COMMISSION
DE RÉGULATION
DE L'ÉNERGIE

13 July 2005

Public consultation concerning pricing principles for utilisation of LNG terminals

Technical consultation document

Foreword

France has two LNG terminals managed by the Gaz de France Large Infrastructure Division (hereafter designated as the operator). They are located in Montoir-de-Bretagne in the *Port autonome de Saint-Nazaire* (hereafter designated as Montoir) and in Fos-sur-mer in the *Port autonome de Marseille* (hereafter designated as Fos Tonkin).

The law of 3 January 2003 guarantees all consumers and suppliers open non-discriminatory access to LNG terminals and rules that decisions on tariffs for utilisation of these systems are made by the Ministers for the Economy and Industry upon proposal from CRE.

On 24 July 2003, CRE proposed initial tariffs for utilisation of LNG terminals for planned validity of 12 to 18 months. These tariffs have been applied by the operator since 1 July 2004 and formally came into force with the Decree of 21 September 2004.

CRE is planning on proposing to the Government a fresh tariff for utilisation of LNG terminals in Montoir and Fos Tonkin in October 2005, to be applied as from 1 January 2006. This tariff is to be applied at least until start-up of the Fos-Cavaou terminal currently under construction.

I. Allowed revenue

In compliance with CRE Deliberation of 24 July 2003, the main rules governing the definition of the operator's level of allowed revenue which have been adopted for setting initial tariffs for utilisation of LNG terminals are as follows.

Capital costs consist of both depreciation allowance and return on invested capital.

Calculation of these two components depends on valuation of each operator's regulated asset base (RAB). Initial RAB value was set as at 31 December 2002 based on revaluation of original values of the operator's assets taking into account:

- An inflation index: the "*PIB marchand*" index ;
- Industrial depreciation so as to consider technical and economic obsolescence of these assets. This depreciation is calculated according to the use of a mixed method of straight-line depreciation / depreciation resulting from a constant annuity.

Once fixed as at 31 December 2002, this initial RAB value changes from year to year depending on:

- Consumer price index excluding tobacco year-over-year from July to July, as published by the *Institut National de la Statistique et des Etudes Economiques* (INSEE);
- Depreciation calculated according to the straight-line method during the normative asset life as indicated in the following paragraph;
- Removal of assets from the operator's ownership (sales and disposal);
- New investments made by the operator.

RAB value as at 1 January 2005 was 397 million Euros.

The annual depreciation allowance is calculated according to the straight-line method based on residual asset value as at 1 January every year. Normative asset lifes used for these calculations are 40 years except for certain categories of associated assets with asset lifes varying from 5 to 30 years.

The amount of financial return is calculated by applying to the RAB as at 1 January every year a return rate of 9.75%, real rate before tax. This rate results from the application of a premium of 2 percentage points to the rate adopted by CRE on transmission assets. A premium of 1.25% (representing under current conditions a total rate of 11%) is applied to the value of assets started up after 31 December 2003.

Operating costs covered by tariffs for utilisation of terminals could be evaluated in the same way as for initial tariffs by taking into account changes since then, including:

- Pension scheme reform of electricity and gas industries as from 1 January 2005. This resulted in suppression of balancing contributions paid by the employer and of recognition of external fund expenses, which were replaced by discharge payments made to the national pension scheme for electricity and gas industries and coverage of specific future rights;

- Audit of unbundled accounts of Gaz de France by CRE, resulting in a certain number of corrections to allocation of expenses.

II. Hypotheses of regasified quantities

The coming arrival of Egyptian LNG to existing LNG terminals before the start-up of the new LNG terminal of Fos Cavaou could result in variations in the use of Fos Tonkin and Montoir terminals. Compared to 2005, the capacities so far reserved have sharply increased for 2006-2007 then plummeted as from the full capacity operations of Fos Cavaou planned for 2008.

