

European Commission, Competition DG

Sector Inquiry under Art 17 Regulation 1/2003 on the gas and electricity markets

Preliminary Report



RTE's Comments

Under the aegis of the French Regulatory Authority (CRE), for almost 6 years, RTE has been developing and implementing market based mechanisms to improve the functioning of the French electricity market and the exchanges with the neighboring countries, allowing free and transparent grid access for all users (consumers, generators and traders):

- the Balance Responsible Entity,
- the Balancing Mechanism,
- market based access to interconnections.

Balance Responsible Entities

To correct the overall imbalance resulting from different exchanges on the system, and to facilitate the change of supplier for all eligible customers, in October 2000, RTE introduced a system of "balance responsible contracts". Balance Responsible Entities make a commitment to RTE about the consolidated imbalances on their own "balance perimeters", which cover various market players (generators and consumers). If they require more electricity than originally foreseen, RTE provides it in exchange for financial payment from the Balance Responsible Entity. If they require less electricity than originally foreseen, RTE pays the Balance Responsible Entity for the supply savings made.

In addition, Balance Responsible Entities can exchange "energy blocks" between themselves. They notify details of these blocks to RTE, which then makes the necessary adjustments on the system.

This mechanism is growing fast. Having started out with only 12 Balance Responsible Entities or "BRs", by 2005 RTE had some 80 on its books. The "energy block exchanges" that these major players regularly notify to RTE have jumped from a few dozen to several hundred per day, and some 229 billion kWh were exchanged this way in 2005 - a third of the total volume of electricity consumed in France. These energy block exchanges can be construed as the building blocks for the French wholesale market. To ensure greater security for these energy block exchanges and to be able to process them in real-time, RTE has introduced a system of automated management.

With this mechanism, RTE is able to reduce the number of consumers with which it has to deal directly, and the number of individual actions it needs to take to balance the system. Meanwhile, by acting as a sort of "insurer", Balance Responsible Entities are able to minimize the risk of imbalances arising from their own commercial transactions and be, mostly, in charge of their management.

Programming and balancing

Since electricity cannot be stored, generation must be strictly equal to consumption at all times. Any change in the demand for or generation of electricity at a given point on the transmission network has an instant impact on the entire power system. This means that the system must constantly adapt to satisfy the balance between supply and demand.

To re-establish the balance between supply and demand for electricity in case of insufficient action of automatic control systems, RTE needs a real-time backup energy reserve. It obtains this reserve by calling upon generators and consumers connected to the network to modify their operating schedule at short notice. This is the aim of the "Balancing Mechanism" that RTE set up in April 2003, after the approval of the French Energy Regulation Commission (CRE).

The setting up of the Balancing Mechanism in France was a major step on the road to building the European internal electricity market. It has since been upgraded in order to activate bids and offers from Germany, Switzerland, Spain and England.

As of 31st December 2005, there were 29 declared Balancing Mechanism players, some 11 more than in 2004. Half of them access the Balancing Mechanism from outside France. The total balancing volume called upon by RTE over the year reached 9.6 TWh (6.1 TWh downward and 3.5 TWh upward).

To give players greater visibility and to help them understanding how the Balancing Mechanism works, every day RTE provides them with a large range of information intended to enable them to make offers (operating margins, balancing prices, etc.). In addition, RTE publishes historical records of all the data validated since the Balancing Mechanism was launched.

The Balancing Mechanism is a market tool regulated by market rules issued by RTE, and intend to contribute to the safety of the power system and to provide the Balance Responsible Entities with a reference price for the settlement of their imbalances.

Market based access to interconnections

The Access Rules for Imports and Exports on the French Public Power Transmission Network describe the conditions for market users to use the interconnections between RTE and neighbouring TSOs. Version 2.0 of these Access Rules, drafted in collaboration with French and European grid users and submitted for opinion to the CRE, came into force on 1st January 2006 and organize a market-based allocation of capacity by means of explicit auctions in compliance with the European Regulation 1228/2003.

To these rules are associated specific rules stipulating the conditions for allocating capacities on interconnections where a sufficient cooperation can be found with neighbouring TSOs. These rules are developed in cooperation with grid users and neighbouring TSOs and concern France–England (IFA), France–Belgium, and France–Germany Interconnections.

The access to the other French interconnections is governed by the Version 2.0 of the Access Rules, without specific rules.

A summary of the capacity allocation mechanisms (exports and imports) is presented below.

