

13<sup>th</sup> May 2008

**Public consultation on pricing principles for transportation of natural gas on transmission networks.**

The Law of 3<sup>rd</sup> January 2003 guarantees transparent and non-discriminatory access to natural gas transmission networks for all users and intends that decisions regarding tariffs for the use of these networks should be made jointly by the Ministers for the Economy and for Energy, based on CRE recommendations.

The current natural gas transmission tariffs, recommended by CRE on 10<sup>th</sup> November 2006 and in force since 1<sup>st</sup> January 2007, are designed for application over a two-year period.

New tariffs for the use of natural gas transmission networks will become necessary as from 1<sup>st</sup> January 2009 to account in particular for:

- the merging of North, East and West balancing zones on the GRTgaz network;
- the simplification of the tariff structure in the South of France.

To prepare for this deadline, CRE consulted all market players in the second half of 2007 on the most significant changes in tariff structure and on mechanisms for allocating available capacities as from January 2009.

Following this consultation, the CRE 25<sup>th</sup> October 2007 decision, in compliance with modified article 37-1 of the 10 February 2000 Law, defined the rules for allocating marketable link capacities within the GRTgaz network in addition to interface capacities between the GRTgaz and TIGF networks as from January 2009.

In summer 2008, CRE intends proposing a new tariff structure for the use of natural gas transmission networks applicable as from 1<sup>st</sup> January 2009. Before finalising its tariff proposal, CRE wishes to consult all market players concerning the strategic orientations and developments to be considered at this point. Interested parties should answer the questions to be found at the end of this document.

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## **I - Regulation framework**

The aim is for the method of regulation to incorporate incentives which include a productivity objective with respect to the scope of operating costs on the one hand and on the other, an incentive mechanism concerning the quality of services provided by the GRTgaz and TIGF transmission network managers.

### **1 Duration of tariff application**

The stability of the global tariff structure for the use of the natural gas transportation network as from 1<sup>st</sup> January 2009 means that it is possible to envisage tariffs remaining in force for a longer period than at present. The increased duration of the tariff structure gives the TSOs a greater visibility which should contribute to the implementation of a framework with incentives for better price control.

A multi-year tariff set-up requires operator activity to remain fairly constant in order to have sufficient visibility on the mid-term evolution of TSO expenditure.

Over the coming tariff period, a strong impact on TSO activity is expected due to increased stringency of French regulations regarding safety and network operation as well as investment programmes which will be more costly than in preceding years. The cost of 10-year development plans forecast around 5 billion euros of investment for GRTgaz and 1 billion for TIGF. However, a large proportion of these investments remain to be confirmed in that they are linked to current *open seasons* or LNG terminal projects where the final decision has not yet been made.

This development of the transmission network, which is necessary to improve market competitiveness and secure natural gas procurement, entails an increase in TSO costs which is not always compensated by additional capacity subscriptions. A case in point is the reduction in the number of balancing zones on the GRTgaz network resulting in a loss in the revenues linked to certain link capacities.

CRE is considering increasing the coming tariff period to 4 years. However, if it finds that visibility concerning changes in TSO expenditure is inadequate, particularly in view of any uncertainty regarding investments or insufficient operating cost control, it may decide on a shorter period.

### **2 Incentive regulation**

#### ***a- Incentive regulation for cost control***

A measure under consideration is the definition of a global productivity objective for each TSO concerning limits to all operating costs believed to be controllable.

This productivity objective could be part of yearly tariff change making it possible to determine in advance each TSO's tariff increase over a given tariff period.

***b- Incentive regulation for quality of service***

CRE is planning to implement a mechanism for incentive regulation aimed at improving the quality of services offered by TSOs, and also as a preventive measure against any deterioration resulting from the operators' productivity efforts.

At this point, a mechanism which could concern the following indicators is under discussion:

Field	Indicator	Recommended monitoring method
Data transmission	Quality of volume information remote read at Transmission Distribution Interface Point (PITD)	Publication with definition of a goal
	Quality of assessed quantities at Transmission Distribution Interface Point (PITD)	Publication with definition of a goal
	Deadlines met in communicating files concerning deliveries at PITD to distribution system operator (DSO)	Publication with definition of a goal
	Number of days per balancing zone for which the quality of temporary measurements communicated to DSOs for calculating temporary allocations is substandard)	Publication with definition of a goal and financial incentive
	Quality of measured or predicted quantities at industrial client delivery points	Publication with definition of a goal and financial incentive
Maintenance programme	Reduction of available capacities: volume and percentage	Publication
	Compliance with published maintenance programme	Publication with definition of a goal
	Amount of overlap at each link of adjacent French operators' maintenance programme (transmission system, LNG terminal and storage operators)	Publication
Customer relations	Time taken to process requests for capacity booking	Publication with definition of a goal and financial incentive
	Availability of TSO gate	Publication with definition of a goal and financial incentive
	User satisfaction (annual survey)	Publication
Environment	CO <sub>2</sub> emissions	Publication
	CO <sub>2</sub> emissions compared with the amount of gas transported	

