

Communiqué from the Commission de régulation de l'énergie on *Virtual Power Plants (VPPs)* introduced by EDF and their development towards a regulated programme for release of electricity on the wholesale market

In its decision of 7th February 2001 authorising EDF's acquisition of the German operator EnBW, the European Commission required the French operator to put part of its electricity production on the French wholesale market for a minimum period of 5 years in order to “*eliminate the strengthening of EDF's dominant position on the market for eligible customers in France*”. As this initial period of commitment has elapsed, the question of stopping or continuing a system such as *Virtual Power Plants (VPPs)* is now being asked.

In addition, on 16th February 2006 the Directorate-General of Competition of the European Commission published a preliminary report on the enquiry it has been conducting since 13th June 2005 on the electricity and gas sectors. In this report, the Commission refers to “*a possible more generalised use of gas and electricity release programmes under regulation, in order to reduce the effect of concentration in the upstream supply level and inject liquidity into the market, as well as other measures reducing the effects of concentration*”.

In this context, and given the possible impact that modifying or stopping the VPP system could have on efficient operation of the French market, CRE wished to set out its position on the implementation of a regulated programme of electricity release by EDF on the French wholesale market.

On 15th December 2005, CRE therefore launched a public consultation on the VPP system implemented in France since 2001. The contributors were invited to give their views on the effect of this system on the French market and on the need for a system of power or production capacity release by EDF to guarantee efficient operation of the market. Twenty-three players replied to this consultation and twelve of them were interviewed by CRE.

EVOLUTION OF THE STRUCTURE OF THE FRENCH ELECTRICITY MARKET

Since 2001, the structure of "upstream" markets (production and imports) has remained stable; EDF still owns 87% of the installed power in France. On the other hand, over the same period, the structure of "downstream" markets (consumption by eligible sites, grid operators' losses, exports) has changed considerably. In particular, the size of the eligible customers market has doubled.

The very high concentration of upstream markets, together with the opening of downstream markets, makes it difficult for alternative operators to guarantee their customers' supply.

In 2005, alternative operators supplied 69.3 TWh to grid operators and eligible customers. These volumes will increase by at least 10 TWh in 2006 simply on the basis of the consumption of customers acquired in 2005. Last year these operators held 77 TWh of French production: 25.2 TWh from their own production, 8.5 TWh from participation agreements with EDF and 43.3 TWh from VPPs (i.e. 95% of the VPP capacity available to them).

Alternative operators' production resources therefore allow them to cover their current commitments towards their customers, but not the expected growth in their activity.

Finally, the liquidity of the French wholesale market for forward products has remained very low since 2001. The report by the Directorate-General of Competition of the European Commission, referred to above, indicates that the ratio between the annual volume of transactions on the French forward market and national consumption is 7 times lower than this ratio on the German market.

ESSENTIAL POINTS LEARNED FROM THE PUBLIC CONSULTATION

With the exception of two incumbent operators who replied to the consultation and one industrial customer, all contributors consider that **a regulated programme of electricity release by EDF is necessary** for efficient operation of the French wholesale market and development of competition on the retail market.

These two incumbent operators, who are required to set up VPP systems in their own countries, consider that this kind of programme is not well suited to the needs of market players and is less efficient than free market operation.

Among the possible systems, the VPP system implemented by the European Commission is considered by nearly all suppliers and traders to be an efficient means of achieving these objectives, provided some adjustments are made. However, the industrial customers and one supplier consider that VPP have not proven their usefulness since they have not allowed end customers to benefit from supply offers at prices lower than wholesale market prices.

CRE'S POSITION

For the market to operate efficiently, suppliers and traders must be able to obtain a sufficient quantity of the products required for their activity.

Failing a structural measure such as EDF's sale of production assets, CRE is in favour of the existence of a regulated programme of electricity release by EDF on the French wholesale market. A programme of this kind, implemented under conditions similar to VPPs decided by the European Commission, is an effective remedy for reducing the effects of concentrated production and increasing the liquidity of the wholesale market for forward products.

