



COMMISSION
DE RÉGULATION
DE L'ÉNERGIE

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Message from the Chairman



This activity report is published a year before the total opening of the electricity and gas markets.

The European Summit in Barcelona in March 2002 confirmed the principle of the opening of the electricity and gas markets. Pursuant to the directives of June 2003, all household and non-household customers may choose their electricity and gas supplier as from 1st of July 2007.

This report also comes at a time when sharp increases in electricity and gas prices are raising issues concerning the liberalisation of the energy market and its consequences.

As highlighted by the various bodies of the European Union, the creation of a single energy market nonetheless forms the cornerstone of the European energy policy, which is based on three key priorities: competitiveness, security of supply and sustainable development.

The creation of a single market therefore constitutes the means of achieving these objectives. This aspect, seldom mentioned up till now, attaches great importance to the lessons that can be learned from the stages that have already been completed, even if it is still difficult to pass judgement on, an as yet, unfinished process.

However, from the point of view of both consumers and new operators joining the electricity and gas markets, it is necessary to observe that the results vary.

Certain facts unrelated to the liberalisation process partly explain the price increases. Geopolitical tensions on the oil markets automatically impact gas prices, given the index linking methods adopted for supply contracts. The reinforcement of environmental restrictions generates additional costs for electricity generators and risks curbing the development of new power plants. Gradual reduction in surplus electricity generation capacities creates new tensions as soon as consumption increases to a significant extent.

The development of interconnections is a key to the setting up of a single market. It fosters price convergence but may cause certain periods of tension on national markets due to the current disparity of generation capacities.

The fact remains that price fluctuations, especially on the electricity market, are characterised by their unpredictability and scale. Understanding of these fluctuations is all the more necessary since the market, still in its early days, does not have sufficient statistical data recorded.

This upward trend in prices is emphasised by the lack of a genuine opening of markets revealed through inadequate transparency, a lack of resources available on the national market in places other than with incumbent suppliers, and the coexistence of regulated tariffs and market prices.

The generation offer is not subject to any transparency. In France, only EDF has information on the forecast capability of a significant part of the generation capacity. This situation fuels

overreactions to occasional events which may result in price peaks. The price formation mechanisms must therefore be studied and monitored carefully. The Commission de régulation de l'énergie (CRE) is able to fulfil this mission if it is granted the necessary legal and regulatory means. It may monitor the markets, something which is not done at present, although the exercise of transparent competition which is in the consumers' interest depends on it.

Lack of competition on the French market is a concern. It is not in the interests of operators or consumers for this situation to continue.

In the electricity sector, the major hold over generation by EDF prevents its competitors from developing all the appropriate capacities they need to be able to make competitive offers. The VPP (Virtual Power Plant) mechanism that requires EDF to auction a limited amount of its generation capacities is itself based on market prices. While it has enabled the market to operate more smoothly, it does not constitute an adequate response. Consideration must be given to the methods enabling alternative suppliers to acquire energy under conditions that allow them to compete against incumbent operators.

In the gas sector, the inadequacy of resources available in the south of France prevents alternative suppliers from being able to propose competitive offers. The temporary gas release at market prices from auctions does not enable this market imbalance to be fully dealt with. Access of alternative suppliers to some of the capacities of the new LNG (liquefied natural gas) terminal, which will be started up in Fos, will help to improve market operations.

The coexistence of market prices and regulated tariffs does not help market development, especially when the tariffs are markedly lower than market prices. For gas tariffs, the lack of national gas production prohibits the supply part of tariffs from being lower than supply costs on international markets. Unfamiliarity with this rule would compromise the development of Gaz de France and concerned gas companies, and create competitive imbalances.

For electricity, the lack of increase in regulated tariffs since July 2003 has raised issues about the correct correlation of tariffs with costs. CRE is to conduct an analysis of these costs to ensure that they are properly taken into account in the different tariff scales.

As highlighted by CRE in its previous reports, the technical methods concerning the freedom of non-household consumers to choose their supplier are satisfactory in France. No significant malfunction has been observed since 1 July 2004, even if improvements can still be made by system operators in the transparency of rules they apply and in the performance of their information systems.

If, by their very nature, gas and electricity transmission and distribution systems remain monopolies, their smooth running is one of the primary conditions of exercising competition. The continuing confusion of brand image among incumbent operators between monopoly and other activities gives them an unjustified competitive edge. The exercise of eligibility must be explained adequately to small-sized consumers so that they only leave the regulated tariff when fully aware of the situation.

Control of system operator costs should be monitored all the more since they are not subject to pressures of competition. Operating rules for system operators have been sufficiently well established so that the costs that they bear are now properly defined to anticipate changing over to incentive-based regulation.

In prospect of the future proposals for system access tariffs, the level of return on regulated assets will be reviewed. As for previous tariff proposals, this level will take into account capital market trends, benchmarking of other European regulators' practices, system development and operating constraints.

European Commission default notices addressing France in April 2006, concerning the transposition of directives governing the common rules for the internal electricity and gas market, mainly involve regulated retail tariffs and independence of system operators. Without prejudging what solutions may be proposed, CRE stresses the need to bring the organisation of our national markets into line with European directives before the opening on 1st of July 2007. Preparation for the practical methods of this opening, which CRE has been coordinating since mid-2005, and which involves public authorities, operators and consumers, is being carried out with this in mind.

CRE pays particular attention to the work underway within European Community institutions for the organisation of national markets. It contributed to surveys and reports made by the Directorate-General for Energy and Transport and the Directorate-General for Competition concerning gas and electricity market operations in Europe. The decision made by European regulators in February 2006 to work on standardising the markets based on a regional approach is a major policy phase, which CRE had recommended in 2003.

Warning

In accordance with article 32 of law 2000-108 of 10 February 2000, transposing articles 23.1 and 25.1 of directives 2003/54 and 2003/55, the Commission de régulation de l'énergie has just published its annual report.

As the European Commission's Directorate-General for Energy would nonetheless like to obtain further information from national regulatory authorities, this report has been sent to the DG TREN.

The Commission de régulation de l'énergie draws the DG TREN's attention to the fact that some of the information provided does not come exclusively under its jurisdiction. Accordingly, with regard to public service (article 3.9 of the directive 2003/54 and 3.6 of directive 2003/55) and to security of supply (article 4 of directive 2003/54 and article 5 of directive 2003/55), the Commission de régulation de l'énergie shares its mission with the Ministers for the Economy and Energy.

Foreword

This report is intended to be an updated version of the DG TREN report published last year. The same structure has therefore been kept but to facilitate reading the updated paragraphs have been highlighted in yellow.

I . Presentation of the Commission de régulation de l'énergie

1 Organisation of CRE¹ and its services²

1.1 The Commission



Eric DYEVRE Jacques-André TROESCH Bruno LECHEVIN Maurice MEDA
Pascal LOROT **Philippe de LADOUCKETTE** Michel LAPEYRE

The Commission de régulation de l'énergie (CRE) consists of seven members appointed for a six-year period on the basis of their qualification in legal, economic and technical fields. Two members, including the Chairman, are appointed by decree, two members are appointed by the President of the Assemblée nationale, two members are appointed by the President of the Senate and one is appointed by the Chairman of the Conseil économique et sociale.

Commission members work full-time, may not be dismissed and their mandate is not renewable.

The role of a member of the Commission de régulation de l'énergie is incompatible with any other professional activity, elected term in office at a communal, departemental, regional, national or European level, public employment and any direct or indirect holding of interests in a company within the energy sector. Commission members may not be members of the

¹ Article 28 of the law of 10 February 2000.

² Article 30 of the law of 10 February 2000.

Conseil économique et social. They may not, on a personal level, take any public stance on subjects coming under CRE's jurisdiction.

Any Commission member carrying out an activity or holding a mandate, position or interests that are incompatible with their mission shall automatically be declared as having resigned, after consultation with the Commission, by order from the Minister for Energy.

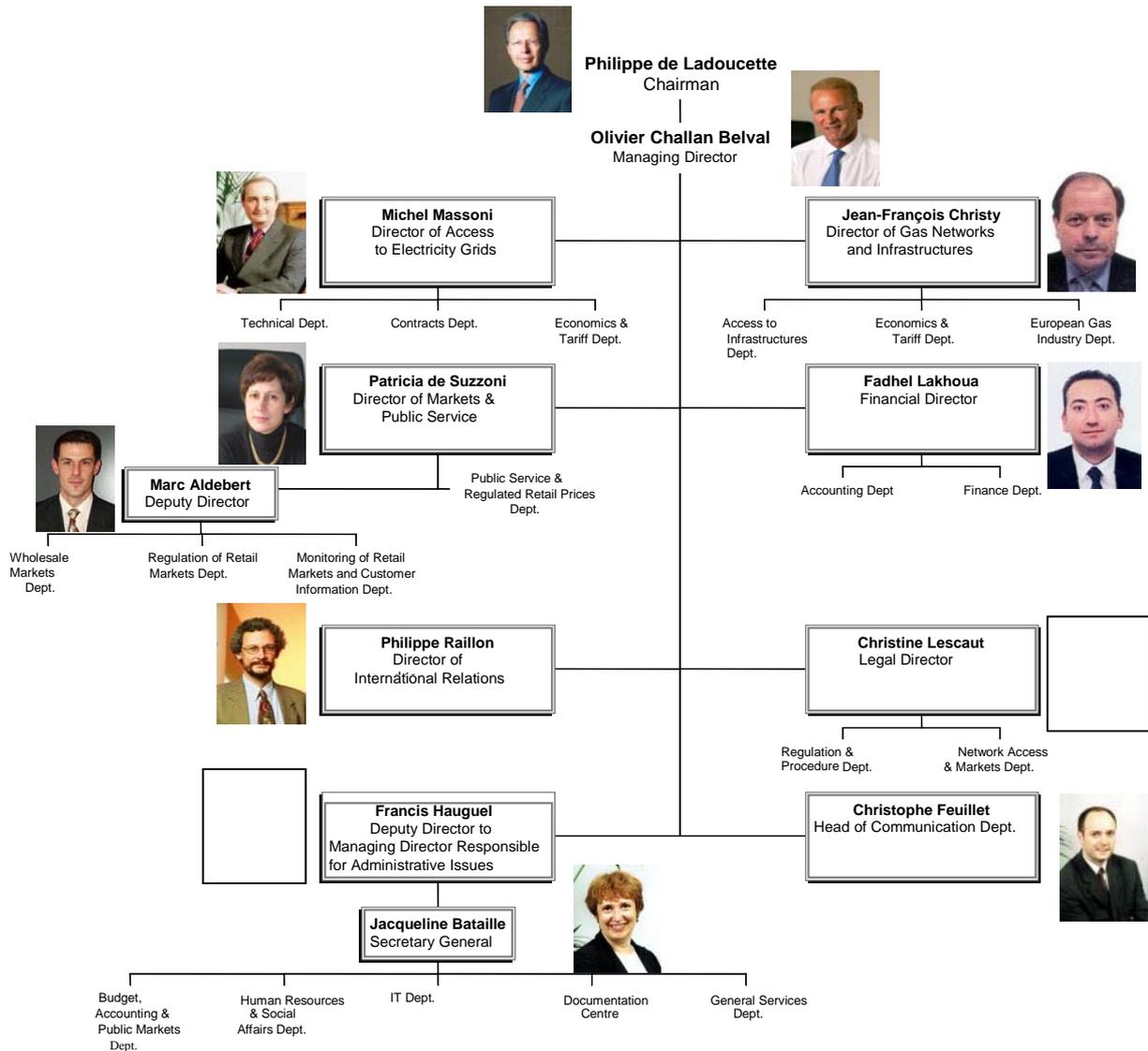
1.2 CRE's services

The Commission de régulation de l'énergie proposes services placed under the Chairman's authority. CRE fixes an internal regulation³, which is published in the *Journal officiel* of the French Republic. CRE can employ civil servants in a post or on secondment under the same conditions as the Department of Energy or recruit staff under contract.

CRE's services are organised in divisions, whose structure has been slightly modified since July 2005:

- operational (electricity public service and markets, access to electricity grids, infrastructures and gas networks);
- functional (financial, legal and international);
- assistance (general secretariat and communication).

³ Article 30 of the law of 10 February 2000.



2 Main mission

Various amended laws, mainly the law 2000-108 of 10th of February 2000 and the law 2003-8 of 3rd January 2003, have entrusted CRE with the following main mission:

- ensuring proper operation of the electricity and natural gas markets;
- guaranteeing access to public electricity grids, natural gas facilities, LNG facilities and natural gas storage systems;
- ensuring the proper operation and development of public electricity grids, natural gas facilities and LNG facilities;
- guaranteeing the independence of electricity and natural gas transmission and distribution system operators;
- guaranteeing the financing of public electricity service charges;

- drafting and applying specifications for calls for tenders of new generation capacities within the framework of pluri-annual electricity generation planning;
- monitoring transactions carried out on organised electricity and natural gas markets as well as border exchanges (article 51 and 52 of law 2005-781 of 13 July 2005).

3 Main powers

Under the laws of 10 February 2000, 3 January 2003 and 9 August 2004, CRE is competent in:

- proposing tariffs for access to public electricity and natural gas systems and LNG facilities;
- approving the annual investment programme of the electricity transmission system operator;
- settling disputes⁴ between users and operators of public electricity transmission and distribution grids, between operators and users of natural gas transmission and distribution facilities and between operators and users of LNG facilities and natural gas storage systems: this procedure is limited to eligible customers;
- setting the technical and financial terms for settling a dispute;
- ordering the protective measures necessary to ensure continuity of system operations in particular;
- taking sanctions in the event of violation of legislative or regulatory rules or rules enacted by CRE, related in particular to access to or use of public electricity grids, natural gas transmission and distribution facilities or LNG facilities, to principles of account unbundling and to rules governing provision of accounts and in the event of non-compliance with dispute settlement decisions;
- conducting surveys and gather all the necessary information for fulfilling its remit;
- giving an opinion on all draft regulations related to access to or use of public electricity grids, natural gas facilities and LNG facilities, on regulated tariffs proposed or on electricity purchase terms within the framework of purchase obligation;
- making regulatory decisions in the electricity sector in various fields:
 - roles of public electricity transmission and distribution system operators with regard to grid development and operation;
 - terms for connection to public electricity transmission and distribution grids;
 - terms for grid access and use;
 - implementation and adjustment of demand, supply and consumption programmes and financial compensation of imbalances;
 - conclusion of purchase contracts and protocols by public transmission and distribution system operators;

⁴ Article 38 of the law of 10 February 2000.

- Scope of each unbundled accounting activity, accounting allocation rules applied to obtain unbundled accounts and principles determining the financial relations between these activities;
- assessing the amount of charges assignable to public electricity service roles.

4 Guarantee of independence

The independence of CRE members is ensured by the statutes and method of appointing its members.

Its budget is fixed by the Committee upon proposal from the Managing Director. Its expenditure is not subject to control, with the exception of a posteriori checking carried out by the Cour des comptes. Whenever applicable, CRE is paid for services rendered.

The Chairman of the Commission de régulation de l'énergie reports on CRE's activities to the standing Parliamentary committees at their request, who are competent in the energy sector,.

The Chairman of the Commission is authorised to take legal action to fulfil CRE's remit.

5 Shared mission

Directives 2003/54/EC and 2003/55/EC determine the minimum scope of mission of national regulatory authorities in the electricity and gas sectors without dictating the administrative organisation of Member States. This remit may therefore be granted to various authorities rather than to one alone, as is the case in France.

5.1 with the Ministers for the Economy and Energy

The Commission de régulation de l'énergie shares some of its remit with the Ministers for the Economy and Energy.

For example, for setting tariffs for use of public electricity and gas systems, article 4 of the amended law of 10 February 2000 stipulates that "*the justified tariff proposals for use of transmission and distribution systems should be sent by the Commission de régulation de l'énergie to the Ministers for the Economy and Energy. Ministerial approval is considered as granted, unless there is opposition from one of the ministers within two months following receipt of the Commission's proposals. The tariffs are published in the Journal officiel by the Ministers for the Economy and Energy*".

5.2 with the Conseil de la Concurrence

Article 39 of the law of 10 February 2000 provides for cooperative mechanisms between CRE and the *Conseil de la Concurrence*: "*The Chairman of the Commission de régulation de l'énergie notifies the Conseil de la concurrence of any abuse of dominant positions and practices hindering the free exercise of competition, of which he is aware in the electricity or natural gas sectors, particularly if he considers that these practices are banned by articles L. 420-1 and L.420-2 of the code of commerce*". This referral may be made as part of an emergency procedure, in compliance with article L. 464-1 of the code of commerce. He may also refer any other issue coming under his jurisdiction for opinion from the *Conseil de la Concurrence*.

The *Conseil de la Concurrence* notifies CRE of any referral coming under CRE's jurisdiction and may submit any issue related to the electricity and natural gas sectors to CRE for opinion.

However, in exercising its mission to guarantee third-party access to networks, CRE may terminate any anti-competitive practices if they are based on refusal of network access.

5.3 with the *Autorité des marchés financiers*

CRE monitors transactions carried out on the organised electricity and gas markets as well as border exchanges. Powernext, an organised market of electricity exchanges, is therefore monitored by both the Commission de régulation de l'énergie and the *Autorité des Marchés Financiers*.

However, CRE is not competent to ensure monitoring of electricity and gas price formation.

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II . Regulation of the electricity market

in application of article 23 - § 1, points a) to g) of Directive 2003-54-EC

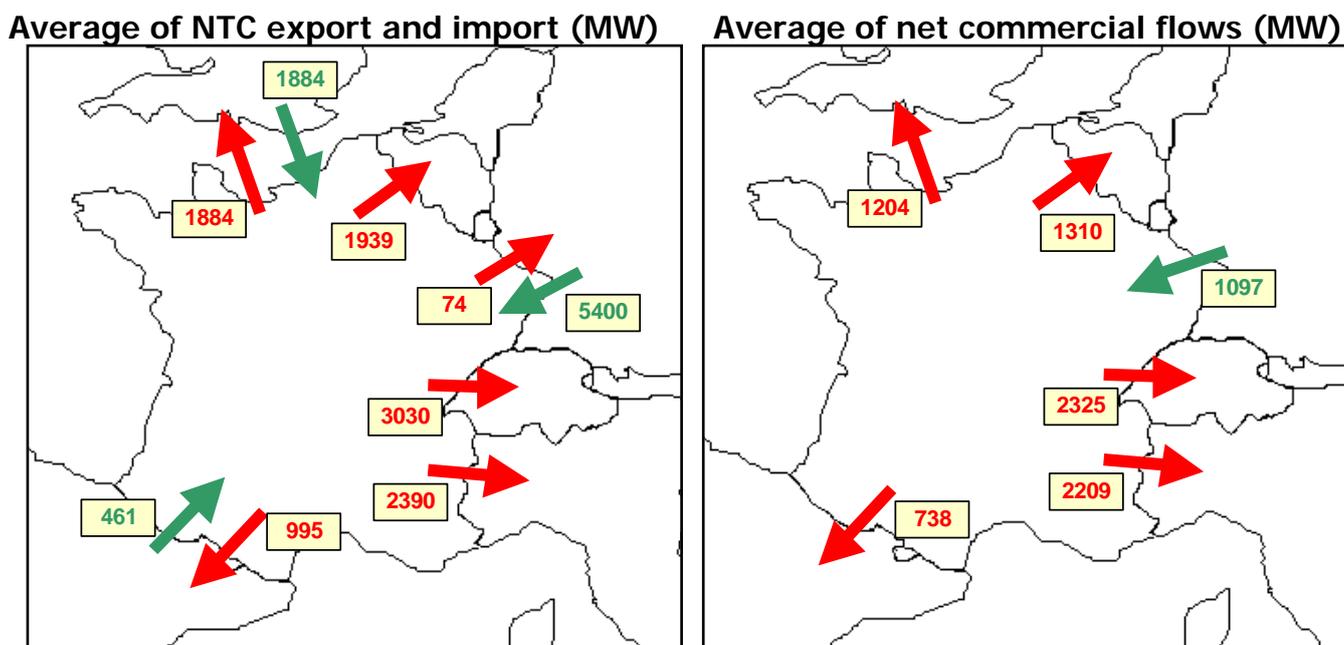
In accordance with Directive 2003/54/EC, all non-household customers in France have been eligible since 1st of July 2004, accounting for 68% of the electricity market, i.e. 295 TWh. The next stage, which will see the electricity and gas markets opening up fully to all consumers, has been set by the Directive for 1st of July 2007. In France, the open electricity market will then comprise 33.5 million consumers, making it the second largest market in Europe. Building on what was done for the opening of the markets to non-household customers on 1st of July 2004, CRE is preparing for this deadline and has been giving consideration to the procedures, information systems, methods for informing and protecting consumers and to any other measure to be taken, in consultation with all the concerned parties.

