COMMISSION
DE RÉGULATION
DE L'ÉNERGIE

CRE tariff proposal of 10th July 2008 for use of natural gas transmission networks

Attending the meeting: Mr. Philippe de LADOUCETTE, president, Mr. Michel LAPEYRE, vice-president, Mr. Maurice MEDA, vice-president, Mr. Jean-Paul AGHETTI, Mr. Eric DYEVRE, Mr. Hugues HOURDIN, Mr. Jean-Christophe LE DUIGOU, Mr. Pascal LOROT and Mr. Emmanuel RODRIGUEZ, Commissioners.

Since 1st January 2007, the transmission system operators (TSOs), namely GRTgaz and TIGF, have been applying the tariffs for use of the natural gas transmission networks recommended by CRE on 10th November 2006 for a two-year period.

In line with article 7 of the modified law of 3rd January 2003, CRE is now proposing new tariffs for the use of natural gas transmission networks to come into force as from 1st January 2009.

To prepare its proposal, CRE carried out two public consultations (12th July - 4th September 2007 and 13th May - 6th June 2008), organised two round tables with market players on 25th October 2007 and 18th June 2008 and held TSO hearings. As in the past, these tariffs were established taking into account the running costs necessary to correctly operate networks and facilities while ensuring their safety in addition to the capital costs (depreciation and return on assets used for transportation activities).

The present tariff proposal takes into account the impact of the following changes on the gas transportation tariffs currently in force:

1. a new gas transportation structure in France which brings the number of balancing zones down to three and simplifies the interface between the GRTgaz and TIGF networks;
2. a new scheme for financial return on assets and incentive for investment in gas transmission networks. This new scheme will provide more visibility to operators by extending the financial incentive principle of 300 base points over ten years to structural investments leading to the creation of new transportation capacities on the main network or reduction in the number of balancing zones. Suppressing the 125 base point bonus previously allocated to all investments means that incentives will be more clearly defined;
3. increased tariff visibility for transporters and network users. The tariff period is increased to four years for GRTgaz with an authorised revenue trajectory determined for this period and an incentive regulation regarding productivity. For TIGF, the tariff period is set at two years to better understand any possible impact of the new regulations on network safety. With respect to both operators, the principles of return on assets and incentive for investment have been set for four years and a regulation system of incentives to provide quality service has been implemented.

The current tariff proposal forecasts increases in gas transportation tariffs due to three main factors:

- the transporters' heavy investment plan, the cost of which is not entirely covered by the additional capacity subscriptions;
- the impact of the new safety regulations on the networks' operating and maintenance costs;
- the increase in the cost of energy necessary for network operation which entails a unit price increase of more than 3 %, all else being equal.

Concerning GRTgaz, the authorised revenue increase in 2009 expressed in current Euros amounts to 8 % compared to the current tariff which means an average increase in unit price of around 6 %. Between 2010 and 2012, the annual average increase in unit price is around 2.8 % per year in current Euros.

Concerning TIGF, the authorised revenue increase over 2009-2010 amounts to 20 % compared to the current tariff which means an average increase in unit price of around 10 % in current Euros.

These increases include an improvement in the services provided to network users resulting from the restructured transportation offer on the gas transmission networks.

By increasing gas entry capacities on the territory and putting an end to internal network congestion, the new investments will improve the security of supply and foster competitiveness.

In the northern part of the territory, the creation of a large balancing zone will give consumers access to an increased number and variety of offers and suppliers will be able to supply more customers from the same gas entry point.

In the southern part of the territory, commissioning of the Fos Cavaou terminal and simplification of the GRTgaz-TIGF interface will improve access conditions to the transmission network and market operations.

Nevertheless, there will be additional changes in transmission structure to further streamline the transportation offer and take into account the development of interconnections with the Iberian peninsula and the possible commissioning of new LNG terminals.

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EXPLANATORY STATEMENT

I - Regulation framework

In the explanatory statement of the 10th November 2006 tariff proposal, it was stated that "*tariffs in the present proposal have been calculated for application over a two year period starting on 1st 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 1st January 2009 at the latest and will require a revision of the tariff structure"*.

The present tariff proposal includes a tariff for GRTgaz and one for TIGF, applicable as from 1st January 2009.The transmission network of each TSO is made up of the main and the regional networks.

1. GRTgaz

The reduction in the number of balancing zones on the GRTgaz transmission network as from 1st January 2009 and the lessons learned from previous tariffs have led to introducing a new regulation framework increasing the duration of the tariff structure to four years, and also an incentive regulation to improve the operator's productivity levels and quality of service.

The authorised revenue trajectory for GRTgaz over a four-year period is determined by (excluding any impact of the expenses and revenue clawback account [CRCP]):

- the capital costs trajectory calculated according to GRTgas investment forecasts;
- the operating costs trajectory calculated:
  - for 2009, based on the level of costs adopted by CRE as described in II.3 of the present document;
  - for each year from 2010-2012, excluding any significant fluctuations in the price of energy, based on the previous year's level of costs multiplied by a coefficient corresponding to the sum of inflation (the INSEE consumer price index excluding tobacco) and a factor of + 1.1 %.

This results in an authorised 8 % increase in GRTgaz revenue in 2009 with respect to the 2007-2008 average in current Euros. On the basis of the adopted inflation hypotheses, GRTgaz's authorised revenue increases by 4.6 % per year on average in current Euros over the 2010-2012 period.

The possible gains in productivity which GRTgaz may achieve based on manageable operating costs, comprising the operator's net costs minus centrally-managed costs deducted at source and expenses and revenue items coming under the CRCP mechanism, will be calculated at the term of the tariff period. 50 % of any profits will remain with GRTgaz. The remaining 50 % will be deducted from costs to be recovered during the following tariff period.
In this way, the operator is encouraged to control his operating costs while users also benefit from part of any gains in productivity.

Given the level of forecasted subscriptions, GRTgaz's average tariff as expressed in current Euros increases by 6 % in 2009 compared to its previous tariff. Over the 2010-2012 period, it should increase by about 2.8 % per year.

GRTgaz's detailed tariff schedule will be updated on 1st April each year as from 2010 taking into account the updated forecast of capacity subscriptions, established inflation data and any significant fluctuations in the price of energy. Choosing April 1st will ensure coherence with marketing periods of capacities at balancing zone links and transporter interface, changes in storage capacities and in the profiling system of natural gas distribution networks.

2. TIGF

The new regulation concerning network security has considerable impact on TIGF since the average age of its network is high (first gas network in France). This has led to TIGF implementing fundamental changes in its organisation and to the maintenance and operating methods of its gas transmission network. This means that operating cost forecasts show a sharp rise over the coming four years with some uncertainty regarding TIGF's actual expenses.

Given the context, the present tariff proposal sets transportation tariffs on the TIGF network for a two-year period only.

TIGF's authorised revenue is determined, excluding CRCP impact, by:

- the capital costs trajectory based on TIGF investment forecasts;
- the operating cost trajectory calculated for 2009 and 2010 on the basis of the level of costs adopted by CRE as described in II.3 of the present document.

This results in a 20 % increase in TIGF's authorised revenue in current Euros when considering the 2009-2010 average compared to the 2007-2008 average.

Given the forecasts concerning subscriptions, there will be a 10 % increase in the average TIGF tariff over 2009-2010 compared to previous tariffs.

The detailed TIGF tariff schedule will be re-examined on 1st April 2010 to ensure coherence of the tariff structure between the two transporters or if there is significant fluctuation in the price of energy.

3. General principles of return on assets and incentive for investment.

The principles of return on assets and incentive for investment have been set for four years for both operators. These principles, described in II.2 of the present document, concern in particular:

- the calculation rules for capital costs;
- the rate of return on assets;
- the incentive for investment mechanism.

By stabilising the rates of return, transporters will be in a position to decide on investments which will foster competitiveness on the French market and the emergence of a European gas market.

4. Expenses and revenues clawback account (CRCP)

Tariffs are determined on the basis of cost hypotheses and capacity subscriptions set for the tariff validity period. CRE recommends maintaining the rules in force for adjusting discrepancy between forecasted and actual costs and revenues related to pre-defined items.

The CRCP is a non-accounting fiduciary account provisioned at regular intervals by all or part of the disparities in cost or revenue identified for pre-defined items. The balance of this account is reconciled over a four-year period by reducing or increasing the revenues to be recovered through tariffs.

To ensure the mechanism's financial neutrality, an interest rate equivalent to the risk-free rate defined in the present tariff proposal is applicable to the amounts adopted in the CRCP after 2009. This rate is fixed at 4.2 % per year, nominal before tax.

In the present tariff proposal, the cost and revenue items concerned by this mechanism are:

- revenues linked to transportation on the transmission network. Given the system of standardised subscriptions of transmission capacity at the transmission distribution interface points (PITD), the revenues linked to transportation on the downstream transmission network (main and regional network exit points and delivery) are 100 % covered by the CRCP. The same is true for revenues linked to storage facility entry and exit points (capacities which are automatically allocated based on subscriptions with the operators of underground storage facilities). Revenue linked to transportation on the upstream transmission network (other main network points) is covered:
  - 50 % by the CRCP for a discrepancy between the actual revenue and the forecast less than or equal to +/- 10 % of the projected revenue,
  - 100 % by the CRCP for a discrepancy between the actual revenue and the forecast exceeding +/- 10 % of the projected revenue;
- the income from connection to combined cycle - gas turbines (CCGT). This income is 100 % covered by the CRCP;
- capital costs supported by the TSOs. The amount of these costs is 100 % covered by the CRCP;
- the costs linked to propulsion energy (gas and electricity) and the discrepancy between costs and revenues linked to the TSOs' CO_2 quotas. These costs are 80 % covered by the CRCP;
- the costs for GRTgaz and the revenues for TIGF linked to their agreement which allows GRTgaz to use the TIGF network. The amount of these costs is 100 % covered by the CRCP;
- the financial incentives generated by the mechanism for incentive regulation aimed at improving the quality of service for all the indicators concerned so that fines can be paid back to network users if the approved level of service quality is not met, or bonuses can be attributed to TSOs if their performance exceeds their objectives.

If necessary, the efficient and judicious nature of invested costs will be checked when applying the CRCP. Monitoring activity could more specifically check TSO investment costs and the energy costs they incur.

Finally, the results of audits carried out by CRE will be taken into account in the CRCP.

5. Incentive regulation to improve the quality of service

The present tariff proposal anticipates setting up a mechanism of incentive regulation for service quality to ensure improvement in the level of service offered by the TSOs and forestall any deterioration resulting from the productivity efforts asked of operators.

This mechanism concerns the following areas: environment, maintenance programmes, quality of relationships with shippers and the quality of allocations and volume information readings. Safety is not included in this mechanism since it comes under mandatory regulations for TSOs and is monitored by state authorities.

The mechanism for incentive regulation of service quality comprises three types of indicators:

- indicators monitored by CRE, with the publication of results;
- indicators monitored by CRE, with the publication of results and definition of an objective;
- indicators monitored by CRE, with the publication of results and a financial incentive in the event of failure to achieve or performances exceeding pre-defined objectives. These financial incentives lead to fines and/or bonuses applicable through the CRCP.

If deemed necessary, CRE will recommend changes to the regulation system for service quality to the Ministers for Energy and for the Economy on the basis of a suitable number of lessons learned, in order to implement the following adjustments:

- implementation of new indicators or cancellation of existing ones;
- definition of objectives for indicators without any, on the basis of sufficient past information;
- implementation of financial incentives (fines and/or bonuses) for indicators without any, if deemed necessary, and reassessment of existing financial incentives.

II - Tariff levels

1. Calculation of operating costs

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Operating costs to be covered by the tariffs have been determined on the basis of all costs necessary for the operation of the transmission networks as they were provided to CRE and appear in the operators' accounting. CRE made adjustments to certain items but took into account all the TSOs' estimates concerning growth in staff numbers and safety expenditure.

To set the level of these costs, CRE based its calculations on the following:

- the data provided by the GRTgaz corporate financial statement and the TIGF unbundled accounts for 2007;
- on forecasts of changes in costs provided by GRTgaz and TIGF;
- on the audit carried out at GRTgaz and TIGF on forecasted changes in certain cost items by an external service provider.

It should be remembered that forecasts for additional revenues other than those resulting from the charges for use of the transmission networks are deducted from the operating charges to be covered by the tariffs.

1.1. Audit of forecasted changes in costs at GRTgaz and TIGF

CRE commissioned an external service provider to audit the forecasted changes in GRTgaz and TIGF expenditure with respect to the following cost items:

- the routine operating costs (monitoring, operation, inspections, metrology, scheduled maintenance, technical studies, industrial informatics…);
- significant maintenance costs (for ensuring compliance, heavy maintenance operations, repairs following inspections, shut downs, accidents...);
- general site services and maintenance costs (excluding information systems);
- information systems (other than industrial informatics).