Country	Allocation mechanism	Agreement with neighbouring TSO
England	Explicit annual, seasonal, quarterly, monthly, week-end and daily auctions	with National Grid
Belgium	Explicit annual, monthly and daily auctions	with ELIA
Germany	Explicit annual, monthly and daily auctions	with RWE and EnBW
Italy	Exportation: explicit annual, monthly and daily auctions by RTE concerning 50 % of the available capacity Importation: no ex-ante allocation. In case of congestion, prorata curtailment of the nominations.	Exportation: capacity shared with GRTN
Switzerland	Exportation: explicit auctions according to the Importation / Exportation Rules (under implementation before the end of 2006) Importation: no ex-ante allocation. In case of congestion, prorata curtailment of the nominations.	No specific agreement
Spain	Explicit auctions according to the Importation / Exportation Rules	Specific agreement expected in May 2006

Two types of auctions are implemented, for importation and exportation:

- Periodic (yearly, monthly (at first)): Base, peak / off peak, profile products for periodic;
- Daily: Hourly products (24 points) for daily.

A Use-It-or-Lose-It mechanism is implemented after the nomination of periodic products. The released capacity is included in the capacity to be allocated at the day-ahead auction.

This overview must be completed by the decision of the CRE dated 1st December 2005 not to grant priority rights for long-term contracts on the interconnection with other EU Member States (priority rights are still granted on the interconnection with Switzerland).

A major project is expected to be launched in the last quarter of 2006, after the agreement of the three regulators: the market coupling between France, Belgium and Netherlands, to allow for the first time in Europe the integration of day-ahead markets between three countries. Powernext, the French Electricity Exchange, and RTE are fully involved in this project, which is certainly a solution to extend progressively the integration of day-ahead regional markets.

Most of these market based allocation mechanisms were implemented after the Commission Sector Inquiry of 2005, which should be updated in order to reflect the current situation in France.

To conclude, since it was founded, RTE has constantly sought to improve its range of services, in an effort to promote easier access to the market for its customers. To achieve this, it has worked closely with CRE, to:

- Determine a transmission price, based on the "postage stamp" principle.
- Design number tools used to balance electricity flows, with the creation in 2003 of the Balancing Mechanism and Balance Responsible Entity contracts.
- Develop, in conjunction with the Association of European Transmission System Operators (ETSO), a range of mechanisms aimed at improving the fluidity of the European electricity market (capacity allocation systems, cross-border pricing).
- Contribute to the creation in 2001 of Powernext, which is chaired by a member of the board of RTE, which became a legal independent company. Around 50 market players, i.e. generators, suppliers, distributors, consumers and banking institutions,

are on its books, and are actively involved in the French electricity market, seven days a week.

Unbundling

RTE was set up on 1st July 2000, as an EDF department with independent accounts, management and finances. Since 1st September 2005, under the terms of the French Law of 9 August on public service electricity and gas and electricity and gas companies, RTE has been a state-owned limited company, a subsidiary of the EDF Group.

The Law of 9 August 2004 states that the network operator:

- retains responsibility for maintaining, operating and developing the electricity transmission system,
- becomes the owner of its industrial assets,
- is a company whose capital continues to be held entirely by "EDF, the State or other firms or institutions belonging to the public sector".

The Decree approving the company's articles of association appeared in the Official Journal of the French Republic on 31 August 2005. In particular, it specifies the legal form, name and purpose of the new company, the composition of its capital and its method of corporate governance.

This legal unbundling fulfills the provisions of the second electricity and gas Directives on unbundling between network activities and all other activities, RTE being independent in its legal form, organization, and decision making since 1st September 2005.

After this global overview of RTE roles and missions in the field of the definition of market rules in France, some more precise comments on the Preliminary Report are listed below.

Part C. ELECTRICITY

II. Issues

II.2 Vertical foreclosure and vertical integration

II.2.1 Vertical integration between generation and retail activities

II.2.1.2 Comparison of net positions

(433) Figure 55

In October 2000 RTE introduced a system of "balance responsible contracts". Balance Responsible Entities make a commitment to RTE about the consolidated imbalances on their own "balance perimeters", which cover various market players (generators and consumers). If they require more electricity than originally thought, RTE provides it in exchange for financial payment from the Balance Responsible Entity. If they require less, RTE pays for the supply savings made.

This mechanism is growing fast, and is representative of the activity of the French wholesale market. Having started out with just 12 Balance Responsible Entities, by 2005 RTE had some 80 on its books, among which 43 were participating to Powernext Spot and 13 to Powernext Futures.

II.2.1.4 Long term power purchase agreements

(440)

Of course the Inquiry is based on a snapshot of a constantly moving situation. In that respect it should be point out that France is migrating from a full exporting profile to an intermediate

profile, where importations into France are more and more frequent. It can thus be considered that imports contracts are another significant source of liquidity on the market, although less important than volumes auctioned under the VPP (Virtual Power Plant: options to buy electricity at a fixed price). It is also important to state that there are generally no physical limitations because of congestions of imports to France (and the more so because of long term export contracts which through netting have created a huge volume of potential import capacity).

