD) and also a forecast of capacity subscriptions for consumers directly connected to the transmission network and for the regional network interconnection points (PIRR).

- Standardised subscriptions of delivery capacities at transmission-distribution interconnection points (PITD):
The standardised capacity subscriptions adopted for PITDs are calculated on the basis of peak consumption with 2% risk determined by the TSOs for the winter of 2005-2006 and trend forecasts for 2007 and 2008 consumption.

- Subscriptions for consumers directly connected to the transmission network and regional network interconnection points (PIRR):

The forecast subscription capacities for these delivery points are established on the basis of capacities actually subscribed in 2005 and 2006 and trend forecasts for 2007 and 2008.

The capacity subscription trend adopted for the tariff period over the entire regional network is as follows:

	Average trend between 2005 actual figure and 2007-2008 forecast
GRTgaz	- 1 % *
TIGF	+ 11 %

* This reduction is linked to revaluation, by the French national meteorological office (Météo France), of the temperatures used by the TSOs to determine peak consumption with 2% risk, which resulted in an average increase in peak temperatures of 1.3°C.

Tariffs for utilisation of natural gas transmission networks

- **Definitions**

Network Interconnection Point (PIR):

Physical or notional interconnection point between the main transmission networks of two transmission system operators (TSOs).

Regional Network Interconnection Point (PIRR):

Physical or notional interconnection point between a regional transmission network and a foreign operator's network.

Transmission-LNG Terminal Interface Point (PITTM):

Physical or notional interconnection point between a transmission network and one or more LNG terminals.

Transmission-storage interconnection point (PITS):

Physical or notional interface point between a transmission network and a storage group.

Transmission-production interconnection point (PITP):

Physical or notional interconnection point between a transmission network and a natural gas production facility.

Transmission-distribution interconnection point (PITD):

Physical or notional interconnection point between a transmission network and a public distribution network.

Main network entry charges:

- | | |
|-------------|--|
| TCE | Charge for entry capacity on the main network, applicable to the subscription of daily capacity at main network entry points from a PIR or PITTM. |
| TCES | Charge for main network entry capacity from storage facilities, applicable to the subscription of daily entry capacity to the main network from a PITS; |
| TCEP | Charge for main network entry capacity from a natural gas production facility, applicable to the subscription of daily entry capacity to the main network from a PITP; |

Main network exit charges:

- | | |
|-------------|--|
| TCST | Charge for exit capacity at transmission network interconnection points, applicable to the subscription of daily exit capacity to a network interconnection point (PIR); |
| TCS | Charge for exit capacity from the main network: applicable to the subscription of daily exit capacity from the main network, except to a PITS or PIR; |
| TCSS | Charge for exit capacity from the main network to storage facilities, applicable to the subscription of daily exit capacity to a PITS; |
| TP | Proximity charge, applicable to quantities of gas injected at a transmission network entry point and withdrawn in an exit zone in the immediate proximity of this point; |

Link capacity charge between balancing zones:

TCLZ Link capacity charge, applicable to the subscription of daily link capacity between balancing zones of the main network of the same TSO;

Regional network transmission charge:

TCR Charge for transmission capacity on the regional network, applicable to the subscription of the daily transmission capacity on the regional network;

Delivery charge:

TCL Charge for delivery capacity, applicable to the subscription of daily delivery capacity to a delivery point;

Firm capacity:

Gas transmission capacity which the TSO guarantees by contract to be non-interruptible.

Backhaul capacity on the main network:

Capacity allowing the shipper to make nominations in the counter direction to the predominant flow when gas flow is only possible in one direction. It can only be used on a given day if the overall flow resulting from all shipper nominations is in the predominant flow direction.

Interruptible capacity:

Gas transmission capacity that can be interrupted by the TSO under conditions stipulated in the contract for use of the gas transmission network.

Releasable capacity:

Firm capacity which the shipper commits himself to releasing to the TSO upon request at any time.

Shipper:

Person who signs a contract with a TSO for use of the gas transmission network. Depending on the case, the shipper is the eligible customer, supplier or their agent, as defined in article 2 of the law of 3 January 2003.

"Subscription" PDL:

Delivery point on the public distribution network coming under options T4 and TP of the current tariffs for use of distribution networks.

"Non-subscription" PDL:

Delivery point on the public distribution network coming under options T1, T2 and T3 of the current tariffs for use of distribution networks.

IV - Tariff for utilisation of the GRTgaz network

1. Transportation on the main network

The tariff for utilisation of the main GRTgaz network is composed of the following elements:

- Charge for entry capacity on the main network (TCE);
- Charge for link capacity between the balancing zones (TCLZ);
- Charge for exit capacity at network interconnection points (TCST);
- Charge for exit capacity from the main network (TCS);
- Proximity term (TP);
- Charges for entry and exit capacity at transmission-storage interconnection points (TCES and TCSS).

On a part of the main GRTgaz network, subscriptions are seasonal:

- Summer season from April to October inclusive;
- Winter season from November to March inclusive.