- **A DOUBLING OF THE CAPACITY PUT ON SALE**

The capacity put on sale must provide alternative operators with a source of supply allowing them to develop their activity on markets already open and then enter the household customer market on 1st July 2007. It must also reduce the effect of the strong vertical integration of the French market by forcing EDF to offer on the wholesale market a large part of the power produced for its own customers.

In its decision of 7th February 2001, the European Commission considers that "*access to 6000 MW generation capacity*", by allowing "*around one third of the eligible market [to] be marketed by competitors with electricity generated in France*" was sufficient to avoid "*the strengthening of EDF's dominant position on the market for eligible customers in France*".

In 2001, the annual volume of the eligible end customer market was 130 TWh; by 2004, it had risen to 300 TWh and will amount to roughly 460 TWh in 2007. CRE therefore considers that to accompany the market opening, without any development of the structure of the generation market, **the capacity put on sale must double from 6000 MW to 12000 MW. This capacity must then be further increased to allow effective opening of the household customer market.**

- **A WIDER PRODUCT PORTFOLIO AND INDEXED PRICES**

In the current VPP system, the Base-load product is representative of the economic operation of a nuclear power plant. The energy price of the Peak-load product does not correspond to the variable production cost of a specific peak-load plant (coal or oil). The PPA product is not optional. Peak-load and PPA products are not therefore virtual power plants.

The products proposed must consist of capacity rights, by nature optional, on EDF's production facilities. The products must offer **a range of energy prices representative of the respective variable production costs of nuclear, coal-burning and oil-burning power plants**, in order to allow the buyers to compete with EDF in these three production fields, in which the operator is dominant.

Given the strong variability of fuel prices, especially fossil fuels, **these energy prices must be modified each quarter by transparent indexing** based on standard fuel price indicators and CO2 emission permits for fields other than nuclear.

- **EXTENSION OF CONTRACT PERIODS**

The duration of contracts currently on sale ranges from 3 to 36 months for Base-load and Peak-load products.

In the proposed programme, the contract periods must be set at:

- **3 months to 15 years or more for products representing the operation of nuclear power plants**, especially to meet the needs of electro-intensive manufacturers and suppliers;
- **3 months to 5 years or more for products representing the operation of fossil fuel power plants.**

The major part of the capacity put on sale must be reserved for contracts with a duration of more than a year.

- **A REGULATED PROGRAMME**

The proposed programme must be regulated *ex ante*. The market players must be involved in the definition and evolution of the programme.

- **ALLOCATION METHODS THAT SEPARATE SHORT- AND LONG-DURATION CONTRACTS**

The auction methods of the VPP system establish a link between sale prices of products of different durations and therefore cause long-term product prices to be unduly affected by the tensions of short-term markets, which seriously reduces their appeal.

Allocation methods must not establish a link between product prices; in particular, products of different durations must be sold separately.

- **MAINTAINING ANONYMITY**

Under the current system, after each auction, EDF knows the identity of the buyers and the capacities they have bought.

The proposed programme must guarantee VPP buyers' anonymity during auctions, after auctions and in daily declarations of use of the acquired capacities.

Transactions must therefore be organised according to a standard method, such as a clearing house, allowing EDF to cover its counterparty risk without revealing the buyers' identity.

- **APPROPRIATE ARRANGEMENTS FOR DECLARATIONS OF USE**

Buyers of VPP capacities must announce "a day ahead" the use that they wish to make of their capacities ("nominations"). Currently, buyers do not always have sufficient time between the publication of prices on the Day Ahead market and the deadline for submitting their nominations.

The deadline for submitting day ahead nominations must be set at 12.30 p.m. at the earliest.

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For the Commission de régulation de l'énergie

The Chairman

Jean SYROTA