1 Cross-border energy exchanges

1.1 State of play

RTE provides CRE with data enabling the regulator to carry out precise monitoring of interconnection use. Based on analysis of this data, the effectiveness of rules governing interconnection access can be measured.

FIGURE N° 1: INTERCONNECTION CAPACITIES AND CROSS-BORDER ELECTRICITY FLOWS IN 2005



Source: CRE

COMMENT: As no congestion occurred in the import direction at interconnections with Belgium, Switzerland and Italy, there is no point in publishing NTC figures for import at these interconnections.

TABLE N° 1 : RATE OF SATURATION OBSERVED AT INTERCONNECTIONS IN 2005

Interconnection	France - Germany	France - England	France - Belgium	France - Spain	France - Italy	France - Switzerland
Export	14%	48%	31%	66%	80%	19%
Import	2%	1%	-	6%	-	-

Source: CRE

RATE OF SATURATION: This involves the proportion between the number of hours during the year when the difference between net commercial flows and net import and export capacity was less than 200 MW and the number of hours in the year. It can be observed that even when an interconnection appears to be, on average, quite well used, it is in fact seldom used to its maximum capacity.

A. FRANCE - GERMANY

As in 2004, this interconnection was mainly used for imports during the winter of 2005-2006.

Due to great constraints experienced by the German grid (resulting from its structure), on days when significant wind power was generated in Outre-Rhin, flows scheduled for D-1 in the Germany-France direction had to be reduced several times at the beginning of the year to the pro rata of quantities that the operators wished to have transited. In April, the German grid operator, RWE Transportnetzstrom, set up a unilateral mechanism of daily explicit auctions for the German capacity exported to France, in order to limit commercial flows in this direction and thus prevent grid congestion.

B. FRANCE - ENGLAND

This interconnection was mainly used as normal in the export direction. Average prices on the English market were higher than French prices and the auction mechanism managed by RTE and NGC enabled operators to use the interconnection, keeping with the price differential between the English and French markets. The export trend was greater at the end of the year, as English prices, closely related to gas prices, experienced a sharp rise. However, the rate of saturation of this interconnection (cf. table no. 1) shows that it was only fully used either for import or for export for 49% of the time in 2005.

C. FRANCE - BELGIUM

In 2005, exports to Belgium actually mainly intended for the Netherlands rose against the previous year. However, some imports were scheduled, up to more than 1000 MW in July 2005.

The interconnection was sometimes congested in the export direction, especially during the second half of 2005, since for almost 70% of the time at least 200 MW available for export were not used (cf. table no. 1). Congestions will henceforth occur less frequently from now on as the interconnection between the two countries was reinforced at the end of 2005.

D. FRANCE - SPAIN

As a general rule, the direction of flows at this interconnection is related to price differential between the two markets. Up to October 2005, as Spanish prices were normally higher than French prices, the interconnection had been virtually exclusively used for exports. At the end of the year, as French prices had risen sharply due to a persistent cold spell, imports were observed on a regular basis.

E. FRANCE - ITALY

Due to the structural generation shortfall, which had existed in Italy until the year 2004, this interconnection was traditionally used exclusively for exports to Italy. As from March 2005, and especially during the last six weeks of the year, there was a sharp drop in export flows to the point of inversion of flows at certain times. The rate of interconnection saturation for exports (cf. table no. 1) fell from virtually 100% in 2004 to 80% in 2005.

This fresh phenomenon bodes well for decreased congestion at this interconnection over the next few years.

F. FRANCE - SWITZERLAND

As in previous years, this interconnection was mainly used for exports to Switzerland. Furthermore, thanks to various means of hydropower generation, which are particularly flexible, Swiss operators were very active at the interconnection within the framework of the balancing mechanism, for import and export alike.

1.2 Changes in interconnections management

In 2005, CRE introduced a number of changes in the management of French interconnections.

The main changes include joint work programmes with neighbouring regulators (the roadmap) and CRE's decision of 1st December 2005 to abolish priority access for original contracts.

A. REGULATORS' ROADMAP

In 2005, CRE launched three public consultations with its European counterparts concerning border exchanges.

INSET N° 1: RECORD OF PUBLIC CONSULTATIONS LAUNCHED BY CRE IN 2005

- 5th of July 2005: Public consultation with the Belgian (CREG) and Dutch (DTe) regulators concerning "*regional integration of Belgian, French and Dutch electricity markets*".
- 31st of August 2005: Public consultation with the Austrian regulator (E Control) concerning "*standardisation of congestion management methods across France, Italy and Austria*".
- 22nd of September 2005: Public consultation with the German regulator (BNA) concerning "*application of a coordinated congestion management method at the Germany-France interconnection*".

The purpose of these consultations was to collect the opinion of market players concerning the setting up of allocation mechanisms in compliance with the European regulation⁵. Market players were invited to express their opinion on the definition of explicit auction rules and their interest in the development of intraday exchanges and of balancing.

A large number of participants replied to these consultations (generators, traders, transmission system operators, industrial companies, market operators and universities). Except for industrial associations, the setting up of auction mechanisms was unanimously recognised as a significant stage in the integration of European electricity markets. However, market players recognised that there was significant progress to be made in terms of coordination between TSOs (calculation and allocation of capacities), standardisation of ground rules and market design, market and TSO transparency as well as in terms of prevention of deviant behaviour on the part of market players.

These consultations enabled regulators to draw up and publish a work programme (roadmap) at the beginning of December 2005 for TSOs to improve allocation mechanisms in 2006.

The roadmap drawn up with the German (BNA), Austrian (E-Control), Belgian (CREG) and Dutch (Dte) regulators in 2005 constitutes regulators' priorities for the year 2006 concerning access to interconnections. Its application was started on 1st January 2006 with the setting up by grid operators of an explicit auction mechanism to allocate exchange capacities available at interconnections with Belgium, Germany, Italy and Spain.

It emphasises the need for greater cooperation between grid operators in order to improve management of interconnection exchanges. It provides for:

- Creation, as from the beginning of 2006, of an inter-regulator working group to monitor the smooth running of allocation mechanisms. A joint report is to be published at the end of 2006 to keep the market players informed;
- Setting up of a secondary market of capacities so as to improve their use planned for 1st July 2006;
- Setting up of intraday exchanges and balancing exchanges with Belgium and Italy planned for 1st January 2007;
- Standardisation of allocation rules based on auction between different interconnections planned for 1st January 2007;
- In compliance with article 5.2 of the regulation of 26th June 2003, setting up by grid operators of a coordinated and transparent procedure for calculation of interconnection capacities subject to formal prior approval from regulators planned for 1st January 2007.

G. SUPPRESSION OF PRIORITY ACCESS

The issue of maintaining priority access to interconnections for original contracts concluded before enforcement of the Directive of 19th December 1996 has been the subject of much discussion. These debates can now be considered as over following the decision of the Court of Justice of the European Communities of 7th June 2005 which removed priority access previously granted to contracts known as "*original*" at interconnections with Belgium, Germany, Italy and Spain.

⁵ Regulation 1228/2003 of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity.

This ruling states that “priority access [...] provided to an operator due to commitments taken before application of the directive, but without compliance with the procedure provided for by article 24 of the directive, must be considered as discriminatory in the sense of articles 7 paragraphs 5 and 16 thereof, and following, as infringing such articles”. Based on this decision and after consulting the various concerned regulators and departments of the European Commission, CRE requested that RTE no longer recognise right of priority access to interconnections through original contracts concluded before enforcement of the directive of 19 December 1996.

H. STATE OF PLAY – INTERCONNECTION BY INTERCONNECTION

Although since 1st January 2006, interconnection capacities between France and European Union border countries have been allocated using explicit auction mechanisms, the extent of coordination between grid operators differs greatly from one border to another.

As in 2005, RTE will keep auction revenue resulting from allocation of capacities and must use it in compliance with the provisions of article 6-6 of European regulation 1228/2003.

a. FRANCE – GERMANY

RTE organises capacity auctions for export to Germany, and RWE Transportnetz Strom manages auctions of capacity for import from Germany. In compliance with the roadmap published by CRE and the German regulator (Bundesnetzagentur, BNA), significant improvements are expected at this interconnection in the year 2006.

b. FRANCE-ITALY-AUSTRIA

In 2005, Austrian (E-Control), Italian (AEEG) and French regulators formed a working group so as to improve and standardise allocation methods used for the three countries over the coming years. However, this working group has not resulted in a joint stance between the three regulators as regards the most appropriate method for managing congestion at the common interconnections with Italy.

On one side, CRE and E-Control consider that the explicit auction method is the sole method of operational allocation for 2006, in compliance with the regulation of 26th June 2003. On the other side, AEEG are intent on continuing for 2006 the method of implicit allocation by the Italian market operator based on virtual market zones and prices, supplemented by an allocation of financial rights (cover instruments).

This has resulted in the coexistence of two complementary allocation mechanisms, one managed by RTE (explicit auctions) and the other by the Italian grid operator TERNA (method “S1”), with each party allocating 50% of total available capacity.

c. FRANCE – SPAIN

Pending Spanish regulatory modifications necessary for the setting up of a coordinated allocation mechanism planned for the joint stance of the two French and Spanish (CNE) regulators, published on 28th January 2005, CRE decided on 1st December 2005, to implement, as from 1st January 2006, an explicit auction mechanism managed by RTE for total available capacities at the France-Spain interconnection.

In December 2005, the Spanish Government published two ministerial orders opening the way up for regulatory modifications governing the setting up of a coordinated allocation mechanism between the two grid operators, at this interconnection.

CRE and the Department for Trade, Industry and Tourism have jointly decided on application of the new rules governing allocation of interconnection capacities between France and

Spain as from 1st June 2006. These new rules, submitted on 26th April 2006 by both transmission system operators, correspond to the first stage of the joint stance adopted by the two regulators. This should subsequently be completed by market coupling organised on a daily basis.

Coordinated explicit auctions make it possible to allocate capacities on an annual, monthly, daily and intraday basis under the terms stipulated by the European regulation of 26th June 2003. First of all, TSOs are able to propose two intraday auctions. Afterwards, so as to provide the additional flexibility requested by market players, they are committed to holding six intraday auctions by 15th November 2006.

d. FRANCE - BELGIUM - NETHERLANDS

Discussions held with the Belgian (CREG) and Dutch (DTe) regulators in 2005, have resulted in the setting up of an explicit auction mechanism at the France-Belgium interconnection, similar to that which has been applied at the Belgium-Netherlands interconnection for several years. In 2006, significant improvements are expected at these two interconnections within the framework of the three regulators' roadmap.

e. FRANCE – ENGLAND

In 2004, CRE had already proposed the following improvements to be made to the current mechanism for allocation of capacities at this interconnection to the British regulator (OFGEM):

- Effective application of the use-it-or-lose-it rule sufficiently early on D-1, by all means before the last auction of the current day.
- Setting up of a secondary market of capacities;
- Setting up of an intraday allocation and balancing mechanism.

Adoption of these proposals will be reviewed in 2006, within the framework of the regional initiative for the British Isles.

f. FRANCE – SWITZERLAND

The announcement of the creation of a grid operator, ETRANS, which would solely be in charge of exchanges on the Swiss side of the border, allows the consideration of the implementation over 2006 of a daily coordinated explicit auction mechanism at the France-Switzerland interconnection. However, the advantage of this system for electricity market operations greatly depends on the level of capacity available after deduction of the required capacity for transit covered by original contracts which still have priority access to this interconnection. The legitimate status of this priority access is currently being reviewed by the European Commission.

1.3 Transparency regarding access to interconnections

European Regulation 1228-2003 on cross-border electricity exchanges mainly defines the rules governing communication of information to market players by TSOs and DSOs as part of congestion management.

The following data is available, publicly and for each interconnection, on RTE's website for this purpose:

- forecasts of net transfer capacity during maintenance periods a year in advance;
- forecasts of net monthly and weekly net transfer capacity;
- net export capacity proposed for D-2;

- capacity allocated to auction and nominated on D-1;
- marginal price of each auction (for the France/England interconnection, with the price and volume of each successful bid being available);
- intraday capacity still available after each gate closure and scheduling.

1.4 Determination of commercial exchange capacities

The following information is available on RTE's website (www.rte-france.com):

The method for determining commercial export capacities is applied according to the following stages:

- calculation of the physical flows on all grid facilities;
- determination of the available physical margins;
- transformation of the physical margins into commercial capacities available.

This method is applied by RTE to all lead times.

When balancing offers and grid constraints allow it, RTE can increase the level of capacity offered to operators by including a capacity band that generates a surcharge for electricity system development to be borne by RTE. The total available capacity is then the proposed available capacity (CDP).

A. HYPOTHESES

Exchange capacity is calculated on the basis of all the hypotheses provided and by a defined lead time. The hypotheses include the following elements:

- Status of the French transmission grid;
- Status of the transmission grid of neighbouring TSOs (simplified models in some cases);
- French consumption forecast (withdrawal in MW per grid node);
- French generation forecast (injection in MW per grid node);
- Exchanges already confirmed or exchange forecasts.

RTE manages the process of French consumption forecast and develops cooperation with its partners to reduce the uncertainty surrounding the other hypotheses.

These hypotheses improve as the day for which the study was conducted draws nearer. The values calculated by RTE therefore always serve as an indication and may change over time depending on events affecting the calculation hypotheses.

I. CALCULATION OF THE PHYSICAL FLOWS ON ALL GRID FACILITIES

RTE calculates the load flow on the basis of the selected hypotheses for the study in question. This calculation leads to active and reactive powers on all grid facilities (lines and transformers).

J. DETERMINATION OF PHYSICAL MARGINS AVAILABLE

RTE determines the physical margins on grid facilities in such a way that the impact of an incident on its customers is minimal.

From the outset, a certain number of incidents, which mainly correspond to loss of lines on the grid are therefore simulated. The post-incident physical flows are compared with the admissible physical limits of the grid facilities.

A facility is said to be under constraint when the admissible physical limits (for example, the overload thresholds) are exceeded. The incidents which must be taken into account and the definition of acceptable consequences as regards operational safety of the electricity system (in terms of power in the lines, voltage stability, reduced consumption, etc) are stipulated in RTE's operating rules.

Any constraints are thus detected (congestion is also mentioned) which may affect "internal" facilities on the grid or interconnection lines. The physical capacity still available, or physical margin, is determined for each grid facility.

K. TRANSFORMATION OF PHYSICAL MARGINS INTO AVAILABLE COMMERCIAL CAPACITIES

To ensure that an incident has zero impact on interconnection users, RTE calculates commercial capacities on the basis of physical margins, by using influencing factors.

The influencing factor of an exchange, in a given direction, on facility 1 after the loss of facility 2, is the impact of an additional exchange volume on facility 1 after the loss of facility 2. This coefficient is expressed in percentage and relative value. For example, if an exchange from France to Belgium has an influence of 10% on facility 1 after the loss of facility 2, this means that 100 MW of exchanges from France to Belgium increase the physical flow by 10 MW on facility 1 after the loss of facility 2.

The physical margin on a given facility is transformed into available commercial capacity at each interconnection: this margin is divided equally over each interconnection, incorporating influencing factors of an additional exchange at the interconnection and the physical flow of the facility for the incident referred to.

This transformation of physical margin into commercial capacity is carried out for all facilities on the French 400 kV grid.

The commercial capacity available at each interconnection is eventually defined as being the minimum value of calculated commercial capacities. This available commercial capacity thus satisfies all of the constraints studied.

If this available commercial capacity is calculated without anticipating any change in the generation plan, it is known as Available Transfer Capacity (ATC) in the ETSO sense.

L. EVALUATION OF ADDITIONAL COMMERCIAL CAPACITIES SUBJECT TO A CONGESTION CHARGE

As from D-2, RTE offers commercial capacities in addition to the ATCs previously calculated by adjusting the generation plan. These additional commercial capacities are then subject to a congestion charge borne by RTE. The method applied is based on the same principles as those used to determine the ATCs.

For each possible adjustment, RTE calculates the physical margin obtained and the related cost. The cheapest and most effective adjustment to the greatest constraint is chosen.

The physical margin obtained is equally divided over all the interconnections affecting the constraint and likely to benefit from additional commercial capacity. It is then reduced to a commercial capacity by using, as before, the influencing factors of an additional exchange at each interconnection for the considered facility.

2 Regulation of access to transmission and distribution grids

In France, there is one transmission system operator, RTE, a major distribution system operator (EDF Réseau Distribution), accounting for 95% of electricity distribution and around 160 local distribution companies (LDCs).

2.1 Grid access tariffs

CRE proposes grid access tariffs to the government, which may only accept or refuse them, without being able to modify them. Under the law of 13 July 2005, amending article 4 of the law of 10 February 2000 governing CRE's remit as regards pricing, CRE's proposal is applied two months after being transmitted to the Ministers for the Economy and for Energy, unless one of the Ministers voices their opposition within this period of time.

A. FRESH TARIFF FOR GRID ACCESS

The new tariff applicable as from 1 January 2006 was laid down by the decision of 23 September 2005 (cf. table no. 2 below). Its planned period of application is around two years. Average fees for grid access are expressed exclusive of tax and applicable deductions⁶.

For 2006, the tariffs for use of public electricity grids are as follows:

TABLE N° 2: GRID ACCESS TARIFFS

Average fees for grid access	
Dc*	41.9 €/MWh
Ib*	40.2 €/MWh
Ig*	12.6 €/MWh

(*) Eurostat classification:

Dc: Households: consumers with an annual consumption of 3500 kWh.

Ib: Commercial concern with an annual consumption of 50 MWh and maximum rated power of 50 kW.

Ig: industrial company with an annual consumption of 24 GWh and maximum rated power of 4000 kW.

CRE sets the tariff structure as well as their level. Experience feedback on application of the initial pricing rules highlighted the need to improve transparency of the tariff for users. In this regard, the tariff, applicable since 1 January 2006, clearly distinguishes the components of contract management, metering and those related to the use of grid infrastructures, each one corresponding to one of the grid operator's specialised activities. With the same aim of improving information provided to grid users, CRE has deemed it necessary to facilitate simulation of the calculation of fresh tariffs and the choice of those most suited to their situation. For this purpose, CRE has put a grid tariff calculator on its website (http://www.cre.fr.reseaux/calculatrice_2006.jsp).

M. LEVEL OF GRID OPERATOR COSTS

In order to draw up its latest pricing proposal, CRE based itself on the results of audits conducted on EDF's unbundled accounts for the financial years 2000 and 2002, and on the

⁶ Excluding tariff contribution to electricity transmission and distribution services set by [decree no. 2005-123](#) of 14 February 2005 and ministerial order of 29 December 2005.

accounts for 2003. Moreover, the pricing proposal takes into account changes in sector organisation when the non-household segment was opened up to competition on 1 July 2004:

- 20% of customer relation management costs borne by grid operators, with the remainder paid for by suppliers who have signed a "single contract";
- Possibility offered to users of requesting installation of metering systems more suited to their needs and owning their metering device;
- Cover of costs related to the setting up of balancing responsible entity and profiling mechanisms for users with a connection point;
- Billing by public grid operators, according to a public price band, which is transparent and applicable without discrimination, of additional services, whose costs were previously partially included in costs covered by regulated tariffs, without the legal status of these services being clearly defined.

