June 2nd 2003

Public consultation on tariff principles for the use of gas transport networks and LNG terminals

Technical consultation notice

1. Principles common to gas transport networks and LNG terminals

Tariffs for using public gas transport networks and LNG terminals will be calculated on the basis of all the costs associated with operating these infrastructures, as determined from operators' unbundled accounts, in particular.

Initial rules stipulate that the tariff level to be implemented by transport and LNG terminal operators is part of a "cost plus" formula, intended to cover operating costs associated with gas transportation and LNG terminals on the one hand, and capital costs (depreciation, remuneration) on the other hand.

In principle, the tariff recommendation put forward by CRE could apply from January 1st 2004. It has been proposed that this recommendation should be based on forecast data for 2004. Predictions for capital and operating costs, consumed or regasified quantities and subscribed capacities will be drawn up on the basis of data from 2002, from 2003 forecasts where applicable and also from a development scenario for 2004.

As far as operating costs are concerned, the level of costs to be covered by tariff revenues in 2004 will be established on the basis of development hypotheses that take into account annual productivity gains.

However, two points should be noted. Firstly, the account unbundling principles proposed by the operators are currently being examined by the *Conseil de la concurrence* (Competition Council) and have not yet been approved by CRE. Secondly, auditing procedures for the operators' unbundled 2002 accounts will not be completed when CRE puts forward its tariff proposal.

This tariff is planned to apply for between 12 and 18 months. Once the operators' unbundled accounts have been fully audited, its structure may be revised to take account of experience acquired, market requirements, as well as the interests of consumers, suppliers and gas transport and LNG terminal operators.

The tariff is set to come into force on January 1st 2004. It requires the *Conseil d'Etat* (State Council) to adopt a decree, to be taken once the *Conseil de la concurrence* has submitted its opinion.

2. Tariffs for using transport networks

2.1 Capital costs

2.1.1 *Initial Regulated Assets Base (RAB)*

2.1.1.1 Economic value of transport assets purchased from the State

For the initial economic value of transport assets, CRE proposes to use the value fixed by the Special commission set up in accordance with article 81 of the amending finance law dated December 28th 2001. This commission was chaired by Mr Daniel Houri, and was responsible for fixing the price at which the State sold its natural gas transport networks.

However, some assets may be withdrawn from this perimeter if it can be shown that they are used mainly by a different activity. This is the case for some compression assets that are assigned to non-transport activities.

2.1.1.2 Economic values of other transport assets

Assets specific to transport activity, but which felt outside the perimeter of concessions was therefore not taken into account by the Special commission, may be included in the base of transport assets.

Of these assets, those which are of an industrial nature will be valued according to the method selected by the Special commission. The others, such as vehicles, fittings, computer hardware, minor equipment and so on, will be taken into account on the basis of their net accounting value.

Once officially determined by CRE, the initial value of the regulated assets base (BAR) will change depending on the annual re-evaluation rate, depreciation, new assets that are entered into the base and depreciated assets that are withdrawn from it.

2.1.2 Re-evaluation of assets

It is proposed that assets should be re-evaluated according to the retail price index for all French households, excluding tobacco, as calculated by the INSEE (French National Institute for Economic Studies and Statistics).

This rate is also used for indexing fungible treasury bonds index-linked to inflation (OATi), to be adopted as the indicator of the real risk-free rate used to calculate the weighted average cost of capital for gas transport assets.

The industrial price index may also be referred to as a re-evaluation index, either as a substitute for the RPI exc. tobacco, or using a weighted average of the two indices, for example.

It is proposed that at the start of each calendar year, assets should be re-evaluated using a forecast rate of inflation[1]. Once the inflation rate for the year has been published by the INSEE, capital costs will be recalculated and the resulting difference observed with the initial inflation forecast will be held over and applied to revenue for the following year.

2.1.3 Method of calculating capital costs

2.1.3.1 Depreciation

Economic lifespan

According to the proposal, the economic lifespan of each class of assets would be the same as that used to calculate the sale value of transport networks.

[1] If t_a is the forecast annual inflation rate, the re-evaluation co-efficient will be defined by the following formula: $(1+t_a)^{1/2}$.