*c- Expenses and revenues clawback account (CRCP)*

The tariffs currently in force include an expenses and revenues clawback account (CRCP) making it possible to retroactively adjust all or some imbalances in expenditure or income observed on the following items:

- revenues linked to transportation on the transmission network;
- capital costs;
- power expenses;
- income from connection to combined cycle gas turbines

The CRCP balance for 2007 for the 2 TSOs is as follows:

	2007 CRCP balance in M€(actual – tariff forecast)
GRTgaz	+ 36,9 M€
TIGF	+ 5,47 M€

These results will show a decrease in expenses needing to be recovered through tariffs over the next tariff period. The CRE proposal will also take into consideration the forecasted CRCP balance for 2008, to be corrected during the tariff period depending on the final value.

An interest rate equal to the basic rate of return on the RAB, i.e. 7,25%, is applied annually to these amounts

CRE is considering the renewal of this measure in the next tariff structure while making some changes in its terms:

- the items concerned by this mechanism could change to incorporate certain events beyond the shippers' control like, for example, the start-up date of the Fos Cavaou LNG terminal;
- the reconciliation terms could be adjusted if the tariff period is extended to allow for CRCP reconciliation during the tariff period;
- the interest rate applied to the CRCP balance could evolve towards an interest rate equivalent to the risk-free rate, given the short duration of CRCP reconciliation.

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<sup>1</sup> Value currently under investigation

## II - Tariff calculation principles

Article 7 of the Law of 3<sup>rd</sup> January 2003 stipulates that tariffs for access to gas infrastructures “*are set on the basis of public, objective and non-discriminatory criteria taking into account the characteristics of the service provided and related costs. In particular, such costs include operation costs and spending on research and development necessary to network security and to quality control of extracted and injected natural gas, as well as [...] costs entailed in the carrying out of public service missions.*”

Article 1 of decree 2005-607 of 27<sup>th</sup> May 2005 completes these measures and rules that “*Tariffs for the use of natural gas transmission networks are based [...] on the total of its operating and investment expenditure. [...] Asset depreciation and return on invested capital are included in investment expenditure* ».

Moreover, the Regulation (EC) n°1775/2005 of 28<sup>th</sup> September 2005 stipulates in Article 3 that “*Tariffs [...] reflect actual costs incurred insofar as such costs correspond to those of an efficient and structurally comparable network operator*”.

### 1 Operating costs

Operating costs to be covered are determined on the basis of all the operational costs necessary to transmission network operation.

The level of operating costs is determined based on analysis of:

- previous fiscal years, particularly 2007, with data provided by the GRTgaz corporate financial statement and the TIGF non-consolidated accounts;
- hypotheses regarding the evolution of expenditure from 2008 to 2012 communicated by the operators;
- productivity objectives set by the regulator.

CRE will perform detailed analyses and audits to ascertain the coherence and the relevance of expenditures forecasted by shippers for 2009-2012.

### 2 Capital costs

#### a- The Regulated Assets Base

Capital costs include depreciation and financial return on fixed capital. Calculation of these two components is based on valuation of the Regulated Assets Base (RAB) which is carried out using a “current economic costs” method, the main principles of which were decided by the Special Commission set up by virtue of Article 81 of the Corrective Finance Act of 28<sup>th</sup> December 2001 and 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 calculation of the RAB value and the capital costs for the tariff lifetime includes the investment forecasts supplied by the operators.

The RAB value on 1<sup>st</sup> January 2008 resulting from this calculation can be found in the table below.

<i>M€</i>	<b>RAB on 01/01/08</b>
<b>GRTgaz</b>	5 572
<b>TIGF</b>	631 <sup>2</sup>

The total forecasted investment expenditure communicated by the operators for 2008-2012 amounts to 3,081 million euros for GRTgaz and 684 million euros for TIGF.

***b- The RAB rate of return***

The real before-tax RAB rate of return used for the tariffs currently in force is 7,25%. CRE will reassess the hypotheses and approved parameters for calculating the rate of return.

More specifically, it commissioned a study from an external consultant, carried out in autumn 2007, on the weighted average cost of capital issue for the electricity and gas infrastructures. It will use the conclusions of this study as the basis for developing its tariff proposal.

***c- The incentive for investment system***

Currently, a 125 base-point bonus is applied to all assets coming into service after 1<sup>st</sup> January 2004. An additional bonus of 300 base points is awarded on a case-by-case basis (CRE decision following analysis of the operator's request) for a period of 5 or 10 years for investments making significant contributions to improving market operations.

As mentioned in the reasons for its 14<sup>th</sup> February 2008 decision, CRE envisages modifying its investment in gas transmission networks incentive strategy with a view to better targeting investment incentives while offering greater visibility to TSOs.