For 2007, these costs amount to 238.4 M€ for GRTgaz, or 34 % of the gross operating costs, and 30.3 M€ for TIGF, or 39 % of the gross operating costs.

In the light of this audit, CRE decided not to adopt costs, for these items as a whole, amounting to 10 M€ per year for GRTgaz and 0.4 M€ per year for TIGF, in the operating costs to cover by the tariff.

Moreover, the audit showed that TIGF only partially capitalises the costs of staff involved in investment projects. As a result, CRE decided on a reduction in operating charges for TIGF amounting to 1.6 M€ in 2009 and 5.1 M€ in 2010. The corresponding amounts have been included in the capital cost forecasts for TIGF.

1.2. Centrally-managed costs paid by GRTgaz to Gaz de France

A certain amount of Gaz de France central charges is supported by GRTgaz. These costs correspond on the one hand to headquarter costs and on the other, to costs linked to staffing issues (mainly the 1 % CCAS and the staff rates).

After analysing the headquarter costs, CRE decided to reduce the forecasted costs provided by GRTgaz by 11.6 M€ per year over the period 2009-2012. The headquarter costs adopted exclude any participation by GRTgaz in the Gaz de France group's costs for communication and management staff.

The amount of authorised centrally-managed costs, in current Euros, remains unchanged throughout the tariff period. In this way, any changes in the Gaz de France group during the tariff period will have no impact on the level of GRTgaz centrally-managed costs.

The costs linked to its status have been taken into account on the basis of the Gaz de France group's forecasts

All told, the projected figures adopted in the present tariff proposal for centrally-managed costs assigned to GRTgaz in 2009 amount to 59 M€, with 32 M€ for statutory costs and 27 M€ for headquarter costs.

1.3. Expenditure on safety issues

The TSOs intend to carry out new safety measures linked largely to the implementation of the 4th August 2006 decree relating to safety rules for flammable-gas transmission pipelines. The impact on operating costs of this new regulation is considerably greater for TIGF than GRTgaz. CRE has taken into consideration the total amount of costs linked to network safety forecasted by the operators.

1.4. Energy purchase

The TSOs' costs linked to purchasing gas and electricity to operate the networks' compression stations have increased sharply compared to former tariffs. This increase is mainly linked to the increase in the price of gas.

For GRTgaz, the "energy and CO_2 quota" item covered by the tariff amounts to 131.1 M€ in 2009 which is a 41 % increase with respect to the figure taken into account for the previous tariff structure. For TIGF, this item amounts to 11 M€ in 2009 which is a 55 % increase with respect to the figure taken into account for the previous tariff structure.

1.5. Feasibility study for the connection of Corsica to the GALSI gas pipeline.

In the GRTgaz operating costs for 2009, CRE adopted 1 M€ as the amount of GRTgaz participation in the feasibility studies for connecting Corsica to the GALSI gas pipeline. If this project sees the day, investment and operating costs will be included in GRTgaz expenditure and financed by the infrastructure's users as is usually the case.

2. Capital costs

Capital costs include the Regulated Assets Base (RAB) rate of return and depreciation in addition to the rate of return on current assets and if applicable, the stranded costs.

To determine the capital costs to cover by the tariffs, CRE has adopted the forecasted figures for investments provided by GRTgaz. The RAB rate of return is maintained at 7.5 %, actual before tax, i.e. the level adopted for the tariff currently in force.

However, it has modified methods for calculating the capital costs agreed to for previous tariff structures with respect to the two following points:

- the return on the pre-start up investment costs, previously taken into account through tariffs as they occurred and non-capitalised, will now be made through the cost of debt;
- the stranded costs linked to assets removed from the RAB before the end of their economic lifetime are now to be taken into consideration in the costs to cover through tariffs, at their net book value and on a case-by-case basis.

A new system of incentive for investment has also been implemented.

2.1. Regulated Assets Base

Capital costs comprise a certain amount of depreciation and a certain amount of financial return on fixed capital. These components are calculated on the basis of the RAB valuation which is carried out using a "current economic costs" methodology, the main principles of which were decided by the Special Commission set up by virtue of Article 81 of the rectifying finance law of 28th December 2001, responsible for determining the price of the State's transfer of its natural gas transmission network.

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

- 50 years for the pipelines;
- 30 years for the compression facilities.

The assets are reassessed every year on 1st January. The reassessment index applicable is the July-to-July consumer price index excluding tobacco, as calculated by INSEE for all households resident in France.

Since 2006, the conventional date for recording assets in the RAB is 1st January of the year following their commissioning (instead of 1st July of the year of their commissioning for assets commissioned before this date).

The RAB and capital costs calculation for the tariff validity period takes into account all investment forecasts provided by the operators. These forecasts have increased sharply compared to previous exercises in particular for TIGF.

The operators' investment efforts mainly concern projects to increase network capacity and to meet their commitments to public service and regulations regarding security and the environment.

2.2. The rate of return on assets

The methodology adopted for determining the basic rate of return on assets is based on the weighted average cost of capital (WACC) for a normative financial structure. The operator's rate of return should both enable him to finance the interest charges on his debt and provide him with a level of profitability on his shareholder's equity comparable to that otherwise obtainable for investments bearing similar levels of risk.

The cost of shareholder's equity is estimated using the "Capital Asset Pricing Model" (CAPM, or MEDAF) methodology.

As for each new tariff proposal, CRE re-examined the different parameters used to calculate the WACC and the resulting bracket of values. It also used the study commissioned from an external consultant on the weighted average cost of capital of electric and gas infrastructures conducted in autumn 2007. The purpose of the study was to present a comparative analysis of rates applicable by European regulators and to determine a bracket of values for each of the elements comprising the WACC.

For the present tariff proposal, CRE maintains the value adopted for the tariff currently in force, i.e. 7.25 % actual before tax, on the basis of value brackets for each of the parameters used in the WACC formula. Estimates for each of these parameters are given in the table below:

Real risk-free rate (*)	2.3 %
Debt spread	0.4 %
Market premium	4.5 %
Equity capital beta	1
Gearing (debt/debt + equity)	40 %
Corporate tax rate	34.43 %
Cost of debt (**)	2.7 %
Equity capital cost (**)	10.3 %
Weighted average cost of capital (**)	7.25 %

(*) i.e. a nominal risk-free rate of 4.2 %
(**) actual before corporation tax

2.3. Incentive for investment system

In the current tariff structure, a 125 base-point bonus is applicable to all investments commissioned as from 1st January 2004. CRE may decide to grant a 300 base-point bonus on a case-by-case basis, for a five- or ten-year period, to investments contributing significantly to the improvement of market operation, based on a TSO's formal, reasoned request.

CRE recommends modifying the system for incentive to invest in gas transmission networks as follows:

- suppression of the 125 base-point bonus previously applicable to all investments in the transmission network in operation as from 1st January 2004;
- allocation of a 300 base-point bonus for ten years for all investments on the main network leading to the creation of additional capacities or a reduction in the number of balancing zones.

The goal of this proposal is to more clearly define the incentives for investment while offering better visibility to TSOs.

Return on investments which are a consequence of transporters' commitments (safety and environment regulations, replacement due to obsolescence, continuity of supply, connection to new gas consumers including electric power plants...) will now be equal to the rate of the weighted average cost of capital, i.e. 7.25 %.

Investments leading to increased transmission capacity on the main network or reduction in the number of balancing zones will improve security of supply and foster competitiveness by improving conditions of access to the French market for new candidates. For this reason, they will benefit from a 300 base-point bonus for ten years.

The items concerned by this measure are:

- the development of entry and exit capacities at interconnection points, from LNG terminals and underground storage facilities, and the associated reinforcements of the network node;
- investments creating link capacities between balancing zones or interfaces between transporters and the associated reinforcements of the network node;
- investments leading to a reduction in the number of balancing zones and the associated reinforcements of the network node.

The new incentive system will be applicable in such a way that all past decisions concerning bonuses and increases in return rates will remain valid:

Concerning the 125 base-point bonus:

- investments commissioned between 1st January 2004 and 31st December 2008 will benefit from the bonus;
- investments planned before 31st December 2007 and operational as from 1st January 2009 will benefit from the bonus;
- investments planned after 1st January 2008 and operational as from 1st January 2009 will not benefit from the bonus.

Concerning the 300 base-point bonus:

- any decisions made by CRE concerning requests for increased rates remain valid. when appropriate, the investments in question benefit from the bonus in compliance with the CRE decision;
- any investments approved before 31st December 2007 for which the CRE did not receive a request for increased rates, will not benefit from the bonus;
- any investments approved after 1st January 2008, eligible for the bonus given the criteria above and operational as from 1st January 2009, benefit from the bonus.

2.4. Return on the financial cost of investments in the pre-operational phase

Capital costs to cover through the gas transmission tariffs also include the financial cost of current capital assets. The amount of these current capital assets is equal to the average of their estimated rate on 1st January and 31st December for each year the tariff applies, taking into account the expenditure incurred during the year. Concerning the tariff in force, this return is determined by applying the basic RAB rate of return to this amount.

CRE recommends that as from 1st January 2009, this rate of return should be determined on the basis of the methodology generally used for assets under construction, taking into account an interest rate comparable to the cost of debt, i.e. 4.6 % actual before tax.

The return on current capital assets at the cost of debt is coherent with covering this cost through transmission tariffs each year. The operators can choose an accounting option which brings into play assets under construction thereby including them in projected investment costs, which would be coherent with expected changes in international accounting standards. If this were the case, assets under construction would therefore be included in the RAB. If this accounting option were to be adopted by the TSOs for the forthcoming tariff structure, the return on current capital assets would subsequently be corrected accordingly via the CRCP so that these assets under construction would not be taken into consideration twice.

2.5. Processing of stranded costs

CRE recommends that the residual book value of assets removed from the inventory before the end of their lifetime (stranded costs), in addition to costs relating to technical studies and preparatory steps which cannot be capitalised if the projects concerned do not see the day, should be included in the capital costs to be covered by the tariff. These costs will be taken into account on a case-by-case basis, with the operators presenting formal, reasoned requests to CRE. In the event of removal of assets, the resulting proceeds will be deducted from the net book value covered by capital costs.

These changes will make it easier to decide on new investments by reducing the long-term financial risk for operators.

For the forthcoming tariff period, estimates of the net book value of assets removed from the inventory before the end of their lifetime amount to around 2 M€ per year on average for GRTgaz and to less than 1 M€ per year on average for TIGF.

3. Total charges to be covered

3.1. Operating costs

- GRTgaz :

M€	**2009**
Gross operating costs	822.2
Operating revenue	- 220.3
Total net operating costs (OPEX)	**601.9**

For the 2010-2012 period, excluding any significant variations in the price of energy, the net OPEX values progress each year based on the level of charges for the previous year multiplied by a coefficient equal to the sum of the average annual variation in the consumer price index excluding tobacco over the previous calendar year as it is calculated by INSEE (CPI), and a factor equal to + 1.1 %.

M€	2009
Net operating costs	601.9
Energy costs	*- 131.1*
costs linked to the inter-operator agreement with TIGF	*- 19.2*
centrally-managed costs	*- 58.9*
revenue from connections to combined cycle - gas turbines	*+ 38.6*
Reference base for manageable charges	**431.3**

The reference base for manageable charges related to productivity measures carried out by GRTgaz corresponds to the net operating charges minus the deducted centrally-managed costs in addition to the cost items and revenues covered by the CRCP. This reference base, set at 431.3 M€ in 2009, will progress over the 2010-2012 period according to an annual variation percentage equal to the CPI + 0.26 %.

- TIGF:

M€	2009	2010	2009-2010 average
Gross operating costs *of which energy costs*	99.7 *11.0*	107.6 *12.2*	103.6 *11.6*
Operating revenue *of which income linked to the inter-operator agreement with GRTgaz*	31.0 *19.2*	51.6 *31.8*	41.3 *25.5*
Total net operating costs	**68.7**	**56.0**	**62.3**

3.2. Capital costs

- GRTgaz : Projected figures for RAB

M€	2008 (estimated)	2009	2010	2011	2012
RAB on 1/1/n	5 572	5 934	6 346	6 933	7 045
Investments (*)	480	560	734	275	573
Depreciation	-263	-273	-282	-301	-310
Revaluation	144	124	136	138	146
RAB on 31/12/n	5 934	6 346	6 933	7 045	7 454

(*) Investments included in the RAB

- TIGF: Projected figures for RAB

M€	2008 (estimated)	2009	2010
RAB on 1/1/n	624	821	1 043
Investments (*)	206	227	103
Depreciation	-32	-35	-43
Revaluation	23	30	27
RAB on 31/12/n	821	1 043	1 130

(*) Investments included in the RAB

- GRTgaz : projected figures for capital costs

M€	2009	2010	2011	2012
Depreciation of commissioned assets	273.2	282.4	301.1	310.1
Return on commissioned assets	450.5	488.6	541.0	550.1
Return on current assets	32.4	31.0	18.5	33.2
Removal of decommissioned assets	0.0	-2.9	-4.3	-4.2
Stranded costs (at net book value)	0.0	1.7	5.6	1.2
Total Capital Costs	**756.1**	**800.8**	**861.9**	**890.4**

- TIGF: projected figures for capital costs

M€	2009	2010	2009-2010 average
Depreciation of commissioned assets	34.9	42.7	38.8
Return on commissioned assets	66.0	84.8	75.4
Return on current assets	10.1	5.8	7.95
Removal of decommissioned assets	0.0	-0.4	-0.2
Stranded costs (at net book value)	0.0	1.5	0.75
Total Capital Costs	**110.9**	**134.4**	**122.7**

Any variations between the projected capital costs above and costs calculated on the basis of actual figures (investments made, removal of assets, rates of inflation...) will be totally covered by the CRCP mechanism.