Asset group	Economic lifespan in years
Pipe network	50
Compression	30
Constructions	30
Pressure reduction/metering	30
Other technical installations	10

Depreciation method

It is proposed that depreciation should be calculated on the basis of straight-line depreciation.

For the sake of simplicity, the proposal suggests that the agreed date on which assets enter the inventory should be fixed to July 1st of each year and that, correspondingly, the date on which assets are withdrawn from the inventory should be fixed to June 30th.

2.1.3.2 Method of calculating the "interest" component of capital costs

Assets base to be used in the "interest" calculation

It is proposed that calculations of the "interest" component of capital costs should be based on the arithmetic mean of asset values at the beginning and end of the period in question.

Rate of return

The chosen method for evaluating the authorised rate of return is based on the weighted average cost of capital (WACC), with a normative financial structure. The level of remuneration attributed to operators must on the one hand, enable to finance interest charges on debts, and on the other hand, provide operators with a return on his own funds similar to that which they could obtain elsewhere, from investments with comparable risk levels.

There are two possible methods:

a) The first involves fixing a single rate of return for all transport assets. If this method were adopted, the real pre-tax rate of return would be between 7 and 8%;

b) The second involves fixing varying rates depending on whether they are intended to remunerate existing assets or new investments. If this method were adopted, the rates to be considered would be as follows:

b1) Existing assets

The rate would be towards the lower end of the interval indicated above.

b2) New investments

In fixing a different rate for new investments, the aim is to encourage operators not to restrict themselves to merely financing the investment required for maintaining, renewing and extending the transport network, but also to make other investments likely to stimulate competition.

With this in mind, the rate would be increased for new investments for a period of five years, according to the following conditions:

- For investments aimed at renewing the network (or development investments that do not contribute greatly to improving competition), the remuneration rate would be increased by 1 to 2 points.

- For investments that CRE considers as likely to improve competition, notably by eliminating congestion, the remuneration rate would be increased by 3 to 5 points, depending on the projects.

2.2 Tariff structure

2.2.1 *Tariff zones*

The gas transport tariffs introduced by operators at the end of 2002 are entry-exit type tariffs, in line with European recommendations by the EU Commission and the CEER[2], with 8 tariff zones in France.

CRE considers that these 8 zones across France could act as a brake on the development of a competitive gas market, and that the number of zones must be reduced as soon as possible.

Consequently, it has asked the operators, when preparing the next tariff, to send it detailed information on the costs and timescales of the investments required to reduce and eventually eliminate the main areas of congestion that have been observed or alleged.

However, CRE considers that the current lack of competition in the South of France is largely due to the absence of competitive gas entry points in the zone.

As long as this problem is not resolved, reducing the impact of distance might lead to an improvement. This could be achieved by lowering the level of link charges between GDF zones in the future transport tariff.

2.2.2 *Reducing the distance effect by lowering link charges between zones*

A decrease in the link charges might be an effective way of reducing the distance effect in the tariff system. It would introduce a degree of equalization which would benefit long distance gas transport, with no major impact on consumers in the North of France.

It is difficult to predict how the market might react to developments of this kind. However, it does appear possible that the distance effect, in conjunction with the other changes brought in by the new tariff, would create more and more opportunities for those starting operations in the South of France.

2.2.3 *Handling of transit flows*

At present, GDF and GSO handle transit flows differently in terms of tariffs and accounting. There are proposals to harmonize their methods, based on the principle that all gas transport networks must be regulated. Consequently, GSO must incorporate all transit-related costs (capital and operating) and flows into its transport tariffs.

Existing contracts would not be affected.

[2] Council of European Energy Regulators.

The prices of existing transit contracts are considered to reflect costs, which are directly linked to distance. Introducing a degree of equalization into future transport tariffs could result in disparity with the prices of transport over the same distance. The practical consequences of such a situation need to be examined.

2.2.4 *Introducing monthly capacity subscriptions*

The current tariff system for gas transport in France only allows for annual capacity subscriptions. Shippers require greater flexibility, and it should be possible for them to subscribe monthly capacities as soon as possible.

These monthly capacity subscriptions provide shippers with extra opportunities, without calling into question annual subscriptions which must remain the priority.

The three transport operators are examining the possibility of handling regional transport networks differently from the main network.