The changes under consideration are as follows:

- suppression of the 125 base-point bonus which is currently allocated to all investments in the transmission network coming into service after 1<sup>st</sup> January 2004;
- allocation of a 300 base-point increase, for 10 years, for all investments on the main network leading to the creation of additional capacity or to reducing the number of balancing zones.

All past decisions relating to increases in rate of return remain valid.

***d- Return on current assets***

The tariffs in force include a return on current assets based on the RAB rate of return.

CRE is considering covering the financial cost of investments in their pre-operational phase, based on the method generally used for calculating interest during construction, taking into account an interest rate comparable with the cost of debt.

CRE envisaged a similar rule in its 11<sup>th</sup> July 2007 public consultation on pricing principles for using LNG terminals.

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<sup>2</sup> Valeur en cours d'analyse

*e- Changes in the RAB calculation method requested by the operators*

In the context of its tariff proposal, CRE will examine certain requests made by the TSOs. These concern: :

- the annual reassessment of the RAB using an index more representative of the increase in investment costs, in the TSOs opinion, than the INSEE index excluding tobacco used to determine the tariff in force;
- the return on completely depreciated assets, based on their economic lifetime fixed in the tariffs, but which are still being used;
- the inclusion of assets removed from the inventory before the end of their economic tariff lifetime (stranded costs);
- provisions covering dismantling obligations and site restoration.



### **III - Tariff structure**

The organisation of gas transmission in France will change considerably as from 1<sup>st</sup> January 2009 to encourage and keep pace with market development. The main changes will concern:

- the in-depth transformation of the network access offer entailed by the reduced number of balancing zones after 1<sup>st</sup> January 2009. After this date, all great North zone consumers will have direct access to a wider selection of gas supplies. The suppliers within this merged zone will take advantage of many market opportunities between the different input points within the zone;
- the reorganisation and simplification of the tariff rules between the GRTgaz and TIGF networks in the South of France;
- preparation for the development of new entry capacities on the French market thanks either to new LNG terminals or to the development of terrestrial interconnections.

These considerable changes entail a modification in the tariff structure while preserving the basic principles of the transmission network tariff structure in force:

- a 100% capacity tariff;
- an entry-exit tariff per balancing zone on the main network, with the overall structure evolving from 5 balancing zones to 3;
- complete independence regarding entry and exit subscriptions;
- a distance tariff on the regional network with a system of standard capacity subscriptions at transmission distribution interface points (PITD).

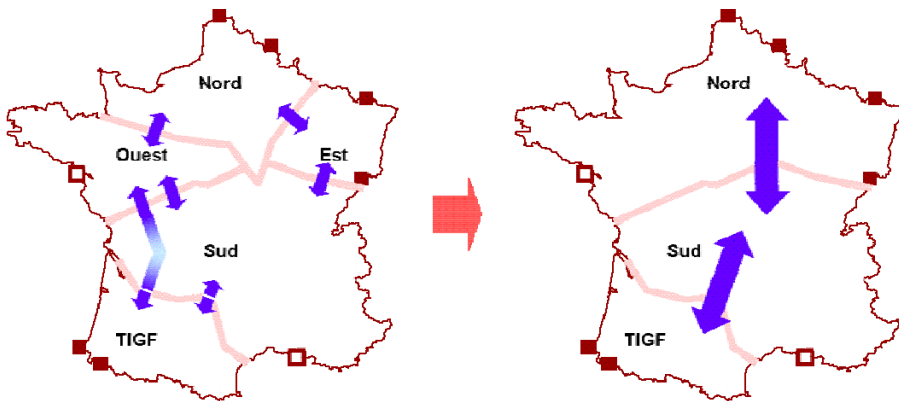
#### **1 A tariff structure with three balancing zones connected in series**

On 1<sup>st</sup> January 2009, a “great North zone” will be set up on the GRTgaz network as a result of combining the current three West, North and East zones. In this new scheme of things, firm capacities at current West, North and East zone input points to the future great North zone are maintained with no modification of the South zone border.

At the national level, the gas network will therefore be organised according to the following principles:

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

CRE plans to maintain the current status for the B gas network.



***a- Nomination on the link between the GRTgaz North and South zones***

The results of GRTgaz marketing of long term capacities available as from 1<sup>st</sup> April 2009 at the North-South link, for a period of 2, 3 and 4 years, shows a demand on the part of shippers exceeding the North-to-South capacity available.

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 UIOLI).

In this context, introducing nomination rules on the North-to-South link is a measure being considered for the forthcoming tariff structure. Such a change will include measures facilitating balancing between shippers in the GRTgaz south zone.

***b- GRTgaz and TIGF coordinated marketing at the GRTgaz South-TIGF interface***

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

A first open subscription period was carried out jointly on long term capacities available as from 1<sup>st</sup> April 2009 for multi-year or multi-season periods.