3.3. Reconciling the CRCP for 2007-2008

The CRCP balance for 2007 is as follows:

M€	CRCP 2007 balance (actual – projected tariffs)
GRTgaz :	**+ 36.9**
– Revenues downstream transportation, 100 % covered	+ 18.6
– Revenues upstream transportation, 50 % covered	+ 2.7
– Energy item	+ 15.4
– Fines for exceeding capacity (correction of the estimate adopted for 2006)	- 1.3
– Capital costs	+ 2.0
– Participation in connection operations	- 0.5
TIGF:	**+ 9.3**
– Revenues downstream transportation, 100 % covered	+ 5.6
– Revenues upstream transportation, 50 % covered	- 0.2
– Energy item	+ 1.2
– Fines for exceeding capacity (correction of the estimate adopted for 2006)	- 1.0
– Capital costs	+ 3.7

For 2008, the CRCP balance is estimated at + 35.6 M€ for GRTgaz and + 8.0 M€ for TIGF.

These amounts will be reconciled over a four-year period with fixed annuities. In compliance with the explanatory statement of the CRE deliberation of 10th November 2006, an interest rate equal to the basic RAB rate of return, i.e. 7.25 % will be applicable annualy to these amounts.

This results in a reduction of charges to recover through forthcoming tariffs of 23.1 M€ per year for GRTgaz and 5.5 M€ per year for TIGF.

3.4. Authorised revenue

The charges to be recovered through the tariff for each TSO are as follows:

- GRTgaz:

M€	**2009**	**2010**	**2011**	**2012**
Capital costs	756.1	800.8	861.9	890.4
Net operating costs	601.9	CPI + 1.1 % (*)		
CRCP 2007-2008	- 23.1	- 23.1	- 23.1	- 23.1
Total authorised revenue	1 334.9			

(*) Excluding significant variation in the price of energy

- TIGF:

M€	**2009-2010 average**
Capital costs	122.7
Net operating costs	62.3
CRCP 2007-2008	- 5.5
Total authorised revenue	179.5

III - Projected transmission capacity subscriptions

1. Main network

The projected subscriptions adopted for the main network are as follows:

- at main network exit points, they are based on those adopted for the regional network;
- for the other main network points, the projections are determined on the basis of capacities actually subscribed in 2007 and 2008 and progression forecasted over the 2009-2012 period for GRTgaz and for 2009 and 2010 for TIGF. These projections take into consideration consumption on the national territory, new capacities launched by the TSOs and new subscription capacities linked to increased competition.

The projected figures for firm annual subscription capacities at main network entry points from interconnections and LNGs adopted for 2009 for GRTgaz and for 2009-2010 for TIGF, lead us to consider the following average growth compared to the subscription capacities used for former tariff periods:

	Average increase in projected subscription capacities at main network entrance points (PIR and PITTM)
GRTgaz	+ 11 %
TIGF	+ 33 %

2. Regional network and delivery capacities

Subscription capacities forecasted for the regional network take into consideration both the projected figures for standardised subscription capacities at Transport Distribution Interface Points (PITD) and subscription capacities of consumers directly connected to the transmission network and of Regional Network Interconnection Points (PIRR).

- Standardised subscription capacities at the transport distribution interface points (PITD):

The system of standardised subscriptions makes it possible to guarantee the subscribed transmission capacities needed to supply the distribution networks in the event of a cold spell. It consists in the TSOs automatically allocating delivery capacities at the transport distribution interface points (PITD) according to the portfolio of customers supplied by each shipper downstream of each PITD. Details of the way it works are to be found in the document "System of standardised transmission capacity subscriptions at transport distribution interface points (PITD)" published on the web site of the 2007 gas working group (http://www.gtg2007.com).

The application of this system means that a firm annual delivery capacity ("standardised capacity") is allocated to each shipper at each transport distribution interface point (PITD) by the TSOs. This is equal to the sum:

- of the annual capacities subscribed on the distribution network for the "subscription" delivery points (PDL) supplied downstream of the transport distribution interface point (PITD) under consideration;
- capacities calculated by GRTgaz for "non-subscription" PDLs downstream of the transport distribution interface point (PITD) under consideration by multiplying the daily peak consumption of "non-subscription" PDLs by the corresponding "A" adjustment coefficient.

The "A" adjustment coefficients applicable as from 1st January 2009 are defined in the table below for each balancing zone and each distribution system operator (DSO):

Balancing zone	North		South	TIGF
	B gas	H gas		
GrDF	1.126	1.029	0.963	1.073
Régaz	not applicable	not applicable	not applicable	1,005
Other DSOs	1	1	1	1

A coefficients may change on 1st April each year to take into account updates in 2 %-risk peak consumption calculated by the TSOs for each balancing zone, in addition to updates in the profiling system and the reference base for annual "non-subscsription" PDL consumptions calculated by the DSOs.

The study of winter 2007-2008 carried out by GRTgaz shows a drop in the 2 %-risk peak consumption on its network. Under these conditions, the level of standardised delivery capacity subscriptions at transport distribution interface points (PITD) adopted for GRTgaz is determined on the basis of the average of results obtained in the last three studies concerning the winter. This level of subscription drops by 2 % compared to the level adopted for the previous tariff structure.

For TIGF, the level of standardised delivery capacity subscriptions at transport distribution interface points (PITD) is stable compared to the level adopted for the previous tariff structure.

- Delivery capacity subscriptions for consumers directly connected to the transmission networks and regional network interconnection points (PIRR) :

The projected subscription capacities for these delivery points are determined on the basis of capacities actually subscribed in 2007 and 2008 and growth forecasts for the following years.

The projected delivery capacity subscriptions for consumers directly connected to the transmission network and regional network interconnection points (PIRR) show an increase of 14 % for GRTgaz and 12.5 % for TIGF compared to projections in previous tariff structures. This sharp increase is due mainly to the following factors:

- the commissioning of combined gas cycle turbines on the GRTgaz network;
- underestimation of subscriptions for previous tariff structures compared to actual 2007 results on the TIGF network.

- Progression of subscriptions on the regional network:

	Progression of transportation capacity subscriptions on the regional network
GRTgaz	+ 0.8 %
TIGF	+ 1.55 %

3. Overall progression of subscriptions

The projected capacity subscriptions for 2009 for GRTgaz and for 2009-2010 for TIGF result in the following average increase compared to projected capacity subscriptions used in previous tariff structures:

	Average increase in projected capacity subscriptions
GRTgaz	+ 2 %
TIGF	+ 10 %

IV - Tariff structure

The organisation of gas transmission in France will change as from 1st January 2009 to foster and keep pace with market development. The main elements of change are:

- the transformation of the network access offer with a reduced number of balancing zones as from 1st January 2009. From then on, all gas consumers in the great North zone will have direct access to a wider choice of gas supplies. The suppliers present in this merged zone will benefit from more choice between the zone's different entry points;
- the reorganisation and simplification of tariff rules between the GRTgaz networks and TIGF in the south of France.

These changes require an adjustment of the tariff structure while maintaining the transmission networks' fundamental tariff principles in force:

- a tariff based 100 % on capacity;
- an entry-exit tariff per main network balancing zone where the overall structure evolves from 5 to 3 balancing zones for H gas;
- the total independence of entry and exit subscriptions;
- a distance-linked tariff on the regional network with a system of standardised capacity subscriptions at transmission distribution interface points (PITD).

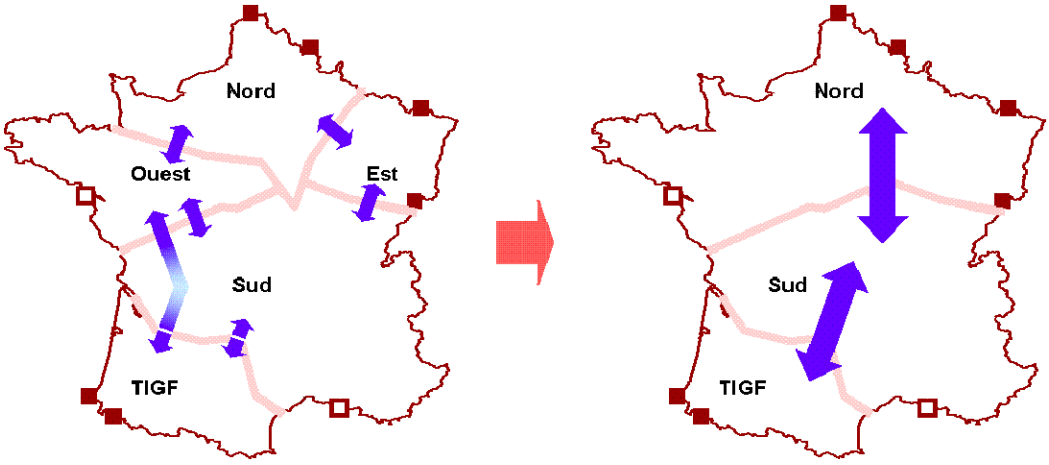
1. Overall structure

On 1st January 2009, a "great North zone" will be created on the GRTgaz network resulting from the merger of the current West, North and East zones. At the level of the future great North zone, this change will be implemented while maintaining the firm entry point capacities of the current West, North and East zones and without modifying the border with the South Zone.

At the national level, the H gas network will then be organised along the following principles:

- three balancing zones connected in series: two zones, the North and South zones, operated by GRTgaz and a zone operated by TIGF;
- a single link between the North and South zones of GRTgaz;
- a single interface between the GRTgaz (at the level of the South zone) and TIGF networks, operated jointly by the two TSOs.

For the L gas network, the current system is maintained.



1.1. Nomination on the link between the GRTgaz North and South zones

Shippers do not currently make nominations on the links between the four balancing zones of the GRTgaz network. GRTgaz determines the amounts allocated to shippers on these links after use in order to optimise any imbalance between balancing zones incurred by the shippers, within the limits of the link capacities they have subscribed. On the other hand, this does not allow for optimising the contractual capacity at these points through implementing mechanisms for reallocating the unused capacity (long or short term "use it or lose it" [UIOLI]).

The results of GRTgaz marketing of capacities available after 1st April 2009 at the North-South link for a four-year period reveal a demand on the part of the shippers exceeding the available North-South capacity.

Given the context, nomination at the North-South link becomes mandatory as from 1st January 2009 so that capacity at this link will be used to the full. Measures making balancing easier for shippers in the GRTgaz South zone will be included in the changes.

1.2. Joint marketing of capacities at the GRTgaz-TIGF interface

As from 1st January 2009, GRTgaz and TIGF will be coupling capacities at their interface and marketing them jointly with the exception of daily transmission capacities.

The open subscription periods are conducted jointly for capacities available from 1st April 2009 for multi-year, multi-season, annual, seasonal and monthly periods.

A short-term interruptible "use it or lose it" service (UIOLI CT) will be introduced by TIGF in coherence with the one already offered by GRTgaz to optimise use of the interface between the two transmission networks in the event of congestion.

2. Changes in the level of the different tariff charges

2.1. Level of tariff charges at the North-South link and GRTgaz-TIGF interface

In view of the forthcoming rebalancing of gas flows between balancing zones, link charges between GRTgaz's new North zone and its South zone will eventually be levelled, as will the interface charges between the GRTgaz South zone and the TIGF zone.

However, the outcome of GRTgaz marketing of capacities available after 1st April 2009 reveal a greater market demand for link capacities in the North-to-South direction.

As a result, tariff charges of 200 €/MWh a day per year for the North-to-South direction and 150 €/MWh a day per year for the South-to-North direction are recommended. The tariff charges for both directions could be levelled once additional capacities have been developed in the south of France.

Concerning the interface between the GRTgaz and TIGF networks, it is recommended to level the tariff charges in both directions, i.e. 150 €/MWh a day per year, in keeping with the trend to reduce transportation costs from GRTgaz to TIGF and give easier access to the TIGF zone. This strategy is coherent with the outcome of the two TSOs capacity marketing efforts.

2.2. Impact on the GRTgaz network of the disappearance of the North-East and North-West links

The implementation of the great North zone on the GRTgaz network as from 1st January 2009 will entail the loss of revenues from link capacity sales between both the North and East zones and the North and West zones (i.e. around 45 % of the overall revenue from link capacity sales).