The proposal also takes into account changes made by the European Parliament and Council regulation of 26th June 2003 and the law of 9th August 2004. These involve assets included in the transmission and distribution scopes, the amount of pension costs borne by grid operators and revenue from the congestion management mechanisms at international interconnections. Revenue from grid capacity auctions at international interconnections lowers the level of transmission tariffs for the benefit of all users.

N. BALANCE OF REVENUES AND EXPENSES

Setting the tariff level takes into account operating and capital costs as well as revenue forecast for each regulated activity of grid operators. For this purpose, CRE assessed the forecast revenues and expenses of the public transmission grid for the period 2006 to 2007. However, only the year 2006 was the subject of forecasts for the public distribution grids. This method was adopted due to modifications to organisation and to operating modes in 2007 when the supply of household customers will be open to competition.

Capital costs comprise depreciations of the regulated asset base and return on it.

O. RETURN ON ASSETS

For transmission, the value of RTE's regulated asset base corresponds to the net book value of its assets as at 1st January of the year reduced by investment grants for the financial year. Its amount as at 1st January 2006 was 10 799 M€. For distribution, the regulated asset base reflects the book value of franchised assets and takes into account particularities related to the existence of public distribution franchise schemes. Its amount as at 1st January 2006 was 26 324 M€.

The method of calculating the rate of return on the asset base is based on weighted average capital costs (WACC). For the duration of tariff validity it was set at a nominal pre-tax rate of 7.25% for RTE and ERD, against 6.5% for the previous period.

P. REQUESTED PRODUCTIVITY GAINS

In compliance with article 4 of the regulation of 26th June 2003, CRE wishes to incorporate costs "corresponding to those of an efficient network operator". CRE therefore asked grid operators to make productivity gains during the period of application of the proposed pricing rules. These productivity gains take the form of a general reduction of 3% in total forecast costs proposed by grid operators. The cost assessment basis used to calculate this general

reduction is defined as the sum of personnel costs and external consumption. Capital costs resulting from investments are therefore not concerned.

Q. A NEW EXPENSES AND REVENUES CLAWBACK ACCOUNT (CRCP)

Another innovation of the last tariff proposal is the application of an extra-accounting trustee account, called the Expenses and Revenues Clawback Account (CRCP). Its objective is to incorporate uncertainty surrounding certain categories of revenues and expenses that are out of public grid operators' control. CRE considered that costs related to compensation for losses on public electricity grids, income related to congestion management mechanisms at interconnections of the transmission grid with neighbouring countries and revenues from additional services are difficult for the system operators to control and forecast. This justifies incorporation in the expenses and revenues clawback account. Furthermore, capital costs taken into account in the tariff reflect investments made in application of investment procedures and regulations applicable to public transmission and distribution grids. These capital costs are therefore eligible for inclusion in the expenses and revenues clawback account for the part not forecast by CRE under depreciations of the regulated asset base and return on it.

2.2 The quality of service of electricity grids

A. QUALITY OF DISTRIBUTION GRIDS

Since December 2003, CRE has drawn up an activity report containing a set of indicators to be periodically filled in by grid operators. Given the specific problems related to the bulk of information to be processed, the priority was given to work carried out with EDF Réseau Distribution, the main French DSO. The content of the activity report was defined in October 2005 and the monitoring indicators were broken down into five topics:

- Knowledge of distribution assets including description of grid and customer status and physical development of grid infrastructures;
- Supply continuity and quality of voltage wave;
- Quality of distributor service, including connection conditions, routine management of contracts and commitments related to the quality approach and monitoring of metering activities;
- Losses incurred at lines;
- Trends in revenues and expenses, including distributor revenues and expenses, fixed assets and investments in the grid.

These indicators are not significant at the national level and are therefore mostly filled in at the appropriate level (region or franchise). This facilitates detection of zones where quality of service needs improving and this observation is used to encourage investment in these areas.

Conditions for setting up this report by the main LDCs are currently being reviewed by CRE.

R. QUALITY OF TRANSMISSION GRIDS

Since 2001, CRE has been collecting data describing the performance of the public electricity transmission grid. RTE's activity report was improved in 2005, with the monitoring of indicators related to its seven regions of territorial organisation. It now includes monitoring of significant system events (ESS) classified by gravity.

S. IMPROVED ANALYSIS OF QUALITY OF SERVICE

Activity reports provide practical, reliable tools for CRE to be able to improve its knowledge of overall performance of public grids in terms of quality and its trend over time. These results will be incorporated in international benchmarking carried out for quality of service of European grids.

In addition, they provide CRE with the possibility of determining relevant objectives for levels of quality of service and parameters of economic mechanisms for incentive-based regulation of grid operators. This development is provided for in the appendix to the pricing decision of 23 September 2005⁷ which states that "[...] CRE will apply incentive-based regulation to the financial benefit of [public electricity grid operators] for the improvement of their levels of quality of supply and of service". This system will be "included in the proposal it will make [and] applied at the beginning of 2008".

In order to do so, CRE will base itself on the experience of systems already in place in other European countries. These reports will also provide CRE with useful components for drafting opinions and proposals to be issued concerning the regulation of levels of quality which public grid operators must comply with.

2.3 Balancing

A. LATER CHANGES TO THE BALANCING MECHANISM

Under the law of 10th February 2000 governing modernisation and development of the public electricity service, "the Commission de régulation de l'énergie shall approve, prior to implementation, the rules for presenting balancing programmes and proposals as well as the criteria for choosing from the balancing proposals submitted to the public transmission system operator."

In accordance with CRE's deliberations of 23rd January 2003, on 1st April 2003, RTE implemented a market mechanism for managing grid balance in real time and removal of technical operation constraints of its grid in real time not covered by ancillary services.

The balancing mechanism rules are revised annually, after discussion with the concerned parties and approval from CRE. The modifications which are made aim to improve mechanism operations by increasing its effectiveness and robustness and to act on certain parameters with a view to ensuring balance of financial flows related to settlement of balancing supply and of balancing responsible entities' imbalances.

T. BALANCING MECHANISM OPERATIONS

The balancing mechanism is a market mechanism, open to French generators, major interruptible load consumers and foreign operators. France has just one balancing zone, corresponding to the RTE grid.

Through an upward and downward offer system, market players send the technical and financial conditions under which RTE may modify their generation or consumption programmes. RTE makes up for imbalances by selecting offers after collating them on the basis of a criterion of economic precedence and by incorporating the technical constraints expressed by operators. By law, all unused power technically available from each generation

⁷ Appendix, section III-B-2-c.

facility connected to the public transmission grid is made available to the operator of this grid by generators in their offers to the adjustment mechanism. When they send their day-ahead generation programmes to the French TSO, the generators therefore implicitly submit balancing offers at the same time.

In parallel, major consumers and foreign players may also participate in the balancing mechanism by presenting RTE with explicit balancing offers.

At CRE's initiative, new measures applicable as from 1st July 2006 to facilitate the balancing of balancing responsible entity positions (measures which are of particular benefit to small-sized suppliers who only partly gain from the portfolio effect of their sites). In particular, the principle of increasing the number of intraday scheduling closure gates, of block exchanges between balancing responsible entities and of submission of balancing bids has been officially endorsed. This number will go up from 12 to 24 in the first quarter of 2007.

Moreover, the "*period of neutralisation*" of one hour applied to block exchanges will be abolished by 15th September 2006. From then on, block exchanges between balancing responsible entities will therefore be able to apply from the moment that RTE is informed (i.e. as from the time of exchange notification gate closure). CRE has also asked RTE to study the feasibility of a new reduction in the "*period of neutralisation*" fixed for the generation scheduling. Currently lasting two hours, this period could be reduced by one hour if it is proven that this measure leads to a reduction in overall balancing costs without adversely affecting short-term security of supply.

Here are a few characteristics of balancing market design in France:

- As from the first quarter of 2007, times of scheduling closure gates and balancing bids will be as follows:
 - D-1 closure gate: 4pm;
 - 24 intraday closure gates: every hour from 10pm on D-1 to 9pm on the day.
- The period of time fixed before application of modifications to generation programmes (or "*period of neutralisation*") is 2 hours;
- Balancing bids are activated at 5-minute intervals;
- Balancing bids are paid at the price bid ("pay as bid" method);
- Balancing responsible entities' imbalances are calculated at 30-minute intervals.

U. MECHANISM FOR CALCULATING IMBALANCES AND RELATED PRICES

Any actor wishing to carry out energy transactions using the RTE grid must sign an agreement of affiliation with a balancing responsible entity in charge of paying for the imbalances observed within its scope.

Balancing responsible entities' imbalances are calculated for every half-hour of the day, and defined as the difference between physical injections and physical withdrawals measured within their scope.

Imbalance prices are calculated as follows:

TABLE N° 3: IMBALANCE PRICES

	Case where the overall system imbalance is positive	Case where the overall system imbalance is negative
Positive imbalance prices	$\text{Min}(P_{\text{powernext}}, \text{PMP Downturn} / (1+K))$	$P_{\text{powernext}}$
Negative imbalance prices	$P_{\text{powernext}}$	$\text{Max}(P_{\text{powernext}}, \text{PMP Upturn} * / (1+K))$

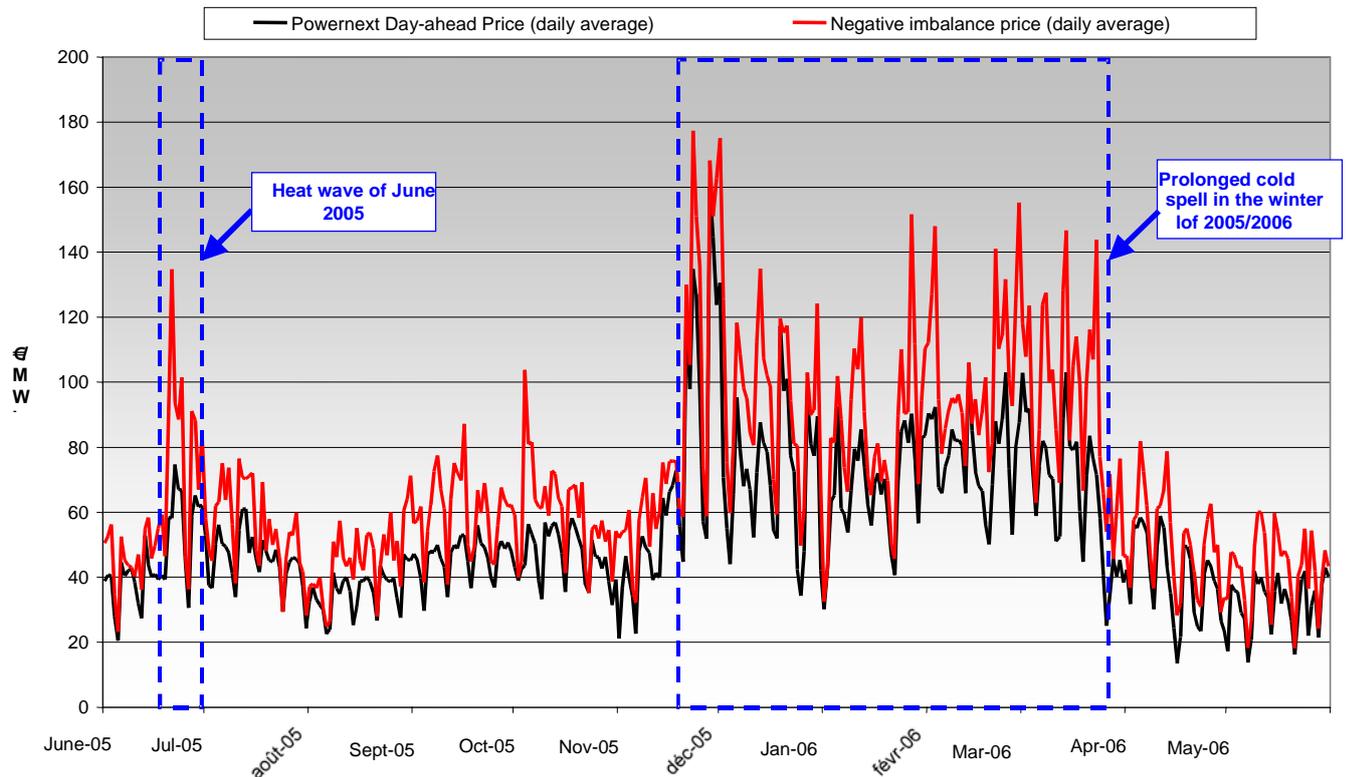
Where:

- Powernext represents the exchange price (or spot price) for the concerned half-hour;
- PMP Upturn represents the average price of upward adjustments that RTE had to activate during the concerned half-hour;
- PMP Downturn represents the average price of downward adjustments that RTE had to activate during the concerned half-hour;
- K is a balancing variable aiming to balance out the financial flows relating to settlement of balancing and imbalances over one year. The value of K was reduced from 0.15 to 0.05 on 1st July 2006 at CRE's request.

By the nature of the structure, the negative imbalance price always exceeds the Powernext price, while the positive imbalance price is always less.

For a year, imbalance prices have been experiencing periods of strain. From the end of November 2005 to the end of March 2006, France experienced a prolonged cold spell which drove prices upwards. More recently, during the second half of June 2005, high temperatures brought about an increase in consumption (due to mass use of air-conditioning) on the one hand, and generation limitations on the other (through application of regulations on release temperatures in bodies of water). Use of expensive balancing offers was therefore necessary.

FIGURE N° 2: IMBALANCE PRICES



V. ROLE OF FOREIGN OPERATORS AND CONSUMERS

Since the introduction of the balancing mechanism in view of encouraging competition and increasing reserve volume available to the TSO, access to the balancing mechanism has been open to operators working via the interconnection with Switzerland and to consumers connected to the public transmission grid. English and Spanish operators were subsequently given access to the mechanism (in November 2004), followed by German operators (in September 2005) and Italian operators (in April 2006). Swiss and German operators regularly participate in the mechanism, for significant volumes (their market share on upward offers is around 25%), while Spanish, English and Italian operators participate on a more occasional basis.

In April 2005, access to the mechanism was extended to consumption or generation sites connected to the public distribution grid. However, it should be pointed out that presently French operators may not participate in any foreign balancing market. Nevertheless, in view of integrating European balancing mechanisms, CRE has asked RTE to study reserve exchange mechanisms between TSOs which would improve means of balancing at their disposal and enable French operators to indirectly participate in foreign balancing mechanisms.

W. INTRADAY EXCHANGES

At present, the French electricity exchange does not allow intraday exchanges. Only OTC exchanges are possible. These exchanges must be declared by RTE via the interconnection gate closure or block exchange mechanism.

CRE recently asked RTE to study the impact and feasibility of creating an organised market for intraday commercial exchanges.

X. OBLIGATIONS OF TRANSPARENCY

The degree of transparency in the balancing mechanism has significantly increased since its establishment in view of improving the small-sized operators' understanding of operations so as to facilitate their access to it.

RTE publishes the following information on its website:

- Balancing volumes activated upwards and downwards for various reasons (overall balancing, congestion settlement, reconstitution of ancillary services and operating margins), per half-hour;
- Upward and downward adjustments in average and marginal prices per half-hour;
- Positive and negative imbalance prices, per half-hour;
- Level of operating margins at peak consumption times, published on D-1 for the day;
- Aggregate curve of upward balancing offers available at peak consumption times;
- Monthly balancing report, containing statistics on the following aspects:
 - characteristics of frequently accepted offers;
 - balancing share per technology;
 - quality of published indicators;
 - statement of balancing/imbalance account;
 - reliability rate of programme notification systems, balancing offers and block exchanges (published since 1st July 2006);
 - report per border and per day of energy volumes activated for reserve exchange contracts between RTE and other TSOs (published since 1st July 2006).
- Message dispatch notice of warning and changeover to "degraded mode" for offer inadequacy (since 1st July 2006).

2.4 Principles of account unbundling

In application of the provisions of article 25 of the amended law of 10th February 2000, the rules for allocating headings in profit and loss accounts and balance sheets, accounting scopes of activities and principles determining their financial relations must be submitted to CRE for approval after opinion from the Conseil de la concurrence. CRE stated in its deliberations of 11th January 2001 that the principles proposed by operators did not enable it to make a valid decision. As a result, in application of the provisions of article 37 § 6 of the aforementioned law, on 15th February 2001, CRE stipulated the principles of account unbundling applicable as from the accounts of the year 2000.

The principles of account unbundling are as follows:

The scope of transmission activity corresponds to the one of the public electricity transmission system operator (RTE), which has been subsidiarised since 1st January 2005. This scope covers all the lines of the continental mainland grid and of its interconnections where voltage is equal to or higher than 63 kV. The scope of distribution activity covers activities related to management of the continental mainland distribution grid and of grids in non-interconnected territories. The scope of "other generation" activity includes all activities related to electricity power generation, interconnections and exchanges with foreign operators. The scopes of supply to eligible and non-eligible customers consist of all activities respectively related to commercialisation and commercial management of eligible and non-

eligible customers respectively. The scope of "other activities" covers all activities performed outside the electricity sector.

The principles for keeping unbundled accounts for supply activities to eligible customers and supply activities to non-eligible customers were approved, with some reservations, by CRE on 14th June 2006.

The policy implemented for allocation of headings in balance sheets and revenue and expense accounts is the direct allocation principle. If an asset component is useful for several activities, it is allocated to the activity which is its main user. If an item cannot, by its very nature, be allocated to a main activity, it is then spread across several activities according to the rules in compliance with the principle of absence of cross-subsidy and of non-discrimination. Lastly, if revenues and expenses are identified as coming under a main activity, they are allocated to this activity with revenues or expenses being cross-charged to other activities.

Since 2005, electricity operators have no longer had to publish their unbundled accounts. These accounts are submitted to the Commission de régulation de l'énergie on an annual basis.

Unbundled accounts are subject to approval by auditors who certify the operators' annual accounts. Moreover, the Commission de régulation de l'énergie may carry out audits, in application of the provisions of article 27 of the law of 10th February 2000. These are carried out either by CRE employees accredited for this purpose, or by external audit firms selected after calls for tenders.

Financial relations between unbundled activities are covered by protocols, the establishment of some of these are provided for by law (for example, access to infrastructures). The protocol terms applicable to unbundled entities must be the same as those applicable to third parties, in compliance with the rules governing non-discrimination and prohibition of cross-subsidies between unbundled activities. Therefore, if terms applicable to third parties result from a public tariff (access to regulated infrastructures) or regulations, these public rules constitute the reference standard for rules applicable across unbundled activities.

In the event of violation of these rules, the Commission de régulation de l'énergie may institute the default notice procedure stipulated in 3^o of article 40 of the law of 10th February 2000 and apply the ensuing financial sanctions stipulated in 1^o of article 40. The financial sanction may not exceed 3% of the previous financial year's turnover, excluding taxes, and may be increased to 5% if the same obligation is violated again. There are no sanctions other than those stipulated in article 40 mentioned above.

2.5 Independence of public grid operators⁸

In application of the law of 9 August 2004, the public transmission system operator has been a separate legal subsidiary of the integrated electricity undertaking since 1st September 2005. Legal unbundling of distribution system operators must be applicable by 1st July 2007 at the latest.

⁸ A summary table (no.10) of data on the unbundling of electricity and gas system operators is provided on page 56.

The law of 9 August 2004, transposing the European directives of 26 June 2003, provided for the publication by CRE of an annual report on compliance with codes of good conduct and grid operator independence. CRE published its first report in November 2005.