***c- Changes in the level of tariff charges***

Repercussions on the GRTgaz network of the disappearance of the North-East and North-West links:

The implementation of the GRTgaz network great North zone as from 1<sup>st</sup> January 2009 will mean the loss of revenues generated by the sale of link capacities between both the North and East and the North and West zones (around 45% of the overall revenue from link capacity sales).

Compensation for this loss of income is being considered in the form of an overall increase in tariff charges on the main GRTgaz network.

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

In its 25<sup>th</sup> October 2007 decision, CRE communicated an estimate of tariff charges applicable to capacities available as from 1<sup>st</sup> January 2009 at the balancing zone links on the GRTgaz network and at the GRTgaz-TIGF interface in order to provide the market with better visibility before the TSOs marketed these capacities.

Three orientations reflecting the changes in the transmission network structure and rebalancing of gas flows between balancing zones were communicated by CRE:

- equalising tariff charges between the GRTgaz new North zone and its South zone in addition to the interface charges between the GRTgaz South and TIGF zones;
- an estimate of tariff charges at the North-South link amounting to between 150 and 200 €/MWh a day per year to account for the lasting nature of congestions between the North and the South of France;
- an estimate of tariff charges at the GRTgaz and TIGF networks interface amounting to between 100 and 150 €/MWh a day per year to continue the downturn of transmission from GRTgaz to TIGF so as to facilitate access to the TIGF zone and to contribute to the future creation of a gas hub in the South of France.

For the North-South link, it is planned to fix the tariff charge for the North-to-South flow at 200 €/MWh a day per year. The results obtained by GRTgaz in marketing its long term capacities available as from 1<sup>st</sup> April 2009 demonstrate a greater market demand for North-to-South link capacities. In the light of these results, it is planned to fix the tariff charge in the South-to-North direction at 150 €/MWh a day per year for the next tariff structure. Equalising the North-to-South and South-to-North tariff charges will be considered for the subsequent tariff period when additional capacities have been developed in the South of France.

Regarding the GRTgaz-TIGF interface, it is planned to equalise the tariff charges for both directions at 150 €/MWh a day per year. This is coherent with the results of the two TSOs' long term capacity marketing.

#### Division of expenditures and revenues between the main and the regional networks:

The tariffs in force have been determined so as to reflect the costs specific to the main and regional networks.

The GRTgaz tariff structure was defined taking into account the division of revenue forecast for 2007 and 2008 with 52% assigned to the main network and 48% to the regional.

The TIGF tariff structure was defined taking into account the division of revenue forecast for 2007 and 2008 with 57% assigned to the main network and 43% to the regional.

For forthcoming tariffs, it is planned to maintain the principle of charging expenditures to reflect those specific to the main and regional networks of each TSO. Given the large investments planned to develop entry capacities and reduce the number of balancing zones, the main network share should increase.

#### Tariff structure for interruptible capacities at the North-South link:

The new transmission organisation in force as from 1<sup>st</sup> January 2009 means the disappearance of:

- North-West, North-East, East-South and West-South link capacities, replaced by the North-South link capacities;
- Dordogne interconnection capacities between the GRTgaz West and TIGF zones, replaced by the North-South link capacities on the one hand and the South-TIGF interface on the other.

Capacities at the Dordogne interconnection from the West to TIGF, i.e. around 40 GWh a day, are currently marketed as firm capacities as they presuppose the presence of gas in the GRTgaz West zone

supplied mainly by the Montoir LNG terminal. With the disappearance of the West zone, these capacities become interruptible insofar as they still require 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 marketed as firm capacities and 220 GWh a day as interruptible capacities. The elements which influence the availability of interruptible capacities are the Montoir terminal supply, weather conditions and the allocation of part of these capacities for injection in the Atlantique PITS (cf. III 2.d).

At the present time, it is intended to fix the tariff charge applicable to yearly interruptible capacity subscriptions at 50% of the charge applicable to yearly firm capacity subscriptions for the North-South link and the South-TIGF interface. .

## **2 Reorganisation of the transport-storage interface on the GRTgaz network**

Creation of the great North network means redefining the interfaces between the Gaz de France Major infrastructures division (DGI) storage capacities and the GRTgaz network as from 1<sup>st</sup> January 2009.

### ***a- Organisation of transport –storage interfaces in the first quarter of 2009.***

The storage year is defined as beginning on 1<sup>st</sup> April of year N and ending on 31<sup>st</sup> March in year N+1; and so storage capacities subscribed for the period beginning on 1<sup>st</sup> April 2008 are valid until 31<sup>st</sup> March 2009.

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

The operating rules applicable to the transport –storage interface points (PITS) at this time are published on the GRTgaz website.