1.1. Charge for entry capacity on the main network (TCE)

Charges applicable to annual and seasonal subscriptions for daily entry capacity on the main GRTgaz network are defined in the following table:

Entry point	Balancing zone	TCE (€/MWh/day per year or season)		TCE (firm charge coefficient) Interruptible subscriptions
		Firm subscriptions		
Taisnières L	North	57.22		50%
Taisnières H	North	78.03		50%
Dunkirk	North	78.03		50%
Obergailbach	East	78.03		50%
Montoir	West	73.44		N/A
Fos	South	73.44		N/A
Dordogne	West	Summer: 34.13	Winter: 24.38	75%
Hérault	South	Summer: 17.00	Winter: 12.14	75%

At the transmission-LNG terminal interconnection points (PITTM) of Fos and Montoir:

- Every shipper subscribing to a continuous service with LNG terminal operators is assigned an annual firm base capacity equal to 1/330 of the regasification capacity subscribed with LNG terminal operators. At the beginning of every month, GRTgaz calculates for each shipper the maximum daily output for the previous month. If this exceeds the firm base capacity assigned to the shipper, GRTgaz invoices the latter for an additional monthly capacity equal to the difference between the daily maximum output for the previous month and the annual firm base capacity at a price equal to 1/12 of the price of the annual firm capacity;
- Every shipper subscribing to a band or spot service with LNG terminal operators is assigned a monthly firm base capacity equal to 1/30 of the regasification capacity subscribed with LNG terminal operators. The price applicable is equal to 1/12 of the price of the annual firm capacity.

1.2. Charge for link capacity between balancing zones

The charges applicable to annual subscriptions to daily capacity for links between GRTgaz balancing zones are defined in the following table:

Link between balancing zones	TCLZ (€/MWh/day per year) Firm subscriptions	TCLZ (firm charge coefficient) Interruptible subscriptions
North → East	58.25	50%
East → North	11.68	50%
North → West	58.25	50%
West → North	11.68	50%
East → South	146.88	50%
South → East	29.40	50%
West → South	146.88	50%
South → West	29.40	50%

1.3. Charge for exit capacity at network interconnection points

Charges applicable to annual and seasonal subscriptions to daily exit capacity from the network interconnection points are defined in the following table:

Exit to network interconnection points	Balancing zone	TCST (€/MWh/day per year or season) Firm subscriptions		TCST (firm charge coefficient) Interruptible subscriptions	
		Summer	Winter	Summer	Winter
Dordogne	West	170.65	121.89	90%	75%
Hérault	South	84.97	60.69	90%	75%
Oltingue	East	270.00		75%	
Jura	South	60.00		75%	

1.4. Charge for exit capacity from the main network

Every exit zone on the main GRTgaz network is defined by all the delivery points attached to it.

For every shipper and every exit zone, the annual firm subscription to exit capacity from the main network must be greater than or equal to the sum of annual firm subscriptions to delivery capacity in this exit zone.

a) Until 31 December 2007:

Every exit zone on the main GRTgaz network is assigned an exit tariff level (NTS). Charges applicable to annual firm subscriptions to daily exit capacity from the main GRTgaz network are defined in the following table:

	TCS (€/MWh/day per year)
NTS of 1 to 6	$k \times 10 \times \text{NTS}$
NTS of 7 to 10	$k \times (20 \times \text{NTS} - 60)$

With $k = 0.863$

GRTgaz balancing zone	Exit zone	Exit tariff level
North	Dunkirk Region	1
	Taisnières L Region	1
	Taisnières H Region	1
	Hauts de France	2
	North L	2
	North H	2
	Ardennes	3
	Gournay H	4
	Gournay L	5
	Paris Region	8
	Beauce	9
	Sud Paris	9
	Haute Normandie	10
	Seine Ouest	10
East	Obergailbach Region	1
	Lorraine	1
	North-East	2
	Haute Saône	7
	Langres	8
West	Oltingue Region	9
	Brittany	4
	Perche	4
	Maine	5
	Vendômois	6
	Sologne	7
	Touraine	9
Basse Normandie	10	
South	South-East	3
	Berry	4
	Bourgogne	4
	Auvergne	5
	Lyonnais	5
	Charolais	6
	Vienne	6
	Midi	7
	Provence	7
	Rhône Sud	7
	Charente	8
	Rhône Nord	8
	Périgord	9
Cruzy Region	9	

b) As from 1 January 2008:

For all the exit zones, the charge applicable to annual firm subscriptions to daily exit capacity from the main GRTgaz network is 57.20 €/MWh/day per year.

1.5. Proximity term

The proximity term is deducted from the monthly invoice of every shipper concerned. It is applied, for every shipper, to the daily gas quantity corresponding to the minimum between the quantity of gas allocated at the transmission network entry point and the quantity of gas withdrawn in the associated exit zone.

The proximity term is applied to the following pairs of entry points/exit zones:

Balancing zone	Entry point	Associated exit zone	2007 TP (€/MWh)	2008 TP (€/MWh)
North	L Taisnières	Taisnières L Region	0.09	0.18
North	H Taisnières	Taisnières H Region	0.16	0.24
North	Dunkirk	Dunkirk Region	0.16	0.24
East	Obergailbach	Obergailbach Region	0.16	0.24

1.6. Charges for entry and exit capacity from storage facilities

Every GRTgaz balancing zone has one or more transmission-storage interconnection points (PITS):

- The North balancing zone has three transmission-storage interconnection points: *Ile de France Nord (H gas)*, *Ile de France Sud (H gas)*, and *Picardy (B gas)*;
- The East balancing zone has one transmission-storage interconnection point: *Lorraine (H gas)*;
- The West balancing zone has one transmission-storage interconnection point: *Centre (H gas)*;
- The South balancing zone has two transmission-storage interconnection points: *Centre (H gas)* and *Salins Sud (H gas)*.