The public transmission system operator, RTE, as well as all distribution grid operators who supply over 100,000 connected customers, drew up a code of good conduct in 2005 and submitted it to CRE. The codes have been sent to all grid operator staff and published on the grid operators' websites. Some are sometimes difficult to access, however, and, despite their being published almost a year ago, grid users are still largely unfamiliar with them, although they should be the main beneficiaries.

These codes mainly deal with the protection of commercially sensitive information (CSI) and, to a lesser extent, with non-discrimination and transparency. Yet, the first objective assigned to these codes by European directives is prevention of discrimination.

During the second half of 2005, the concerned grid operators sent CRE annual reports on the application of codes of good conduct.

CRE analysed the grid operators' codes and annual reports. It then carried out a public consultation of market players and held auditions attended by grid operators in October 2005 and it has also checked operators' practices.

In the first report published in November 2005, CRE made the following proposals:

- The codes must provide more explicitly for internal and external checking of results achieved in terms of non-discrimination and transparency. They must remind personnel of the disciplinary sanctions in the event of non-compliance with non-discrimination rules;
- The codes must be simplified and made more accessible to grid users. A mechanism for dealing with customer complaints must be provided for and made public;
- Every grid operator must establish an indicator of compliance with the principle of non-discrimination based on customer complaints;
- Electricity grid operators must continue the drive underway to improve transparency of their practices with regard to grid users, by completing their technical guidelines promptly;
- Audits carried out as part of ISO 9001 certification can complete internal checking;

CRE checks the implementation of commitments undertaken by electricity and natural gas system operators in these codes of good practice.

In its report of November 2005, CRE pointed out that grid operators had to be organised and managed independently as from 1st July 2004, whether they were affiliated (transmission systems) or not (distribution systems). This independence should result in an organisation comparable with that of an autonomous undertaking, one free to take any decisions in accordance with its interests, subject to the "*economic supervision and management rights*" acknowledged as belonging to the parent company by the directives of 26th June 2003.

The grids must be managed independently from the other activities of the integrated groups. Progress has been observed regarding transmission: However, supply and distribution grid management activities have still not been unbundled, although this is essential to ensure independence of the grid management activity as from 1st July 2007.

In the light of observations made by CRE, progress must be made in the following areas:

- All suppliers must have identical access to customer files in distribution grid operators' information systems;
- Independence of grid operator senior management must be better guaranteed, particularly by enabling them to appoint their associates freely;
- All grid operators must be able to decide on every investment independently from its parent company, within the framework of the total budget allocated to them. This is not the case for EDF Réseau Distribution for major investments;
- EDF statutes must expressly forbid the participation of "*grid operator management*" in structures of the integrated undertaking directly or indirectly responsible for the daily management of generation and supply activities. A member from a managing body of the parent company may not be a grid operator manager at the same time. This is because the grid operator's policy must not be influenced by the group's interests;
- Communication of integrated groups must take account of the unbundling of activities so as to avoid any confusion for customers between regulated activities and competitive activities.

The preservation of the independence of electricity transmission grid operators is not absolutely guaranteed by the contents of the statutes adopted alone. The proper behaviour of concerned parties in their implementation will now be essential for achieving the result prescribed by the directives of 26 June 2003. Whatever the energy concerned, the affiliation of public transmission grid operators cannot ensure their independence alone, due to the very nature of the link which unites a parent company to its subsidiary within an integrated group.

Transmission grid operator independence is restricted by the right, resulting from laws applicable to limited companies, for any shareholder or director to access exhaustive information, at any time, to carry out their role or mandate. This right cannot be limited in the current state of national law. The protection of CSI is incompatible with the fact that directors who are appointed by a shareholder can have permanent access to certain information and then report back.

The brand image confusion between regulated and competitive activities is harmful. EDF Réseau Distribution has opted for a similar visual identity for its competitive supply activities and regulated distribution grid operator activities.

This confusion clouds customer understanding of how the market is organised and operated.

The institutional communication of these groups, which ignores the unbundling of activities, heightens this effect.

Confusion may lead customers to believe that they runs risks in terms of quality and continuity of supply if they switch supplier.

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III . Operation of the French electricity market

in application of article 23, § 8 and 1, point h of Directive 2003-54-EC

CRE has set up a quarterly observatory of markets comprising quantitative indicators to make reference data on the opening of the electricity and gas markets available to the public. Available on CRE's website (www.cre.fr) in French and English, this contains a description of the wholesale and retail markets in mainland France.

1 The wholesale market

1.1 Generation - consumption

According to RTE, domestic consumption, including losses on the distribution and transmission grids, amounted to 482.4 TWh in 2005, exceeding consumption in 2004 by 0.7%. Maximum consumption reached 86,024 MW in 2005. This record high was beaten on 27 January 2006 with 86,280 MW of instantaneous consumption.

Again according to RTE, installed capacity in France amounted to 115,500 MW in 2005, compared with 116,700 in 2004.

With 87% of installed capacity, EDF was the only generator to reach the 5% threshold of installed generation capacity available. The other two major generators are:

- Electrabel-Suez which, through CNR, SHEM and its holdings in the nuclear power plants, operates 4% of installed capacity;
- SNET (ENDESA group), which holds 2% of installed capacity.

These three generators hold a total of 93% of installed capacity.

The table below shows the structure of the French market with different components ranked in order of importance:

TABLE N° 4: STRUCTURE OF THE FRENCH MARKET

Order of importance	Number of generators	List of generators
Baseload	2	EDF, Total
Semi-baseload	3	EDF, SNET, Gaz De France
Peakload	2	EDF, SNET
Hydropower	3	EDF, CNR, SHEM
Small-sized decentralised generation	Several thousand	Small-sized independent generators, local distribution companies, industrial companies (self-generation)

2005 was the first year of commercial operation of two significant means of generation:

- The Gaz de France combined cycle plant in Dunkirk, the first facility of this type in France, which enables the operator to have a generation capacity of 550 MW for their own needs using natural gas;
- The Total natural gas cogeneration plant in Gonfreville, which with a capacity of 250 MW, is the most powerful cogeneration facility in France.

1.2 Organised markets

Volumes of electricity commercialised in 2005 on Powernext include:

- Day-ahead traded volumes (hourly products or blocks quoted a day ahead) increased by 39% in one year, rising from 14.2 TWh in 2004 to 19.7 TWh in 2005;
- Future volumes traded since the opening of Powernext Futures on 18th June 2004 have been rising steadily. In 2005, 62.4 TWh was traded on Powernext Futures (against 12.8 TWh for June to December 2004).

Since 29th August 2005, the German exchange *EEX* has proposed baseload and peakload futures products for physical delivery in France: After launching annual products last summer, quarterly products have been quoted since October and monthly products since December 2005. *EEX* also proposes a clearing service for *OTC* transactions. From 29th August to 31st December 2005, *EEX* France traded a volume of 1.6 TWh.

1.3 The OTC market

The bulk of transactions on the French market are still carried out on a bilateral basis (OTC).

CRE does not have access to bilateral transactions; it is only aware of the volumes of net physical deliveries between operators. In 2005, OTC transactions recorded a total volume of 200 TWh, a rise of 27% compared with 2004 (157 TWh).

1.4 Integration of the French market within border markets

The French wholesale market remains national. There are no regional markets within the French market.

However, the French market is fairly closely linked with the German and British markets and is less so with markets in other border countries, although market interaction seems to have increased since 2004:

- In 2005, French prices were quite well correlated to German and British prices.

TABLE N° 5: COEFFICIENTS OF CORRELATIONS BETWEEN BASELOAD SPOT PRICES IN FRANCE AND IN OTHER COUNTRIES

	France/Germany	France/Spain	France/UK	France/Italy
2004	91%	61%	53%	50%
2005	89%	67%	84%	53%

Sources: 2004 and 2005 data, Powernext, EEX, OMEL, Platts UK and IPEX (CRE does not have price data concerning the Belgian and Swiss markets)

- In 2005, exchanges with Germany represented the bulk of imports/exports, and a significant volume with regard to the size of the French market.

Last year, France imported 32.1 TWh including 21.2 TWh from Germany (compared with 29.1 TWh in 2004, including 20 TWh from Germany) and exported 90.9 TWh (compared

with 89.6 TWh in 2004). The following table shows the breakdown per border of these exchanges, which changed very slightly between 2004 and 2005:

TABLE N° 6: BREAKDOWN OF EXCHANGES PER BORDER

		Switzer-land	Germany	Belgium	Spain	United Kingdom	Italy
2004	Imports	19%	68%	3%	7%	4%	0%
	Exports	29%	12%	15%	8%	12%	24%
2005	Imports	19%	66%	4%	2%	4%	3%
	Exports	29%	12%	14%	8%	13%	22%

Source: RTE public data

1.5 Mergers and acquisitions in the sector

The period July 2005 – June 2006 was marked by concentration operations in the European energy sector and opening up of EDF and Gaz de France capital.

- In November 2005, an IPO of 13.8% of EDF capital was carried out. The law of 9th August 2004 authorises the State to sell a maximum of 30% of the incumbent operator's capital.
- In July 2005, an IPO of 19.8 % of Gaz de France capital was carried out. The law of 9th August 2004 authorises the State to sell a maximum of 30% of the incumbent operator's capital.
- In the last quarter of 2005, Suez acquired the whole capital of the Belgian incumbent operator Electrabel, of which it was already the main shareholder. In February 2006, Suez and Gaz de France announced a merger project for the two groups.

Enel has declared its intent to become a major player on the French market. The Italian group is supported by an agreement with EDF, signed in May 2005, for partnership in the French nuclear programme of the third generation EPR. In December 2005, the Italian operator also proposed purchase of the 35% of SNET still held by Charbonnages de France and EDF.

2 Retail market

2.1 Eligible customers

Before the opening up of the French electricity market (June 2000), all consumption sites were subject to regulated tariffs set by the public authorities. As from June 2000, all sites with annual electricity consumption higher than 16 GWh became eligible, meaning that they earned the right to terminate their contract at regulated tariffs:

- either by renegotiating their contract with the incumbent supplier;
- or by switching suppliers.

Opening up of the French electricity market then underwent another two decisive stages:

- As from February 2003, eligibility of all sites with annual consumption higher than 7 GWh;
- As from July 2004, eligibility of all companies and public authorities.

Household customers are still not eligible.

Even if, every month, nearly 30,000 sites, on average, leave the regulated tariff scheme for new offers from incumbent suppliers and their competitors, the majority of eligible sites will still remain subject to regulated tariffs. As at 1st June 2006, CRE assessed the number of eligible sites having effectively taken up their eligibility as being 13% (i.e. 604,900 sites).

INSET N° 2: SEGMENTATION OF ELIGIBLE CUSTOMERS

To ensure monitoring of the retail market, CRE has defined a segmentation of eligible clientele:

Large-sized: sites connected to high voltage supply with rated power of higher than or equal to 250 kW. These sites are industrial sites, hospitals, hypermarkets, and large office blocks. This segment accounts for about 1% of sites in number but 66% of electricity consumption of eligible sites.

Medium-sized: sites connected to high voltage supply with subscribed power lower than 250 kW and low voltage sites with rated power higher than or equal to 36 kVA. These sites correspond, for example, to premises of SMEs. This segment accounts for 8% of sites and 19% of consumption of eligible sites.

Small-sized: sites connected to low voltage supply with rated power lower than 36 kVA. These sites correspond to the professional mass market (freelancers, craftsmen, etc.). This segment accounts for 91% of sites in number and only 15% of consumption of eligible sites.

2.2 Market shares

As at 1st June 2006, alternative suppliers' market share, compared to the number of sites having taken up their eligibility, is 4.8% (or around 14.8% of eligible consumption volume). This figure hides a disparate reality in the various segments. Penetration of alternative suppliers is thus limited to the segment of medium-sized sites:

TABLE N° 7: ALTERNATIVE SUPPLIERS' MARKET SHARES (IN NUMBER OF SITES):

All sites	Large-sized	Medium-sized	Small-sized
4.8%	4.2%	0.6%	5.1%

A. ANALYSIS IN TERMS OF NUMBER OF SITES

One supplier (EDF) holds a market share greater than 5% of the eligible market. This comment is also valid for the 3 sub-segments of the eligible market described above.

The market share of the 3 most significant suppliers in each segment is:

- 96% (all segments);
- 93% (segment of LARGE-SIZED sites);
- 98% (segment of MEDIUM-SIZED sites);
- 96% (segment of SMALL-SIZED sites).

Foreign suppliers in France include all suppliers governed by foreign law who operate on the French market as well as suppliers governed by French law whose main shareholder is a supplier governed by foreign law. The foreign suppliers' market share in France is:

- 0.05% (all segments);

- 3% (segment of LARGE-SIZED sites);
- 0.04% (segment of MEDIUM-SIZED sites);
- 0.03% (segment of SMALL-SIZED sites).

B. ANALYSIS IN TERMS OF CONSUMPTION VOLUME

One supplier (EDF) holds a market share greater than 5% of the eligible market. The market share of the 3 most significant suppliers is 94%. The foreign suppliers' market share is 6%.

2.3 Incumbent suppliers

A. INCUMBENT SUPPLIERS ALSO INVOLVED IN GENERATION

In France, there are over 160 incumbent suppliers who originally ensured supply and distribution in geographical areas:

- EDF, who is also involved in generation, supplied 95% of French consumption sites;
- around 160 Local Distribution Companies (LDCs) supplied the remaining 5%, with 52 of them also being involved in generation (1998 figure).

B. ALTERNATIVE SUPPLIERS ALSO INVOLVED IN GENERATION

As at 1st June 2006, 5 alternative suppliers operating since the opening of the markets have generation capacities: SNET, CNR, Electrabel, Gaz de France and Total.

In total, there are therefore around 58 suppliers in France with generation capacities.

C. SUPPLIERS ALSO WORKING AS GRID OPERATORS

In France, one sole supplier (EDF) is also a transmission system operator (TSO).

Along with 160 LDCs, EDF is also a distribution system operator (DSO).

At the same time, suppliers with no transmission or distribution capacities have entered the market since the opening of the markets. As at 1st June 2006, there were around twenty operating in France.

2.4 Switching supplier

As at 30th June 2004, the electricity market was only open for some sites in the segment of LARGE-SIZED sites. Alternative suppliers serviced around 800 sites at this point.

Since 1st July 2004, alternative suppliers have also been able to develop offers for other segments of clientele. As a result, by 1st June 2006, alternative suppliers serviced 215,300 sites, or:

- 1,500 sites in the segment of LARGE-SIZED sites;
- 2,500 sites in the segment of MEDIUM-SIZED sites;
- 211,300 sites in the segment of SMALL-SIZED sites;

Their consumption accounts for 14.8% of the eligible market.

Standard procedures have been drawn up to organise the methods for switching suppliers, but not defined by law. They have resulted from discussion between various players in the

electricity sector (end consumers, suppliers, distributors, transporters and administrative authorities). The objective set by CRE was for the process of switching supplier to be easy, quick and free of charge.

The opening of the electricity market has seen the introduction of two types of contracts. The standard procedure applicable for switching supplier depends on the type of contract signed by the consumer.

A. THE SINGLE CONTRACT

Customers sign a single contract stipulating terms for both electricity supply and its transportation by the public distribution system operator⁹.

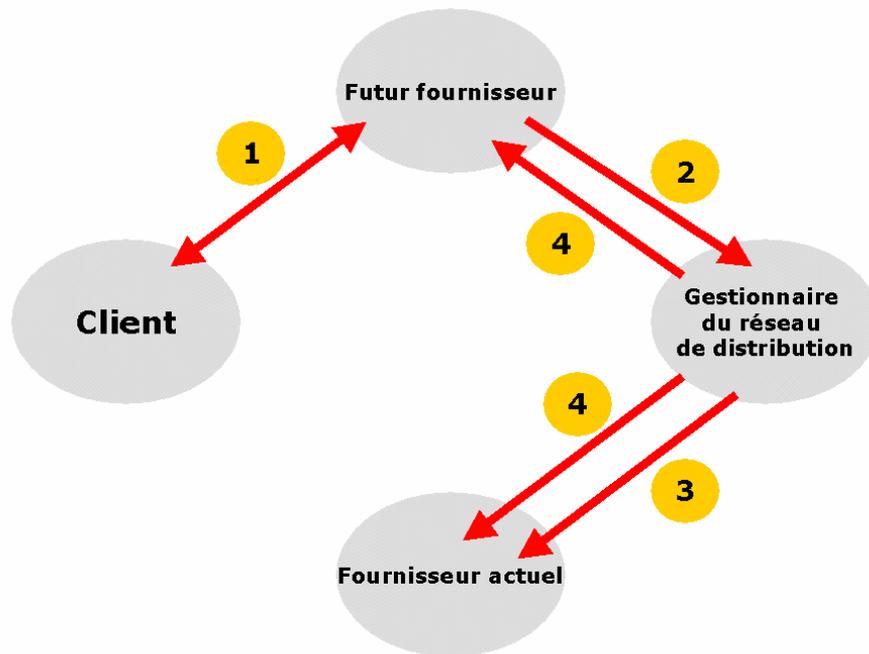
a. THE VARIOUS STAGES INVOLVED IN THE PROCEDURE ARE AS FOLLOWS:

- Customer sign a "*certificate for switching supplier*", kept by their future supplier;
- The future supplier informs the distribution system operator of the customer's desire to switch supplier;
- Distribution system operators acknowledge receipt of the application:
 - they check admissibility of the application (to prevent fraud);
 - they send a copy of the acknowledgement of receipt to the customer's current supplier.
- Distribution system operators estimate the customer's index for switching:
 - they send the indexes to the current supplier on the date suppliers are switched along with the invoice for the corresponding amount;
 - they send the same indexes and the initial invoice corresponding to the fixed part of the grid tariff to the future supplier.

Some DSOs impose additional obligations on their customers: some systematically demand the "*certificate for switching supplier*", signed by the customer, from the future supplier, others carry out a special meter reading, invoiced to the future supplier.

⁹ This type of contract accounts for the vast majority of contracts signed (around 601,300 as at 1 June 2006).

FIGURE N° 3: PROCEDURE FOR SWITCHING SUPPLIER



b. REASONS FOR REFUSAL

The distribution system operator may object to an application to switch supplier (application admissibility verification) if:

- a previous application to switch supplier is already underway;
- fraud has been observed on the metering equipment.

The former supplier may also object within a 7-day period. The new supplier must then produce the certificate for switching supplier within 7 days, failure to do so results in cancellation of the switching process.

c. TIMEFRAMES

The process of switching supplier, without modification of the rated power or the metering structure, must take place within the following timeframes:

- the 1st of the month following the application if it was made **before** the 10th of the month;
- the 1st of the second month following the application if it was made **after** the 10th of the month.

B. THE TWO CONTRACTS

The customer signs two contracts: a supply contract stipulating the terms of electricity supply, and a distribution grid access contract (CARD) for connection with a distribution system operator, or a transmission grid access contract (CART) for connection with a transmission system operator.

a. THE VARIOUS STAGES IN THE PROCEDURE ARE AS FOLLOWS:

- Customers terminate their supply contract with their balancing responsible entity;
- They sign a new supply contract with a new balancing responsible entity;
- They notify the distribution system operator (in the event of a CARD) or the transmission system operator (in the event of a CART) of their new balancing responsible entity.

b. TIMEFRAMES

The process of switching supplier, without modifying of the rated power or the metering structure, must take place within the following timeframes:

- either on the 1st of the month following the application if it was made **at least** 7 days before the end of the month;
- or on the 1st of the second month following the application if it was made **less** than 7 days before the end of the month.

C. COSTS RELATED TO SWITCHING SUPPLIER

Article 83 of law no. 2005-781 of 13th July 2005 of the programme setting out the energy policy guidelines amends the rules governing payment of services provided for switching supplier.

