

## **Public consultation on pricing principles for use of LNG terminals**

### **Foreword**

Two LNG terminals are currently in service in France, both operated by the Direction des Grandes Infrastructures de Gaz de France (Management of the major infrastructures, hereafter referred to as DGI) – one located at Fos-sur-Mer, in the autonomous port of Marseilles (hereafter referred to as Fos Tonkin), and the other at Montoir-de-Bretagne, in the autonomous port of Saint-Nazaire (hereafter referred to as Montoir).

Construction of a third LNG terminal is currently underway at Fos-sur-Mer (hereafter referred to as Fos Cavaou). It is managed by the Société du Terminal Méthanier de Fos Cavaou (hereafter referred to as STMFC), which is owned by Gaz de France and Total. Its commercial start-up is currently scheduled for 1 April 2008.

The law of 3 January 2003 guarantees all consumers and suppliers transparent, non-discriminatory access to LNG terminals. The modified Article 7 of this law rules in particular that *“reasoned proposals of tariffs [...] for liquefied natural gas facilities are transmitted to the Ministers for the Economy and Energy by the Commission de Régulation de l’Energie, [...]. Ministerial approval is considered as granted, unless there is opposition from one of the ministers within the two months following receipt of the Commission’s proposals.”*

Current tariffs for use of the Fos Tonkin and Montoir LNG terminals were proposed by CRE on 26 October 2005, and came into force on 1 January 2006. They were designed to be applied until start-up of the Fos Cavaou LNG terminal

In October 2007, CRE plans to propose new tariffs for use of LNG terminals, and applicable to the Montoir, Fos Tonkin and Fos Cavaou terminals. In order to prepare this forthcoming tariff proposal, CRE would like to consult all market players.

Interested parties are invited to reply to the questions at the end of this document.

## **I - Regulation framework**

### **1 Pricing principles**

The following pricing principles have been adopted for the forthcoming tariffs for use of LNG terminals:

- the tariff shall be fixed so as to cover capital and operating costs borne by operators;
- the pricing structure, whether regarding services on offer or tariff terms, shall be identical for all three LNG terminals.

However, it is envisaged that pricing levels will be individualised for each LNG terminal.

As regards the Fos Cavaou terminal, which is operated by a legally distinct company, terminal users will have to pay a tariff that enables its specific costs to be covered.

Furthermore, the Fos Tonkin and Montoir terminals, which are both operated by the same entity (Gaz de France DGI), are certain to develop differently in the future, taking into account:

- the investment programme of around 100 M€ spread over the years 2008, 2009 and 2010, necessary if levels of performance at the Montoir terminal are to be maintained;
- the project for extension of the Montoir terminal, in 2 stages starting in 2011, which depends on the results of the open season currently underway at DGI's initiative;
- the characteristics of the Fos Tonkin terminal, which at present can only receive ships with capacities lower than 75,000 m<sup>3</sup>, and prolongation of whose lifetime beyond 2014 has not yet been decided.

It would therefore seem desirable that tariffs for use of these two terminals be individualised for the forthcoming pricing period, so as to accurately reflect costs specific to each terminal.

Such separation would have little effect over the next three years, with each terminal's average unit tariffs remaining very similar to one another during that time. Assuming that current methods of calculating capital costs are maintained, and basing calculations only on subscriptions received up until the present time, average unit tariffs at the two terminals will be very similar, to the order of 1.1 €/MWh.

As from 2011, pricing trajectories may well start to differ more distinctly, with implementation of stage 1 of the Montoir terminal extension project.

Finally, as regards the Montoir terminal, it is envisaged that, after 2011, the tariff in force will apply in identical fashion both to existing capacities and to new capacities resulting from its extension.

### **2 Date of coming into force and duration of application of new tariffs**

It is planned to propose that tariffs be applied for an estimated period of three years. Specifically:

- for the Fos Cavaou terminal, the tariff would be applied for three years as from its commercial start-up (currently scheduled for 1 April 2008), in line with the duration of the recently allocated short-term contracts for this terminal;
- for the Fos Tonkin and Montoir terminals, the tariff would be applied as from 1 January 2008 up until the beginning of January 2011, a period in line with the Montoir extension project, the first stage of which would be implemented in early 2011.