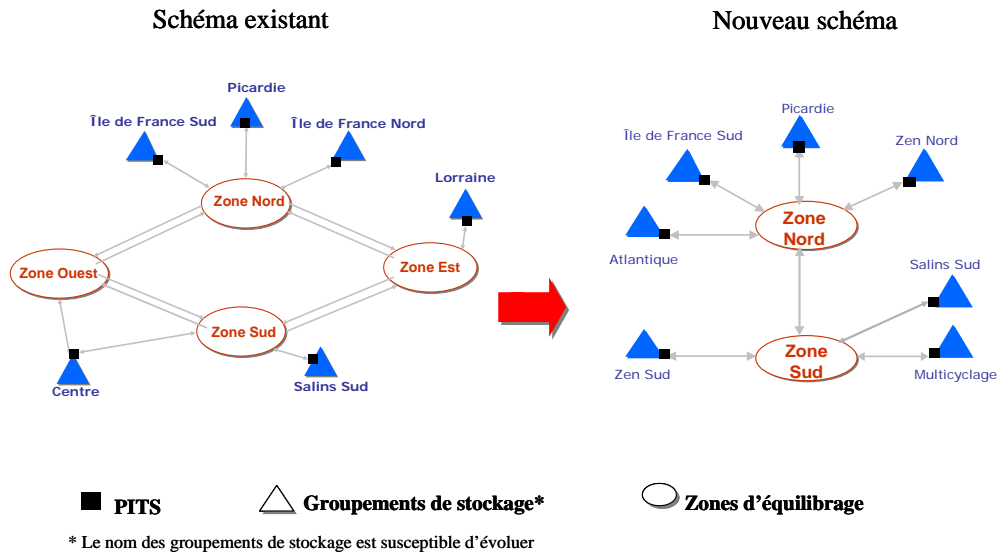
### ***b- Organisation of transport-storage interfaces as from 1<sup>st</sup> April 2009***

Following a request formulated by CRE, the two operators have worked together to propose a new definition of the interface points between their structures taking into account both the creation of the great north zone on the GRTgaz network and a change in the Gaz de France DGI storage capacity beginning on 1<sup>st</sup> April 2009.

This proposal is based on a redefinition of storage groups in the Gaz de France DGI offer. In particular, the existing “Centre” group, currently accessible through the GRTgaz West and South zones, will be split into two distinct groups:

- the “Atlantique” group, accessible through the future GRTgaz great North zone;
- the “Zen Sud” group, accessible through the GRTgaz South zone.

Within this new structural framework currently being defined, the PITS for each of the GRTgaz balancing zones as from 1<sup>st</sup> April 2009 would be as follows:



The capacities at the “Atlantique and the “Zen Sud” PITS would be as follows:

Input from the PITS	GRTgaz North zone (GWh/day)		GRTgaz South zone (GWh/day)	
	Firm	Interruptible	Firm	Interruptible
Atlantique (H gas)	430	50		
Zen Sud (H gas)			300	70

Exit to the PITS	GRTgaz North Zone (GWh a day)		GRTgaz South Zone (GWh a day)	
	Firm	Interruptible	Firm	Interruptible
Atlantique (H gas)	170	185		
Zen Sud (H gas)			200	130

*c- Level of injection/withdrawal tariff charges at transport-storage interfaces*

The tariff structure rules in force allow for access to the “Centre” group from the West and South balancing zones. This flexibility is taken into consideration in the Centre PITS tariff which is higher than that of the other PITS, which all have identical tariff charges.

With the reorganisation of the PITS, bringing both entry and exit tariffs at the GRTgaz PITS to the same level as from 1<sup>st</sup> April 2009 is being considered.

#### *d- Management of interruptible injection capacities in the “Atlantique” group*

On the GRTgaz network, the same physical infrastructures handle the transmission both for injection in the “Atlantique” storage group and for transportation from the North to the South zone.

Moreover, the transported gas comes from North zone input points which include the Montoir terminal.

Thus gas supply from the Montoir terminal allows the conversion of 200 GWh a day of interruptible capacity into firm capacity which needs to be divided between the exit to the Atlantique PITS and the North-to-South link.

At this stage, the following division is being considered for the first 150 GWh a day converted into firm capacity by the Montoir gas supply:

- 40% dedicated to the North-South link, i.e. 60 GWh a day;
- 60% dedicated to injection at the Atlantique PITS, i.e. 90 GWh a day;

The subsequent 50 GWh a day would be entirely allocated to the North-to-South link.

### **3 Tariff rules at input points from LNG terminals**

The forthcoming tariff period could see some important changes with respect to LNG terminals:

- start-up of the Fos-Cavaou terminal;
- investment decisions and, maybe, the start-up of extensions at existing terminals (in particular, Montoir);
- investment decisions regarding new LNG terminal projects.

Under these conditions, the CRE tariff proposal should provide the actors involved with appropriate visibility concerning the rules which would be applicable to entry capacities on the transmission network from LNG terminals.

CRE envisages the following changes with respect to current rules.

#### *a- Extension of the automatic allocation rule regarding entry capacities on the transmission network depending on the assigned regasification capacities*

As a general rule, it is planned that assigned regasification capacities, whatever their level and duration, gives the right and the obligation to subscribe to the corresponding entry capacities on the corresponding transmission network. This rule means:

- guaranteeing shippers that access to the transmission network will not be a problem if they have subscribed to regasification capacities;
- ensuring that investment costs on the transmission network which are linked to LNG terminals are at least partially covered by the shippers’ subscription to capacities.