Article 83 stipulates that, when eligible customers take up their eligibility for a site and switching supplier, *"their current contracts at the regulated tariff regarding electricity supply of this site are legally terminated. This termination may not give rise to any compensation whatsoever"*.

However, *"when this termination occurs within one year following a modification, made at the customer's initiative, to the rated power in the contract, Electricité de France or the non-nationalised distributor concerned shall be entitled to compensation corresponding to the sum of fixed premiums due for the electricity actually consumed"*.

Finally, *"when customers who have already exercised their eligibility switch supplier for a second time, they alone are liable for the costs incurred by this change, particularly to the grid operator to which they are connected"*.

2.5 Retail prices

The taxes included in grid costs correspond mainly to taxes on pylons and are not identified in the bills for use of public grids.

Since 1 January 2006, costs related to pension schemes for electricity and gas industry employees are funded by a tariff contribution separate from the tariff for use of public electricity grids.

The following data, like the Eurostat data of July 2005, corresponds to customers who have kept a regulated retail tariff:

TABLE N° 8: DETAILS OF A BILL

	Dc ¹⁰	Ib ⁷	Ig ⁷
Bill for use of public grids (€/MWh)	42.9	37.4	12.6
Supply bill (€/MWh)	44.3	41.6	32.2
Taxes (excluding VAT): CTA (€/MWh)	2.8	5.1	0.7
Taxes (excluding VAT): CSPE (€/MWh)	4.5	4.5	4.5
Taxes (excluding VAT): local taxes (*) (€/MWh)	9.5	3.3	0.0
VAT (**) (€/MWh)	17.3	18.0	9.8
Total (€/MWh)	121.3	109.9	59.8

(*) Local taxes corresponding to a percentage of 13.2% for Paris (and 11% on the national scale) are applied to 80% of the bill excluding taxes for rated power lower than 36 kVA and to 30% of the bill excluding taxes for rated power between 36 kVA and 250 kVA. No local taxes are paid on power exceeding 250 kVA.

(**) For power lower or equal to 36 kVA, VAT corresponds to 5.5% of the invoice subscription excluding taxes and 19.6% of the rest of the bill excluding VAT and other taxes. For powers exceeding 36 kVA, VAT corresponds to 19.6% applied to the bill excluding VAT and other taxes.

Comments on the calculation hypotheses:

- the grid bill is calculated on the basis of Eurostat customer characteristics (annual consumption c , consumption during off-peak hours for households, rated power ps and duration of use $c/(ps*8760)$);
- the supply bill is obtained from the difference between the total bill excluding taxes, as published by Eurostat in July 2005, and the grid bill + CTA (transportation tariff contribution)
- the VAT estimation of DC customers is obtained by applying the 5.5% rate to the average subscriptions of 6 and 9 kVA resulting from regulated retail tariffs and the 19.6% rate to the rest of the bill.

3 Measures to avoid abuse of dominant positions

3.1 Wholesale market

No specific rule has been applied on the French wholesale market to avoid abuse of dominant positions on the part of the dominant generator.

For example, French generators are not subject to any obligation to publish ex ante or ex post information on the structure, capability or operation of power plants. On the subject of transparency, the Commission de régulation de l'énergie participated in drafting recommendations of the European Regulators Group for Electricity and Gas (EREG).

Likewise, in terms of price strategy on the wholesale market, no specific rule applies to generators. Only the national rules governing competition apply.

¹⁰ Eurostat Classification, cf. definitions p.16.

VPP (Virtual Power Plants) are a key element of the French wholesale market. These are virtual generation capacities periodically put up for auction by EDF following the European Commission ruling allowing it to acquire a 34.5% stake in the German electricity company EnBW.

In 2005, VPPs accounted for 56% of procurement necessary for alternative operators to cover their eligible customers' consumption and also their commitments concerning supply of losses to RTE and EDF distribution system operator.

In December 2005, CRE launched a public consultation concerning the future of the mechanism. Except for incumbent operators subject to VPP systems in their countries of origin and an industrial customer, all contributors indicated that, according to them, a regulated programme of provision of electricity by EDF is necessary for proper French wholesale market operations and for the development of competition on the retail market.

At the end of this consultation, in its statement of 16th March 2006, CRE indicated that it is in favour of the existence of a regulated programme for provision of electricity on the French wholesale market by EDF. In the absence of such structural measures as disposal of generation assets, such a programme implemented in keeping with methods similar to VPPs decided upon by the European Commission, constitutes an effective remedy to reduce effects of generation concentration and increase wholesale market liquidity for forward products. CRE specified the essential characteristics of the proposed programme, including the necessity for the sale of products with durations of up to 15 years.

3.2 Retail market

In their current relations with eligible customers, electricity suppliers are subject to the common law of the *Civil Code* and *Code of Commerce*. All electricity end consumers are currently recognised as eligible on a consumption site, as soon as all or part of the electricity consumed on this site is intended for non-household use.

Suppliers are subject to an obligation of transparency as regards eligible consumers. They must clearly explain their obligations and any obscure or ambiguous contractual provision will be interpreted to their detriment.

The structure and contents of contracts concluded with eligible consumers are free, providing that they do not go against applicable regulations. Grid access contracts are sent to CRE and their provisions must be transparent and non-discriminatory. If it is necessary for the settlement of a dispute submitted to CRE, the regulator may set the methods of access to grids, structures and facilities or the terms of their use in an objective, transparent, non-discriminatory and proportionate manner.

The duration of the contract is also free and can be of long duration if the customer so wishes and if the supplier makes the customer an attractive offer. CRE has declared itself in favour of establishing long-term contracts, in which suppliers commit to prices whose trends over the contract duration would be linked to transparent indexes. These contracts must nevertheless comply with the competition law, particularly regarding operators in a dominant position. The conclusion of long-term electricity supply contracts must not aim at or result in the eviction of competitors. Furthermore, customers must be able to terminate their contract in advance with related fines being of a reasonable amount.

In application of article L.441-6 of the code of commerce which applies to all suppliers as regards their contractual relations with non-household customers, they are obliged to send their general terms of sale to any non-household customer upon request. These form the basis for commercial negotiation and contain the sales terms, unit price scale, price reductions and payment terms.

Article 22-VI of the law of 10 February 2000 also stipulates that suppliers are obliged to send their price scales and a precise description of the commercial offers to which these prices apply to customers subscribing to demand of ≤ 36 kVA upon request. These price scales must be identical for all eligible customers in this category, connected to the continental electricity grid.

As is the case for the contract, the format of the bill is free but any bill issued by an electricity supplier must contain a minimum of the following information:

- Line concerning consumed energy billed. The law of 10 February 2000 (article 22-VII), stipulates, firstly, that the energy invoiced for contracts of rated power ≤ 36 kVA must be invoiced "*on the basis of energy consumed*" and, secondly, that each kWh consumed must be billed "*at the minimum [...] of the amount specified by the tariff for grid use*" if the supplier invoices the consumer for both the energy supply and use of public transmission and distribution grids;
- If the supplier has concluded a "*single*" contract with a customer, covering the supply and transportation of electricity, the customer is billed for both the energy supply and use of public grids. The bill identifies the amount corresponding to the use of public grids by the customer (article 5-I of decree 2001-365 of 26 April 2001 governing tariffs for use of public electricity transmission and distribution grids);
- The supplier applies the retail tariff to non-eligible customers and eligible customers who have not exercised their eligibility. For the tariff concerned category, the bills indicate the proportion corresponding to the costs for use of public grids. The supplier pays the grid operator the sums received for use of this grid (article 5-I of the decree of 26 April 2001);
- Line for the public electricity service contribution (CSPE) in accordance with CRE's statement of 12 February 2002;
- Line concerning valued added tax (VAT) in accordance with decree 2003-632 of 7 July 2003;
- Line for local taxes (of *départements* and *communes*) in accordance with decree 2004-1210 of 15 November 2004;
- Information on the origin of the electricity supplied in accordance with decree 2004-388 of 30 April 2004 (article 5).

Other lines may be added freely by suppliers (for example to detail other services provided by the supplier).

IV . Regulation of the natural gas market

In application of article 25 § 1

Since 1st July 2004, all non-household customers have been eligible, i.e. 675,000 sites, accounting for an annual consumption of 380 TWh of natural gas and an opening of 73% of the total market. The next step, which will see the electricity and gas markets fully opening up to all consumers, is set by the Directive for 1st July 2007. The open gas market will then encompass 11 million consumers, becoming the fourth largest market in Europe. Building on what was done for the opening of the markets to non-household customers on st July 2004, CRE is preparing for this deadline and has been giving consideration to the procedures, information systems, methods for informing and protecting consumers and to any other measure which could need to be taken, in consultation with all the concerned parties.

1 General rules for allocation of capacities in France:

1.1 Obligations of transparency

The development of a competitive gas market requires access for all market players to detailed information on capacities under transparent and non-discriminatory conditions.

CRE asked operators to publish information on their websites concerning maximum marketable firm capacities, subscribed firm capacities, available firm capacities, interruptible capacities as from 1 July 2003 and daily observed flows as from 1 September 2003 (CRE's deliberations of 28 May 2003).

This information is published for all entry and exit capacities and link capacities between balancing zones, as well as for LNG terminals. CRE also asked each operator concerned to produce a general policy document describing the methods for calculating maximum marketable firm capacities and to submit details of the methodology and calculations leading to the results published.

Finally, CRE asked operators to publish the programme forecast for the coming six months of capacity reductions caused by maintenance and repair work, with at least an update every month .

These provisions have been put in place by French operators, thus placing them in a more transparent situation than their European counterparts.

INSET N° 3: OBLIGATION OF TRANSPARENCY

New operational data has been published on a daily basis by GRTgaz since 1 July 2006:

- daily consumption and daily consumption forecasts (for D-1, D and D+1) per balancing zone;
- exchanges at gas exchange points per balancing zone;
- flows at interconnections of the GRTgaz network.

Moreover, since 1st April 2006, both French storage system operators have published storage levels, injection and withdrawal flows and the rates of past use per storage group on a weekly basis.

In terms of transparency, the French TSOs apply the European Regulation provisions, which came into force on 1st July 2006. At each interconnection point and network link, capacities and aggregate daily flows are published. However, for the Oltingue and Larrau points, the daily flows observed are not published so as to respect the commercial confidentiality of certain sensitive data (under three users).

1.2 Transmission networks

As there were so many different subscription periods for transmission capacity, a set of rules prioritising the various types of subscription currently available to shippers had to be defined. The types of subscription available include long-notice annual bookings (more than 6 months), short-notice annual bookings (between 1 and 6 months), monthly and daily bookings of firm and, where applicable, interruptible capacities.

The general principles of capacity allocation on transmission networks were defined by CRE in its tariff proposal of 27th October 2004. Their main purpose is to avoid any refusal of access if an existing customer changes supplier:

- on the regional network and at the main network exit point, the corresponding capacities are automatically transferred to the new supplier;
- at storage interface points, the corresponding capacities are automatically allocated according to the subscribed storage capacities;
- on the main network, the system of releasable capacities is maintained and its terms of application defined.

The general subscription rules for the various types of capacity have been specified:

- for GRTgaz, long-notice annual bookings are restricted to 80% of the firm capacities marketable each year. This threshold is still to be determined for Total Infrastructure Gaz France (TIGF);
- monthly capacities are marketed fifteen days to one month before the start of delivery. However, the maximum period of notice has been extended to two months for the Fos and Montoir entry points. At least 25% of the existing monthly firm capacities must be reserved for monthly subscriptions;
- daily capacities are marketed between the 16th of the previous month and the day before delivery.

Within this context, on 13th December 2004 GRTgaz published its transmission capacity allocation rules on its website, applicable since 1st January 2005. A document containing all the rules for capacity allocation on the TIGF network was published on 27th April 2005.

Marketable, subscribed and available capacities over 10 years are now published by GRTgaz on its website for its network.

The activity of shippers on the French network is developing. As at 1st May 2006, 21 shippers were operating on the GRTgaz network and 8 on the TIGF network. As at 1st January 2005, there were 10 shippers operating on the transmission network in total.

1.3 Congestion management

On the transmission network in France there are physical internal congestion problems. In order to handle this problem, the Gaz de France transmission network has been divided up over several balancing zones as part of the definition of "entry-exit" tariffs.

Moreover, for all onshore network entry points, except the Taisnières H entry point, all firm annual capacities are subscribed. It is not really a case of physical congestion. So that new suppliers can, nevertheless, supply customers across France from these points, the regulator asked for part of the capacities retained by dominant shippers to be declared releasable. The shipper is obliged to release these capacities to the TSO if they are required by another shipper, who has gained new customers.

TSOs determine the levels of marketable, firm and interruptible capacities at different points of their network. Their methodology is based on hypotheses of network flows and of expected behaviour of shippers at the main points of the network.

From April 2005 to April 2006, there were 12 unsatisfied capacity requests for low quantities on the GRTgaz network. Although these requests did not bring about applications for dispute settlement, they update the limits of the releasable capacity system.

Almost half of unsatisfied requests, through lack of available capacities, concerned annual firm capacity subscriptions, as all releasable capacities had been returned. The other half concerned monthly firm capacity subscriptions, for which the releasable capacity system did not apply. CRE will consult transmission system operators on adjusting capacity allocation rules so as to limit the number of access refusals. In compliance with European Regulation 1775/2005, CRE will ensure the setting up of long-term Use-It-Or-Lose-It mechanisms, as only short-term mechanisms have been set up by French network operators.

To deal with increasing capacity requests at the entry point of Obergailbach, where there is no long-term capacity available, from May to October 2005, GRTgaz implemented a procedure of call for applicants to identify shippers that would like to undertake capacity reservations for a period of 10 years. At the end of the procedure, only Gaz de France, E.On Ruhrgas and ENOI were allocated capacities, with Gaz de France and E.On Ruhrgas obtaining virtually all of them. With the exception of ENOI, the other applicants withdrew as they were unable to contract capacities on the network upstream, in Germany.

1.4 Secondary capacity markets and UIOLI rules

Current tariffs for use of transmission networks establish the setting up of secondary capacity markets for each TSO.

A short-term Use-It-Or-Lose-It mechanism has been set up by GRTgaz. This enables subscribed capacities that are unused by primary subscribers to be put back on the market, a day ahead, when all firm daily capacities from an entry or exit point have been sold. Shippers have been making regular use of this mechanism on the GRTgaz network since 12 December 2005. TIGF is planning to launch this service during the final quarter of 2006;

The capacity exchange service has been improved. Before informing a shipper of an access refusal for capacity shortage, GRTgaz looks for the corresponding capacity among shippers with corresponding capacities, in such a way as to preserve the anonymity of requesting and supplying parties.

The prices of transactions carried out are not known.

Neither transportation contracts nor transmission tariffs distinguish between the domestic market and transits.

2 Regulation of access to transmission and distribution networks

Since 1st January 2005, there have been 2 transmission network operators in France:

- GRTgaz, a subsidiary of Gaz de France SA, which operates around 88% of the French transmission network
- TIGF, a subsidiary of Total, which operates around 12% of the French transmission network.

There are 22 distribution system operators:

- Gaz de France Réseau Distribution, a separate accounting and operational division within Gaz de France SA, which operates around 96% of the French distribution network;
- 21 local distribution companies, which operate 4% of the French distribution network. The most significant companies are Gaz de Bordeaux, Gaz de Strasbourg and Gaz de Grenoble, in which the local council is the main shareholder.

FIGURE N° 4: NATURAL GAS TRANSMISSION NETWORKS, LNG TERMINALS, UNDERGROUND STORAGE FACILITIES AND LOCAL DISTRIBUTION COMPANIES



2.1 Network access tariffs

A. ESTABLISHMENT OF TARIFFS:

On 24th July 2003, CRE proposed its first tariffs for use of gas transmission networks, intended for application from 1st January 2004 for a period of 12 to 18 months. These tariffs came into force officially by the decree of 21st September 2004, but were implemented by transmission system operators, at their own initiative, from 1st July 2004.

On 27 October 2004, CRE proposed new tariffs for use of transmission networks as it was necessary to incorporate the changes arising on the French gas scene:

- the modified scopes of Gaz de France and TIGF transport networks following the signing, on 17th October 2004, of agreements between Gaz de France and Total providing, in particular, for the untying of their joint stakes in GSO and CFM. This operation, which came into effect on 1st January 2005, led to the disappearance of the transmission operator CFM, and removed two balancing zones;
- the subsidiarisation, on 1 January 2005, of the transmission system operators: the setting up of subsidiaries GRTgaz for Gaz de France and TIGF for Total;
- the need to create secondary transmission capacity markets and introduce the possibility of daily capacity reservations in compliance with the "Guidelines for good third-party access practice for storage system operators" adopted during the Madrid Forum in September 2003.

These tariffs, intended for application from 1st January 2005 for a period of 12 to 18 months, were established, like the previous tariffs, taking into account both the operating costs required to operate and maintain the networks and facilities with productivity gains discounted and capital costs (depreciation of and return on assets used for the transmission activity). They incorporate the application of the tariff contribution paid to the national fund for electricity and gas industries.

The operators GRTgaz and TIGF have applied these tariffs since 1st January 2005.

INSET N° 4: FRESH GAS TRANSMISSION TARIFFS

CRE is defining fresh gas transmission tariffs to be applied as from 1 January 2007. The guidelines adopted for drawing up these tariffs are:

- Stability of the general tariff structure (4 GRTgaz balancing zones and 1 TIGF balancing zone) designed for application until 1 January 2009, when GRTgaz will drop from 4 to 2 balancing zones;
- Modification of the regional transmission network pricing system with the setting up of standardised subscriptions;
- Introduction of an expenses and revenues clawback account (CRCP). This type of mechanism, set up for the second tariff for use of public electricity grids (TURP 2), neutralises the financial issues related to asymmetric information existing between the regulator and grid operators as well as expenses and revenues over which grid operators have no control;
- Adaptation of rates of return on the regulated asset base to financial market trends.

B. METHOD FOR SETTING TARIFFS

In order to draw up its proposals, CRE works closely with transmission system operators. It also organises public consultations so as to gather the opinion of all parties concerned.

CRE proposes both a tariff level and structure for the use of transmission networks.

To prepare tariff proposals for the use of gas transmission networks, CRE took a real pre-tax rate of return of 7.75% for assets existing on 1st January 2004 and 9% for investments made after this date. It has also made provision for raising the rate of return on assets from 9 to 12% for a period of 5 to 10 years for certain investments likely to contribute significantly to market operation.

The energy orientation law of 13th July 2005 stipulates that, when CRE issues tariffs for the use of transmission and distribution networks and LNG facilities, Ministerial approval is considered as granted, unless there is opposition from ministers within two months.

C. LEVEL OF TARIFFS

Average transportation costs on the national network for Eurostat type consumers are as follows:

TABLE N° 9: TRANSPORTATION COSTS AS AT 1ST JULY 2006

Profile		Transportation costs in €/MWh
I4-1	Transmission connection	1.55
	Distribution connection	1.3
I1		7.2
D3		10.9

D. DISTRIBUTION TARIFFS

On 26th October 2005, CRE proposed new tariffs for the use of natural gas distribution networks for the 23 distribution system operators (DSOs) – Gaz de France Réseau Distribution (Gaz de France RD) and the 22 local distribution companies (LDCs).

These tariffs officially came into force on 1st January 2006, pursuant to the decision of 27th December 2005 of the Ministers for the Economy and Energy. They were set up to incorporate the application of the employee pension scheme reform to electricity and gas industries (IEG). This reform resulted in a reduction in pension costs for DSOs, due to the setting up of a transportation tariff contribution (CTA) levied on natural gas distribution services.

To set these tariffs, CRE worked together with the DSOs. CRE conducted hearings and organised a public consultation from 21st July 2005 to 16 September 2005 so as to gather the opinion of all parties concerned. These consultations revealed that the distribution network pricing principles proposed by CRE for its first tariffs were satisfactory and the general principles were therefore kept.