### **3 Long-term visibility**

The stability and predictability of the access tariffs to the LNG terminals offered to investors and users are ensured by the application of the provisions stated by the French law, which transposes the European principles regarding conditions for third-party access to. It endorses the principle of covering the costs linked to the activity, including a return on the invested capital. The method for calculating such capital and the

return on it is based on theories and practices recognised both in France and at international level. The CRE will entrust a consultancy with carrying out a study about the weighted average cost of capital issue.

To afford concerned players the visibility necessary to decision-making, the possibility of defining some tariff principles over the long term, with a periodical updating system, may be envisaged.

#### The project for extension of the Montoir terminal's regasification capacities

Gaz de France DGI is currently proposing an extension of the Montoir terminal's capacities, initiating an 'open season' for the market. The extension, if finally decided upon, would be carried out in two stages. The first stage, scheduled for 2011, would bring the terminal's capacities from 10 bcm/year up to 12.5 bcm/year. The second phase, scheduled for 2014, would bring capacities up to 16.5 bcm/year.

The operator's current estimate of investment stands at 100 M€ for the first stage and 300 M€ for the second. After communication of detailed investment costs by the operator, following its feasibility study, it is envisaged that the latter bears the risk of any possible future up-drift in such costs.

In this context, and provided that present methods for calculation of capital costs (depreciation period and rates of return on assets, in particular) are maintained, the average unit tariff between 2011 and 2020, expressed in 2007 euros, would stand at between 1.1 €/MWh (assuming subscription of 80% of technical capacities) and 1.4 €/MWh (assuming subscription of 80% of technical capacities, and taking into account a 10% contingencies regarding operation costs and a 30% contingencies regarding the investment budget).

## II - Tariff level

Article 7 of the law of 3 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 system security and to quality control of extracted and injected natural gas, as well as costs entailed in the carrying out of public service missions”.

### 1 Operating costs

Levels of operating costs are fixed on the basis of analysis of previous fiscal years, operators’ budget forecasts for the fiscal years concerned by the tariffs, and audits of operators’ accounts.

In preparation for the forthcoming tariff proposal, CRE is currently carrying out two audits:

- an audit of Gaz de France accounts regarding DGI;
- an audit of STMFC accounts.

### 2 Capital costs

#### a) regulated asset base

Capital costs include two parts: depreciation and financial return on fixed capital. Calculation of these two components is based on valuation of the Regulatory Assets Base (RAB) for the existing Fos Tonkin and Montoir terminals, which is carried out using ‘current economic costs’ methodology, the main principles of which were decided upon by the Special Commission, known as ‘Commission Houri’, set up by virtue of Article 81 of the rectified finance law of 28 December 2001, and responsible for fixing the price of the State’s transfer of its natural gas transmission systems.

Lifetimes adopted for the main categories of industrial assets are:

- 20 years for ancillary facilities and unloading systems;
- 40 years for regasification assets, civil engineering and constructions, and storages and other facilities.

RAB value as at 1 January 2007, as calculated for the Fos Tonkin and Montoir terminals, is detailed in the table below:

M€	RAB on 01/01/2007
<b>Fos Tonkin</b>	144
<b>Montoir</b>	229
<b>Total</b>	373

Regarding newly commissioned facilities, value incorporated in the RAB is their gross value. This principle, which figured prominently in the explanatory statement for tariffs in force for LNG terminals, applies to all infrastructures coming into service since 2003.

As regards the Fos Cavaou terminal, the regulatory assets base (RAB) total at the LNG terminal’s start-up day is currently valued at 588 M€. The history of operator costs is as follows:

in M€	2004	2005	2006	2007 *	2008*	Total
CAPEX	35.2	103.2	205.4	208.5	35.6	587.9

\* STMFC estimates

Investment in the Fos Cavaou terminal commenced in 2004. It is envisaged that financing costs resulting from it, as well as those linked to pre-start-up operating costs, would be specifically covered on the basis of the methodology generally adopted for the calculation of the interests on assets in the course of construction, taking into account an interest rate comparable with the cost of the debt, in line with usual practice in financing projects of this kind.

The prescriptive date for start-up of assets, adopted for the tariff in force for LNG terminals, is 30 June of the start-up year.

Given that the Fos Cavaou start-up and the Montoir terminal extension are both one-off operations, CRE is studying the possibility of adopting the real start-up date (scheduled for 1 April 2008 in the case of Fos Cavaou), as an exception to the 30 June prescriptive-date principle.