The charges (TCES and TCSS) applicable to annual subscriptions to daily entry and exit capacity at the PITSs are defined in the following table:

Storage-transmission interconnection point (PITS)	TCES (€/MWh/day per year)	TCSS (€/MWh/day per year)
Centre	23.00	4.60
Other PITSs	6.00	1.20

Annual entry and exit capacities at the PITSs allocated to each shipper by GRTgaz are respectively equal to the daily nominal withdrawal capacity increased, if need be, by the daily conditional withdrawal capacity and the daily nominal injection capacity increased, if need be, by the daily conditional injection capacity, subscribed by this shipper with the storage operator, within the limits of network capacities.

No annual interruptible entry and exit capacity is sold at the PITSs, except at the *Centre* PITSs. These annual interruptible capacities are only sold if all annual firm capacities have been subscribed. The price applicable to annual interruptible subscriptions to daily capacity from the *Centre* PITSs is equal to 75% of the price of the annual firm subscription to daily capacity.

1.7. Backhaul capacities on the main network

The price applicable to annual subscriptions to daily backhaul capacities is equal to 20% of the price of the annual firm subscription to daily capacity in the predominant direction.

The backhaul capacity exists at the following points on the GRTgaz network:

Entry points	Taisnières H
	Obergailbach
Exit point to network interconnection point (PIR)	Oltingue

1.8. Releasable capacities on the main network

At the entry points, excluding transmission-LNG terminal interconnection points, at the exit points to the network interconnection points in Dordogne and Hérault, and at the links between the balancing zones, firm capacities known as releasable capacities are defined. The shipper is committed to releasing these at any time if a request is made by GRTgaz, for a duration of one, two, three or four years.

For any shipper subscribing to more than 20% of annual or seasonal firm capacities to be sold at one of the points mentioned above, a fraction R of the part of the subscription above 20% of annual or seasonal firm capacities is converted to releasable capacity.

The fraction R of releasable capacity is defined in the table below:

Point concerned	Dunkirk	Obergailbach	Taisnières H	Taisnières L	Hérault	Dordogne	Lines
R	20%	20%	0%	15%	20%	20%	20%

The price of an annual or seasonal releasable capacity is equal to 90% of the price of the corresponding annual or seasonal firm capacity.

The rules on capacity release and subscription are defined by GRTgaz, on objective and transparent bases preventing any discrimination, and published on its website.

2. Transportation on the regional network

2.1. Annual firm subscription

The charge applicable to annual firm subscriptions to daily transmission capacity on the regional network is the product of the unit charge set at 45 €/MWh/day per year and the regional tariff level (NTR) for the delivery point in question:

	TCR (€/MWh/day per year)
GRTgaz	45.00 x NTR

The list of the delivery points on the GRTgaz network, along with their exit zone and their regional tariff level value is included in the appendix to this document.

If a new delivery point is set up, GRTgaz calculates the regional tariff level value in a transparent and non-discriminatory manner based on a calculation method published on its website and CRE is notified of the result.

Subscription to firm transmission capacity on the regional network is equal, for each delivery point, to the subscription to firm delivery capacity at this point.

2.2. Annual interruptible capacity

For any annual interruptible transmission capacity subscribed on the regional network, the transmission capacity charge on the regional network is reduced by 50%.

Subscription to interruptible transmission capacity on the regional network is equal for each delivery point to the subscription to interruptible delivery capacity at this point.

The terms for interruptibility on the regional network are defined by GRTgaz on objective and transparent bases preventing any discrimination, and published on its web site.

3. Gas delivery

3.1. For consumers connected to the transmission network and regional network interconnection points (PIRR)

For shippers supplying end-consumers connected to the transmission network and PIRRs, the delivery charge is composed of:

- A fixed charge equal to 3,600 € per year and per delivery station;
- A charge applicable to subscriptions to daily delivery capacity.

The charge applicable to annual firm subscriptions to daily delivery capacity is defined in the following table:

	TCL (€/MWh per day per year)
GRTgaz	20.00

For any annual interruptible delivery capacity subscribed, the delivery capacity charge is reduced by 50%.

Any shipper supplying one or more end-consumers connected to the transmission network is, upon request, simultaneously allocated existing delivery capacities corresponding to needs.

If several shippers simultaneously supply an end-consumer connected to the transmission network or a PIRR, the fixed charge is spread on a pro rata basis of their subscriptions to delivery capacity.

3.2. For transmission-distribution interconnection points (PITD)

For shippers supplying PITDs, the charge applicable to annual firm subscriptions to daily delivery capacity is defined in the following table:

	TCL (€/MWh/day per year)
GRTgaz	23.00

For any annual interruptible delivery capacity subscribed to, the delivery capacity charge is reduced by 50%.

At each PITD, the annual firm delivery capacity ("standardised capacity") is allocated to each shipper by GRTgaz and is equal to the sum of:

- Annual capacities subscribed to on the distribution network for the "subscription" delivery points supplied downstream of the PITD in question;
- Capacities calculated by GRTgaz for the "non-subscription" delivery points supplied downstream of the PITD in question by multiplying daily peak consumption of the "non-subscription" delivery points by the corresponding "A" adjustment coefficient.