Moreover, Balance Responsible Entities can exchange "energy blocks" between themselves. The "energy block exchanges" that these major players regularly notify to RTE have jumped from a few dozen to several hundred per day, and some 229 billion kWh were exchanged in this way in 2005 - a third of the total volume of electricity consumed in France (compared with 180 TWh in 2004, an increase of 27% (for information, this figure had already risen by 36% between 2004 and 2003)). Up until 2001, energy block exchange notifications took place once per day, on a day-ahead basis. Since 2002, they have increased to six per day, and to twelve per day since 2005.

The systems of "balance responsible contracts" and "energy block exchanges", which are operated by RTE, formed the building blocks for the French wholesale market, and largely increase its liquidity.

II.3 Market integration

II.3.1 Introduction

(472 - 473)

In France, like in other European countries, imports should play a prominent role in eroding the market shares of major generation companies in wholesale electricity markets. This is facilitated by the low level of congestion of interconnections in the direction of imports into France and is illustrated by the constant increase of importations into France for several years.

Moreover, imports play a significant role on the French Balancing Mechanism, where 21 % of the total upward energy was imported from other countries in 2005. Imports are as well regularly used by RTE to compensate power losses (RTE calls upon the wholesale market by periodically organising calls for tenders).

(474)

This analysis of the causes of the lack of electricity market integration points out the necessity of a harmonization of the legal and regulatory frameworks all over Europe.

II.3.2 Institutional Setting

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As a public service company, RTE's role is to guarantee that the French power network runs smoothly and safely. It ensures free and fair access to the network for all users. Ensuring that RTE performs its work at minimum cost is guaranteed by the French regulatory authority (CRE). In particular, CRE proposes rates for the use of public electricity grids to ministers for the economy and energy to ensure a high level of productivity, approves the annual investment programme of RTE, and supervises the organisation of the Balancing Mechanism and approves the presentation rules of balancing proposals (impact on the imbalance costs). The efficiency of the market mechanisms operated by RTE and its productivity are then guaranteed by the CRE.

II.3.3 Insufficient interconnecting infrastructure

(481)

As stated in the explanatory note of Figure 60, the index is closely linked to the way the capacity is allocated: requests are dependent on the allocation method, and since the allocation method can be different on both sides of an interconnection, requests can differ per border between TSOs.

Moreover, coordination is not only required on allocation methods, but on capacity calculation too: data discrepancies may be explained as well by the fact that different physical constraints are taken in account depending on which area each TSO controls.

Concerning French interconnections, capacity calculation is coordinated on almost all of the interconnections, excepted for the France-Spain one (where the TSOs agree on the minimum value of the capacities calculated in France and in Spain), and allocations are coordinated on all borders excepted on the France-Italy interconnection (but with a mutual acceptance of transactions) and on the France-Spain one (allocation on this last border should be actually coordinated before the end of the first semester of 2006).

Figure 60: the congestion level seems to be surprisingly low on the France-Italy interconnection in this figure.

(483 - Figure 61)

The congestion level of the France-Germany interconnection given in Figure 60 seems to be higher than RTE's assessment (for example: congestion for 100% of the hours of May 2005).

Moreover, this article states *"...For instance, from the Germany to France congestion has increased from almost 0% in January 2004 to 100% in the month May 2005. Figure 61 shows this development of congestion per month between January 2003 and May 2005. Further investigation is required to explain the differences in the level of congestion between the period before and after January 2005"*.

These differences may be explained by the change of allocation method on the Germany-France interconnection, which occurred in March 2005. A change of allocation method could indeed have a significant impact on the requests of capacity and therefore on the value of the index and the congestion assessment.

A complementary analysis could probably be performed on price levels (in the case of allocation by explicit auctions), which are as well representative of the congestion level of an interconnection.

II.3.4 Level of interconnector capacity

(486 - Table 24; 487)

For the sake of clarity of Table 24 and Article 487, it is suggested to change the title of Table 24 into: *"Average hourly total import capacity relative to installed generation..."*, and to precise that this import capacity has been defined as the sum of individual NTC. This definition could be furthermore questionable.

(491)

As stated in this article, NTC levels can be affected by other factors than outside temperature, as maintenance works for example. As an illustration, it is suggested to complete the wording in the following way: *"However it is important to note that there are*

other factors than outside temperature that affect NTC levels. For instance, maintenance works of transmission network occurs often off winter period. Additionally, as explained above, local generation and consumption...

II.3.5 Incentives for TSOs to build more capacity

(495)

The statement exposed in this article may be valid only when considering consumers as a whole ("the average European consumer") or specifically in importing countries. Thus as a proposal, and to avoid doubts, the wording could be amended as follows: *"...Since the existing interconnections were financed in the past by tariffs paid by the local consumers it could be justified to allocate the welfare resulting from auctions to these consumers. On the other hand consumers in the importing countries would also profit from increased generation efficiency gained from additional cross border trade and enhancement of the markets..."*.