At present, depreciation is calculated using the linear depreciation method. It is, however, envisaged that, in the cases of the Fos Cavaou terminal and the Montoir terminal extension, RAB depreciation would be calculated according to a 'progressiveness' principle, a method that would enable more homogenous spreading of capital costs over asset lifetime.

As concerns possible future investments linked to the Montoir terminal extension project, it is envisaged that they would either be incorporated into the extension start-up year RAB, using the methodology adopted for the calculation of the interests on assets in the course of construction, or incorporated into the RAB on a yearly basis, as and when they are made. In the latter case, they would have an effect on tariffs prior to extension start-up.

b) Rate of return on assets:

The standard real before-tax rate of return currently in force for gas infrastructures is 7.25%, to which a bonus 200 base points are added in the case of LNG terminals in order to take specific risks connected with the activity. An additional 125 base-point bonus is applied to assets coming into service after 2003.

The rate of return and the duration of its application will be re-examined by CRE for its upcoming tariff proposal.

### III - Hypotheses regarding regasification capacity subscriptions and average unit tariff level

The tariff currently in force is around 15% lower than its predecessor, largely due to very high capacity subscriptions in 2006 and 2007.

Start-up of the new Fos Cavaou LNG terminal will most probably lead to a reduction in use of the Fos Tonkin and Montoir terminals, compared to levels recorded in 2006 and 2007. Capacities currently reserved at these two terminals for 2008 to 2010 do not fully cover existing technical capacities.

Subscriptions taken into account in the tariff in force, in TWh	2006		2007	
	Fos Tonkin	Montoir	Fos Tonkin	Montoir
	83	107	83	103

Current subscriptions, in TWh	2008		2009		2010	
	Fos Tonkin	Montoir	Fos Tonkin	Montoir	Fos Tonkin	Montoir
	65	95	59	79	48	97

Subscribed capacities between 2008 and 2010 are therefore currently lower than subscriptions taken into account for the preceding tariff - around 30% for Fos Tonkin and around 15% for Montoir, which could lead to an appreciable increase in unit tariffs at these terminals.

It is envisaged that, in calculating the forthcoming unit tariffs, hypotheses of subscriptions higher than those already in place would be considered, so as to take possible future subscriptions into account.

In order to encourage operators to optimise use of their terminals, they would be authorised to retain a part of the extra revenue obtained if capacity subscriptions are higher than hypothesised. The rest of such extra revenue would be returned to terminal users, employing a mechanism similar to the Compte de Régularisation des Charges et des Produits (CRCP – costs and products regulation account) set up for the latest tariff for use of gas transmission systems.

On the other hand, the Fos Cavaou subscription level is known with certainty, as the terminal is subscribed to the full extent of its technical capacities for the next three years.

## IV - Tariff structure

The tariff structure envisaged would be based on the principles presented below.

### 1 Maintenance of regasification services currently in operation

LNG terminals must operate in optimal fashion, with numbers of users having different ways of making use of them: regular long-term users, occasional users (fewer than 12 unloadings a year), and one-off users (unloading scheduled after the 20<sup>th</sup> day of month  $m$  for month  $m+1$ ).

With this in mind, two different services are currently in operation, with division of output capacities dependent on user profile:

#### a) Continuous output service

For users scheduling a yearly average of more than one ship per month, daily output is currently fixed by the terminal operator so as to be as regular as possible, in line with the same user's unloading schedule. With this service, users enjoy a degree of flexibility, within the limits of the terminal's possibilities.

#### b) 30-day band output service

For users scheduling an average of less than one ship a year, regasification of a cargo is carried out over 30 days of constant output, a service that enables isolated cargoes access to constant output over a relatively long period, enabling regular deliveries adapted to the needs of the downstream market. The 30-day band is not flexible, but output is guaranteed during it.

It is planned to keep the 'continuous' and 'band' services going, and this would also apply to the Fos Cavaou terminal. It is envisaged that, in a case where several users subscribed the continuous service at the same terminal, division of outputs would be made on the basis of scheduled volumes of gas. Furthermore, after close examination of operational feasibility, a choice between 'band' and 'continuous' services might be proposed to users reserving between 6 and 12 cargoes unloaded per year.