The A adjustment coefficients are defined for each balancing zone and each DSO in the table below:

Balancing zone	North		East	West	South
	L Gas	H Gas			
Until 31 March 2007					
Gaz de France Réseau Distribution	1.218	1.141	1.021	1.082	0.990
Other DSOs	1	1	1	1	1
As from 1 April 2007					
Gaz de France Réseau Distribution	1.168	1.029	1.057	1.092	0.990
Other DSOs	1	1	1	1	1

4. Monthly subscriptions to capacities

- At the entry points, at the exits to the PIRs and at links between balancing zones:

The charges applicable to monthly firm subscriptions to daily capacity at the entry points, excluding Fos, Montoir, Hérault and Dordogne, at the exit to the PIRs, excluding Hérault and Dordogne, and at links between balancing zones are equal to 1/8 of the corresponding annual charges.

Charges applicable to monthly firm subscriptions to daily capacity at the entry points of Hérault and Dordogne and the exits to the PIRs of Hérault and Dordogne are equal to 1.5/7 of the corresponding charge in summer and to 1.5/5 of the corresponding charge in winter.

- At the PITS:

No monthly entry and exit capacity is sold at the PITS.

- At the main network exit, on the regional network and for delivery:

Charges applicable to monthly firm subscriptions to daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to the charges applicable to the corresponding annual firm subscriptions, multiplied by the following coefficients:

Month	Monthly charge proportional to annual charge
January – February	8/12
December	4/12
March – November	2/12
April – May – June – September – October	1/12
July – August	0,5/12

5. Daily subscriptions to capacities

- At the entry points, at the exits to the PIRs and at the connections between balancing zones:

Charges applicable to daily subscriptions to daily capacity at the entry points, excluding Fos and Montoir, at the exits to the PIRs and at connections between the balancing zones, are equal to 1/20 of charges applicable to the corresponding monthly subscriptions.

- At the PITS:

Daily entry and exit capacities at the PITS allocated to each shipper by GRTgaz are respectively equal to the daily withdrawal capacity and to the daily injection capacity allocated by the storage system operator additional to the corresponding annual capacities, within the limits of network capacities.

The charge applicable to daily subscriptions to daily capacity at the PITS is equal to 1/320 of the price of the annual firm subscription to capacity at these points.

- At the main network exit, on the regional network and for delivery:

Daily subscriptions of capacity are marketed by GRTgaz to meet sporadic exceptional needs for an end-consumer.

Charges applicable to daily firm subscriptions of daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to 1/20 of the charges applicable to the corresponding monthly firm subscriptions.

Charges applicable to daily interruptible subscriptions of daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to 1/30 of the charges applicable to the corresponding monthly firm subscriptions.

Daily interruptible capacities are marketed by GRTgaz, if all the marketable daily firm capacities have been subscribed on the day in question.

6. Hourly delivery capacity

Hourly delivery capacities only apply to end-consumers connected to the transmission network.

Any annual, monthly or daily subscription of daily delivery capacity results in the right to hourly delivery capacity of 1/20 of daily subscribed capacity (except for the specific case when this hourly capacity is not available).

In order to benefit from higher hourly capacity, insofar as the network is capable, the shipper must pay an additional price p , equal to:

$$p = (C_{max} - C) \times 10 \times (TCL + TCR)$$

Where:

C_{max} = Hourly delivery capacity requested by the shipper.

C = Hourly delivery capacity reserved through annual, monthly or daily subscription of daily delivery capacity.

TCL = Annual, monthly or daily charge for daily delivery capacity.

TCR = Annual, monthly or daily charge for daily transmission capacity on the regional network.

7. Additional services

7.1. Short term interruptible “use it or lose it” (UIOLI CT)

At the entry points, excluding Fos and Montoir, and at the exits to the network interconnection points, if all the firm capacities have been subscribed, the unused subscribed capacities are sold in interruptible form by GRTgaz, at a price equal to 1/500 of the price of annual firm subscription or at 1/500 of the sum of the summer firm subscription price and the winter firm subscription price at these points.

The short term interruptible use-it-or-lose-it operating rules are defined by GRTgaz on objective and transparent bases preventing any discrimination, and published on its website.

7.2. Auctions of daily capacity

At the entry points, excluding Fos and Montoir, at the exits to the network interconnection points and on links, GRTgaz is authorised to sell, on a daily basis, the firm capacities remaining available after the end of the sales period for daily firm capacities at the regulated tariff.

The operating rules for the daily capacity auction mechanism are defined by GRTgaz on an objective and transparent basis preventing any discrimination, and published on its website.

7.3. Offer of short-term interruptible transportation on the main network

An optional interruptible transportation offer is proposed for sites connected to the GRTgaz H gas network after the introduction of this pricing proposal which meet both of the following conditions:

- annual subscription of daily delivery capacity is more than 10 GWh per day;
- the site is located on the GRTgaz network less than 50 km, as the crow flies, from a transmission-LNG terminal interconnection point (PITTM) or from the Dunkirk, Taisnières H or Obergailbach entry point.