The total opening up of the natural gas supply market to competition on 1st July 2007, as well as the legal unbundling of DSOs planned for this date, raise uncertainties as to trends in DSO costs. As a result, these tariffs were designed to be applied from 1st January 2006 for around a period of two years.

Inset n° 5: Calculation of the level of tariffs for the use of distribution networks

CRE determines the level of tariffs for the use of networks so as to enable costs borne by DSOs to be covered. The calculation of costs to be covered by the tariffs concern DSOs who have submitted unbundled accounts, i.e. Gaz de France and nine LDCs. This calculation makes a distinction between operating costs and capital costs.

CALCULATION OF THE LEVEL OF OPERATING COSTS:

The level of these costs has been fixed on the basis of an analysis of financial data in operators' records and on hypotheses of trends in costs for the 2005-2007 period. This analysis took account of the results of the audit of the LDCs' unbundled accounts.

The tariff proposal of 26th October 2005 introduced two major changes compared to the choices adopted for setting the first tariffs:

- 20% of customer management costs were charged to DSOs and 80% to suppliers (compared to 50% to DSOs and 50% to suppliers previously) so as to take account of the larger role played by suppliers in customer relations management;
- The amount of fees paid to franchising authorities is excluded from the expenses to be covered after 2006, insofar as fee analysis concluded that they did not result from any service provided by the franchising authorities.

CRE's new tariff proposal also incorporates the impact of pension scheme reform in the electricity and gas industries (IEG).

CALCULATION OF THE LEVEL OF CAPITAL COSTS:

Capital costs are broken down into depreciation and return on capital employed. These two components were calculated on the basis of the economic value of the operators' assets, the regulated asset base (RAB).

Initial RAB value was fixed on 31st December 2002 on the basis of revaluation of past gross asset worth according to a "*current economic costs*" type methodology. Once it has been set by CRE, initial RAB value changes according to the rate of inflation applied, depreciation of the RAB and acquisition and disposal of assets (mid year).

Depreciation instalments are calculated on a straight line basis over the economic lifetime of the assets. The standard lifetime has been estimated at 45 years for pipes and connections, 40 years for expansion stations, 20 years for metering systems and 10 years for other types of technical equipment.

The return on capital employed is based on the weighted average cost of capital with a standard financial structure. So as to incorporate trends on the capital market since the first tariffs were fixed, the rate of return has been set at 7.25%.

The first tariffs for the use of distribution networks proposed by CRE led to a 9% reduction in current Euros in the average unit tariff of Gaz de France RD. Apart from the effect of the IEG pension scheme reform, the two tariffs result in a 1.9% reduction in current Euros.

For LDCs, with the same pricing method as used for Gaz de France RD, the first tariffs were from 25% to 75% higher than those of Gaz de France RD. These tariff differences will gradually be reduced. The two tariffs form a first step in this direction, insofar as the

average unit tariffs of LDCs are decreasing more sharply than that of Gaz de France RD, between 5 and 10% depending on the LDC concerned.

The tariffs have made improvements to foster opening of the natural gas market:

- Standardisation of services covered by tariffs for the use of different DSO networks;
- Introduction of new flexibility (grouping of delivery points, choice of meter reading method and daily subscriptions);
- Fall in the level of fines for exceeding capacity which could, in some cases, hinder exercising of eligibility;
- Simplification of DSO tier 2 pricing.

E. TARIFFS FOR USE OF LNG TERMINALS

In 2005, the LNG terminal in Fos-sur-Mer received 167 ships and released 58 TWh of gas on the transmission network. The Montoir-de-Bretagne terminal received 101 ships and released 85 TWh of gas on the transmission network.

The only user in 2005 of the Fos and Montoir terminals was Gaz de France Négoce, with the exception of a cargo unloaded by Total Gas & Power in May 2005.

In October 2005, CRE proposed a new tariff to the government for use of the LNG terminals in Montoir and Fos Tonkin for application as of 1st January 2006. This tariff was adopted by ministerial decision on 27th December 2005 and is due to be applied at least until the commercial start-up of the Fos-Cavaou terminal currently under construction.

This new tariff takes into account of the major increase in capacity subscriptions due to the arrival of Egyptian LNG purchased by Gaz de France. It creates more favourable conditions for the arrival of new shippers at French LNG terminals. It contains special clauses on the operation of terminals when several shippers are operating at the same time. It provides for a reduction of around 20% for spot cargoes.

In order to make its proposal, CRE incorporated the results of the audit it conducted on the unbundled accounts of Gaz de France. CRE also conducted hearings and organised a public consultation from 23rd July to 16th September 2005.

The fall in the average unit tariff is 15% in current Euros, for users bringing in regular cargoes of liquefied natural gas (LNG). The fall is around 20% for users bringing in spot LNG cargoes.

This decrease is a result of a volume effect (increase in capacity subscriptions) and a fall in the costs taken into account for payment of the LNG terminal operator, Gaz de France. Application of employee pension scheme reform to the electricity and gas industries has led to a reduction in pension costs borne by the operator. So as to incorporate trends on the capital markets since the last tariff was fixed, the rate of return of assets has been lowered from 9.75% to 9.25% (real, pre-tax) for assets in use before 31st December 2003, and from 11% to 10.5% for other assets.

Three distinct regasification services have been introduced in CRE's new tariff proposal. This distinction is necessary to define the operation of terminals with several users at the same time.

"CONTINUOUS" SERVICE

This service is for shippers unloading an average of at least one cargo a month at a terminal. The operator provides continuous output over a contractual period and as regular as possible for the user, depending on the overall unloading programme of the terminal.

"BAND" SERVICE

This service is for shippers unloading an average of a maximum of one cargo a month at a terminal. Each cargo is released in the form of a constant band, for a 30-day period as from the end date of unloading.

"SPOT" SERVICE

This service is for the unloading of cargoes over a given month m , subscribed to after the 20th day of month $m-1$. The subscription is made on the basis of vacant slots in the monthly programme on the booking date. Each cargo is released in the form of a constant band, for a 30-day period as from the end date of unloading.

The fresh tariff introduces the principle of a secondary regasification capacity market for the first time and also improves transparency.

F. QUALITY OF SERVICE

The development of relations between distribution system operators and their shipping customers and end consumers requires closer definition of certain aspects of the monitoring of their activity, concerning for example quality of service indicators or the procedures for extending networks and conditions of connection.

CRE worked in partnership with DSOs to set up indicators measuring processing timeframes and quality of service as regards suppliers and end customers.

Accordingly, based on operators' performance indicators, CRE monitors the following indicators:

- transmission networks:

Transmission system operators (TSOs) monitor the indicator of delivery incidents occurring on their networks by indicating the date of the event, the type of incident, delivery station concerned and the duration and cause of the incident.

- distribution networks:

- for suppliers:

- applications for switching supplier;
- applications for cut off of supply due to unpaid bills;
- applications for changing profile;
- applications for changing annual reference consumption;
- invocations of force majeure clauses and assimilated circumstances.

- for end consumers:

- applications for connection;
- capacity inadequacies;
- end consumer complaints/claims;

- rates of compliance with quality standard;
- applications for specific pressure;
- defective measurements.

Quality of service indicators are issued on a monthly or quarterly basis.

2.2 Balancing

The detailed methods of how balancing operates are defined by each transporter, sent to CRE and published on the TSOs' websites.

Each shipper is subject to a balancing obligation on a daily and monthly basis, for each of the balancing zones in which capacities have been reserved.

Shippers who have subscribed to linking capacities between balancing zones may compensate for their imbalances in the balancing zones of the same transporter, within the limit of the linking capacities to which they have subscribed. Likewise, in the North zone of Gaz de France, shippers who have subscribed to capacities to convert H gas to L gas may compensate for their imbalances in L gas, within the limit of the conversion capacities to which they have subscribed.

A. DAILY IMBALANCE

Gas transmission network operations require rigorous management of network balancing, i.e. compliance with equality, at any time, between gas injections and withdrawals. These imbalances are operationally managed by network operators, using gas stocks in pipelines and storage facilities provided as a service. Moreover, shippers are subject to daily and monthly balancing commitments, plus tolerances.

For each shipper, on a daily basis, for each balancing zone and, in the North zone of Gaz de France, for each type of gas, daily imbalance is calculated.

For each balancing zone, if the shipper's daily imbalance exceeds the daily imbalance tolerance, quantities outside the tolerances must be bought from or sold to the transporter, as the case may be, by the shipper.

B. DAILY IMBALANCE TOLERANCE

For each balancing zone and, in the North zone of Gaz de France, for each type of gas, each shipper has a daily tolerance range defined according to the following methods:

- $\pm 20\%$ of total daily delivery capacities subscribed by the shipper at delivery points attached to the balancing zone in question, in a bracket ranging from 0 to 1000 MWh per day;
- $\pm 5\%$ for the share of this total exceeding 1000 MWh per day.

C. GAS PURCHASE OR SALE PRICE IF THE DAILY IMBALANCE TOLERANCE IS EXCEEDED

If the daily balance is positive and exceeds the maximum authorised, the excess quantity is sold by the shipper to the transporter at a price equal to the daily reference price decreased by 50%.

If the daily balance is negative and exceeds the maximum authorised in absolute terms, the deficit quantity is bought by the shipper from the transporter at a price equal to the daily reference price increased by 50%.

The daily reference price for a balancing zone and, in the North zone of Gaz de France, for each type of gas, for a given day, is equal to the market price (based on day ahead quotations) in €/MWh at the Zeebrugge hub, increased by 50%.

D. CUMULATIVE IMBALANCE

For each balancing zone and, in the North zone of Gaz de France, for each type of gas, each shipper's residual imbalances, after incorporation of purchases and sales described above, are reported on a daily basis in order to calculate cumulative imbalance.

If, on a given day, cumulative imbalance is positive and exceeds the maximum authorised, the excess quantity is sold by the shipper to the transporter at the daily reference price as defined in § C, reduced by 50%.

If, on a given day, cumulative imbalance is negative and exceeds the maximum authorised in absolute terms, the deficit quantity is bought by the shipper from the transporter at the daily reference price as defined above, increased by 50%.

At the end of each month, the excess or deficit quantity is, depending on the case, bought from or sold to the transporter concerned at the reference price for the month in question. This monthly reference price is calculated on the basis of the market price at the Zeebrugge hub, plus the same increases as the daily reference price defined in § C.

E. IMPROVING THE BALANCING REGIME

At present, the price at which shippers' imbalances are cleared off when they exceed these tolerances does not reflect the balancing costs borne by network operators.

To rectify this situation, balancing regime development focuses on three objectives:

- For transporters, satisfy their balancing needs on the market and reduce the balancing share provided by the storage system operator's service;
- For shippers, reconcile the price at which their imbalances are cleared off with the actual balancing costs;
- As a result of the first two objectives, formulate a daily balancing gas price in France.

The system will change gradually, after CRE has consulted gas market players.

2.3 Principles of account unbundling

In application of article 8 of the amended law of 3 January 2003, the rules for allocating headings in profit and loss accounts and balance sheets, accounting scopes of activities and principles determining their financial relations must be approved by CRE after opinion from the Conseil de la concurrence. The principles proposed by operators were approved by CRE in its deliberations of 23 October 2003. The first unbundled accounts were drawn up as from 2002.

The principles of account unbundling are as follows:

The accounting scope for each industrial activity (transmission, LNG, storage and distribution) includes construction, operation, maintenance and performance of infrastructures concerned, as well as marketing of the service provided. Non-regulated activities such as enhancing a system operator's expertise (engineering services, etc.) may also be included within this scope. The accounting scope of "*supply and commercialisation*" consists of the purchase-resale of natural gas to all customers using, for example, transmission or LNG services provided by other activities.

From 1st July 2004 until 1st July 2007, the operators concerned are obliged to split this scope between supply to non-eligible customers and supply to eligible customers. The principles of account unbundling for supply activities were approved, with some reservations, by CRE in July 2006.

The policy implemented for allocation of headings in balance sheets and revenue and expense accounts is the direct allocation principle. If an asset component is useful for several activities, it is allocated to the activity which is its main user. If an item cannot, by its very nature, be allocated to a main activity, it is then spread across several activities according to the rules in compliance with the principle of absence of cross-subsidy and of non-discrimination. Finally, if revenues and expenses are identified as coming under a main activity, they are allocated to this activity with revenues or expenses being cross-charged to other activities.

Financial relations between unbundled activities are covered by protocols, the establishment of some of which is provided for by law (for example, access to infrastructures). The protocol terms applicable to unbundled entities must be the same as those applicable to third parties, in compliance with the rules governing non-discrimination and prohibition of cross-subsidies between unbundled activities. Therefore, if terms applicable to third parties result from a public tariff (access to regulated infrastructures) or regulations, these public rules constitute the reference standard for rules applicable across unbundled activities.

In the event of violation of these rules, the Commission de régulation de l'énergie may institute the default notice procedure stipulated in 3^o of article 40 of the amended law of 10th February 2000 and apply the ensuing financial sanctions stipulated in 1^o of article 40. The financial sanction may not exceed 3% of the previous financial year's turnover excluding taxes and may be increased to 5% if the same obligation is violated again. There are no sanctions other than those stipulated in article 40 mentioned above.

Gas operators are not obliged to publish their unbundled accounts. These accounts are sent to CRE each year.

Unbundled accounts are subject to approval by auditors who certify the operators' annual accounts. Moreover, the Commission de régulation de l'énergie may carry out audits, in application of the provisions of article 27 of the law of 10 February 2000. These are carried out either by CRE employees accredited for this purpose, or by external audit firms selected after call for tenders.

2.4 Independence of public network operators

Since 1st January 2005, transmission system operators have formed legal entities that are distinct from integrated gas undertakings. Legal unbundling of distribution system operators must be applicable by 1st July 2007 at the latest.

The law of 9th August 2004, transposing the European directives of 26th June 2003, provided for the publication by CRE of an annual report on compliance with codes of good conduct and grid operator independence. CRE published its first report on 5th December 2005.

The gas transmission system operators, GRTgaz and Total Infrastructures Gaz France (TIGF), as well as all distribution system operators who supply over 100,000 connected customers, drew up a code of good conduct in 2005 and submitted it to CRE. The codes have been sent to all network operator staff and published on the network operators' websites. Some are sometimes difficult to access, however, and, despite their being published almost a year ago, users are still largely unfamiliar with them, although they should be the main beneficiaries.

These codes mainly deal with the protection of commercially sensitive information (CSI) and, to a lesser extent, with non-discrimination and transparency. Yet, the first objective assigned to these codes by European directives is prevention of discrimination.

During the second half of 2005, the network operators concerned sent CRE annual reports on the application of codes of good conduct.

CRE analysed the network operators' codes and annual reports. It then carried out a public consultation of market players and held auditions attended by network operators in October 2005 and it has also checked operators' practices.

In the first report published in November 2005, CRE made the following proposals:

- The codes must provide more explicitly for internal and external checking of results achieved in terms of non-discrimination and transparency. They must remind personnel of the disciplinary sanctions in the event of non-compliance with non-discrimination rules;
- The codes must be simplified and made more accessible to network users. A mechanism for dealing with customer complaints must be provided for and made public;
- Every network operator must establish an indicator of compliance with the principle of non-discrimination based on customer complaints;
- Audits carried out as part of ISO 9001 certification can complete internal checking;
- GRTgaz, the Gaz de France transmission subsidiary, and TIGF, the Total transmission subsidiary, must publish a catalogue of services containing the corresponding pricing rules on their website. This obligation must be applied to the guarantee of pressure and maintenance of delivery stations;
- GRTgaz and TIGF must sign connection contracts with every customer.

CRE checks the implementation of commitments undertaken by electricity and natural gas system operators in these codes of good practice.

In its report of November 2005, CRE pointed out that network operators had to be organised and managed independently as from 1st July 2004, whether they are affiliated (transmission networks) or not (distribution networks). This independence should result in an organisation similar to that of an autonomous undertaking and free to take any decisions in accordance with its interests. It would be subject to the "*economic supervision and management rights*" and acknowledged as belonging to the parent company by the directives of 26 June 2003.

The networks must be managed independently from the other activities of the integrated groups. Progress has been observed regarding transmission. Unbundling of supply and

distribution network management activities, planned for 1st July 2007, will also be essential to ensure independence of the network management activity.

In the light of observations made by CRE, progress must be made in the following areas:

- All suppliers must have identical access to customer files in distribution network operators' information systems;
- Independence of network operator senior management must be better guaranteed, particularly by enabling them to appoint their associates freely;
- All network operators must be able to decide on every investment independently from its parent company, within the framework of the total budget allocated to them. This is not the case for Gaz de France Réseau Distribution and EDF Gaz de France Distribution for major investments;
- EDF and Gaz de France statutes must expressly forbid the participation of "*network operator management*" in structures of the integrated undertaking directly or indirectly responsible for the daily management of generation, production and supply activities. A member from a managing body of the parent company may not be a network operator manager at the same time. This is because the network operator's policy must not be influenced by the group's interests;
- Communication of integrated groups must take into account the unbundling of activities so as to avoid any confusion for customers between regulated activities and competitive activities.

The preservation of the independence of gas transmission system operators is not absolutely guaranteed by the contents of the statutes adopted alone. The proper behaviour of concerned parties in their implementation will now be essential for achieving the result prescribed by the directives of 26th June 2003. Whatever the energy concerned, the affiliation of public transmission system operators cannot ensure their independence alone, due to the very nature of the link which unites a parent company to its subsidiary within an integrated group.

Transmission system operator independence is restricted by the right, resulting from laws applicable to limited companies, for any shareholder or director to access exhaustive information, at any time, to carry out their role or mandate. This right cannot be limited in the current state of national law. The protection of CSI is incompatible with the fact that directors who are appointed by a shareholder can have permanent access to certain information and then report back.

The brand image confusion between regulated and competitive activities is harmful. Gaz de France has opted for a similar visual identity for its competitive supply activities and regulated distribution system operator activities. Total has opted for a similar visual identity for its worldwide energy activities and regulated transmission system operator activities.

This confusion clouds customer understanding of how the market is organised and operated.

The institutional communication of these groups, which ignores the unbundling of activities, heightens this effect.

Confusion may lead customers to believe that they run risks in terms of quality and continuity of supply if they switch supplier.

TABLE N° 10: SUMMARY TABLE OF INFORMATION REQUESTED BY THE DG TREN

	Electricity	Gas
Number of TSOs	1	2
DSOs	169	23
Application of the 100,000 customer rule	yes	yes
Unbundling of TSO/DSO ownership	none	none
Number of DSOs with fewer than 100,000 customers	164	20
Legal unbundling of TSOs	none	none
Number of system operator employees		
TSOs:	RTE: 8 300	GRTgaz: 2 650 TIGF: 150
DSOs	EDF: 48 000	Gaz de France: 15 000 22 other DSOs: fewer than 800 in total
% of shared services		
TSOs	< 10%	GRTgaz: 25% TIGF: < 10%
% of shared employees	0%	0%
Application of legal unbundling		
TSOs	yes	yes
DSOs	no	no
Ownership of:		
TSOs	100% EDF	100% Gaz de France 100% Total
DSOs	not relevant	not relevant
Unbundling as regards generation/production and supply entities of the group		
TSOs	complete	complete
DSOs	complete or underway	complete or underway
Presentation as a separate entity		
TSOs	yes	GRTgaz: yes TIGF: partially
DSOs	no	no
Publication of unbundled accounts		
TSOs	yes	yes
DSOs	no	no
Detailed rules adopted by the regulator concerning account unbundling	yes	yes
Consequences of rule violation	Possibility of fines	Possibility of fines
Specific audit of unbundled accounts	no	no
Role of compliance officer	none	none
Possible sanctions on the regulator's part	yes	yes

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* *

V . French gas market operations

1 The wholesale market

1.1 Review

For the bulk of its supplies, the French gas market relies on long-term contracts signed between incumbent suppliers and national companies from the producing countries. The share of alternative suppliers¹¹ in imports is nonetheless on the rise.