They all agree that activity on the regional network is highly seasonal in nature, with a peak in winter, an intermediate season and a quiet period in summer. However, they differ in their precise definitions of the seasons, and in particular they disagree on whether the month of December should be included in the peak winter season or the intermediate season.

Flows on the main network are much more stable throughout the year, due to regular deliveries to entry points in France and the fact that storages must be filled up in summer. Consequently, two transporters propose fixing the monthly charge at $2/12^{ths}$ of the annual price, with the third taking $2/5^{ths}$ of the winter season price and $2/7^{ths}$ of the summer season price.

In its tariff proposal, CRE will seek to achieve a degree of consistency between the operators on this issue.

2.2.5 *Shorter capacity subscriptions*

CRE is considering asking transporters to take steps as quickly as possible, aimed at enabling shippers to exchange unused capacities on a daily basis.

In a second phase, CRE wishes to introduce tariffs for reservations shorter than one month, once it has received feedback on monthly capacities.

2.2.6 *Multiannual capacity subscriptions*

One desirable development is the possibility of subscribing multiannual capacities, which would give market actors greater flexibility. Under the new proposals, market actors would be able to subscribe capacities for periods of up to three years at the annual tariff, to be revised at each tariff modification.

To begin with, the offer of multiannual capacities could be made subject to the existence of a gas sale contract over the same period. This would prevent actors from subscribing these multiannual capacities for speculative purposes.

2.2.7 *Harmonization required between transporters*

The fixed charge for delivery stands at 9,180 €/year at GDF and CFM, and 2,000 €/year at GSO. Having examined the situation, CRE has observed that the three transporters distribute costs differently between the connection contract (paid for by the consumer) and the transport contract (paid by the shipper). One possible solution would be to ask the transporters to include in the connection contract all costs relating to facilities located on the customer's premises (substations and connections).

2.2.8 *Tariffs on regional networks*

CRE proposes to leave the tariff structures in place on regional networks unchanged. The level of these tariffs will therefore only evolve in line with changes in the overall level of costs to be recovered by each operator.

2.2.9 *Balancing tariff*

The rules on daily balancing and the prices applied to imbalances are included in transport contracts. For example, on each zone of its network GDF applies the following conditions:

- Within a certain tolerance band (plus or minus 20% up to 1,000 MWh/day, plus or minus 5% beyond that), imbalances are free of charge;

- Outside this band, imbalances must be paid for: excess gas is purchased by the transporter at half the "market price" (calculated on the basis of the Zeebruge spot price), while gas shortfalls are sold at 1.5 times the "market price".

There are no proposals to change this mechanism.

Furthermore, imbalances are currently calculated for each tariff zone. It would be advisable to examine the possibility of globalising imbalances for each operator's entire network.

2.2.10 *Access to gas exchange points*

The option of subscribing entry and exit capacities independently is one of the major advantages of the "entry-exit" tariff system. It opens up the possibility of developing gas exchanges without having to reserve capacities for the journey between the entry point and the exit point. By the end of 2003, transporters plan to give shippers the option of exchanging gas, by defining a "gas exchange point" for each zone. The mechanism currently being considered is similar in principle to the one introduced by RTE for exchanging electricity blocks.

2.2.11 *Interruptible capacities*

On the main transport network, it is proposed that interruptible capacities should be marketed only where no firm capacity is available.

Conversely, on regional networks, allowing interruptible capacity subscriptions is being considered. Operators will be asked to indicate the conditions for implementing interruptibility clearly in their transport contracts. Furthermore, if a customer changes supplier, there should be no effect on the contractual and financial conditions governing interruptibility on the regional network.

2.2.12 *Counterflow link capacities*

Under the current tariff system, counterflow capacity subscriptions are set at 20% of the price for capacity in the main direction. It is proposed that this co-efficient should be maintained at 20%.

3. Tariffs for using LNG terminals

3.1 Capital costs

3.1.1 Initial asset value

3.1.1.1 Economic value of LNG terminals

For the purposes of valuing LNG terminals, CRE suggests a method similar to that adopted by the Special commission for gas transport networks.

3.1.1.2 Economic value of other assets

In addition to these assets comes the quota of assets used for common functions that can be attributed to LNG terminals.