However, the actual magnitude of these variations depends on two currently uncertain factors:

- effective start-up date of of the new terminal of Fos Cavaou;
- Any supplementary subscriptions from other shippers.

III. Calculation mode for next tariff for utilisation of LNG terminals

The tariff for utilisation of LNG terminals is set so as to cover operating and capital costs borne by the operator, depending on forecasts of gas quantities to be regasified.

Until the start-up of the new terminal of Fos-Cavaou, these forecasts are reliable since a high proportion of capacities available in Fos Tonkin and Montoir has already been subscribed. It is therefore envisaged to calculate the next tariff based on hypotheses of costs and subscriptions expected up to that date.

Due to high subscriptions of capacities until the start-up of Fos-Cavaou, whereas the level of operator costs is relatively stable, unit tariffs could experience a drop against current tariffs of around 15%.

As from the start-up of Fos-Cavaou, CRE can propose a fresh tariff, in line with that it will propose for the new terminal of Fos-Cavaou.

IV. Pricing structure

IV. 1. Definition of services proposed by the operator

LNG terminals have to be able to work in an optimum way with several users, even if they have very different modes of utilisation: regular long-term users, occasional users and one-off users.

According to this perspective, two different services could be defined for sharing output capacity depending on user profile:

Continuous output services

For users who schedule a yearly average of more than one ship per month, daily output is set by the terminal operator so as to be as steady as possible depending on the duration between two arrivals of the same user's ships.

Daily output is proportional to total terminal capacity, so that within the possibilities of terminal limits, users can benefit from a certain amount of flexibility.

30-day band output services

For users scheduling an annual average of less than one ship a month, regasification of a cargo is ensured with constant output over 30 days. This service enables isolated cargoes to benefit from constant output over a relatively long period so as to provide regular deliveries adapted to market needs downstream. This service nevertheless imposes certain terminal restrictions on regular long term users as their unloads must physically

guarantee a third party's contractual cargo output over 30 days . The 30-day band is therefore not flexible, but output is guaranteed.

For these users, application of different tariffs, if reservation is made in advance (annual or long-term contract) or after the monthly unloading schedule has been drawn up ("firm spot") can be envisaged. In the latter, case, a reduced tariff could be proposed if the unloading slot cannot be guaranteed by the operator ("interruptible spot").

IV. 2. Reminder of current tariffs

Current tariffs consist of the following terms:

- Fees for the number of cargos unloaded, equal to 30,000 €;
- Fees for quantities unloaded equal to 0.92 €/MWh, accounting for 80 to 95% of an average customer's invoice;
- Fees for utilisation of LNG storage equal to 0.023 €/MWh per day, proportional to quantities of LNG stored, with free allowance corresponding to complete unloading of a cargo in 5 days;
- Fees in kind: deduction by the operator of 0.5% on quantities unloaded.

IV. 3. Fresh pricing structure envisaged

The pricing structure could be slightly modified so as to adapt to multi-user operating described above:

1) **Fees for the number of cargoes unloaded** (30,000 €) and fees in kind (0.5% of quantities unloaded) would remain unchanged. These fees account for between 3 and 10% of the user's total invoice.

2) **Fees for quantities unloaded** would remain unchanged based on the principle that the level can change depending on values ultimately adopted for authorised revenue and subscription hypotheses.

3) **Fees for utilisation of storage facilities** would be amended to take into account the fact that the daily output rate is not chosen by users. Quantities of LNG stored every day are not controlled by users and therefore cannot be charged as such. These fees would be replaced by:
    a. **Fees for duration of utilisation of storage facilities,** which would be proportional to annual quantities unloaded (Q) and to the average number of days between this user's cargoes (N). N would be equal to 365 / T (T being the total number of the user's cargoes in a year) for users with more than 12 cargoes per year and to 30 for the others;
    b. **Fees for reception capacity**, representative of the storage volume used during the contractual period. These fees would be proportional to the average size of the user's cargo, i.e. **Q/T**.