It is also the responsibility of LNG terminal operators and TSOs to coordinate their investments so as to offer shippers coherent capacities on the LNG terminals and the transmission networks.

For the Montoir, Fos-Tonkin and Fos-Cavaou terminals where the operators’ offers are expressed in terms of annual regasification capacity, it is intended to maintain the automatic allocation principle while adapting the way daily capacity is invoiced to shippers so that it is proportional to their regasification capacity and their total firm network entry capacity.

Thus, all shippers subscribing to a “continuous” service with the LNG terminal operators will be invoiced the amount M determined using the following formula:

$$M = Q_{Aexp} / Q_{TM} * C_{PITTM} * TCE_{PITTM}$$

where:

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

$Q_{TM}$  = firm total annual regasification capacity of the LNG terminal;

$C_{PITTM}$  = firm daily entry capacity at PITTM (transport-LNG terminal interface point);

$TCE_{PITTM}$  = charge for entry capacity on main network, applicable to the daily capacity subscription to main network input points from the PITTM.

At the beginning of each month, the TSO calculates the previous month's maximum daily supply for each shipper. If this exceeds the capacity  $C = Q_{Aexp} / Q_{TM} * C_{PITTM}$ , then the TSO invoices the shipper with an additional daily capacity monthly subscription equal to the difference between the previous month's maximum daily supply and the capacity C at a price equal to 1/12<sup>th</sup> of the firm annual subscription.

All shippers subscribing to a "band" or "spot" service with the LNG terminal operators will be invoiced a firm daily capacity monthly subscription equivalent to 1/30<sup>th</sup> of the regasification capacity booked with the LNG terminal operators. The rate applicable is equal to 1/12<sup>th</sup> the firm annual subscription.

For projected new LNG terminals, the principles are the same but the rules will be adapted depending on the offer of these terminals' operators which could be different from the current "continuous" service offer.

More specifically, when the terminal operator's offer includes a daily supply capacity, the TSO will allocate to all shippers subscribing to one of the terminal operator's services for a given period, a firm daily capacity for the same period which is equal to the daily supply capacity subscribed to with the terminal operator.

#### ***b- Level of entry tariff charges from LNG terminals***

CRE envisages maintaining the current principal of equalising entry tariff charges from LNG terminals.

For basing tariffs on marginal transmission network development costs would be very complicated to implement insofar as, for the main network, it is difficult to distinguish infrastructures which contribute partially or entirely to:

- defining the entry capacities of the terminal in question,
- and defining other capacities sold as entry or exit on the balancing zone concerned.

In addition to which, given the use by the various projects of facilities relative to each balancing zone network node<sup>3</sup>, a tariff structure based on marginal costs would result in tariff charges which depend largely on the order in which projects are initiated.

Nevertheless, CRE is considering the introduction of an economic test which would involve part of the costs being borne directly by the shippers concerned if a terminal project entails very high investment expenditure on the transmission networks.

This economic test could be based on the principle that revenue generated by subscriptions to transmission network entry capacities from the LNG terminal should cover the cost of constructions between the terminal and the transmission network node over a period of 20 years.

If this prerequisite is not met, then the transmission network entry charge from the LNG terminal will increase or the TSO will request a participation from the terminal operator to cover the costs of construction.

#### ***c- Specific case of the Verdon terminal project***

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<sup>3</sup> The main transmission network node comprises the meshed part of the network enabling gas transport from several input points.

Technical studies are currently being carried out to determine whether this terminal will be connected to the TIGF or the GRTgaz network.

If the project is implemented, the choice of connection will be based on the overall economically optimised solution. To this end, the CRE intends:

- that tariff rules, in particular the equalising principle and the economic test, should apply in exactly the same way whichever network (TIGF or GRTgaz) a terminal is connected to;
- to create a contractual input point for the Verdon LNG terminal(s) giving access to the GRTgaz (South zone) and the TIGF networks.

#### **4 Other possible changes**

##### ***a- Consolidation of downstream capacity charges***

Tariffs currently in force differentiate two tariff charges with respect to downstream capacities: a tariff charge for transmission on the regional network (TCR) and a delivery capacity charge (TCL).

For the forthcoming tariff structure, merging the TCR and the TCL into a single charge is being considered, in an effort to simplify the capacity offer for shippers.

##### ***b- Suppression of interruptible delivery capacities at transmission distribution interface points (PITD)***

Given transmission network reinforcement upstream of PITD over time, it is intended to cease commercialisation of interruptible delivery capacities at PITDs except when these they may be necessary for securing gas transportation during the 2% risk cold peak.