This loss of revenue is compensated by an overall increase in the main tariff charges on the GRTgaz main network.

2.3. Distribution of tariff charges between the main and regional networks

Gas transmission tariffs are determined so as take into account costs specific to the main and regional networks. The current GRTgaz tariff was determined taking into consideration a distribution of projected income for 2007 and 2008 to the amount of 52 % for the main network and 48 % for the regional. The TIGF tariff was determined taking into consideration a distribution of projected income for 2007 and 2008 to the amount of 57 % for the main network and 43 % for the regional.

In the present tariff proposal, the distribution of projected income between the main and regional networks is maintained for GRTgaz insofar as the significant investments made to decongest the main network are offset by the expenditure on safety and environmental issues on the regional network.

Regarding TIGF, the main network's contribution to projected 2009 and 2010 income is increased to 61 % due to the greater increase in investments on this part of its network.

2.4. Interruptible capacities at the North-South link

The new transmission organisation as from 1st January 2009 entails the loss of:

- North-West, North-East, East-South and West-South link capacities replaced by the North-South link capacities;
- capacities at the Dordogne interconnection point with the GRTgaz West and the TIGF zones, replaced by capacities both at the North-South link and the South-TIGF interface.

The capacities at the Dordogne interconnection point in the West-to-TIGF direction, i.e. around 40 GWh a day, are currently sold as firm capacities. The disappearance of the West zone means that these capacities become interruptible insofar as they depend on the presence of gas in the western sector of the future great North zone supplied by the Montoir LNG terminal.

In the North-to-South direction, capacities up to 230 GWh a day will be sold as firm capacities and up to 220 GWh a day as interruptible capacities. Factors with an impact on the availability of interruptible capacities are Montoir terminal supplies, the climate and the allocation of part of these capacities to injection in the Sediane Littoral transport storage interface point (PITS) (cf. IV.3.2).

Given the respective interruption probabilities, the recommendation is to set the tariff charge applicable to interruptible annual capacity subscriptions at 50 % of the charge applicable to firm annual capacity subscriptions for the North-South link in both directions, at 75 % at the GRTgaz-TIGF interface in the TIGF to GRTgaz South direction and at 90 % in the GRTgaz South to TIGF direction.

2.5. Summary of the changes in tariff charges.

Concerning GRTgaz, after setting the level of tariff charges at the North-South link and the interface with the TIGF network (see above), the main tariff charges increase by about 16 % on the main network and 6 % on the regional.

On the TIGF network, firm entry capacities at Larrau will be created as from 2010. The tariff charge for firm entry capacities at Biriatou and Larrau is set at the same level as for firm entry capacities at network interconnection points (PIR) on the GRTgaz network. The outcome of setting the level of tariff charges at the interface with GRTgaz and at entry points at Biriatou and Larrau as stated above, will be that the other tariff charges increase by about 6 %.

3. Coordination among the gas infrastructure operators

3.1. Interface between the transmission networks and the LNG terminals

The upcoming tariff period could see considerable changes concerning LNG terminals:

- commissioning of the Fos-Cavaou terminal;
- investment decisions and potential commissioning of extensions to the existing terminals (Montoir in particular);
- investment decisions concerning projects for new LNG terminals.

Given the situation, CRE intends to implement the following changes in existing rules.

a) Extension of the automatic allocation rule concerning the transmission network entry capacities depending on the assigned regasification capacities

Assigned regasification capacities, whatever their level and duration, entail the right and the obligation to subscribe to the corresponding transmission network entry capacities. This rule means that:

- shippers are guaranteed that access to the transmission network will be trouble-free if they have subscribed to regasification capacities;
- any investment costs in the transmission network linked to LNG terminals are covered, at least partly, by the shippers' capacity subscriptions.

LNG terminal operators and TSOs should therefore coordinate their investment efforts to offer shippers consistent capacities on both the LNG terminals and the transmission networks.

b) Level of entry tariff charges from LNG terminals

CRE recommends maintaining the current principle of equalising tariff charges for entry to the transmission network from LNG terminals.

- For basing tariffs on marginal transmission network development costs would be very complicated to implement insofar as the TSO cannot distinguish infrastructures on the main network which contribute partially or entirely to:
- determining entry capacities on the transmission network from the terminal in question;
- and determining other capacities sold at entry and exit points to the balancing zone concerned.

In addition to which, all the various LNG terminal and land interconnection projects involve infrastructures which are part of the network node[1] of the main networks in each balancing zone. Basing tariffs on the marginal costs would lead to tariff charges depending on the order in which the different projects are initiated.

CRE also proposes introducing an economic test to check that the costs linked directly to each project are borne by the shippers concerned if a terminal project entails very high investment costs on the transmission networks. This economic test is based on the principle that income from subscriptions of transmission network entry capacities from the LNG terminal should make it possible to cover the cost of all constructions between the terminal and the transmission network node over a period of 20 years.

If this prerequisite is not met, the charge for entry to the transmission network from the LNG terminal will be increased or the TSO will require the terminal operator to contribute to covering the construction costs.

[1] The main transmission network node comprises the meshed part of the network enabling gas transport from several entry points.

c) The Verdon terminal

Studies to determine the best connection scenario for the Verdon terminal are underway. Depending on the results, a terminal located at Verdon will be connected either to the GRTgaz or the TIGF network.

Given the situation, CRE will determine the tariff rules concerning this terminal at a later date. They will take into consideration the specificities of this terminal which will be connected near the borderline between the GRTgaz and TIGF networks.

3.2. Interface between the transmission networks and the storage facilities

The tariff rules at the transport storage interface points (PITS) are determined so as to guarantee all shippers the availability of the transmission capacities corresponding to the injection and withdrawal capacities allocated for a given storage group within the limits of the network's capacities.

a) Reorganisation of the GRTgaz network transport-storage interface

The creation of the great North zone makes it necessary to redefine the interfaces between the Gaz de France Direction des Grandes Infrastructures (DGI) storage facilities and the GRTgaz network as from 1st January 2009.

- Organisation of the transport-storage interfaces in the first quarter of 2009:

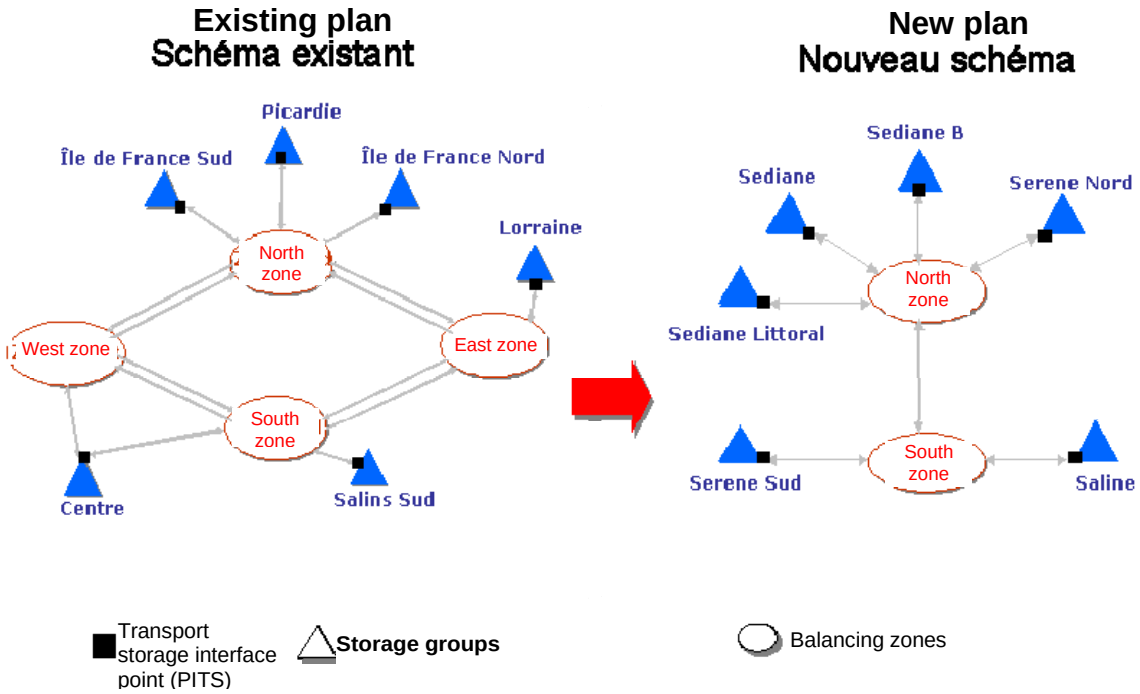
Since the storage year is defined as beginning on 1st April of year N and ending on 31st March in year N + 1, storage capacities subscribed for the period beginning on 1st April 2008 are valid until 31st March 2009.

Therefore, during the first quarter of 2009, the current Gaz de France DGI storage offer will coexist with the new GRTgaz-network structure comprising two balancing zones.

The operating rules applying to the transport storage interface points (PITS) during this period are published on the GRTgaz web site.

- Organisation of transport-storage interfaces as from 1st April 2009:

Due to the creation of the GRTgaz network's great North zone and changes in Gaz de France DGI's storage offer modifying storage groups as from 1st April 2009, the following recommendations are made concerning the transport storage interface points (PITS) of each GRTgaz balancing zone:



The "Saline" transport storage interface point (PITS) will merge the DGI storage offer known as "Saline" and "Multicyclage".

The existing "Centre" group, accessible from the current West and South zones on the GRTgaz network, will be broken down into two distinct groups:

- the "Sediane Littoral" group, accessible from GRTgaz's future great North zone;
- the "Serene Sud" group, accessible from GRTgaz's South zone.

The capacities at the "Sediane Littoral" and "Serene Sud" transport storage interface points (PITS) will be as follows:

Entry from the transport storage interface points (PITS)	GRTgaz North Zone (GWh a day)		GRTgaz South Zone (GWh a day)	
	Firm	Interruptible	Firm	Interruptible
Sediane Littoral (H gas)	430	50	-	-
Serene Sud (H gas)	-	-	300	70

Exit to transport storage interface points (PITS)	GRTgaz North Zone (GWh a day)		GRTgaz South Zone (GWh a day)	
	Firm	Interruptible	Firm	Interruptible
Sediane Littoral (H gas)	170	185	-	-
Serene Sud (H gas)	-	-	200	130

b) Level of tariff charges at transport storage interface points (PITS)

In view of the splitting of the "Centre" group into two, namely "Sediane Littoral" and "Serene Sud" (each group being accessible from the balancing zone to which it belongs), both entry and exit tariffs at the transport storage interface points (PITS) on the GRTgaz network will be levelled as from 1st April 2009.

c) Interruptible injection capacities in the “Sediane Littoral” group

On the GRTgaz network, the same material infrastructures ensure both transmission for injection into the “Sediane Littoral” storage facility and transportation from the North to the South zone. In addition to which, the gas transported comes from the North zone entry points which include the Montoir terminal. This means that gas from the Montoir terminal turns 200 GWh a day of interruptible capacities into firm and these latter will be shared between the exit to the “Sediane Littoral” transport storage interface point (PITS) and the North-to-South link as follows for the summer season:

- for the first 150 GWh a day made available by the gas send-out from Montoir:
  - 40 % will be dedicated to the North-South link, i.e. 60 GWh a day;
  - 60 % will be dedicated to injection at the Sediane Littoral transport storage interface point (PITS), i.e. 90 GWh a day;
- the subsequent 50 GWh a day will be allocated entirely to the North-to-South link.

For the winter period, all the capacities will be dedicated to the North-South link.

GRTgaz will publish the operational rules for availability of interruptible capacities and the projected availability of capacity at the North-South link.

Moreover, on the basis of past gas send-outs from Montoir, interruptions in the interruptible injection capacities at the Sediane Littoral and Serene Sud transport storage interface points (PITS) appear more likely than at the Centre transport storage interface point (PITS). As a result, the tariff of interruptible annual injection capacities in the Sediane Littoral and Serene Sud transport storage interface points (PITS) is set at 50 % of the price of the corresponding firm capacities. The tariff of interruptible annual withdrawal capacities in the Sediane Littoral and Serene Sud transport storage interface points (PITS) is set at 75 % of the price of the corresponding firm capacities.

4. Changes in the service offer for users of gas transmission networks

4.1. Suppression of the interruptible delivery capacities at the PITDs

Given the fact that the transmission network upstream of transport distribution interface points (PITD) has been consolidated over the years, the recommendation is that interruptible delivery capacities at the transport distribution interface points (PITD) should no longer be on the market as from 1st April 2010, except when these interruptible capacities are necessary to ensure gas transportation during 2 %-risk cold peaks. The TSOs will make available the list of transport distribution interface points (PITD) concerned by this measure on their websites.