The table below shows the imports and production per transmission system operator zone measured over 12 months from 1st June 2005 to 31st May 2006.

TABLE N° 11: GAS IMPORTS AND PRODUCTION PER ZONE

(Quantities in bcm)	All suppliers	Alternative suppliers ⁽¹⁾	
Gas flow, per TSO zone (including transits and exports)			
Gaz de France réseau Transport zone			
Imports	56.8	2.7	5%
Production	ε	-	-
TIGF Zone			
Supplies from Gaz de France réseau Transport zones	4.9	ε	ε
Production	1.1	-	-

Source: CRE, based on data provided by Gaz de France Réseau Transport - Total Infrastructures Gaz France

Import capacities are presented in Table n°. 14¹².

The 2 incumbent suppliers, Gaz de France and Total, manage around 95% of imports alone. The three largest market suppliers account for around 97% of imports. Twelve foreign companies (EU and non-EU) operate on the wholesale market.

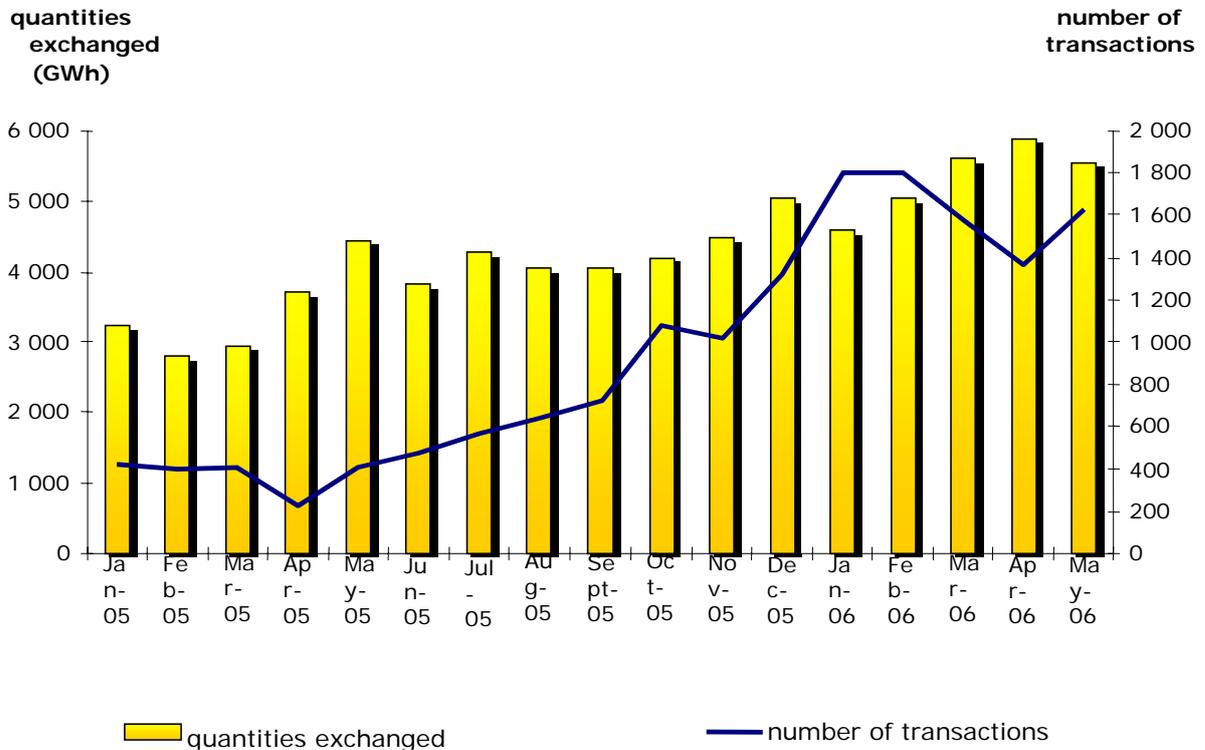
The gas exchange points were set up at the beginning of 2004 by Gaz de France and TIGF. These are virtual points, connected to a balancing zone, where a shipper can deliver gas to another shipper. Transactions are carried out at gas exchange points on a day-to-day basis and may result from longer-term commitments.

¹¹ Alternative suppliers are suppliers other than incumbent suppliers (Gaz de France, Tegaz and LDCs).

¹² Page 66, paragraph VI.2.1.

The gas sold under the temporary gas release programme is delivered to the south gas exchange point by Gaz de France and to the southwest gas exchange point by Total.

FIGURE N° 5: NUMBER OF TRANSACTIONS AND QUANTITIES EXCHANGED



Sources: CRE based on data provided by TSOs and DSOs.

In May 2006, exchanges at gas exchange points represented a volume of 0.5 bcm and 1,635 transactions.

1.2 Gas release programme

There is a geographical disparity on the French gas market related to the source of supplies and network constraints. Competition developed initially in the north and east of France. This is because the gas available for creating competition with the long-term supplies of incumbent operators currently mainly comes from gas deposits in the north of Europe. To get round this problem, and in response to CRE's request, at the end of 2004, Gaz de France and TOTAL set up gas release programmes in the south of France to foster the development of competition.

CRE's deliberations of 15th April 2004 concerned the conditions for release:

- Gaz de France will make 15 TWh (1.4 bcm) available at the south gas exchange point each year for three years (i.e. 45 TWh, 4 bcm), including at least 6 TWh per year by auction, accounting for around 15% of the gas quantities sold to eligible customers in this zone;
- Total will make 1.1 TWh (0.1 bcm) available at the southwest gas exchange point by auction each year for three years (i.e. 3.3 TWh, 0.3 bcm).

All the quantities available were sold. Sixteen companies took part in the auction organised by Gaz de France on 22 October 2004. The 12 lots sold were assigned to Distrigaz, Gas Natural and Total. In addition, Gaz de France sold 9 TWh (0.8 bcm) over the counter to BP, Distrigaz, Gas Natural and EDF.

Eight companies took part in the auction organised by Total on 27th October 2004. Only 5 of the 10 lots sold were acquired, by EDF and Iberdrola, at the reserve price set by Total. Total sold the remaining quantities over the counter to Distrigaz at the beginning of 2005.

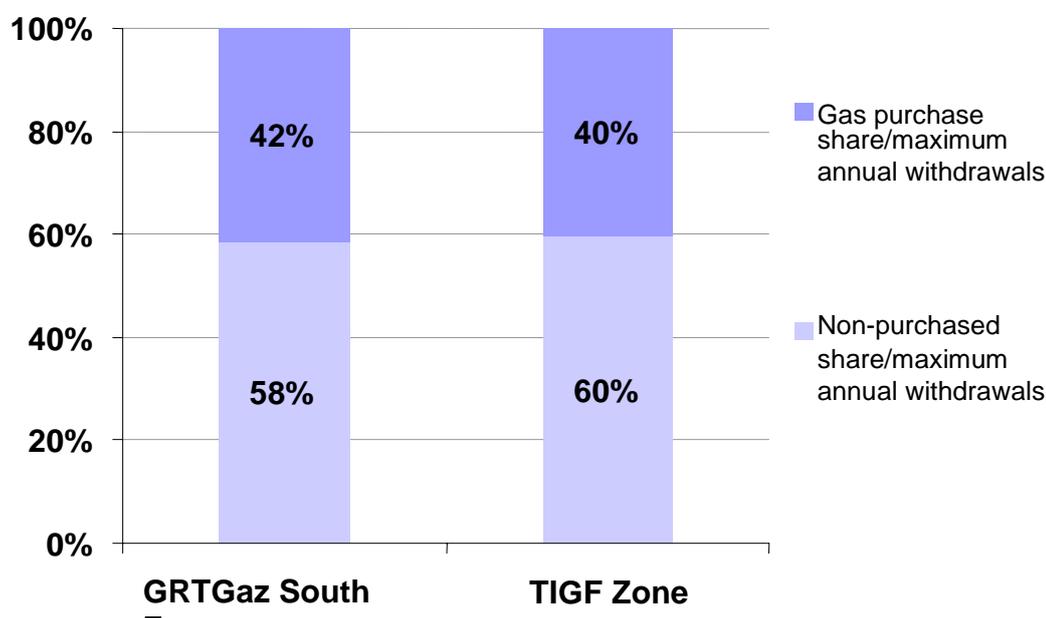
The lot purchasers are able to adapt the increased load of their gas purchases to their needs.

Gas deliveries began on 1st January 2005. Gas purchases in 2005 accounted for around 40% of maximum possible annual withdrawals, considering the gradual start-up of contracts.

One year after its launch, the gas release programme therefore enabled 3 foreign suppliers to compete against incumbent operators on the end consumer market in the south of France. However, this competition is still too limited.

FIGURE N° 6: GAS PURCHASES OBSERVED IN 2005 IN COMPARISON WITH MAXIMUM POSSIBLE ANNUAL WITHDRAWALS

Source: CRE based on data provided by TSOs.



2 Retail market

2.1 State of play

Eleven independent suppliers of French network operators who entered the market following the introduction of competition in France were active in April 2006.

As at 1st April 2006, after the gas market opened up to competition, 63,900 sites bought their gas at market prices.

18,400 of these sites are supplied by alternative suppliers. The corresponding annual consumption was around 37 TWh (3.4 bcm), i.e. 10% of the volume open to competition at that time.

45,500 sites had signed contracts with their incumbent suppliers at market prices.

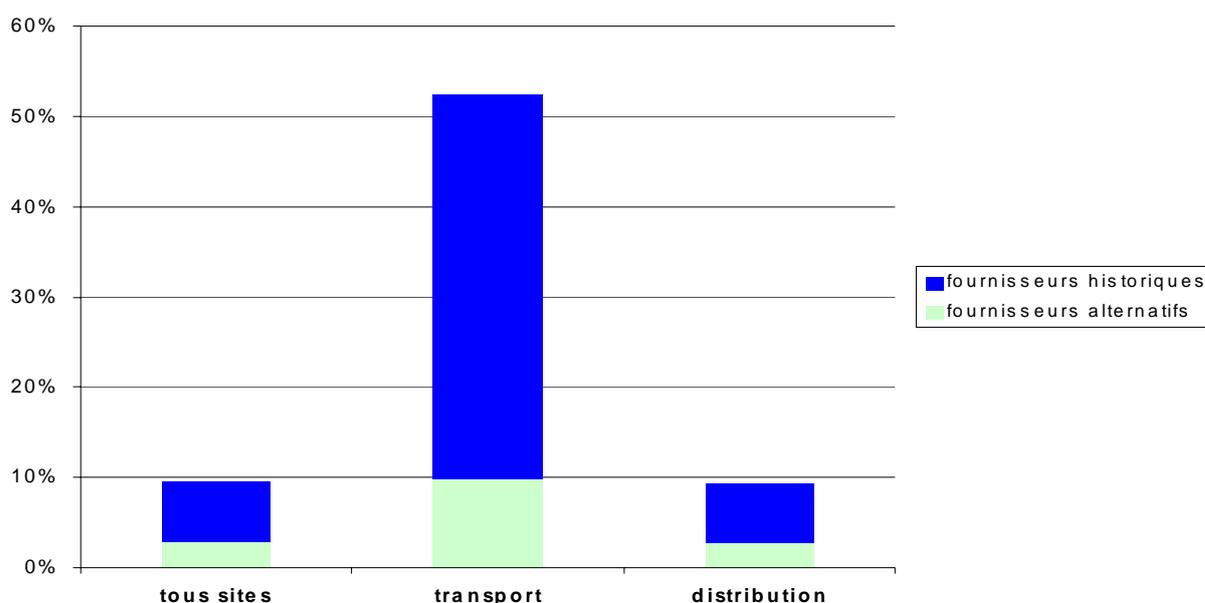


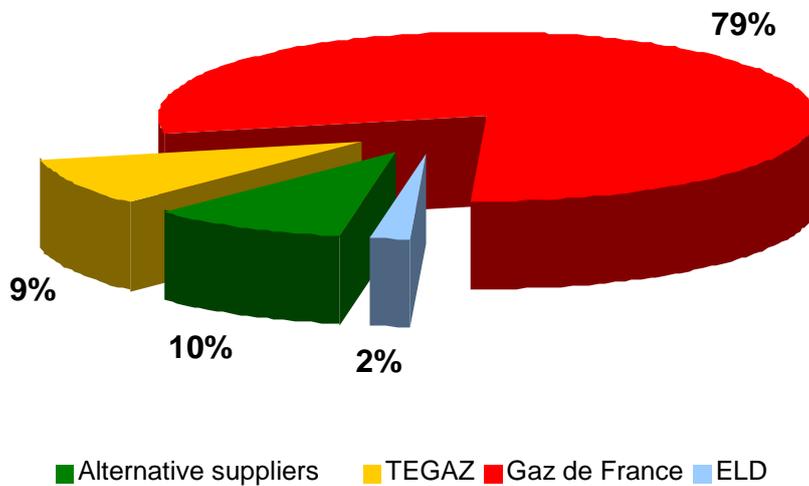
FIGURE N° 7: RATE OF EXERCISING ELIGIBILITY¹³ AS AT 1ST APRIL 2006

N.B.: incumbent suppliers: Gaz de France, TEGAZ and LDCs.

Sources: CRE based on data provided by TSOs and DSOs.

¹³ The rate of exercising eligibility is equal to the number of sites which have exercised their eligibility divided by all the eligible sites in the segment concerned.

FIGURE N° 8: BREAKDOWN OF ELIGIBLE CUSTOMER CONSUMPTION AS AT 1 APRIL 2006



Sources: CRE based on data provided by TSOs and DSOs.

Four suppliers operating on the retail market have exploration-production activities.

When customers exercise their eligibility for a site, the former regulated price contract is legally terminated within thirty days without any compensation being due to either party.

For customers connected to the distribution networks, a procedure for switching supplier was drafted within the GTG 2004 working group. This group, created under the auspices of CRE, gathers together all the parties concerned: consumers, suppliers, network operators and representatives of administrative authorities. The procedure set up is simple, quick and free of direct charge for the end consumer. The change in supplier may come into effect within 28 days after the DSO receives a certificate for switching supplier, signed by the customer.

For the opening of the market to all gas consumers on 1st July 2007, in May 2005, CRE set up a consultation body, the GTG 2007. This body will only act as from 1st October 2006, the minimum timeframe for switching supplier will be 21 calendar days as from formulation of the application, plus the 7-day legal retraction period when it is applicable. Given the volumes at stake (11 million consumers), the new supplier will ensure possession of the certificate for switching supplier signed by the customer, without systematically sending it to the DSO. The DSO will conduct random checks at a later date.

2.2 Retail prices

TABLE N° 12: RETAIL GAS PRICES

Eurostat customer definition	D3 Euro/MWh	I1 Euro/MWh	I4 Euro/MWh
Average import price in France in 2006	n.d	n.d	n.d
Transmission cost excluding regulatory deductions	2.4	2.0	1.0
Distribution cost excluding regulatory deductions	10.9	7.2	1.3
Regulatory deductions on network costs ⁽¹⁾	0.9	0.2	0.02 ⁽²⁾
Margin built in to cover retail costs	nd	nd	nd
Regulated tariffs as at 1 July 2006	43.33 (B1 tariff)	37.62 (B2I tariff)	25.65 ⁽³⁾ (STS tariff)

(1) Transmission + distribution

(2) transmission only as most customers are connected to the bulk transmission network

(3) STS tariff for a consumer connected to the bulk transmission network

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VI . Security of supply

CRE draws attention to the fact that the bulk of information given in this chapter comes under the jurisdiction of the Minister for Energy. Security of electricity supply is mainly ensured by the scheduling of means of generation. This scheduling takes place every two years when the pluri-annual generation investment programme is adopted. Article 6 of the law of 10 February 2000 stipulates that the "*Minister for Energy shall fix and make public the pluri-annual generation investment programme which sets the objectives for the distribution of electricity generation capacities by primary energy source and, if need be, by generation technique and geographical area*". For gas, CRE has no responsibility in terms of security of supply, which comes under the government's jurisdiction.

1 Electricity

In accordance with article 4 of the directive

1.1 The current situation

A. PEAKS IN ELECTRICITY DEMAND

According to RTE, maximum consumption in 2005 reached 86,024 MW at 7.15pm on 28 February 2005, and the record high for instantaneous consumption of 86,280 MW was recorded at 6.58pm on 27 January 2006.

B. ENERGY MIX

According to RTE, installed capacity in France amounts to 120,892 MW. This figure does not include the generation capacities definitively shut down or connected to distribution grids (6,313 MW). The energy mix is as follows:

TABLE N° 13: ENERGY MIX IN FRANCE

Sector	Energy generated in 2005	Share in energy mix	Variation 2004/2005
Nuclear power	430 TWh	78.3%	+ 0.7%
Conventional thermal power	58.9 TWh	10.7%	+ 10.7%
Hydropower	56 TWh	10.2%	- 13%
Other renewable energy sources	4.3 TWh	0.8%	+ 11.5%

Source: RTE published data

According to RTE, 25.9 MW of thermal generation capacities were installed in 2005, while 2,662.3 MW of thermal generation capacities were withdrawn from use in 2005. This mainly concerns EDF conventional thermal power plants.

C. INVESTMENTS IN THE GENERATION SECTOR

The law of 10 February 2000 on the public electricity service stipulates that new electricity generation facilities and modified facilities must obtain an operating permit or a declaration from the Minister for Energy.

Within the framework of the pluri-annual investment programme, the government has launched calls for tenders concerning:

- 232 MW of biomass and biogas generation facilities, for which an operating permit must be issued;
- 500 MW of offshore wind power generation and 500 MW of onshore wind power generation. These two files are under examination and may be followed by a call for tenders of an additional 500 MW.

Outside this framework of calls for tenders, operators have made several investment decisions public.

- On the occasion of the opening up of its capital, EDF defined its investment plan for the period 2006-2010.
The operator is planning to construct combined cycle power plants in France: 150 MW of capacities will be operational in 2007 and an additional 350 MW will be available in 2008. EDF has also announced the restart of four oil-fired generation groups currently 'under wraps': 600 MW in 2006, an additional 700 MW in 2007, and 1300 MW in 2008. In addition, EDF is examining the replacement, by 2011, of three oil-fired generation units of 250 MW by two combined cycle power plants of 440 MW.
- Gaz de France, SNET, Poweo – in partnership with Verbund – and Suez-Electrabel have announced the imminent commissioning of new means of generation, all in the sector of combined natural gas cycles. The total capacity of the new power plants announced by these four operators exceeds 4900 MW. These power plants should be commissioned between 2008 and 2010.

Previously mainly managed by EDF, under the State's control, the electricity generation investment programme (pluri-annual investment programme) has become a State prerogative, which is carried out under the terms defined by article 6 of the law of 10 February 2000: *"The Minister for Energy shall fix and make public the pluri-annual generation investment programme which sets the objectives for the distribution of electricity generation capacities by primary energy source and, if need be, by generation technique and geographical area. This programme is drawn up so as to accommodate decentralised generation, cogeneration and new technologies and is the subject of a report submitted to Parliament by the Minister for Energy in the year following any re-election of the Assemblée nationale. [...]*

In order to define this programme, the Minister for Energy uses the energy collective services scheme in particular along with a pluri-annual forecast report drawn up at least every two years, under the State's control, by the public transmission system operator. This statement incorporates trends in consumption, transmission and distribution capacities and exchanges with foreign grids".

The Government may launch a call for tender, implemented by CRE, if it considers that existing and planned means of generation do not fulfil the objectives set by the Minister for Energy within the framework of the pluri-annual generation investment programme.