##### ***c- Industrial client access to gas exchange points (PEG)***

In January 2008, GRTgaz applied to CRE for permission to conduct an experiment designed to facilitate access to the natural gas wholesale market for consumers directly connected to the transmission network.

The principles governing the new experimental scheme are as follows:

- the industrial client becomes a shipper by signing a transportation contract with GRTgaz. By doing this, he obtains access to the PEG in order to secure his gas supplies and subscribes directly to downstream transport capacities with the TSO;
- the industrial client can delegate management of his balancing contracts to a third party known as a “balancing shipper”. He transfers the aggregated volume of purchased gas, the downstream transmission capacities and the balancing tolerance linked to the transferred delivery capacities.

This scenario meets the expectations of industrial clients and may foster competitiveness and liquidity on the wholesale market with new players at the PEG.

By virtue of its decision of 7<sup>th</sup> February 2008, CRE approves the 2008 experimental scheme GRTgaz intends to carry out with those of its industrial clients who are interested. CRE also indicated this new scheme would be assessed before being incorporated into the new tariff structure rules.

At the present time, two sites are involved in the experiment.

##### ***d- Conditions of access to the combined cycle gas transmission network***



According to the TSOs, 9 combined cycle gas turbines (CCGT) will start up between 2008 and 2010 producing 3,900 MW of electric power with a yearly gas consumption of around 30 TWh. This trend may continue beyond 2010 with more than 15 other projects under study.

The large number of turbines with particular needs in terms of flexibility related to peak and semi-base electricity production will modify the way gas transmission networks are managed and their operating rules.

In this context GRTgas has created a working group bringing together all the parties concerned (project proponents, TIGF, RTE, DIDEME, CRE) in an effort to define how to proceed concerning these new users.

The tariff and operational rules applicable to these facilities could be defined in the framework of a future tariff structure proposal, especially since they have hourly modulation needs which differ from those currently offered to transmission network clients.

#### **IV - Analysis of TSOs initial forecasts regarding the forthcoming tariff structure**

The TSOs have communicated their first expenditure and subscription forecasts for the period 2009-2012 to CRE.

Comparison with current tariffs is difficult due to the substantial changes in tariff structure from one tariff period to another, especially for GRTgaz.

##### **1 Tariff changes predicted for GRTgaz**

At the present time, it is difficult to measure the impact for shippers arising from organisational changes in the GRTgaz transmission network where the current four balancing zones will be reduced to two.

For shippers using only one or two input points in the current three zones in northern France, they will be able to access all consumers in these zones in the same transmission conditions and will take advantage of many market opportunities between the various gas suppliers.

The “advantages” linked to these improvements in the GRTgaz transportation offer are specific to each shipper and it is difficult to estimate an average cost.

Preliminary analysis of the elements communicated by GRTgaz shows an increase of around 10% in current euros of the operator’s total expenditure (capital costs and net operating expenditure) in 2009 in comparison with expenditure covered by the tariff in force (2007-2008 average).

This rise in 2009 is linked to the substantial growth in investment resulting in increases of nearly 12% in capital costs and 8% in net operating costs compared with the average value assessed for 2007 and 2008, with no change in tariff rules.

The increase in expenditure for the 2010-2012 period would be around 5% per year on average, in current euros.

The subscribed capacities will also increase but not enough to compensate for the increase in expenditure.

Tariff simulations have been carried out on the basis of forecasts communicated by GRTgaz, with the following hypotheses:

- the tariff charges at the North-South link are fixed at 200 €/ MWh a day per year in the North-to-South direction and at 150 €/ MWh a day per year in the South-to-North direction;
- the tariff charges at the interface with TIGF are fixed at 75 €/ MWh a day per year in both directions. The corresponding loss in revenue for GRTgaz is compensated through a general increase in tariff charges on the main GRTgaz network;
- The calculations for each shipper are based on the current portfolios subscribed.

These simulations show that for an average shipper, the transportation cost for an equivalent portfolio subscription would increase by about 9% in 2009. As from 2010, the average increase in the transportation cost would be 4% per year in current euros.

The merging of zones and the reduction in TIGF interface charges will have a different impact on each shipper depending on his portfolio’s geographical distribution and type:

- a shipper present in several GRTgaz balancing zones transporting gas from northern France to the TIGF network may see a reduction in its transportation costs on the GRTgaz network;
- a shipper who doesn’t use the links between balancing zones (e.g. entering via and remaining within the North zone) will see an increase in its transportation costs which could reach 14 %.