4.2. Industry access to gas exchange points (PEG)

In order to make it easier for consumers linked directly to the transmission network to access the natural gas wholesale market and to follow up experiments carried out in 2008, the following mechanism is recommended:

- the industrial customer signs a transportation contract with the TSO and becomes a shipper. In this way, he has access to the PEG to secure his gas supply and subscribes his downstream transportation capacities directly with the TSO;
- the industrial customer may delegate his balancing obligations to a third party known as a “balancing shipper”. He transfers to the latter the total volume of gas purchased from the PEG, the downstream transport capacities and the balancing tolerance linked to the transferred delivery capacities.

Initial feedback shows that this scenario meets industrial customer requirements and may contribute to fostering both increased competitiveness and liquidity on the wholesale market with new players at the PEGs.

4.3. Level of tariff charges at PEGs

Powernext's project to create an organised gas market in France will increase liquidity at the PEGs and improve transparency regarding the calculation of wholesale prices. To ensure an identical PEG tariff in both bilateral and stock market transactions, nominations by the stock exchange clearing house, which collects the nominations made by various stock market participants to TSOs, will not be subject to payment of the variable access charge to PEGs.

4.4. Access conditions to the transmission network for combined cycle - gas turbines

According to the TSOs, 9 combined cycle - gas turbines (CCGT) will be commissioned between 2008 and 2010, corresponding to 3,900 MW of electricity and an annual gas consumption of around 30 TWh. This tendency could continue beyond 2010 with more than 15 other projects under study.

The large number of power stations with specific needs regarding flexibility corresponding to a production at peak and semi-base loads, could lead to modifying the way gas transmission networks are operated and their operating rules.

Under these conditions, CRE will make a new tariff proposal if the tariff and operational rules applicable to these facilities make this necessary, particularly in view of their requirements in terms of scheduled variations differing from those currently in force for the other customers connected to the transmission network.

4.5. Changes in GRTgaz's releasable capacity offer

No releasable capacities are projected at the North-South link and the interface between the two TSOs since these are new products where sales have been limited to a maximum of four years to open up the periodical redistribution of these capacities to all shippers, in compliance with transparent and non-discriminatory rules

4.6. Auction of daily capacities

TSOs are allowed to auction firm daily capacities which are still available after the sales period at regulated tariffs to optimise use of the transmission network. Feedback shows that this practice tends to be detrimental to the sales of annual or monthly capacities. As a result, a reserve price set at $1/200^{th}$ of the firm annual capacity price has been introduced to avoid this offer becoming a substitute for firm capacity subscriptions.

4.7. Platform for a secondary market dedicated to capacities

GRTgaz is considering offering access to an electronic platform for exchanging short-term transmission capacities to facilitate capacity transfers on the secondary market.

TSOs have been granted permission to sell such a service as an experiment.

Details of how this service works will be published by TSOs on their web sites.

This service will be included in the tariff after feedback.

4.8. Daily subscription offer for industrial site tests.

GRTgaz offers an optional transportation deal on an experimental basis for sites connected directly to its network. This offer is a response to the requirements of certain industries in test phases subject to technical contingencies, where they wish to subscribe to a daily capacity without knowing exactly when they will use it.

Details of how this service works will be published by GRTgaz on its web site.

This service will be included in the GRTgaz tariff after feedback.

5. Changes in tariff rules

Changes in the rules of capacity allocation and subscription will continue to be determined by the TSOs after discussion with the network users and prior information to CRE. By virtue of article 37-1 of the 10th February 2000 law, CRE will specify the rules relative to conditions of use of the natural gas transmission networks, when necessary through decisions published in the Official Gazette of the French Republic.

Changes in the balancing rules are set by CRE based on TSO recommendations following discussion with the transmission network users.

TARIFFS FOR USE OF THE NATURAL GAS TRANSMISSION NETWORKS

I. Definitions

Network Interconnection Point (PIR):

Physical or notional interface point between the transmission networks of two transmission system operators (TSO)

Regional Network Interconnection Point (PIRR):

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

Transmission-LNG terminal Interface Point (PITTM):

Physical or notional interface point between a transmission network and one or several LNG terminals.

Transport Storage Interface Point (PITS):

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

Transmission Production Interface Point (PITP):

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

Transmission Distribution Interface Point (PITD):

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

Entry charges to the main network

TCE main network entry capacity charge,
applicable to daily capacity subscriptions at main network entry points from a network interconnection point (PIR) or a transmission LNG terminal interconnection point (PITTM);

TCES main network entry capacity charge from storage facilities,
applicable to main network daily entry capacity subscriptions from a transport storage interface point (PITS);

TCEP main network entry capacity charge from a gas production facility,,
applicable to main network daily entry capacity subscriptions from a PITP;

Exit charges from the main network:

TCST exit capacity charge at transmission network interconnection points,
applicable to daily exit capacity subscriptions of a network interconnection point (PIR);

TCS main network exit capacity charge,
applicable to main network daily exit capacity subscriptions, except to a transport storage interface point (PITS) or a network interconnection point (PIR);

TCSS main network exit capacity charge to storages,
applicable to main network daily exit capacity subscriptions to a transport storage interface point (PITS);

TP proximity charge,
applicable to volumes of gas injected at a transmission network entry point and withdrawn at an exit zone in close proximity to this point;

Link charge between balancing zones:

TCLZ link capacity charge,
applicable to daily link capacity subscriptions between balancing zones on the main network of a single TSO;

Transmission charge on the regional network:

TCR regional network transmission capacity charge,
applicable to regional network daily transmission capacity subscriptions;

Delivery charge :

TCL delivery capacity charge,
applicable to daily delivery capacity subscriptions at a delivery point;

Firm capacity:

Gas transportation capacity guaranteed non-interruptible by contract with the TSO.

Reverse capacity on the main network;

Capacity enabling the shipper to make nominations in the opposite direction to the main flow direction when gas can only flow in one direction. On a given day, it can only be used if the overall flow resulting from all the shippers' nominations runs in the main flow direction.

Interruptible capacity:

Gas transmission capacity which the TSO can interrupt under the conditions laid out in the contract for use of the gas transmission network.

Releasable capacity:

Firm capacity which the shipper commits to return to the TSO at any time if requested.

Shipper:

Individual or legal entity entering into a transportation contract with a TSO on the gas transmission network. Depending on the case, the shipper is the eligible customer, the supplier or their representative as defined in article 2 of the 3rd January 2003 law.

"Subscription" delivery points (PDL)

A delivery point on the public distribution network coming under the T4 and TP options of the current tariffs for using the distribution network.

"Non-subscription" delivery points (PDL)

A delivery point on the public distribution network coming under the T1, T2 and T3 options of the current tariffs for using the distribution network.

Authorised revenue:

Sum of the forecasted capital and operating costs increased or reduced by the CRCP annuity, which has been adopted for establishing each TSO's tariff schedule.

II. Principles governing the rate of return for transimission system operators

The principles governing the rate of return defined below are set for GRTgaz and TIGF for a four-year period beginning on 1st January 2009.

1. Calculation of capital costs

Capital costs include return on and depreciation of the Regulated Assets Base (RAB) in addition to return on current assets and stranded costs where applicable.

The scope of the RAB includes investments made by the TSOs. RAB assets are revalued annually on 1st January. This is achieved using a revaluation index equal to the July-to-July consumer price index excluding tobacco as calculated by INSEE for all households resident in France.

The sum of current assets is equal to the average for each year of the tariff period between the values of current assets on 1st January and 31st December, taking into consideration expenditure during the exercise.

Stranded costs linked to removal of assets from the RAB before the end of their economic lifetime are covered by the tariff at their net book value. Approval for the removal of these assets is granted on the basis of reasoned requests made by operators to CRE.

2. Rate of rturn

The RAB rate of return is 7.25 %.

A bonus of 125 base points is applicable to investments commissioned between 1st January 2004 and 31st December 2008 in addition to those decided before 1st January 2008 and commissioned before 1st January 2009.

The rate of return on current assets amounts to 4.6 % as from 1st January 2009.

3. Incentive for investment

Investments leading to creating additional transportation capacities on the main network or to reducing the number of balancing zones benefit from a 300 base-point bonus compared to the RAB rate of return, applicable for ten years.

III. Tariff for use of the GRTgaz network

The tariff for use of the GRTgaz network as defined below will apply as from 1st January 2009 for a four-year period.

1. Authorised revenue trajectory

GRTgaz's authorised revenue trajectory is set for four years. It is made up of the following elements:

M€	**2009**	**2010**	**2011**	**2012**
Capital costs	756.1	800.8	861.9	890.4
Net operating costs	601.9	CRI + 1.1 %		
2007 – 2008 CRCP	- 23.1	- 23.1	- 23.1	- 23.1
Total authorised revenue:	1 334.9			

- Capital costs (CAPEX):

The possible variations between the above projections for CAPEX and actual expenditure are entirely covered by the expenses and revenue clawback account (CRCP) defined in 1.3 below.

- Net operating costs (OPEX):

For 2009, the net OPEX taken into consideration in the authorised revenue adopted for defining the tariff schedule are set at 601.9 M€.

For 2010, 2011 and 2012, excluding variations in energy prices as defined in 1.1 below, the net OPEX taken into consideration in the authorised revenue are determined by applying the following percentage of $\mathbf{Z_1}$ variation to the previous year's amount:

$$\mathbf{Z_1 = CPI + 1.1\%}$$

With CPI corresponding to the previous calendar year's mean annual variation in the consumer price index excluding tobacco as calculated by INSEE for all households throughout France.

At the end of the tariff period, any productivity gains achieved by GRTgaz will be shared in equal parts between the operator and network users.

These productivity gains will be evaluated based on the difference between:

- the total sum of GRTgaz's net manageable operating costs, defined as its net operating costs minus centrally-managed costs and cost and product items covered by the CRCP mechanism, calculated a posteriori on the basis of actual data for 2009, 2010, 2011 and 2012.
- the trajectory of reference for GRTgaz's net manageable operating costs. This trajectory will be calculated at the end of the tariff period for 2010, 2011 and 2012 by applying to each year a variation percentage equal to CPI + 0.26 % based on the reference level adopted for 2009, i.e. 431.3 M€.

1.1. Reconciling the CRCP balance during the tariff period

A first CRCP balance calculated by CRE is reconciled over a four-year period with set annuities as from 1st April 2011. It integrates a device to correct the CRCP forecasted for 2008, variations recorded in 2009 and an estimate of variations in 2010.

At the end of the four-year tariff period, a new CRCP balance calculated by CRE will be taken into consideration for determining tariffs for the following tariff period; it will comprise a device to correct the 2010 CRCP, variations recorded in 2011, forecasted 2012 variations and remaining annuities linked to the first CRCP balance.

The reference amounts of CRCP items are as follows:

M€	GRTgaz			
	2009	2010	2011	2012
Downstream transportation revenues, 100 % covered	923.4			
Upstream transportation revenues, 50 % covered	411.5			
Income from CCGT connections, 100 % covered	38.6	18.1	18.1	12.5
Capital costs, 100 % covered	756.1	800.8	861.9	890.4
Propulsion energy costs and differences in income and costs linked to CO_2 quotas, 80 % covered	131.1	112.8(*)	115.1(*)	118.5(*)
Costs linked to inter-operator contracts, 100 % covered	19.2	31.8	32.6	33.4

(*) In the event of energy price variations exceeding 5 %, the reference sum adopted for propulsion energy charges could be revised at tariff schedule update.

2. Tariff schedule for the use of the GRTgaz network

The detailed GRTgaz tariff schedule is updated on 1st April each year as from 2010.

It is established so as to cover the authorised revenue defined in III-1 each year, taking into account the best available forecast for capacity subscription for the year under consideration.

3. Tariff schedule for use of the GRTgaz network applicable as from 1st January 2009

3.1. Transportation on the main network

The tariff for use of GRTgaz's main network comprises the following charges:

- main network entry capacity charge (TCE);
- link capacity charge between balancing zones (TCLZ);
- exit capacity charge at network interconnection points (PIR) (TCST);
- main network exit capacity charge (TCS)
- proximity charge (TP);
- entry and exit charges at transport storage interface points (PITS) (TCES et TCSS).

At the GRTgaz – TIGF network interface, subscriptions will be seasonable:

- summer season from April to October inclusive;
- winter season from November to March inclusive.

a) Main network entry capacity charge

The charges applicable to annual or seasonal daily entry capacity subscriptions on the main GRTgaz network are given in the following table:

Entry point	**Balancing zone**	**TCE** (€/MWh a day per year or season) Firm subscriptions		**TCE** (coefficient on firm charge) Interruptible subscriptions
Taisnières B	North	70.00		50 %
Taisnières H	North	90.00		50 %
Dunkerque	North	90.00		50 %
Obergailbach	North	90.00		50 %
Montoir	North	85.00		Not applicable
Fos	South	85.00		Not applicable
TIGF	South	Summer: 43.75	Winter: 31.25	75 %

The holding of regasification capacities at the level of an LNG terminal entails the obligation to subscribe to entry capacities on the corresponding transmission networks for the same period and to the same level.