Since the beginning of 2004, several calls for tenders have been launched:

- A call for tender for a 40 MW combustion turbine in Martinique has led to an operating permit being issued for a power plant in Bois-Rouge;

- A call for tender for electricity generation facilities using biomass and biogas energy has led to an operating permit for 232 MW of capacity;
- A call for tender for offshore wind power plants has led to an operating permit for 100 MW of capacity (500 MW was requested);
- A call for tender for onshore wind power plants has led to an operating permit for 278 MW of capacity (500 MW was requested);
- A call for tender for electricity generation facilities using biomass energy should be launched in 2006, targeting a capacity of 300 MW.

Furthermore, purchase obligations are intended to foster development of certain sectors and, as a result, EDF and LDCs must, under certain conditions and at tariffs fixed by the State, purchase energy generated by:

- Facilities using renewable energy sources (small-sized hydropower facilities, wind power, photovoltaic, recycling of household waste, biomass/biogas and geothermal power);
- Cogeneration facilities.

1.2 Infrastructure projects

A. FRANCE - BELGIUM

Up to 2005, the interconnection grid between France and Belgium had been composed of 4 very high voltage lines with an average commercial capacity of 2,200 MW, deemed insufficient within the context of opening of the European markets. Interconnection reinforcement constitutes an essential stage in the process of merging with the Belgian market as well as with the German market. A significant part of the loop flows resulting from exports from France to Germany is delayed on the France-Belgium interconnection grid.

The technical solution, provided by RTE and included in the investment programme approved by CRE, consists of strengthening the Avelin-Avelgem line with a second electrical circuit, for a total cost of 15.7 M€. The reinforcement structure inaugurated on 14 December 2005 after 15 months of work has increased commercial capacity by at least 700 MW.

B. FRANCE – SPAIN

Commercial capacity of transits between France and Spain is currently around 1,600 MW. The Iberian Peninsula interconnection rate is one of the lowest in Europe. It is far from being in line with recommendations made by the European Summit held in Barcelona in 2002 (10% of domestic consumption i.e. 4,000 MW).

The objective currently targeted by TSOs is to raise the capacity to 2,800 MW, and then to 4,000 MW at a later date.

Interconnection reinforcement initially consisted of two headings: strengthening of the existing electrical line of Baixas/La Gaudière, and construction of a cross-border structure between Baixas and Bescanos. Even if the Baixas/La Gaudière reinforcement successfully passed through the stage of local consultation in 2003, the same cannot be said for the second heading.

New in-depth studies were therefore conducted by RTE in order to determine options complementary to the initial project. RTE transmitted possible solutions to the Department for Industry with a view of drafting the new project to be submitted for local consultation.

The start-up date for the project has already been postponed several times and has now been set for 2009 with an estimated budget of 150 M€.

2 Gas

in application of article 5 of the directive

2.1 The current situation

Current levels of gas consumption and forecasts of future consumption constitute data coming under the jurisdiction of the Department for Industry, the Economy and Finance.

A. IMPORT CAPACITIES

Firm import capacities per entry point are provided in the table below:

TABLE N° 14: IMPORT CAPACITIES PER ENTRY POINT

Entry point (total firm capacities)	MWh/d	bcm/year
H TAISNIÈRES	590,000	17.4
DUNKIRK	555,000	16.4
OBERGAILBACH	430,000	12.7
FOS / MER	220,000	6.4
MONTOIR	370,000	10.9
L TAISNIERES (L gas, GCV of 9.8 kWh/m ³)	230,000	8

Source: GDF RT in MWh per day and in bcm per year (with 340 days of use and a GCV of 11.5 kWh/m³)

Total import capacity in France is around 70 bcm per year.

2.2 Infrastructure projects

The current structure of the French gas network limits flows in the north-south direction, which hinders extension of competition in the south of France. The construction of an interconnection with Spain and the construction of the Fos Cavaou (Fos 2) LNG terminal will improve this situation and allow the regional gas markets to develop.

To prepare tariff proposals for the use of gas transmission networks, CRE took a real pre-tax rate of return of 7.75% for assets existing on 1st January 2004 and 9% for investments made after this date.

However, in order to encourage certain investments likely to significantly improve market operations (particularly by increasing import, transmission and storage capacities), CRE made provision for raising the rate of return on assets from 9 to 12% for a period of 5 to 10 years.

A. NEW COMPRESSION STATION AT CUVILLY

For this project, GRTgaz has asked CRE to agree to a rate of return of 12% over a period of 10 years. The compression station will allow simultaneous use of the maximum capacities at the Taisnières and Dunkirk entry points and increase marketable firm capacities at the links between the north, west and east balancing zones.

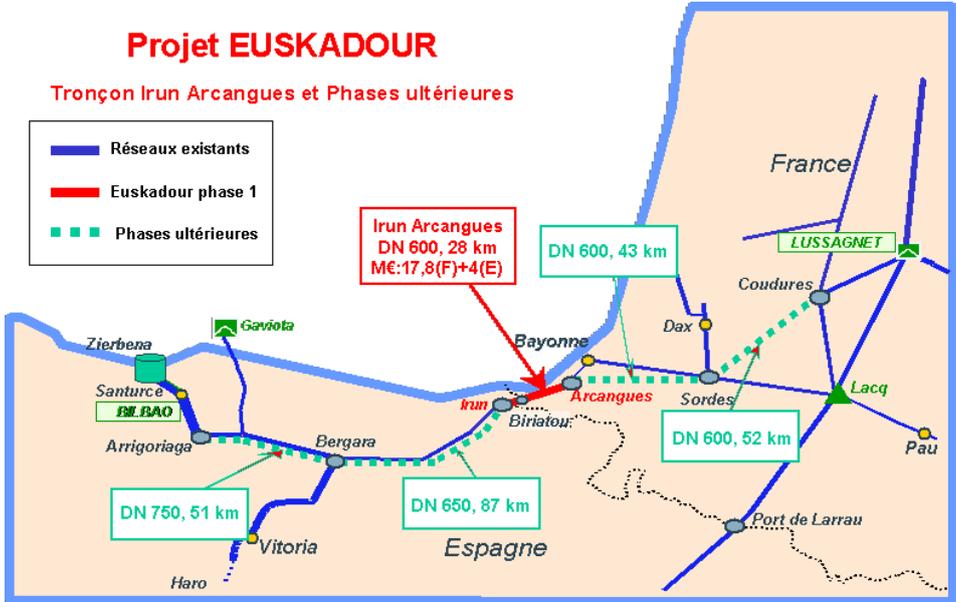
CRE has decided that this project belongs to the category that can benefit from a rate of return of 12% for 5 years. However, this agreement is conditional upon the completion of the entire investment programme aiming to eliminate the east and west balancing zones by January 2009 at the latest.

B. THE EUSKADOUR PROJECT

For this project, TIGF has asked CRE to agree to a rate of return of 12% over a period of 10 years. The Euskadour project is a pipe connecting the Bilbao LNG terminal to the Lussagnet and Izaute storage facilities. Phase 1 of the project consists of a 28-km pipe connecting Irun (Spain) to Arcangues (Pyrénées Atlantiques). This new interconnection with Spain was commissioned in July 2006.

CRE has decided that this project belongs to the category of projects that can benefit from a rate of return of 12% over a period of 5 years, which will be raised to 10 years if the entire Bilbao-Lussagnet link is constructed (Euskadour phase 2).

FIGURE N° 9: EUSKADOUR PROJECT



Source: TIGF

C. THE FOS CAVAOU PROJECT

With the construction of a new LNG terminal at Fos Cavaou (Fos 2), France is helping to increase LNG (liquefied natural gas) import capacities in Europe. The untying of the joint stakes between Gaz de France and Total in CFM and GSO requires Total to take a 30% share, the remaining 70% staying with Gaz de France for a planned capacity of 8.3 bcm as from 2007. CRE has requested that 10% of the Fos Cavaou capacity be reserved for third parties.

D. EXTENSION OF IMPORT CAPACITIES AT OBERGAILBACH

The need for an eventual increase in transportation capacities at the Obergailbach entry point arose from different non-binding requests from shippers or transmission system operators upstream, and from GRTgaz’s own analysis of trends in gas flows in Europe.

From May to October 2005, GRTgaz implemented a procedure of call for applicants to identify shippers that would like to undertake capacity reservations for a period of 10 years. At the end of the procedure, only Gaz de France, E.On Ruhrgas and ENOI were allocated capacities, with Gaz de France and E.On Ruhrgas obtaining virtually all of them. With the exception of ENOI, the other applicants withdrew as they were unable to contract capacities on the network upstream, in Germany.

New capacities of up to 170 GWh per day will be available at the end of 2008.

E. CONNECTION OF THE FOS CAVAOU LNG TERMINAL TO THE TRANSMISSION NETWORK (BOUCHES DU RHÔNE)

Planned for the last quarter of 2007, the commissioning of the new LNG terminal in Fos Cavaou, of an annual capacity of 8.25 bcm or almost 20% of French natural gas consumption, requires transmission pipelines to be fitted between the terminal and interconnection and compression station of Saint-Martin-de-Crau (Bouches du Rhône) and reinforcement of this station to ensure connection of this terminal to the GRTgaz transmission network.

For this project, for a total amount of 78 M€, GRTgaz requested that CRE agree to a rate of return of 12% over a period of 10 years.

CRE considered that only the part of the project presented by GRTgaz offering surplus capacity beyond what is strictly necessary for the connection of the LNG terminal in Fos Cavaou would contribute significantly to improving market operations by providing flexibility.

It has therefore decided that this part of the project, representing an investment of 33 M€, may benefit from a 3% increase in the rate of return for a 10-year period starting from the commissioning date of the facilities.

F. REINFORCEMENT PROJECT OF THE GUYENNE TRUNK MAIN (GIRONDE – LANDES)

The commissioning of the LNG terminal in Fos Cavaou and development of interconnections with Spain and storage capacities in the southwest of France will change the flow system of dominant gas in France.

To deal with these new gas flows, it is necessary to develop gas transmission capacities in the "south to north" direction and to reinforce certain structures as a result.

The technical solution adopted for overall optimisation of investments is to reinforce the Guyenne trunk main, partly integrated in both the GRTgaz and TIGF networks. The project, amounting to a total of between 320 and 360 M€ (65 M€ for GRTgaz and between 255 and 295 M€ for TIGF), is composed of three phases and will enable the capacity of the Guyenne trunk main to reach 380 GWh per day in the south-north direction.

For the first phase of the project, GRTgaz and TIGF asked CRE to grant a rate of return of 12% for a 10-year period, each for the part of the project concerning it.

CRE decided that only the part of the project offering a surplus of capacity beyond what is strictly necessary to evacuate gas from the LNG terminal in Fos Cavaou, i.e. investments of 50 M€ for TIGF and 16 M€ for GRTgaz, could benefit from a 3% increase in the rate of return for a 10-year period starting from the commissioning date of the facilities.

Finally, within the framework of the "Marathon" case, Gaz de France has committed itself to reducing the number of balancing zones on its network to 2 by 1 January 2009. In order to do so, GRTgaz has launched a pluri-annual investment programme to decongest the northern part of its main network.

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VII . Public-service related issues

in application of article 3, paragraph 9 of the electricity directive
in application of article 3, paragraph 6 of the gas directive

1 Summary of provisions applicable

1.1 for implementation of a labelling system

Under article 5 of decree 2004-388 of 30th April 2004, suppliers are obliged to inform end consumers of the origin of the electricity supplied. This information is provided in bills and documents enclosed as well as in promotional material distributed.

1.2 for application of criteria stipulated in appendix A of the directive

The provisions of appendix A of the directive were, for the most part, already transposed by existing texts, and primarily in the consumer code. Nevertheless, the French Department of Competition, Consumption and Fraud Prevention (DGCCRF) is examining the possibility of completing the consumer code to finalise this transposition.

Concerning the fact that the procedure for switching supplier is free of charge, article 83 of law 2005-781 of 13 July 2005 of the programme fixing the energy policy guidelines states that if, customers who has already exercised their eligibility, switch supplier for a second time, they are solely liable for the costs incurred by this change.

1.3 for management of vulnerable customers

Social provisions regarding the protection of vulnerable consumers (exclusively household customers, and not companies) came into force under article 37 of the law of 3 January 2003.

Decree 2001-531 of 20 June 2001 sets up a system "*to preserve or guarantee access to electricity*" for people in precarious situations. Within the framework of the public electricity service, consumers in financial difficulty may benefit from an energy maintenance service (minimum rated power of 3 kVA) and assistance with paying invoices together with social services.

Decree 2004-325 of 8 April 2004, governing the special pricing of electricity as a staple, refers to the "*special pricing of electricity as a staple*". Within the framework of the public electricity service, consumers with low incomes (lower than a certain cap depending on household composition) may qualify for a discount on the regulated retail tariff for electricity.

Part of the cost borne by suppliers for this duty of public service is compensated by the public electricity service contribution (CSPE).

2 Regulation of prices applied to end users

Only household customers are non-eligible (until 2007) and must have a regulated tariff contract.

Regarding customers who are eligible, those who have not exercised their eligibility continue to benefit from regulated retail tariffs. A customer who has exercised his eligibility, however, has no further claim to regulated retail tariffs.

Changes to regulated retail tariffs are decided by joint order of the Ministers for the Economy and Energy, after receiving CRE's opinion. Under the law of 10 February 2000, tariffs are required to cover costs, namely transportation and supply costs (generation and commercialisation/customer management).

For electricity, no formula for index linking to market prices is applied to regulated retail tariffs.

The designated supplier does not receive compensation in return for the obligation to supply energy at regulated tariffs.

INSET N° 6: REGULATED TARIFFS

The coexistence of market prices and regulated tariffs, whose level does not always reflect costs, does not facilitate market development.

While the continued existence of regulated tariffs, during a period of transition may be understood, the abnormally low level of some of them, however, constitutes an obstacle for the arrival of newcomers and, in electricity, curbs investment in new generation capacities.

2.1 Electricity

There are around twenty regulated tariffs, depending on the rated power.

After an average drop of around 24% in constant Euros over 10 years, regulated retail tariffs for electricity increased by an average of 3% on 1 July 2003. They fell by 1.2 €/MWh on 1 January 2004, an amount equivalent to the rise in the public electricity service contribution for 2004.

As from 1 January 2006, they comprise:

- A grid part, equal to the total tariff for grid use set by the decision of 25 September 2005 (TURP2) and the transportation tariff contribution (CTA);
- A supply part, which must remunerate electricity generation and commercialisation activities.

For electricity, the lack of increase in regulated tariffs since July 2003 has raised issues about the correct correlation of tariffs with costs. In particular, certain tariffs applicable to non-household customers do not cover generation costs.

No periodicity of change has been decided upon.

The public service contract between EDF and the State, signed in October 2005, stipulates that the rise in tariffs for household customers shall not exceed inflation for the first five years.

2.2 Gas

Regulated retail tariffs concern two different customer markets:

- Household consumers who, as they are not eligible, form a captive market;
- Non-household consumers who have not yet exercised their eligibility. For the latter, regulated tariffs compete with commercial offers from suppliers and form the basis of reference for deciding whether or not to exercise eligibility.

Regulated retail tariffs for natural gas must reflect operators' costs. This is to stamp out any cross-subsidy between the captive market and the market open to competition, in order to develop competition on the open market and prevent imbalance in competition between energy sources.

In its opinions, CRE analyses the costs borne by operators (supply costs and other costs: transmission, distribution, storage and commercial costs).

Since June 2004, CRE's opinions concerning movements of regulated sales tariffs have been followed by the government, except for the opinion of 9 November 2004 concerning the movement of public distribution tariffs.

Without identifying them, these tariffs include:

- the cost of gas supply;
- the cost of use of the transmission and distribution networks (where applicable);
- the cost of load-balancing (use of storage facilities to meet seasonal consumption demand);
- marketing costs.

Two types of regulated tariff exist.

A. SUBSCRIPTION TARIFFS

Subscription tariffs apply to gas consumers connected directly to the gas transmission network and customers connected to a distribution network who consume more than 4 GWh a year. These customers are all eligible.

Subscription tariffs are revised four times a year (1st January, 1st April, 1st July and 1st October), on the basis of a "3-1-3" formula¹⁴.

Subscription tariff movements are proposed by operators and are applicable directly, provided that the Government, having considered CRE's opinion, does not oppose them.

¹⁴ The 3-1-3 formula is calculated on the months N-4, N-3 and N-2 to be applied to months N, N+1 and N+2.

B. PUBLIC DISTRIBUTION TARIFFS

Public distribution tariffs concern all customers connected to a distribution network consuming less than 4 GWh a year. Gaz de France accounts for around 96% of sales for these tariffs and local distribution companies of natural gas, around 4%.

Methods for changing public distribution tariffs are defined by the ministerial order of 16th June 2005 which provides for quarterly increases for LDCs. The quarterly updating of Gaz de France tariffs was abolished by the ministerial order of 28th April 2006, which modified the ministerial order of 16th June 2005. No frequency for updating tariffs has been set for this operator. The next tariff update has been announced for 1 July 2007.

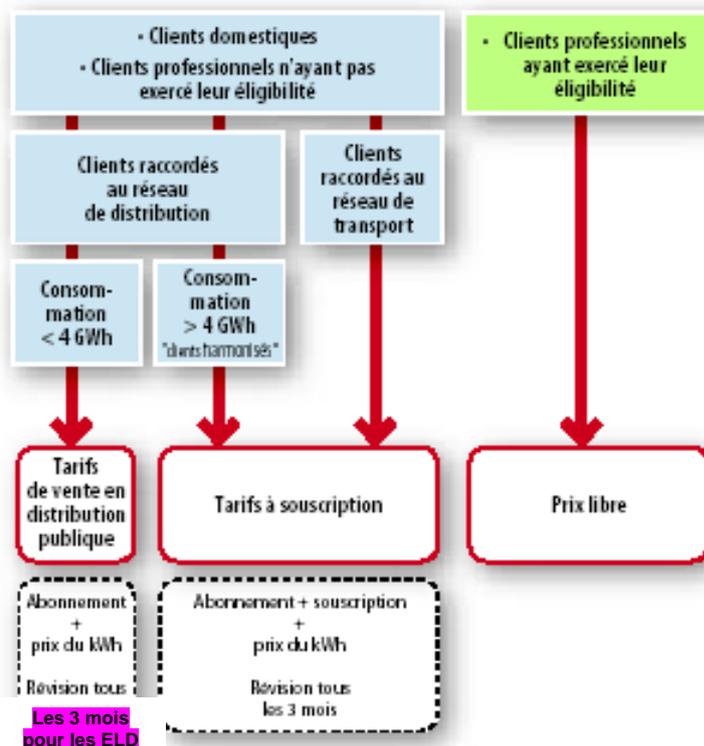
Operators submit their proposed price scale to the Ministers for the Economy and Energy with a copy to CRE, 21 days before the date that the change is due to come into effect.

After opinion from CRE on the Ministers' referral, the price scales come into effect unless there is opposition from the Ministers.

The tariff changes incorporate trends in supply costs, on the basis of a formula unique to each operator, and trends in other types of costs.

Current formulas for changing supply costs are of the type "6-1-3"¹⁵.

FIGURE N° 10: REGULATED RETAIL TARIFFS FOR NATURAL GAS



The consequences of the freezing of updates in Gaz de France public distribution tariffs are as follows:

¹⁵ The 6-1-3 formula is calculated on the months N-7 to N-2 to be applied to months N to N+2.

- Artificial improvement of the competitiveness of gas compared with domestic fuel oil;
- Restricted opening of the market to competition, by reducing the appeal of eligibility and slowing down the entry of new suppliers;
- Creation of a disparity between subscription tariffs and public distribution tariffs which, if no other measure is taken, will lead to discrimination between end consumers connected to the transmission network and those connected to the distribution network.

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