### 2 Maintenance of current terms

#### a) Reminder of current tariff

The tariff currently applicable at the Montoir and Fos Tonkin terminals includes the following terms:

- *Fees for the number of cargoes unloaded*, representing between 3 and 10 % of a user's total invoice;
- *Fees for quantities unloaded*, which represents 80 to 95% of an average customer invoice. These fees are reduced in the case of reservations made after the monthly unloading schedule has been drawn up ('spot' service), with a view to encouraging shippers to use the terminal's still available capacities up until the last minute;
- *Fees for use of gasification capacities*, depending on the average length of time between the arrival of two ships;
- *Fees for reception capacity*, depending on the average size of a cargo, which is indicative of the storage volume used over the contractual period;
- *Fees for irregular use*, depending on the difference, in absolute value, between quantities of LNG unloaded in winter and quantities of LNG unloaded in summer, thus encouraging shippers to schedule their cargoes as regularly as possible over the year;
- *Fees in kind*: deduction by the operator of 0.5% of quantities of natural gas unloaded.

#### b) Simplification of the pricing structure

In order to simplify the tariff, it is envisaged that the following two terms be done away with:

- fees for use of gasification capacities;
- fees for reception capacity.

It is also envisaged that a single price be adopted for fees for irregular use (at present, the fees are different for 'continuous' service users and 'band' service users).

Such changes would result in alignment of unit prices paid by all users, whatever capacity volumes they have subscribed.

### **3 Optimisation of use of regasification capacities**

LNG terminals are rare infrastructures, costly and complex to run when used by several shippers. It is therefore essential to establish mechanisms designed to facilitate marketing of capacities and optimise actual use thereof.

#### a) Obligation to pay for subscribed capacities ('ship or pay')

This obligation currently bears upon 90% of subscribed capacities at the Fos Tonkin and Montoir terminals, and upon 95% of subscribed capacities at the Fos Cavaou terminal. It is envisaged that the rate should be set at 95 % for all three terminals, in order to ensure improved security of revenue for operators and encourage users to subscribe to capacities that correspond exactly to their needs.

#### b) Penalty for non-compliance with scheduling

This penalty is applicable in cases of late cancellation of a reserved unloading forming part of the monthly schedule. Any late changes in scheduling are likely to have an effect on other users' outputs, and to desoptimise output flow for terminal operators.

In the tariff currently in force, a penalty of 10,000 € is imposed on any user cancelling an unloading scheduled for month  $m$  if:

- notice is less than or equal to 5 days;
- and
- the unloading is not rescheduled in month  $m$  or in the first 5 days of month  $m+1$ ;
- and
- the slot could not be used by another shipper.

It is envisaged that the penalty should be reinforced by prohibiting any cancellation of a scheduled unloading without prior notice of more than 3 days, with consequent imposition of a penalty equal to 50% of the cost of gasification of the cancelled unloading.

The penalty might act to complement a 'responsibilisation' system for subscribers of capacities at the same terminal, with shippers who make late changes in their schedules having to compensate – either in gas or financially – shippers whose outputs have been reduced in consequence.

#### c) 'Use it or lose it' mechanism

In order to optimise use of LNG terminal gasification capacities, and to avoid any risk of capacity retention, it is envisaged that a 'Use it or lose it' mechanism be implemented, which might work as follows:

As from the 20<sup>th</sup> day of month  $m$ , gasification capacity subscribers at LNG terminals would have to inform operators of their provisional unloading schedule for months  $m+2$  and  $m+3$ , and their finalised schedule for month  $m+1$ , this latter schedule acting as a constraint. These pieces of information would be published by the operators. If no unloading windows were available in month  $m$  for this schedule, any cancellation without notice of an unscheduled unloading in the first 5 days of month  $m+1$ , would be put on record, except in cases of force majeure, and the regulator informed. In a case where all terminal capacities are subscribed, temporary restoration of capacities subscribed by the shipper concerned might be demanded.

d) Regasification capacities secondary market

The current tariff provides for the possibility of regasification capacities being transferred from one shipper to another. It does not, however, seem desirable to encourage speculation on long-term LNG terminal capacities.

Consequently, it is envisaged that regasification capacity transfers carried out over a year before their date of fulfilment should be subject to operator control. If all capacities at a terminal are subscribed for the year concerned, and if a shipper wishes to transfer his long-term capacities to another shipper, the initial holder of such capacities must resell them to the terminal operator at the regulated price in force, who will resell them, in his turn, at the regulated tariff and in compliance with the allocation rules in force.