This offer provides for a reduction or interruption of supply to the sites concerned upon request from GRTgaz, with minimum notice of 2 hours, if both the following conditions are met:

- the quantity of the gas physically injected on the network at the closest entry point is lower than the subscription to the daily delivery capacity of sites benefiting from this interruptible offer within the perimeter of this entry point;
- the daytime temperature is lower than the average daily temperature statistically likely to be reached or negatively exceeded for more than 20 days per year with a 2% risk.

Interruptible terms are defined by GRTgaz on objective and transparent bases preventing any discrimination, and published on its website.

Shippers subscribing to this offer benefit from a price reduction equal to the delivery capacity they have subscribed for this delivery point multiplied by the sum of:

- 50% of the charge for main network exit capacity;
- 50% of the charge for entry capacity on the main network at the closest entry point.

For the same site, a shipper cannot accumulate price reduction agreed under this optional offer with price reduction awarded under:

- interruptible transportation on the regional network;
- the proximity term for customers located in the Dunkirk Région, Taisnières H Region and Obergailbach Region exit zones.

7.4. Injection of gas on the network from a gas production facility

Charges applicable to annual subscriptions of daily entry capacity on the GRTgaz network from the transmission-production interface point (PITP) are as follows:

- for PITPs whose entry capacity on the network is less than 5 GWh per day, the applicable charge is 6 €/MWh day per year;
- the definition of the charge applicable for the other PITPs is subject to a specific study.

7.5. Gas type

a) Conversion of H gas to L gas

GRTgaz markets two annual services for conversion of H gas to L gas:

- a peak service, accessible to all shippers with H gas in the north balancing zone;
- a firm base service accessible to shippers with H gas in the North balancing zone and holding less than 15% of entry capacities at Taisnières L, within the limits of their needs to supply end-consumers with L-gas.

The prices of conversion services are defined in the following table:

	Capacity charge (€/MWh/day per year)	Quantity charge (€/MWh)
Peak service	133.00	0.16
Base service	60.00	0.16

GRTgaz also sells monthly firm conversion capacities for the base service. The applicable monthly coefficients are equal to the applicable coefficients for the monthly transmission capacities on the regional network.

The operating rules for the H gas to L gas conversion service are defined by GRTgaz on an objective and transparent basis preventing any discrimination, and published on its website.

b) L gas to H gas conversion

The price of L gas to H gas conversion services proposed by GRTgaz is composed of:

- an annual offer charge, proportional to the annual capacity subscription, of 20.81 €/MWh per day per year;
- a monthly offer charge, proportional to the monthly capacity subscription, of 2.60 €/MWh per day per month.

The operating rules for the L gas to H gas conversion service are defined by GRTgaz on an objective and transparent basis preventing any discrimination, and published on its website.

V - Tariff for utilisation of the Total Infrastructures Gaz France network

1. Transportation on the main network

The tariff for utilisation of the main TIGF network is composed of the following charges:

- Charge for entry capacity on the main network (TCE);
- Charge for exit capacity at network interconnection points (TCST);
- Charge for exit capacity from the main network (TCS);
- Proximity term (TP);
- Charge for entry and exit capacity at the transmission-storage interconnection points (TCES and TCSS).

On a part of the main TIGF network, subscriptions are seasonal:

- Summer season from April to October inclusive;
- Winter season from November to March inclusive.

1.1. Charge for entry capacity on the main network (TCE)

Charges applicable to annual and seasonal subscriptions for daily entry capacity on the main TIGF network are defined in the following table:

Entry point	TCE (€/MWh/day per season) Firm subscriptions		TCE (firm charge coefficient) Interruptible subscriptions
	Summer	Winter	Summer and winter
Dordogne	22	22	75 %
Hérault	24	22	75 %
Lacq	20	23	75 %
Biriatou	76	54	75 %
Larrau	76	54	75 %

In the event of congestion, requests for allocation of entry capacity on the main TIGF network in order to supply an end customer in the TIGF zone are handled according to a capacity reallocation procedure implemented by TIGF.

1.2. Charge for exit capacity at the network interconnection points (TCST)

Charges applicable to seasonal subscription to daily exit capacity at the network interconnection points are defined in the following table:

PIR	TCST (€/MWh/day per season) Firm subscriptions		TCST (firm charge coefficient) Interruptible subscriptions
	Summer	Winter	Summer and Winter
Dordogne	49	66	75%
Hérault	30	38	75%
Biriatou	157	113	75%
Larrau	157	113	75%

1.3 Charge for exit capacity from the main network (TCS)

Every exit zone on the main TIGF network is defined by all the delivery points attached to it.

For every shipper and every exit zone, the annual firm subscription to exit capacity from the main network must be greater than or equal to the sum of annual firm subscriptions to delivery capacity in this exit zone.

a) Until 31 December 2007:

Charges applicable to annual firm subscriptions to daily exit capacity from the main TIGF network are defined in the following table:

Exit zone	TCS (€/MWh/day per year)
Adour	56
Auch	56
Barbaira	71
Coudures	66
Guyenne	84
Muret	94
Dordogne Region	100
Hérault Region	49
Lacq Region	93
Toulouse	85

b) As from 1 January 2008:

The charge applicable to annual firm subscriptions to daily exit capacity from the main TIGF network is 82€/MWh/day per year for all exit zones.