At Montoir and Fos Transmission-LNG terminal interface points (PITTM) :

- all shippers subscribing to a "continuous" service with LNG terminal operators will be allocated an firm annual capacity (C) equal to:

  $C = Q_{Aexp} / Q_{TM} * C_{PITTM}$

  where:

  Q_{Aexp} = annual regasification capacity subscribed by the shipper with the terminal;

  Q_{TM} = firm total annual regasification capacity of the Montoir LNG terminal for the Montoir transmission LNG terminal interconnection point (PITTM) or sum of the firm total annual regasification capacity of the Fos Cavaou LNG terminal and the firm total annual regasification capacity of the Fos Tonkin terminal subscribed for the Fos transmission LNG terminal interconnection point (PITTM);

  C_{PITTM} = firm daily entry capacity at PITTM;

- All shippers subscribing to a band or spot service with LNG terminal operators will be allocated a basic firm monthly capacity (C) equal to $1/30^{th}$ of the regasification capacity subscribed with the LNG terminal operators. The price applicable will be equal to $1/12^{th}$ the price of the firm annual subscription.

- At the beginning of each month, the TSO calculates the previous month's maximum daily send-out for each shipper. If this exceeds the capacity C calculated as described above, he will invoice the shipper a monthly subscription of an additional daily supply equal to the difference between the previous month's maximum daily send-out and the capacity C at a price equal to $1/12^{th}$ of the price of the firm annual subscription.

b) Link capacity charge between balancing zones;

The charges applicable to annual daily link capacity subscriptions between the GRTgaz balancing zones are given in the following table:

Link between balancing zones	**TCLZ** (€/MWh a day per year) Firm subscriptions	**TCLZ** (coefficient on firm charge) Interruptible subscriptions
North → South	200	50 %
South → North	150	50 %

c) Exit capacity charge at network interconnection points (PIR)

The charges applicable to annual or seasonal daily exit capacity subscriptions at network interconnection points (PIR) are given in the following table:

Exit to PIRs	**Balancing zone**	**TCST** (€/MWh a day per year or season) Firm subscriptions		**TCST** (coefficient on firm charge) Interruptible subscriptions
TIGF	South	Summer: 43.75	Winter: 31.25	90 %
Oltingue	North	314		75 %
Jura	South	70		75 %

d) Main network exit capacity charge

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

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

The charge for firm annual subscriptions of main GRTgaz network daily exit capacities is the same for all exit zones at 66,5 €/MWh a day per year.

e) Proximity charge

The proximity charge is deducted from the monthly invoice of each shipper concerned. For each shipper, it is applicable every day to the quantity of gas equal 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 charge applies to the following pairs of entry points / exit zones:

Balancing zone	**Entry point**	**Associated exit zone**	**TP** (€/MWh)
North	Taisnières B	Taisnières B area	0.18
North	Taisnières H	Taisnières H area	0.24
North	Dunkerque	Dunkerque area	0.24
North	Obergailbach	Obergailbach area	0.24

f) Storage entry and exit capacity charges

Each GRTgaz balancing zone comprises several transport storage interface points (PITS):

- the North balancing zone comprises four transport storage interface points (PITS): *Sediane Littoral (H gas), Sediane (H gas), Serene Nord (H gas), Sediane B (B gas)*
- the South balancing zone comprises two transport storage interface points (PITS): *Serene Sud (H gas) and Saline (H gas).*

The charges (TCES and TCSS) applicable between 1st January and 31st March 2009 to annual subscriptions of daily entry and exit capacities at transport storage interface point (PITS) are given in the following table:

PITS	**TCES** (€/MWh a day per year)	**TCES** (€/MWh a day per year)
Centre	27.00	5.40
Other transport storage interface points (PITS)	7.00	1.40

The charges (TCES and TCSS) applicable as from 1st April 2009 to annual subscriptions for daily entry and exit capacities at transport storage interface points (PITS) are given in the following table:

PITS	**TCES** (€/MWh a day per year)	**TCES** (€/MWh a day per year)
All transport storage interface points (PITS)	13.00	2.60

GRTgaz allocates annual entry and exit capacities at transport storage interface points (PITS) to each shipper which are respectively equal to the nominal daily withdrawal capacity (increased if necessary by the conditional daily withdrawal capacity) and the nominal daily injection capacity (increased if necessary by the conditional daily injection capacity) subscribed by the shipper in question with the storage operator, within the limits of network capacities.

Interruptible annual entry and exit capacities at transport storage interface points (PITS) are marketed:

- between 1st January and 31st March 2009, at the *Centre* transport storage interface point (PITS). These interruptible annual capacities are only sold when all the firm annual capacities have been subscribed. The price for interruptible annual entry and exit subscriptions at the *Centre* transport storage interface point (PITS) is equal to 75 % of the price of the firm annual daily capacity subscription;
- as from 1st April 2009 at the *Sediane Littoral* and *Serene Sud* transport storage interface points (PITS) . These interruptible annual capacities are only sold when all the firm annual capacities have been subscribed. The price for interruptible annual subscriptions of daily entry capacities from the *Sediane Littoral* and *Serene Sud* transport storage interface points (PITS) is equal to 75 % of the firm annual daily capacity subscription. The price for interruptible annual subscriptions of

daily exit capacities from the *Sediane Littoral* and *Serene Sud* transport storage interface points (PITS) is equal to 50 % of the firm annual daily capacity subscription.

g) Main network reverse capacities

The price for annual subscriptions of daily reverse capacities is equal to 20 % of the firm annual subscription to daily capacities in the prevailing flow direction.

The reverse capacity exists at the following points of the GRTgaz network:

Entry points	Taisnières H
	Obergailbach
Exit to PIR	Oltingue

h) Main network releasable capacities ,

At entry points other than Transmission-LNG terminal interface points (PITTM) , firm capacities known as “releasable" are set up which the shipper commits to return at any time to GRTgaz if requested, for a period of one, two, three or four years.

For all shippers subscribing to more than 20 % of the firm annual capacities for sale at any one of the afore-mentioned points, a fraction R of the part of the subscription above 20 % of the firm annual capacities for sale is converted into releasable capacity.

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

Point concerned	**Dunkerque**	**Obergailbach**	**Taisnières H**	**Taisnières B**
R	20 %	20 %	0 %	15 %

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

The rules on capacity release and subscription are defined by GRTgaz on the basis of transparent and objective criteria to avoid any discrimination and published on its website.

3.2. Transportation on the regional network

a) Firm annual subscription

The charge for firm annual subscriptions of daily transmission capacity on the regional network is the sum of the tariff charge, set at 48 €/MWh a day per year, and the level of regional tariff (NTR) at the delivery point under consideration:

	TCR (€/MWh a day per year)
GRTgaz	48 x NTR

The list of GRTgaz network delivery points together with their exit zones and their NTR values are to be found in an appendix to this document.
When a new delivery point is created, GRTgaz is fully transparent and non-discriminatory in calculating the NTR value on the basis of a computing method published on its website and it communicates its results to CRE.

For each delivery point, firm transmission capacity subscription on the regional network is equal to the firm delivery capacity subscription at the point in question.

b) Interruptible annual subscription

All interruptible annual transmission capacities subscribed on the regional network entail a reduction of 50 % in the charge for transmission capacity on this network.

For each delivery point, interruptible transmission capacity subscription on the regional network is equal to the interruptible delivery capacity subscription at the point in question.

The rules on regional network interruptibility are defined by GRTgaz based on the basis of transparent and objective criteria to avoid any discrimination and published on its website.

3.3. Gas delivery

a) For consumers linked to the transmission network and the regional network interconnection points (PIRR)

For shippers supplying end consumers linked to the transmission network and regional network interconnection points (PIRR), the delivery charge comprises:

- a set charge equal to 3,800 € per year and per delivery point;
- a charge for subscription to daily delivery capacities.

The charges applicable to annual subscriptions of daily delivery capacities are given in the following table:

	TCL (€/MWh a day per year)
GRTgaz	21.00

All interruptible annual delivery capacities subscribed entail a reduction of 50 % in the charge for delivery capacity.

Any shipper supplying one or more end customers connected to the GRTgaz transmission network will be simultaneously allocated the existing delivery capacities matching needs, upon request.

If several shippers simultaneously supply an end customer connected to the transmission network or a regional network interconnection point (PIRR) , the set charge is redistributed on a prorate basis proportionally to their delivery capacity subscriptions.

b) For the PITDs

The charge applicable to firm annual subscriptions of daily delivery capacities by shippers supplying the transport distribution interface point (PITD) is given in the following table:

	TCL (€/MWh a day per year)
GRTgaz	24.00

In application of the standardised transmission capacity subscription at PITDs, TSOs allocate the firm annual delivery capacity ("standardised capacity") to each shipper, at each PITD. It is equal to the sum:

- of annual capacities subscribed on the distribution network for the "subscription" delivery points (PDL) supplied downstream of the PITD under consideration;
- the capacities calculated by GRTgaz for the "non-subscription" PDLs supplied downstream of the PITD under consideration, by multiplying the "non-subscription" PDLs' daily peak consumption by the corresponding "A" adjustment coefficient.

Changes in the A coefficients are set by CRE following TSO recommendations.

As from 1st April 2010, the interruptible capacity subscription is limited to transport distribution interface point (PITD) where these interruptible capacities are needed to secure gas transportation at 2 %-risk cold peaks.

GRTgaz will publish the list of transport distribution interface point (PITD) for which interruptible capacities will be sold after 1st April 2010.

All interruptible annual delivery capacities subscribed entail a reduction of 50 % in the charge for delivery capacity.

3.4. Monthly capacity subscription

- At entry points other than Transmission-LNG terminal interface points (PITTM), at exit points to network interconnection points (PIR) and on the North-South link:

The charges applicable to firm monthly subscriptions of daily capacities at entry points other than Transmission-LNG terminal interface points (PITTM) and entry points from TIGF, at exit points to network interconnection points (PIR) , except for exits to TIGF, and also to the North-South link are equal to 1/8th of the corresponding annual charges.

The charges applicable to firm monthly subscriptions for daily capacity at entry and exit points at the interface with TIGF are equal to 1.5/7th of the corresponding charge during the summer season and to 1.5/5th of the corresponding charge during the winter season.

- At transport storage interface points (PITS):

No monthly entry and exit capacities at transport storage interface points (PITS) are put up for sale.

- At main network exit points to the regional network and delivery points:

The charges applicable to firm monthly subscriptions of daily exit capacities from the main network, to transmission on the regional network and to delivery, are equal to charges applicable to the corresponding firm annual subscriptions multiplied by the following coefficients:

Month	**Monthly charge as a proportion of the annual charge**
January - February	8/12ème
December	4/12ème
March - November	2/12ème
April – May – June – September - October	1/12ème
July - August	0.5/12ème

3.5. Daily capacity subscription

- At entry points excluding transmission LNG terminal interconnection points (PITTM), exit points to network interconnection points (PIR) and on the North-South link:

The charges applicable to daily subscriptions of daily capacities at entry points other than Transmission-LNG terminal interface points (PITTM), at exit points to network interconnection points (PIR) and on the North-South link amount to 1/20th of charges applicable to the corresponding monthly subscriptions.

- At transport storage interface points (PITS):

GRTgaz allocates daily entry and exit capacities at transport storage interface points (PITS) to each shipper which amount respectively to the nominal daily withdrawal capacity and the daily injection capacity allocated by the storage operator in addition to the corresponding annual capacities, within the limits of network capacities.

The charge for daily subscriptions of daily capacities at transport storage interface points (PITS) amounts to 1/320th of the firm annual capacity subscription at these points.

- At main and regional network exit points and delivery points:

GRTgaz sells daily subscription capacities to meet the occasional special need of an end consumer.

The charges for firm daily subscriptions of daily main network exit capacities, regional network transmission and delivery capacities, amount to 1/20th of the charges for the corresponding firm monthly subscriptions.

The charges for interruptible daily subscriptions of daily, main-network exit capacities, regional network transmission and delivery capacities, amount to 1/20th of the charges for the corresponding firm monthly subscriptions.

GRTgaz sells the daily interruptible capacities once all the saleable, firm daily capacities for a given day have been subscribed.

3.6. Hourly delivery capacity

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

All annual, monthly and daily subscriptions of daily delivery capacities results in the right to an hourly daily capacity amounting to 1/20th of the daily delivery capacity subscribed (except for specific cases when this hourly capacity is not available).

To benefit from an additional hourly capacity, insofar as the network can supply it, the shipper must pay an additional price *p* amounting to:

$p = (Cmax – C) \times 10 \times (TCL+TCR)$

where:

Cmax: 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 regional network daily transmission capacity.

3.7. Additional services

a) Short-term interruptible "Use it or lose it" (UIOLI CT)

At entry points, excluding transmission LNG terminal interconnection points (PITTM), at exit points to network interconnection points (PIR) and on the North-South link, once all firm capacities have been subscribed, GRTgaz sells unused subscribed capacities as interruptible capacities each day, for a price amounting to 1/500th of the firm annual subscription or 1/500th of the sum of the firm summer-season and winter-season subscription prices at these points.

