

## Message from the board

Interconnections are essential to develop the internal energy market and help trade between Member States. They enable end consumers to benefit from cost-effective energy by diversifying sources of supply and improve Europe's security of supply.

Since it was created, the CRE has played a leading role in this area, by fostering the development of interconnections at the French borders and by making them more efficiently used.

The report draws two main conclusions:

- France is well interconnected to its neighbours. In terms of electricity, the average export capacity is 13.5 GW compared to a peak consumption of 102 GW. In terms of gas, exit capacity has doubled and entry capacity has risen by 50% in 10 years.
- The use of interconnections has been significantly improved over the last ten years and is now largely optimised. In terms of electricity, France, as part of Central Western Europe region, has pioneered the introduction of market coupling and, more recently, has implemented a "Flow based" capacity calculation method which allocates capacity to the most useful flows. In terms of gas, all the interconnections are based on competitive procedures in line with the European network codes, that the CRE applies in full and anticipated their implementation.

After major efforts, the question of creating new interconnections is now being raised.

New interconnections are costly and complex projects both in electricity and gas. If you include the network's internal reinforcements required by a new interconnection, the costs of investment often exceed one billion Euros.

Given how much and how quickly the industry is changing (renewable energy development, consumption stabilisation, appearance of new usage and flexibility etc.), it is essential that investment decisions are based on market tests and sound cost-benefit analyses that take into account all the networks' internal reinforcements required to create these new capacities.

This is what was involved in the new electricity interconnection between France and Italy (Savoy-Piedmont project) approved by the CRE in 2015. Similarly, reinforcing the electricity interconnection with Great Britain is now justified by economic fundamentals. In 2014, the CRE and its counterpart Ofgem granted an exemption to the non-regulated Eleclink interconnection project and RTE has just submitted a financial incentive request to the CRE, to create a new regulated interconnection with Great Britain (IFA 2 project), which will be reviewed in the second half of 2016.

In terms of gas, the Midcat project (a new gas interconnection between France and Spain) provides a good illustration of this question. Given the required internal reinforcements, the project would cost almost three billion Euros (including over two billion euros for the French part) to create capacities accounting for up to around 15% of gas consumption in France or Spain.

The CRE has supported the project since 2010 with the launch of an open season (which proved futile) and its inclusion on the list of European projects of common interest. However, given the changes in the gas market in the last few years, especially in terms of demand stagnation and existing overcapacity, a number of conditions must be fulfilled for such a costly project to be launched without being too risky for Spanish and French consumers.

A market test must firstly be conducted by the TSOs involved, in accordance with the rules of the European network code regarding incremental capacity. This stage is required to ensure there is a market need for such an infrastructure and that all or some of its costs can be funded by capacity bookings by market players.

Should the market test prove negative, which is likely in the current climate, no decision to launch the project can be made without sound cost-benefit analysis.

This analysis should namely identify and quantify the benefits for each country concerned as well as for the European Union and organise the project funding in relation to benefits in line with the CBCA (*cost benefit cost allocation*) procedure outlined for European projects of common interest.

Regarding the Bay of Biscay electricity interconnection project between France and Spain, overcoming technical uncertainties is an essential prerequisite before commenting on the opportunities it offers in terms of the costs and benefits that it might generate.

In compliance with the law, the CRE acts on behalf of end consumers in all its missions. It will seek to avoid them being exposed to considerable costs to build infrastructure facilities whose advantages for developing the European market and security of supply have not been demonstrated.