1.3. Proximity term (TP)

The proximity term is deducted from the monthly invoice of every shipper concerned. It is applied, for every shipper, to the daily gas quantity corresponding to the minimum between the quantity of gas allocated at the transmission network entry point and the quantity of gas withdrawn in the associated exit zone.

The proximity term is applied to the following pairs of entry points/exit zones:

Entry point	Associated zone	2007 TP (€/MWh)	2008 TP (€/MWh)
Dordogne	Dordogne Region	0.16	0.32
Hérault	Hérault Region	0.16	0.32
Lacq	Lacq Region	0.42	0.37

1.4. Charges for storage facility entry and exit capacity

The TIGF transmission network has a transport storage interface point (PITS): the *South-West storage facility*

The charges (TCES and TCSS) applicable to annual subscriptions to daily entry and exit capacity at the transport storage interface points are defined in the following table:

PITS	TCES (€/MWh/day per year)	TCSS (€/MWh/day per year)
South-West storage facility	23	51

Annual entry and exit capacities at the transmission-storage interconnection points allocated to each shipper by TIGF are respectively equal to the nominal daily withdrawal capacity increased, if need be, by the conditional daily withdrawal capacity and the nominal daily injection capacity increased, if need be, by the conditional daily injection capacity, subscribed by this shipper with the storage operator, within the limits of network capacities.

No annual interruptible entry and exit capacity is sold at the transmission-storage interface points.

2. Transportation on the regional network

2.1. Annual firm subscription

The charge applicable to annual firm subscriptions to daily transmission capacity on the regional network (TCR) is the sum of the unit charge, set at 43 €/MWh/day per year, and the regional tariff level (NTR) for the delivery point in question:

	TCR (€/MWh/day per year)
TIGF	43 x NTR

The list of the delivery points on the TIGF network, along with their exit zone and their NTR value is included in the appendix to this document.

If a new delivery point is set up, TIGF calculates the NTR value in a transparent and non-discriminatory manner based on a calculation method published on its website and CRE is notified of the result.

Subscription to firm transmission capacity on the regional network is equal for each delivery point to the subscription to the firm delivery capacity at this point.

2.2. Annual interruptible subscription

For any annual interruptible transmission capacity subscribed on the regional network, the transmission capacity charge on the regional network is replaced by a unit charge equal to the regional tariff level multiplied by 0.10 €/MWh, applicable to the gas consumed on a daily basis over and above the annual firm subscription to daily capacity.

Annual subscription to interruptible transmission capacity on the regional network is equal, for each delivery point, to the subscription to interruptible delivery capacity at this point.

The terms for interruptibility on the regional network are defined by TIGF on objective and transparent bases preventing any discrimination, and published on its website.

3. Gas delivery

3.1. For consumers connected to the transmission network

For shippers supplying end-consumers connected to the transmission network, the delivery charge is composed of:

- A fixed charge equal to 1800 €per year and per delivery station;
- A charge applicable to subscriptions to daily delivery capacity.

The charge applicable to annual firm subscriptions to daily delivery capacity (TCL) is defined in the following table:

	TCL (€/MWh/day per year)
TIGF	11

For any annual interruptible delivery capacity subscribed, the delivery capacity charge is equal to 11 €/MWh per day.

Any shipper supplying one or more end-consumers connected to the TIGF transmission network is simultaneously allocated, upon request, the existing delivery capacities corresponding to needs.

If several shippers simultaneously supply an end-consumer connected to the transmission network, the fixed charge is spread on a pro rata basis of their subscriptions to delivery capacity.

3.2. For the transmission-distribution interconnection points (PITD)

For shippers supplying PITDs, the charge applicable to annual firm or interruptible subscriptions to daily delivery capacity (TCL) is defined in the following table:

	TCL (€/MWh day per year)
TIGF	14

At each PITD, the annual firm delivery capacity ("standardised capacity") is allocated to each shipper by TIGF and is equal to the sum of:

- Annual capacities subscribed to on the distribution network for "subscription" delivery points supplied downstream of the PITD in question;
- Capacities calculated by TIGF for the "non-subscription" delivery points supplied downstream of the PITD in question by multiplying daily peak consumption of the "non-subscription" delivery points by the corresponding "A" adjustment coefficient.

The A adjustment coefficients are defined for each DSO in the table below:

DSOs	Gaz de France Réseau Distribution	Régaz	Other DSOs
Until 31 March 2007:	1.144	1.164	1
As from 1 April 2007 :	1.142	1.123	1

4. Monthly subscriptions to capacities

- At entry and exit points to the network interconnection points (PIR):

The charges applicable to monthly firm subscriptions of daily capacity at the entry and exit points to the TIGF network interconnection points are equal to 1.5/7 of the corresponding firm charge in summer and 1.5/5 of the corresponding charge in winter.

Monthly interruptible capacities are marketed by TIGF at the Larrau entry point and at the exit point to Biriadou PIR. The tariff for these capacities in summer is equal to 1.5/7 of the corresponding interruptible charge in summer and to 1.5/5 of the corresponding interruptible charge in winter.

- At the transmission-storage interconnection points (PITS):

No monthly entry and exit capacity is sold at transmission-storage interconnection points.