4) **Fees for irregular utilisation** would be introduced, as optimal utilisation of terminal capacities when there are several users requires shippers to schedule their unloads as evenly spread as possible throughout the year. Fees for irregular utilisation would be proportional to the difference in absolute

value between quantities unloaded from April to September (Qe) and quantities unloaded from October to March (Qh).

New tariff would therefore take the following form:

$$\text{Tariff} = a*Q + b*T + c*Q/T + d*Q*N + e*\left|Q_{\acute{e}} - Q_h\right|$$

Fees could be set so that the difference in prices between a regular user and a user with fewer than 12 cargoes per year is reduced from around 0.3 €/MWh to around 0.15 €/MWh. Prices for an infrequent user would fall more than for a regular user.

IV. 4. Other elements

1) **Penalty for non-compliance with scheduling could be introduced**, applicable in the event of cancellation of unloading reserved within the framework of the monthly programme and not cancelled in time. This penalty is intended to encourage regular users to schedule their unloads properly.

2) **Obligation for payment for subscribed capacities** (*ship or pay*) currently involves 90% of subscribed capacities. This rate might be increased so as to encourage users to reserve capacities corresponding to their actual needs.

3) **Tariffs for utilisation of LNG exchange points** are currently as follows: an annual fixed fee equal to a maximum of 6,000 € per exchange point, and a fee proportional to quantities exchanged, equal to the maximum of 0.015 €/MWh up to 4 TWh per exchange, and to 0.003 €/MWh over that.

These tariffs could be amended by replacing the annual fixed fee with a monthly one and by bringing the fee proportional to quantities into line with the one already used for gas exchange points on transport system.

4) **Tariffs for associated services** (inspection of ships prior to initial unloading authorisation, inerting, etc) could be published by the operator.

CRE invites participants who wish to transmit any observations and comments concerning this consultation document to do so by **16 September 2005 at the latest**. For information purposes only, some questions are listed below:

Q1 *Do you have any experience feedback on current tariffs and terms for utilisation of LNG terminals?*

Q2 *What do you think of the principles adopted by CRE to determine operators' authorised revenue level (RAB valuation method, rate of return on invested capital, etc)?*

Q3 *What do you think of the two services, "continuous output" and "30 day band", envisaged according to types of users?*

Q4 *Within the framework of 30-day band output services, do you think it appropriate to apply different tariffs for spot cargoes reserved after the monthly unloading has been drawn up?*

Q5 *What do you think of modifications to the pricing structure for utilisation of LNG terminals envisaged in the consultation document? And more especially what do you think of the solution proposed to replace the fees for utilisation of storage facilities? What do you think of the introduction of fees for regular use?*

Q6 *Do you think the fees planned for non-compliance with scheduling is justified?*

Q7 *What level of obligation of payment for subscribed capacities ("ship or pay") do you deem appropriate?*

Q8 *What do you think of planned modifications to tariffs for utilisation of LNG exchange points?*

Q9 *Do you think you are sufficiently informed about terms for utilisation of LNG terminals and capacities available? If not, what additional information would you like the LNG terminal operator to make public?*

Q10 *Do you have any comments on the allocation rule published by the LNG terminal operator and/or its application?*

Q11 *Do you have any other remarks concerning tariffs and methods for utilisation of LNG terminals?*

Useful links for information concerning current tariffs and terms for utilisation of LNG terminals

CRE pricing proposal on 24 July 2003:
http://www.cre.fr/fr/ressources/deliberations/deliberations_consultation.jsp?idDoc=2297
Capacities available:
http://www.grandesinfrastructures.gazdefrance.com/sicsFront/offre_terminaux/telechargements/telechargements.html
Operating rules:
http://www.grandesinfrastructures.gazdefrance.com/sicsFront/offre_terminaux/terminaux/terminaux.html
Allocation rule:
http://www.grandesinfrastructures.gazdefrance.com/sicsFront/offre_terminaux/telechargements/Regle_allocation_terminaux.pdf