Simulation of the GRTgaz tariff structure:

Most of the GRTgaz investments concern the main network. CRE envisages a larger increase in tariff charges for the main network than for the regional network. On the basis of GRTgaz expenditure and subscription forecasts, the main tariff charges could see the following changes in 2009:

	<b>Tariff charge range Firm subscriptions</b> (€/ MWh a day per year)
<b>H gas entries (Dunkerque, Obergailbach, Taisnières H)</b>	90 - 100
<b>Taisnières B entry</b>	65 - 75
<b>LNG terminal entry</b>	85 - 95
<b>North-to-South link:</b>	200
<b>South-to-North link:</b>	150
<b>GRTgaz-TIGF interface</b>	75
<b>Main network exit</b>	65 - 75
<b>Storage entry</b>	13 - 18
<b>Storage exit</b>	3 - 4
<b>Regional transmission</b>	47-53
<b>Delivery to industrial clients</b>	21-24
<b>PITD delivery</b>	24-27

## 2 Tariff changes predicted for TIGF

Preliminary analysis of the elements communicated by TIGF show an increase of around 20% in current euros of the operator's total expenditure (capital costs and net operating expenditure) in 2009 with respect to expenditure covered by the tariff in force (2007-2008 average).

This rise is linked to the substantial growth in investment resulting in an increase of nearly 22 % in capital costs with no change in tariff rules. In 2009, an 18% increase in operating costs is foreseen with respect to the predicted 2007-2008 average, mainly due to regulatory changes regarding safety and network operation ("multifluid" decree) and the steep increase in energy expenditure.

The increase in expenditure for the 2010-2012 period would be around 8% per year on average, in current euros.

The subscribed capacities over the same period will also increase but not enough to completely compensate for the increase in expenditure.

A first round of tariff simulations has been carried out after studying the forecasts communicated by TIGF, with the following hypotheses:

- the tariff charges at the interface with GRTgaz are fixed at 75 €/ MWh a day per year in both directions:
- calculations are made based on a standard 2009-2012 portfolio.

These simulations show that for an average shipper, the transportation cost of an equivalent subscription portfolio would increase by about 8% in 2009 and about 5% a year for the 2010-2012 period.

Simulation of the TIGF tariff structure:

Most of the TIGF investments concern the main network. CRE therefore envisages a larger increase in tariff charges for the main network than for the regional network. On the basis of the elements communicated by TIGF, CRE believes that the main tariff charges could see the following changes in 2009:

- a GRTgaz-TIGF interface charge at 75 euros;
- an entry charge at Biriadou and Larrau of 90-100 euros;
- an increase of around 6% in other tariff charges.

CRE invites interested parties to send their contributions, **by 6<sup>th</sup> June 2008 at the latest:**

- by email to the following address: webmestre@cre.fr ;
- by contributing directly on the CRE website (www.cre.fr) in the section "Publications / Public consultations";
- by post to the following address: 2, rue du Quatre Septembre - F-75084 Paris Cedex 02;
- by calling the Division of gas infrastructures and networks on +33.1.44.50.42.12;
- by requesting a hearing by the Commission.

CRE will publish a summary of contributions except when these fall under the Official Secrets Act. Contributors' confidentiality and / or anonymity of information is guaranteed if requested.

Interested parties are in particular asked to answer the following questions:

#### **QUESTIONS CONCERNING THE REGULATION FRAMEWORK**

1. *Do you agree with extending the tariff period? Do you think that a 4 year period is suitable?*
2. *What do you think of the principle of incentive regulation for TSOs?*
3. *Concerning quality control of service, do you have any comments on the proposed list of indicators to be monitored and those specified for financial incentive? Do you have any additional proposals for these two categories?*

#### **FINANCIAL QUESTIONS**

4. *Do you think that the rate of return on natural gas transmission assets in force is adequate given the nature of and risks involved in this activity?*
5. *What do you think of the TSOs requests concerning the RAB calculation method?*
6. *What do you think of the proposal to change the investment incentive scheme for gas transmission networks?*

#### **QUESTIONS REGARDING THE TARIFF STRUCTURE**

7. *What do you think of the range of tariff charges being considered for the North-South link and South-TIGF interface?*
8. *What do you think of setting up a nomination system between the North and South zones? Do you have additional proposals for facilitating the implementation of such a system?*
9. *What do you think of the new transport-storage interface scheme on the GRTgaz network as from 1<sup>st</sup> April 2009?*
10. *What do you think of equalising the tariff charges at transport-storage interface points (PITS) on the GRTgaz network as from 1<sup>st</sup> April 2009?*
11. *What do you think of the distribution between the North-to-South link and the injection at the "Atlantique" PITS of firm capacities thanks to the Montoir gas supply?*
12. *Do you have any comments on the allocating rules of input point capacities from LNG terminals? ?*

13. *What do you think of proposals concerning entry charges on the transmission network from LNG terminals? What do you think of the idea of introducing an economic test for LNG terminals?*
14. *Are you in favour of the proposal to limit marketing of downstream interruptible capacities at PITDs to the occasions when they are strictly necessary?*
15. *What do you think of the GRTgaz plan to facilitate industrial client access at PEGs? ?*
16. *Have you any comments on the TSOs forecasts and the tariff structure estimates in the present document?*
17. *Do you have any other remarks or comments on the current tariff in force or the proposed changes for the new tariffs?*

Mis en forme : Anglais  
(Royaume-Uni)