3.1.2 Re-evaluation of assets

CRE proposes re-evaluating assets according to the same conditions as those adopted for transport activity.

3.1.3 Method of calculating capital costs

3.1.3.1 Depreciation

Economic lifespan

For each asset group, the table below gives the planned economic lifespan.

Asset group	Content in terms of assets	Economic lifespan
G1	Auxiliary installations and discharge facilities	20
G2	Regasification	40
G3	Civil engineering and constructions	40
G4	Storage facilities	40
G5	Other installations (evaporation compression)	40

Method of depreciation

Depreciation of LNG terminals can be carried out either by the linear method, or by the progressive depreciation method resulting from a constant annuity. In the case of linear depreciation, capital costs would initially be higher than those under the current tariff system calculated on the basis of progressive depreciation. They would then decrease gradually. In the case of progressive depreciation, capital costs remain constant, all other things being equal.

For the date on which assets are entered into the inventory, the conditions proposed are identical to those put forward for transport activity.

3.1.3.2 Method of calculating the "interest" portion of capital costs

Asset base to be remunerated

If a constant financial annuity is adopted over the calendar year, the "interest" portion of capital costs is calculated based on the value of assets at the start of the period in question.

If linear depreciation is chosen, the method used would be identical to that proposed for transport activity.

Remuneration rate

CRE considers that for LNG terminals, there is a greater financial risk than for gas transport activity. The risk premium is estimated at two points.

CRE thus proposes to fix the authorised rate of return for LNG terminals approximately two points above the average rate adopted for transport activity.

3.2 Tariff structure

The current tariff for access to LNG terminals, which is common to the terminals at Fos and Montoir, includes three components:

- A fixed charge per shipment;
- A charge proportional to quantities;
- A charge for use of LNG storage.

To date, GDF Négoce is the only shipper to have used either of the terminals at Fos or Montoir.

As indicated above, the absence of competition in the South of France is largely due to the lack of supply at the nearest entry points.

It is therefore advisable to look at what modifications might be made to the tariff system, in order to enable extra shipments to arrive at Fos and Montoir, by diversifying the shippers.

To this end, measures could be considered to reduce the cost of LNG storage.

CRE invites those who so wish to contact it with their observations and comments on the general principles put forward in the above document. As examples, some possible questions are listed below:

General questions

Question 1: *What is your opinion of the entry-exit tariff system currently in place? What changes do you think should be made to it, and under what conditions?*

Question 2: *Is there a real need to equalize tariffs geographically across the whole country? Must transits benefit from this geographical equalization?*

Question 3: *What are your comments on the length of capacity subscriptions? What are your suggestions for defining monthly co-efficients, both on the main network and on regional networks?*

Question 4: *What do you think of transporters' current balancing tariffs?*

Question 5: *How should "gas exchange points" work? In your opinion, what sort of tariff should be applied for this service?*

Question 6: *What are your thoughts on the current tariff for using LNG terminals, and what changes do you think could be made?*

Questions of a financial nature

Question 7: *What do you think of the decision to approach the authorised return rate via the average weighted cost of capital (CMPC) ?*

Question 8: *What do you think of the possibility of fixing a normative lever for calculating CMPC?*

Question 9: *Would it be better to adopt a single remuneration rate for all assets irrespective of their age, or should differentiated tariffs be fixed?*

Question 10: *Which index do you think should be adopted for re-evaluating the regulated assets base? The retail price index or the industrial price index? Another?*

Question 11: *What is your view of a difference in remuneration of two percentage points between transport assets and LNG terminals?*

Question 12: *In your opinion, should the amount of annual remuneration for assets be calculated on the value of the regulated assets base on January 1st, on the same value on December 31st after depreciation, or using the average of these two values?*

Questions of a technical nature

Question 13: *What do you think of the proposal to include all costs relative to facilities located on the customer's premises in connection contracts?*

Question 14: *What are your thoughts on the current tariffs on regional networks? Do you think they should be restructured?*

Question 15: *Do you agree with the proposal to market interruptible capacities on the major transport network* only *if the firm corresponding capacity is no longer available? If so, what tariff should be applied? If not, what quantity should be marketed, and at what tariff?*