#### **4 Interfacing with transmission systems**

Gas transmission system pricing rules in force guarantee all shippers availability of annual and monthly capacities of access to the transmission system corresponding to regasification capacities that they hold at an LNG terminal.

In order to improve consistency between transmission system access and LNG terminal access, it is envisaged that, whatever the service subscribed from the terminal operator, an automatic subscription of access capacities on the transmission system be provided for, for a duration equal to that of the regasification capacity subscription and for a quantity equal to  $1/330^{\text{th}}$  of the regasification capacity subscribed for the ‘continuous’ service and  $1/30^{\text{th}}$  for the ‘band’ service.

CRE invites all interested parties to send in their contributions **by 04 September 2007** at the latest:

- via the CRE website, to the 'Public Consultations' section, using the 'Contribute' function (electronic documents can be sent);
- by email to the following address: [webmestre@cre.fr](mailto:webmestre@cre.fr);
- by post, to: 2, rue du Quatre Septembre - 75084 Paris Cedex 02 – France;
- by contacting the Direction des Réseaux et Infrastructures de Gaz (telephone +33 (0)1 44 50 41 72) to arrange a meeting with Commission services +33 (0)1 44 50 41 72),
- or by requesting to be heard by the Commission.

A summary of contributions to this consultation, observing legally protected secrets, will be published by the Commission. Confidentiality and/or anonymity of contributions will be guaranteed if requested by the contributor.

Interested parties are invited to answer the questions below:

- Q1** *Do you have any feedback on current tariffs and conditions for use of LNG terminals?*
- Q2** *What do you think of the proposal to individualise the tariff for each terminal, the pricing structure being the same for all three terminals?*
- Q3** *What do you think of the proposal to apply the tariff in force in the same way to existing capacities and to capacities resulting from the Montoir terminal extension?*
- Q4** *What do you think of the schedule and duration of the forthcoming tariff envisaged by CRE?*
- Q5** *Do you think the current tariff framework, which has legally to cover the costs, affords long-term visibility to the new Fos Cavaou terminal and the Montoir terminal extension? Do you think that rules for calculation of capital costs and ways of periodic revision of the tariff should be fixed for a long period?*
- Q6** *As regards the Montoir terminal extension project, do you think it fair to have the terminal operator bear the risk of up-drift in anticipated investment costs?*
- Q7** *What do you think of the means envisaged for calculation of capital costs at the Fos Cavaou terminal (calculation of the interests on assets in the course of construction, date of incorporation in the RAB, etc.)?*
- Q8** *Regarding the Montoir terminal extension, do you think that investments should be included in the RAB at the time of extension start-up, or as and when costs occur?*
- Q9** *Have you any comments on the rates of return on assets for the LNG terminals, or on their duration of application?*
- Q10** *What do you think of the proposals made in the consultation document regarding hypotheses on capacity subscriptions to be taken into account when fixing tariffs?*
- Q11** *Do you agree with the proposal to maintain 'continuous output' and '30-day band' services? What do you think of the proposal to divide up outputs on the basis of gas volumes scheduled in a case where there are several shippers subscribing the 'continuous output' service? What do you think of the proposal to leave a choice between the 'continuous output' service and the 'band' service for shippers subscribing between 6 and 12 unloadings per year?*
- Q12** *What do you think of the proposal to simplify charges in order to align unit tariffs paid by all users, whatever the capacity volume subscribed?*
- Q13** *What do you think of the proposal to raise the payment obligation for subscribed capacities ('ship or pay') to 95%?*

**Q14** *Do you think the penalty envisaged for non-compliance with scheduling is justified?*

**Q15** *What do you think of the proposed 'Use It or Lose It' mechanism?*

**Q16** *Do you think it necessary to put the secondary market under control in order to prevent speculation on long-term capacities?*

**Q17** *Do you think you are sufficiently well informed about conditions for use of LNG terminals and available capacities? If not, what further information would you like LNG terminal operators to make public?*

**Q18** *Have you any comments on the rules for allocation published by LNG terminal operators and/or on their application, as well as their method of reservation (short term or long term)?*

**Q19** *Have you have any other comments concerning tariffs and methods for use of LNG terminals?*