The short-term, use-it-or-lose-it operating rules are defined by GRTgaz on the basis of transparent and objective criteria to avoid any discrimination and published on its website.

At the TIGF interface, this service is marketed jointly with TIGF.

b) Auction of daily capacity

At entry points excluding Fos and Montoir, at exits to the network interconnection points (PIR) and on the North-South link, GRTgaz has the right to sell, on a daily basis, the firm capacities remaining available after sale of the daily firm capacities at the regulated tariff.

The operating rules for the daily capacity auction mechanisms are defined by GRTgaz on the basis of transparent and objective criteria to avoid any discrimination and published on its website.

The reserve price used to this auction mechanism amounts to 1/200th of the subscription price for the corresponding firm annual capacity.

3.8. Offer for short-notice interruptible transportation

An option for interruptible transportation capacity is offered to customers linked to GRTgaz's H gas network meeting both of the following conditions:

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

To benefit from this offer, the customer concerned must guarantee GRTgaz that they will subscribe to it, or to get a shipper to subscribe to it, before signing the connection contract.

Customers whose connection contract is already signed but who are eligible for this offer, can benefit from it on the condition that they commit to subscribing to it, or to getting a shipper to subscribe to it, within the 6 months following the date the present tariff comes into force.

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

GRTgaz defines the interruptibility rules on the basis of transparent and objective criteria to exclude any discrimination and publishes them 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 main network exit capacity charge;
- 50 % of the main network entry capacity charge at the nearest entry point.

For the same site, shippers cannot accumulate the price reduction agreed under this optional offer with the price reductions awarded for:

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

Minimum notice of four years is necessary to terminate this optional offer.

3.9. Gas injection on the network from a gas production facility

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

- for PITPs whose entry capacity on the network is less than 5 GWh a day, the charge applicable is 7 €/MWh a day per year;
- the charge applicable to other PITPs is the subject of a specific study.

3.10. Conversion of gas type

a) Conversion of gas H to gas B

GRTgaz markets two annual services for converting H gas into B:

- 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 the Taisnières B entry capacities, within the limits of what they need to supply end consumers in B gas.

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

	Capacity charge (€/MWh a day per year)	Quantity charge (€/MWh)
Peak service	133.0	0.16
Base service	60.0	0.16

GRTgaz also sells firm monthly conversion capacities for the base service. The applicable monthly coefficients are equal to the coefficients applicable to 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 the basis of transparent and objective criteria to avoid any discrimination and published on tis website.

b) Conversion of L gas to H gas

The price of the L gas to H gas conversion service offered by GRTgaz is made up of:

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

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

3.11. Optional balancing tolerance

GRTgaz markets an optional balancing tolerance proportional to the delivery capacities at a tariff of 17 €/MWh a day per year.

IV. Tariff for use of the TIGF network

The tariff for use of the TIGF network as defined below will apply as from 1st January 2009 for a two-year period.

1. Authorised revenue

TIGF's authorised revenue is defined below:

M€	2009-2010 average
Capital costs	122.7
Net operating costs	62.3
2007 – 2008 CRCP	- 5.5
Total authorised revenue	179.5

2. Reconciling the CRCP balance at the end of the tariff period

At the end of the tariff period, the CRCP balance calculated by CRE and comprising a device to correct the 2008 CRCP, variations recorded in 2009 and forecasted 2010 variations, is taken into consideration for determining tariffs for the following tariff period.

The amounts taken into consideration in the CRCP are updated at an interest rate equivalent to the risk-free rate adopted in the present tariff proposal. This rate is set at 4.2 % per year, nominal, before tax.

The reference amounts of CRCP items for TIGF are as follows:

M€	2009	2010
Downstream transportation revenues, 100 % covered	124.93	125.63
Upstream transportation revenues, 50 % covered	53.42	55.31
Income from CCGT connections, 100 % covered	0	0
Capital costs, 100 % covered	110.9	134.4
Propulsion energy costs and difference in costs and income linked to CO_2 quotas, 80 % covered	11.0	12.2(*)
Income linked to inter-operator contracts, 100 % covered	19.2	31.8

(*) In the event of energy price variations exceeding 5 %, the reference sum adopted for propulsion energy charges could be revised at tariff schedule update.

3. Tariff schedule for the use of the TIGF network applicable on 1st January 2009

The detailed TIGF tariff schedule is determined so as to cover the average authorised revenue for 2009-2010. This tariff schedule could be updated on 1st April 2010.

3.1. Transportation on the main network

The tariff for use of TIGF's main network comprises the following charges:

- main network entry capacity charge (TCE);
- exit capacity charge at network interconnection points (PIR) (TCST);
- main network exit capacity charge (TCS)
- proximity charge (TP);
- entry and exit capacity charges at transport storage interface points (PITS) (TCES et TCSS).

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

- summer season, from April to October inclusive;
- winter season, from November to March inclusive.

a) Main network entry capacity charge

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

Entry point	**TCE** (€/MWh a day per season) Firm subscriptions		**TCE** (coefficient on firm charge) Interruptible subscriptions
	Summer	**Winter**	**Summer and Winter**
GRTgaz South	43.75	31.25	90 %
Lacq	21	24	75 %
Biriatou	52.5	37 .5	75 %
Larrau	52.5	37.5	75 %

b) Exit capacity charge at network interconnection points (PIR)

The charges applicable to seasonal daily exit capacity subscriptions at network interconnection points (PIR) are given in the following table:

PIR	**TCST** (€/MWh a day per season) Firm subscriptions		**TCST** (coefficient on firm charge) Interruptible subscriptions
	Summer	**Winter**	**Summer and Winter**
GRTgaz South	43.75	31.25	75 %
Biriatou	166	119	75 %
Larrau	166	119	75 %

c) Main network exit capacity charge

Each exit area from the main TIGF network is defined by all the delivery points attached to it.

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

The charge applicable to firm annual subscriptions of daily exit capacity on the main TIGF network is the same for all exit zones at 87 €/MWh a day per year.

d) Proximity charge

The proximity charge is deducted from the monthly invoice of each shipper concerned. For each shipper, it applies to the amount of gas equal, each day, to the minimum between the amount of gas allocated at each entry point on the transmission network and the amount of gas withdrawn in the associated exit zone.

The proximity charge is applicable to the following entry point / exit zone pairs:

Entry point	**Associated exit zone**	**TP** (€/MWh)
GRTgaz South	Hérault Region / Dordogne Region	0.32
Lacq	Lacq Region	0.37

e) Storage facility entry and exit capacity charges

There is one transport storage interface point (PITS) on the TIGF transmission network: *Sud-ouest storage*

Charges (TCES and TCSS) applicable to annual subscriptions of daily entry and exit capacity at the transport storage interface points (PITS) are given in the following table:

PITS	**TCES** (€/MWh a day per year)	**TCSS** (€/MWh a day per year)
Sud-ouest storage facility	24	54

The annual entry and exit capacities at transport storage interface points (PITS) allocated to each shipper by TIGF amount respectively to the nominal daily withdrawal capacity (increased by the daily peak withdrawal capacity when necessary) and the nominal daily injection capacity subscribed by the shipper in question with the storage facility operator, within the limits of network capacity.

No interruptible annual entry or exit capacities are marketed at transport storage interface points (PITS) .

3.2. Transportation on the regional network

a) Firm annual subscription

The charge applicable to firm annual subscriptions of regional network daily transmission capacity is the sum of the unit tariff set at 45.51 €/MWh a day per year, and the regional tariff level (NTR) of the delivery point under consideration:

	TCR (€/MWh a day per year)
TIGF	45.5 x NTR

The list of TIGF network delivery points with their exit zones and NTR values can be found in appendix to the present document.

When a new delivery point is created, TIGF calculates the NTR value on a transparent and non-discriminatory basis using a computing method published on its website and communicates results to CRE.

For each delivery point, the subscription to regional network firm transmission capacity is the same as the subscription to firm delivery capacity at the point in question.

b) Interruptible annual subscription

For all interruptible annual transmission capacities subscribed on the regional network, the transmission capacity charge on the regional network (TCR) is replaced by a unit charge equal to the sum of the regional tariff level (NTR) multiplied by 0.10 €/MWh, applying to the amount of gas consumed each day in excess of the firm annual daily capacity subscription.

For each delivery point, the annual subscription to regional network interruptible transmission capacity is the same as the annual subscription to interruptible delivery capacity at the point in question.

TIGF defines the regional network interruptibility rules on the basis of transparent and objective criteria to avoid any discrimination, and publishes them on its website.

3.3. Gas delivery

a) For consumers connected to the transmission network

For shippers supplying end consumers linked to the transmission network, the delivery charge is made up of:

- a set charge of 1,900 € per year and per delivery item;
- a charge applicable to daily delivery capacity subscriptions.

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

	TCL (€/MWh a day per year)
TIGF	12

Each shipper supplying one or several end consumers connected to the TIGF transmission network is allocated simultaneously, at his request, the existing delivery capacities matching needs.

If several shippers simultaneously supply an end consumer connected to the transmission network, the set charge is redistributed on a prorate basis proportional to their delivery capacity subscriptions.

b) For transmission distribution interface points (PITD)

For shippers supplying transmission distribution interface points (PITD), the charge applicable to firm annual or interruptible subscriptions of daily delivery capacity is defined in the following table:

	TCL (€/MWh a day per year)
TIGF	15

In application of the standardised transmission capacity subscription system at PITDs, TSOs allocate the firm annual delivery capacity ("standardised capacity") to each shipper, on each PITD. This amounts to the sum of:

- annual capacities subscribed on the distribution network for "subscription" delivery points (PDL) downstream of the transport distribution interface point (PITD) in question;
- capacities calculated by GRTgaz for the "non-subscription" delivery points (PDL) supplied downstream of the transport distribution interface point (PITD) in question, multiplying the daily peak consumption of "non-subscription" PDLs by the corresponding "A" adjustment coefficient.

Changes in the A coefficients are determined by CRE, on TSO recommendations.

As from 1st April 2010, subscription to interruptible capacities will be limited to transport distribution interface point (PITD) where these interruptible capacities are necessary to secure gas transportation at cold peaks with a 2 % risk.

TIGF will publish the list of transport distribution interface point (PITD) where interruptible capacities will be marketed after 1st April 2010 on its website.

3.4. Monthly subscription of capacities

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

The charges applicable to firm monthly subscriptions of daily entry and exit capacity to TIGF's network interconnection points (PIR) amount to 1.5/7th of the corresponding firm summer season charge and 1.5/5th of the corresponding firm winter season charge.

Interruptible monthly capacities are sold by TIGF at the Larrau entry point and the exit point to Biriatou interconnection point (PIR). The summer tariff of these capacities amounts to 1.5/7th of the corresponding interruptible summer season charge and in winter, to 1.5/5th of the corresponding interruptible winter season charge.

- At transport storage interface points (PITS) :

No monthly entry or exit capacities are marketed at transport storage interface points (PITS) .

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

The charges applicable to firm monthly subscriptions of main network daily exit capacity, regional network transmission and delivery are the same as charges applicable to the corresponding firm annual subscriptions, multiplied by the following coefficients:

Month	Monthly charge in proportion to annual charge
January - February	8/12ème
December	4/12ème
March - November	2/12ème
April – May – June – September - October	1/12ème
July - August	0.5/12ème

3.5. Daily subscription of capacities

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

The charges applicable to firm daily subscriptions of daily entry and exit capacity to network interconnection points (PIR) amount to 1/20th of the charges applicable to the corresponding firm monthly subscriptions.

Interruptible daily capacities are sold by TIGF at the Larrau entry point and the exit point to Biriatou network interconnection point (PIR) at a price equal to 1/20th of charges applicable to the corresponding interruptible monthly charges at these points.

- At transport storage interface points (PITS) :

The annual entry and exit capacities at transport storage interface points (PITS) allocated to each shipper by TIGF amount respectively to the daily withdrawal capacity and the daily injection capacity subscribed allocated by the storage facility operator in addition to the corresponding annual capacities, within the limits of network capacity.

The charge applicable to daily subscriptions of daily capacity at transport storage interface points (PITS) amounts to 1/320th of the price of the firm annual subscription at these points.

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

TIGF markets the daily capacity subscriptions of meet the occasional and special needs of an end consumer.

The charges applicable to firm daily subscriptions of main network daily exit capacity, regional network transmission and delivery, amount to 1/20th of the charges applicable to the corresponding firm monthly subscriptions.

The charges applicable to interruptible daily subscriptions of main network daily exit capacity, regional network transmission and delivery, amount to 1/30th of the charges applicable to the corresponding firm monthly subscriptions.

TIGF markets the interruptible daily capacities once all the marketable firm daily capacities have been subscribed on the day in question.