Furthermore, in France congestion revenues are used not only to reduce national grid tariffs, but also to guarantee the firmness of transactions on interconnections, as written by RTE in the Access Rules for Imports and Exports on the French Public Power Transmission Network version 2.0.

II.3.5.1 Utilisation of existing interconnector capacity

(499 - Table 28)

As Swiss borders are outside the EU scope, any reference to the France-Switzerland border as a "first come first served" should be suppressed in the table. Besides, long-term contracts between France and Switzerland use all the capacity on this interconnection, and it is planned to implement an allocation mechanism (if needed, in case of non-used capacity) based on explicit auctions on this interconnection, at the end of 2006.

Moreover, none of the French interconnections uses a First-come-first-serve allocation rule anymore in 2006. The allocation mechanism on the France-Spain interconnection is indeed no more based on a First-come-first-serve rule: it was changed in January 2006 to an allocation mechanism based on explicit auctions, which will be coordinated with the Spanish TSO before the end of the first semester of 2006.

Then, in the purpose of clarification, it is suggested to modify Note (3) accordingly.

Moreover, since some allocation mechanisms in Europe, and especially in France, have evolved since 2005, it could be interesting to update Table 28.

II.3.5.2 Non market based methods

(500 – Table 29)

Table 29 illustrates that a significant proportion of existing interconnector capacity was still allocated on the basis of priority rights or "pre-liberalisation" contracts in 2005. For the sake of clarity, this table should probably be updated, in order to take into account the removal of these priority rights decided in some Members States at the end of 2005 or early 2006.

Concerning France, the French Regulatory Authority decided not to grant priority rights anymore for long-term contracts on the interconnection with other EU Member States (priority rights are still granted on the interconnection with Switzerland).

Table 29 should be updated with the following values: France-Spain and Spain-France: 0 %, and France-Italy: about 29 % (considering that the Italian Regulatory Authority decided to grant priority for long term contracts for the part of the capacity allocated by the Italian TSO).

II.3.5.3 Market based methods

(503)

It should be noted that the explicit auctions of day ahead capacity nominally accounts for circa 10%-15% of the total capacity in both directions. All other capacity is allocated in Annual and Periodic explicit auctions. During the data timeframe indicated in Figure 64, July to Dec 2004, the daily auction accounted for 15% (300MW) of the total capacity in both directions except during planned maintenance outages when this was reduced to zero for short periods.

(504 - Figure 64)

There seems to be a misunderstanding concerning Figure 64, part FR/UK: The title seems incoherent with the drawing (is it "Fr to UK" imports nominations? or net "Fr to UK" schedule?).

(505)

Following our comment above, 85%-90% of capacity on the IFA is allocated to Users in a variety of timescales prior to the day ahead process for nomination and market clearance. Interconnector Users who participate in the day ahead auction, which is open and transparent, have their day ahead capacity allocation confirmed within 30 min of auction closure, and generally no later than 08:45 GMT (D-1). This provides sufficient time for users to participate in energy trades in the markets in both mainland Europe and the UK prior to day ahead clearance. The interconnector gate closure takes place at 13:00 GMT D-1 for day ahead nominations, e.g. after day ahead clearance in mainland Europe (UKPX having no day ahead clearance).

Figure 64 appears to compare the actual hourly price differential available on the day with a net nomination profile which takes place on D-1. For the sake of clarity, there is currently no practical means of achieving commercially viable participation from FR-UK interconnector in the GB Balancing Mechanism, which operates with a 1 Hr closed period over 48 (½ hourly) gate closures per day.

(509 - Figure 64 & Table 30)

The analysis appears to take no account of the cost of the losses of the DC transfer, which is absorbed by the Users, and amounts to 2.34% per MWh transferred from end to end. The UK is not presently, and was not at the time of the sample data, a member of the ITC agreement, and therefore an injection charge of €1/MWh is also applicable at the injection point to the French network. Similarly, Use of system costs for both network and balancing are applicable to flows in the UK in addition to UK system losses.

The combined effect of these costs when compared to the available price differential may explain the majority of so called "wrong sign" nominations and further explain the seemingly "economically irrational" behaviour described in Para 511. To this extent the value of unused cross border capacity indicated in Table 30 would appear to an over-estimation. It should also be noted that this effect would be broadly the same regardless of the choice of explicit or implicit auction mechanisms.

This remark does not alter the findings of the report about France-Spain interconnection.

(Note to Table 30)

The inclusion of the wrong sign nominations in the definition of the estimated value of unused cross border capacity could be questionable: it should be borne in mind that day ahead and within day (hourly) price differentials cannot be the only explanatory factor to exchanges, and that longer term drivers linked to forward prices play an important role.