- At the main network exit, on the regional network and for delivery:

Charges applicable to monthly firm subscriptions of daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to the charges applicable to the corresponding annual firm subscriptions, multiplied by the following coefficients:

Months	Monthly charge proportional to annual charge
January – February	8/12
December	4/12
March – November	2/12
April – May – June – September – October	1/12
July – August	0.5/12

5. Daily subscriptions to capacities

- At the entry points, at the exits to the network interconnection points (PIR):

Charges applicable to daily firm subscriptions of daily capacity at the entry points and at the exits to the PIRs are equal to 1/20 of charges applicable to the corresponding monthly firm subscriptions.

Daily interruptible capacities are marketed by TIGF at the Larrau entry point and at the exit to the Biriadou PIR at a price equal to 1/20 of charges applicable to the corresponding interruptible monthly subscriptions at these points, within the limit of network capacities.

- At transmission-storage interconnection points (PITS):

Daily entry and exit capacities at transmission-storage interconnection points allocated to each shipper by TIGF are respectively equal to the daily withdrawal capacity and to the daily injection capacity allocated by the storage system operator additional to the corresponding annual capacities, within the limits of network capacities.

The charge applicable to daily subscriptions of daily capacity at the PITSs is equal to 1/320 of the price of the annual firm subscription to capacity at these points.

- At the main network exit, on the regional network and for delivery:

Daily capacity subscriptions marketed by TIGF to meet an end-consumer's exceptional sporadic needs.

Charges applicable to daily firm subscriptions of daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to 1/20 of the charges applicable to the corresponding monthly firm subscriptions.

Charges applicable to daily interruptible subscriptions of daily capacity at the main network exit, for transmission on the regional network and for delivery are equal to 1/30 of the charges applicable to the corresponding monthly firm subscriptions.

Daily interruptible capacities are marketed by TIGF, if all marketable daily firm capacities have been subscribed to on the day in question.

6. Hourly delivery capacity

Hourly delivery capacities only apply to end-consumers connected to the transmission network.

Any annual, monthly or daily subscription of daily delivery capacity results in the right to hourly delivery capacity of 1/20 of daily subscribed capacity (except for the specific case when this hourly capacity is not available).

In order to benefit from higher hourly capacity, insofar as the network is capable, the shipper must pay an additional price p , equal to:

$$p = (C_{max} - C) \times 10 \times (TCL + TCR)$$

Where:

C_{max} = Hourly delivery capacity requested by the shipper.

C = Hourly delivery capacity reserved through annual, monthly or daily subscription to daily delivery capacity.

TCL = Annual, monthly or daily charge for daily delivery capacity.

TCR = Annual, monthly or daily charge for daily transmission capacity on the regional network.

7. Additional services

7.1. Short-term interruptible “use it or lose it” (UIOLI CT)

At the entry points and at the exits to the network interconnection points, if all the firm capacities have been subscribed, unused subscribed capacities are marketed in interruptible form by TIGF, at a price equal to 1/500 of the sum of the price of summer firm subscription and the price of winter firm subscription at these points.

The use-it-or-lose-it short term interruptible operating rules are defined by TIGF, on an objective and transparent basis preventing any discrimination, and published on its website.

7.2. Daily capacity auctions

At the entry points and at the exits to the network interconnection points, TIGF is authorised to market, on a daily basis, the firm capacities remaining available after the end of the sales period for daily firm capacities at the regulated tariff.

The operating rules for the daily capacity auction mechanism are defined by TIGF, on an objective and transparent basis preventing any discrimination, and published on its website.

7.3. Injection of gas on the network from a gas production facility, excluding Lacq

Charges applicable to annual subscriptions to daily entry capacity on the TIGF network from the transmission-production interface points are as follows:

- For transmission-production interface points with entry capacity on the network of less than 5 GWh per day, the charge applicable is 6 €/MWh day per year;
- The definition of the charge applicable to the other transmission-production interface points is subject to a specific study.

VI - Transfer of transmission capacities

Transmission capacities subscribed at the entry points, at the exits to the network interconnection points and at the links between the balancing zones can be freely transferred without any surcharge for shippers.

If the transfer involves complete annual or seasonal subscriptions, the purchaser recovers all the rights and obligations related to these subscriptions. In the other cases, only the right to use the capacities is transferred and the initial owner remains committed to his obligations to the TSO. The duration of the exchanged right of use can be as little as one day, regardless of the duration of the initial subscription.

The methods for these transfers of transmission capacities are defined by the TSOs on objective and transparent bases preventing any discrimination, and published by the TSOs on their web site.

VII - Fines for exceeding capacities

1. Fines for exceeding daily capacity

1.1. Methods for calculating fines for exceeding daily capacity

Every day, observed overshoots of the daily exit capacity from the main network, for transmission on the regional network and for delivery are subject to fines.

For the part of the overshoot less than or equal to 3% of daily subscribed capacity, no fine is invoiced.

For the part of the overshoot greater than 3%, fines are calculated on the basis of the price of the daily firm subscription to daily capacity as follows:

- For the part of the overshoot between 3% and 10%, the fine amounts to 20 times the price of the daily firm subscription to daily capacity;
- For the part of the overshoot greater than 10%, the fine amounts to 40 times the price of the daily firm subscription to daily capacity.

TSOs will give shippers the possibility, subject to network availability, of quickly adjusting their capacity subscriptions when a capacity overshoot is observed.