3.6. Hourly delivery capacity

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

Any annual, monthly or daily subscription of daily delivery capacity results in the right to an hourly delivery capacity equal to 1/20th of the subscribed daily capacity –except in special cases where this hourly capacity may not be available).

To benefit from more hourly capacity, within network capacity, the shipper must pay an additional price *p*, amounting to:

$p = (Cmax – C) \times 10 \times (TCL+TCR)$

where:

Cmax: 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 regional network daily transmission capacity.

3.7. Additional services

a) Short-term interruptible use it or lose it (UIOLI CT)

At entry and exit points to network interconnection points (PIR), once all firm capacities have been subscribed, TIGF sells unused subscribed capacities as interruptible capacities each day, at a price amounting to 1/500th of the sum of the firm summer-season and winter-season subscription prices at these points.

The short-term, interruptible use-it-or-lose-it operating rules are defined by TIGF on the basis of transparent and objective criteria to avoid any discrimination, and published on its website.

At the interface with GRTgaz, this service is marketed jointly with GRTgaz.

b) Auction of daily capacity

At entry and exit points to network interconnection points (PIR), TIGF has the right to sell, on a daily basis, the firm capacities remaining available after sale of the firm daily capacities at the regulated tariff.

The operating rules for the daily capacity auction mechanism are defined by TIGF on the basis of transparent and objective criteria to avoid any discrimination and are made public on its website.

The reserve price used for this auction mechanism amounts to 1/200th of the subscription price for the corresponding firm annual capacity.

3.8. Gas injection on the network from a gas production facility, excluding Lacq

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

- for the transmission-production interface points (PITP) whose network entry capacity is less than 5 GWh a day, the charge applicable is 7 €/MWh a day per year;
- the charge applicable to other PITPs is the subject of a specific study.

V. Transfer of GRTgaz and TIGF network transmission capacities

Transmission capacities subscribed at the entry points, at the exit points to network interconnection points (PIR) and at the links between balancing zones can be freely transferred at no extra charge to shippers who do not use the capacity exchange platform offered, when needed, by the TSOs.

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

Downstream transmission capacities between the gas exchange point (PEG) and the point of delivery to an industrial site directly connected to the transmission network are transferrable if the industry in question has subscribed these capacities with a TSO.

The methods for transfer of transmission capacities are defined by the TSOs on the basis of transparent and objective criteria to avoid any discrimination, and are published on their websites.

VI. Fines for exceeding capacities on the GRTgaz and TIGF networks

1. Fines for exceeding daily capacity

1.1. Methods for calculating fines for exceeding daily capacity

Each day, observed overshoots of main network daily exit capacity, of regional network transmission and of delivery are subject to fines.

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

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

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

TSOs allow shippers to make rapid adjustments to their capacity subscriptions when an overshoot is observed, subject to network availability.

1.2. Methods for calculating fines for 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 this is positive, between the amount of gas delivered and the subscribed daily delivery capacity.

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

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

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

c) Daily exit capacity overshoot on the main network

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

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

If the TSO exercises interruptibility, the above overshoot calculations will take this into account by deducting the part interrupted at the TSO's request from the interruptible capacity.

2. Fines for exceeding hourly capacity

Each day, overshoot of hourly regional transmission capacity and delivery capacity for supplying end consumers connected to the transmission network are the subject of fines. For a given day, the hourly capacity overshoot is calculated by taking the maximum value of the hourly average of amounts delivered at the delivery point concerned over four consecutive hours.

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

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

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

GRTgaz does not apply fines for hourly capacity overshoots if the shipper corrects his annual subscription to hourly capacity up to the observed level of overshoot.

3. Annual redistribution of fines for exceeding capacity

Each TSO redistributes the amounts collected each year in fines for exceeding capacity at the latest in June of the following year.

For each TSO, the amount of fines to redistribute is divided among the shippers in proportion to the quantities of gas delivered to end consumers connected to the transmission network and the regional network interconnection points (PIRR). Each TSO publishes the unit amount of redistributed fines on its website, expressed in euros per MWh consumed by end consumers connected to the transmission network.

VII. Notional gas exchange points on the GRTgaz and TIGF networks

There is a notional gas exchange point (PEG) in each balancing zone giving shippers the opportunity to exchange quantities of gas.

The PEG operating methods are defined by the TSOs on the basis of transparent and objective criteria to avoid any discrimination and are published on their websites.

For 2009, the access charge to gas exchange points comprises:

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

Gas exchanges made through an electronic platform may be delivered at a gas exchange point by a third party responsible for compensating the exchanges performed on the aforesaid platform. Nominations at PEGs made by such third parties for compensation purposes, neutral with respect to the market, are not subject to the charge proportional to quantities exchanged.

VIII. Regulation mechanism for TSOs' quality of service

Monitoring the quality of service is now in operation for the two TSOs in the key areas of their activity. This monitoring consists in indicators regularly communicated to CRE by the TSOs and published on their websites.

Certain indicators are subject to a system of financial incentive .

Indicators for monitoring the quality of service communicated to CRE by the TSOs must be certified by an external body. Moreover, the method for monitoring the TSOs quality of service may be subject to any audits CRE deems useful.

1. Monitoring indicators for TSOs quality of service giving rise to financial incentives

1.1. Quality of provisional readings of gas quantities delivered at transport distribution interface point (PITD) transmitted to DSOs for calculating provisional allocations

Calculation:	Number of non compliant days (1) by balancing zone per month (one indicator per balancing zone, all shippers and DSOs combined)
Monitoring:	Frequency of calculation: monthly Frequency of transmission to CRE: monthly Frequency of publication: monthly Frequency of financial incentive calculation: monthly
Objective	Basic objective: 4 non-compliant days per month for GRTgaz and 3 non-compliant days per month for TIGF Target objective: 1 non-compliant day per month
Incentives:	**GRTgaz:** • Fine: – 100 k€ per non-compliant day in excess of the basic objective – 50 k€ per non-compliant day in excess of the 6th non-compliant day • Bonus: 100 k€ per non-compliant day if the number of non-compliant days is less than or equal to the target objective • Ceiling: the total annual amount, corresponding to the absolute value of the algebraic sum of fines to pay and bonuses to receive by GRTgaz, is limited to 1.2 M€ per year and per balancing zone **TIGF :** • Fine: 25 k€ per non-compliant day in excess of the basic objective • Bonus: 25 k€ per non-compliant day if the number of non-compliant days is less than or equal to the target objective • Ceiling: the total annual amount, corresponding to the absolute value of the algebraic sum of fines to pay and bonuses to receive by TIGF, is limited to 0.3 M€ per year

(1) : For a given balancing zone (ZET), the day D of the month M is non-compliant if the difference, in absolute value, between the following values is exactly 3 % more:

- the provisional meter reading of the quantity of gas delivered to all the transport distribution interface point (PITD) of the ZET on this day D and transmitted to the DSOs on day D+1 of the month M;
- the final meter reading of the quantity of gas delivered to all the transport distribution interface point (PITD) of the ZET on day D and transmitted to the DSOs on 20th of month M+1.

1.2. Quality of volume information remote read at delivery points of consumers linked to the transmission network

Calculation:	Number of compliant meterings at industrial delivery points remote-read during the month (2) / total number of meterings at industrial delivery points remote-read during the month. (one indicator per TSO, all shippers, all ZETs and all remote-read industrial delivery points combined).
Monitoring:	Frequency of calculation: monthly Frequency of transmission to CRE: monthly Frequency of publication: monthly Frequency of financial incentive calculation: monthly
Objective	Basic objective : 93 % per month Target objective: 97 % per month
Incentives:	**GRTgaz:** • Fine: 50 k€ per percentage point below (exactly) the basic objective • Bonus: 100 k€ per percentage point below (exactly) the target objective • Ceiling: the total annual amount, corresponding to the sum of fines to pay and bonuses to receive by GRTgaz, is limited to 2 M€ per year **TIGF :** • Fine: 12.5 k€ per percentage point below (exactly) the basic objective • Bonus: 25 k€ per percentage point below (exactly) the target objective • Ceiling: the total annual amount, corresponding to the sum of fines to pay and bonuses to receive by TIGF, is limited to 0.5 M€ per year

(2) : For a given month M, the metering is compliant if there are no more than 5 days in the month M where the difference, in absolute value, between the following values is exactly 3 % greater:

- the provisional energy reading for day D transmitted on day D +1 of month M;
- the final energy reading for day D transmitted on 20th of month M+1.

1.3. Rate of TSO portal availability

Calculation:	Number of hours of portal availability in the month / total number of projected opening hours in the month (one indicator per TSO of the monthly portal availability rate, calculated over a period of use from 07.00-23.00, 7/7 days)
Monitoring:	Frequency of calculation: monthly Frequency of transmission to CRE: monthly Frequency of publication: monthly Frequency of financial incentive calculation: monthly
Objective	Basic objective : 98 % per month Target objective: 100 % per month for GRTgaz and 99 % per month for TIGF
Incentives:	**GRTgaz:** • Fine: 100 k€ per percentage point below (exactly) the basic objective • Bonus: 100 k€ if the target objective is reached **TIGF:** • Fine: 25 k€ per percentage point below (exactly) the basic objective • Bonus: 25 k€ per percentage point below in excess of the target objective

For TIGF, given that the portal will only be operational at the beginning of 2009, the financial incentive will concern results observed for 2010.

For 2010, the adopted time bracket for use may be reviewed according to return on experience.

2. Other monitoring indicators for TSOs quality of service

2.1. Indicators related to the quality of data transmission

Name of indicator	Calculation of indicator	Frequency of transmission to CRE and publication	Objective / Start date
Quality of remote-read data at PITDs	Number of non-compliant days [3] per month for remote-read quantities at transport distribution interface point (PITD) / number of days per month, per balancing zone (i.e. one indicator per balancing zone, all shippers and DSOs combined)	Monthly	*Objective:* • 8 % non-compliant days for GRTgaz • 6 % non-compliant days for TIGF *Start date:* 01/01/2009
Quality of estimated quantities at PITDs	Number of non-compliant days (3) per month for estimated quantities at transport distribution interface point (PITD) / number of days per month, per balancing zone (i.e. one indicator per balancing zone, all shippers and DSOs combined)		*Objective:* • 40 % non-compliant days for GRTgaz • 70 % non-compliant days for TIGF *Start date:* 01/01/2009
Quality of infra day volume readings at delivery points of consumers linked to the transmission network	Number of compliant infra day meterings at industrial delivery points remote read in the month [4] / total number of infra day meterings at industrial delivery points remote read in the month. (i.e. one indicator per TSO, all shippers, all ZETs and all remote-read industrial delivery points combined).		*Start date:* mid-2010
Time required to transmit files concerning withdrawals at transport distribution interface point (PITD) to DSOs	Number of days per month where the TSO has not transmitted to the DSO the file concerning provisional daily withdrawals at transport distribution interface point (PITD) within the time agreed between TSOs and DSOs (one indicator per TSO, all shippers, all ZETs and all DSOs combined).		*Objective:* only one file per month transmitted outside deadlines *Start date:* 01/01/2009

(3): cf. (1).
(4): cf. (2).

2.2. Indicators related to maintenance programmes

Name of indicator	Calculation of indicator	Frequency of transmission to CRE and publication	Start date
Reduction in available capacities	Firm capacity made available during work / firm technical capacity, by catgegory of network point (5)	Monthly Indicator calculated from April to December	01/01/2009
Compliance with the annual maintenance programme published by the TSO at the beginning of the year	Variation (percentage) of the capacity made available (increase or decrease) in the provisional maintenance programme published at the beginning of the year and the actual maintenance programme, by category of network point (5)		01/01/2009
Compliance with the annual maintenance programme published by the TSO in M-2	Variation (percentage) of the capacity made available (increase or decrease) in the provisional maintenance programme published at M-2 and the actual maintenance programme, by category of network point (5)		mid-2009

(5) : five categories of point have been adopted:

- network interconnection points (PIR) in the main flow direction
- the GRTgaz South/TIGF interface in both directions
- the North-South link in both directions
- Entry points to transmission-LNG terminal interface points (PITTM)
- Entry and exit points to transport storage interface points (PITS)

2.3. Indicators related to relations with shippers

Name of indicator	Calculation of indicator	Frequency of transmission to CRE and publication	Objective / start date
Processing time for capacity reservation requests on the main network	Average processing time for reservation requests	Monthly	*Objective:* 5 days *Start date:* 01/07/2009

2.4. Indicators related to the environment

Name of indicator	Calculation of indicator	Frequency of transmission to CRE and publication	Start date
Emissions of greenhouse gases	Monthly greenhouse gas emissions (in CO_2 equivalent)	Quarterly	01/01/2009
Emissions of greenhouses gases against the volume of gas transported	Monthly greenhouse gas emissions / monthly volume of gas transported		01/01/2009

IX. Appendices

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

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

Signed in Paris, 10th July 2008

For the Energy Regulation Commission,

The President

Philippe de LADOUCETTE