1.2. Methods for calculating daily capacity overshoots

a) Overshoot of daily regional transmission and delivery capacity for end-consumers connected to the transmission network and regional network interconnection points (PIRR)

For a given day, the value of the daily capacity overshoot taken into account is equal to the difference, if it is positive, between the quantity of gas delivered and the subscribed daily delivery capacity.

b) Overshoot of daily regional transmission capacity and delivery capacity for transmission-distribution interconnection points (PITD)

For a given day, the value of the daily capacity overshoot taken into account is equal to the difference, if it is positive, between the following two values:

- difference between the daily quantity of gas delivered and the corresponding daily delivery capacity if this difference is positive, otherwise zero;
- difference between the sum of daily quantities delivered at the "non-subscription" delivery points and the sum of standardised capacities for "subscription" delivery points if this difference is positive, otherwise zero.

c) Overshoot of daily exit capacity on the main network

For a given day, the value of the daily capacity overshoot taken into account is equal to the difference, if it is positive, between the following two values:

- difference between the daily quantity of gas delivered and the corresponding daily exit capacity from the main network if this difference is positive, otherwise zero;
- between the sum of daily quantities delivered in the exit zone to "non-subscription" delivery points and the sum for the exit zone of standardised capacities for the "non-subscription" delivery points if this difference is positive, otherwise zero.

If the TSO exercises interruptibility, the overshoot calculations defined above take into account the part interrupted at the TSO's request by reducing it from the interruptible capacity.

2. Fines for exceeding hourly capacity

Every day, overshoots of hourly transmission capacity on the regional network and for delivery to supply end-consumers connected to the transmission network, are subject to fines. For a given day, the hourly capacity overshoot is calculated by taking the maximum value of the hourly average of quantities delivered at the delivery point over four consecutive hours.

For the part of the overshoot lower than or equal to 10% of the hourly subscribed capacity, no fine is invoiced.

For the part of the overshoot greater than 10%, fines are calculated on the basis of the price of the daily subscription to hourly capacity as follows:

- For the part of the overshoot between 10% and 20%, the fine is equal to 45 times the price of the daily subscription to hourly capacity;
- For the part of the overshoot greater than 20%, the fine is equal to 90 times the price of the daily subscription to hourly capacity.

Fines for exceeding the hourly capacity are not applied by GRTgaz if the shipper corrects his annual subscription to daily capacity up to the level of the overshoot observed.

3. Annual redistribution of fines for exceeding capacity

Each TSO redistributes the amount of the fines for exceeding capacity collected every year at the latest in March of the following year.

For each TSO, the amount of fines to be redistributed is split amongst the shippers in proportion to the quantities of gas delivered to end-consumers connected to the transmission network. Each TSO publishes the unit amount of its redistributed fines on his website, expressed in euros per MWh consumed by end-consumers connected to the transmission network.

VIII - Balancing

Each shipper is subject to a balancing obligation on a daily and monthly basis, for each of the balancing zones in which capacities have been reserved.

In order to transfer gas between two balancing zones of the same operator, it is necessary to reserve linking capacities between balancing zones.

Shippers who have subscribed to linking capacities between balancing zones may compensate for their imbalances in the balancing zones of the same transporter, within the limit of the linking capacities to which they have subscribed. Likewise, in the North zone of GRTgaz, shippers who have subscribed to a firm base service to convert H gas to L gas may compensate for their imbalances in L gas, within the limit of the conversion capacities to which they have subscribed.

In the event of imbalance, fines can be applied by the TSOs depending on the size of the imbalances recorded every day and those accumulated every month.

No fine can be applied to daily imbalance if the shipper's imbalance, for each balancing zone and in the GRTgaz North zone, for each type of gas, is lower than the following values:

- $\pm 20\%$ of total daily delivery capacities subscribed by the shipper at delivery points attached to the balancing zone in question, in a bracket ranging from 0 to 1000 MWh per day;
- $\pm 5\%$ for the share of this total exceeding 1000 MWh per day.

In addition to these values, if need be, an optional balancing service can be subscribed to with the TSO at a price of 15 €/MWh per day per year.

If reduction in capacity due to work on the transmission network makes balancing impossible for the shipper, for limited quantities and a limited period of time, the TSOs do not impose fines on shippers on an exceptional basis providing this does not cast any doubt on the physical balancing of the transmission network.

Any changes to the balancing rules are proposed by the TSOs and fixed by CRE.

IX - Notional gas exchange points

There is a notional gas exchange point (PEG) in each balancing zone providing the shippers with the possibility of exchanging quantities of gas.

The operating methods for gas exchange points are defined by the TSOs according to objective and transparent bases preventing any discrimination and published on their websites.

The charge for access to gas exchange points consists of:

- an annual fixed charge equal to a maximum of 6,000 € per exchange point;
- a charge, proportional to quantities exchanged, of 0.01 €/MWh maximum.

X - Appendices

Appendix 1: List of delivery points on the GRTgaz transmission network classified by exit zone on the main network.

Appendix 2: List of delivery points on the TIGF transmission network classified by exit zone on the main network.

Drawn up in Paris, 10 November 2006

On behalf of the Commission de régulation de l'énergie,

The Chairman

Philippe de LADOUCETTE