

Decision of *Commission de Régulation de l'Énergie* [French Energy Regulatory Commission] dated December 8th, 2011 on RTE's investment programme for 2012

Participating in the deliberations were: Mr. Philippe de LADOUCETTE, chairman, Mr. Olivier CHALLAN BELVAL, Mr. Frédéric GONAND, Mr. Jean-Christophe LE DUIGOU and Mr. Michel THIOLLIÈRE, commissioners.

Pursuant to Article L 321-6 of the French Energy Code, the French transmission system operator (RTE) submitted its 2012 investment programme to the *Commission de Régulation de l'Énergie* (CRE) for approval.

1. Context

- 1.1 RTE operates and maintains the public electricity transmission grid. It is responsible for its development to allow the connection of producers, public distribution grids and consumers, as well as interconnection with the other grids. In the context of these missions, which are essential to the future needs of the community, RTE must, every year, establish its investment programme with a view to maintaining and improving performances and controlling costs borne by the end consumers via the tariffs for use of the public electricity transmission grid.
- 1.2 By exerting its power to approve the RTE investment programme, CRE ensures the necessary investments for developing the grids, as well as transparent and non-discriminatory access to them.

This yearly power of approval is fully within the objectives pursued by implementing Directive 2009/72/CE of July 13th, 2009, regarding the common rules for the internal electricity market (known as the "3rd Energy Package" Directive), which reinforces the independence and autonomy of the transmission grid operator, as regards transmission grid investments.

- 1.3 CRE has based its decision to approve RTE's investment programme considering:
 - RTE's undertakings to maintain or improve the level of technical-economic performance of the public electricity transmission grid;
 - the following main issues :
 - Maintaining the level of security of supply in certain areas weakened by their low level of local generation and by the difficulties encountered in the acceptance of new electric infrastructures, which are nevertheless essential;
 - The integration of new generation facilities by connecting them promptly and carrying out the necessary reinforcements of the upstream grid;
 - The necessary integration of European electricity markets which stimulates the need to develop interconnection capability ;
 - A progressive increase in the need to renew facilities due to their ageing.

- 1.4 These issues require important investments in the public electricity transmission grid in the coming decade. The level of annual investments should reach, on average, €1,193m for the 2009-2012 period, representing an increase of 60 % compared with the 2006-2008 period. The investment programme proposed by RTE for 2012 amounts to €1,379.3m. The increase in terms of investments in the transmission grid testifies to the efforts RTE is putting into solving these issues.
- 1.5 In particular, in a context of deep changes in the generation facilities, CRE remains attentive to the changes in the conditions for connection of new generation units and their transparent and non-discriminatory treatment. These units are essential for maintaining security of supply.
- 1.6 CRE also remains particularly attentive to projects aiming at improving security of supply in areas that are electrically fragile, such as the Provence-Alpes-Côte d'Azur (PACA) region and Brittany.

2. Description of the investment programme presented by RTE for 2012

- 2.1 The proposed programme amounts to €1,379.3m for 2012, up 14.7 % over the programme for 2011, approved by CRE on July 21st, 2011 (€1,202.7m).
- 2.2 Investment expenditure relating to the development of the major transmission grid and the interconnections amounts to €556.2m, up 40.9 % over the allowance for 2011 (€394.7m). For 2012, 64 % of investment expenditure relating to major transmission projects is dedicated to the continuation of two significant projects: the creation of a double 400 kV Cotentin-Maine axis, with the aim of inserting a third electricity generation unit at Flamanville, and the establishing of a Baixas-Santa Llogaia direct current line, aimed at reinforcing the electricity interconnection between France and Spain. The expenditure dedicated to interconnections amounts to €208.8m compared with €114.8m for the 2011 programme.
- 2.3 The investment expenditure for renewing the major transmission grid amounts to €47.4m, compared with €62.7m for the 2011 programme.
- 2.4 The investment expenditure relating to the development of the regional grids amounts to €348.3m compared with €335.0m in 2011. The investments relating to the development of regional grids are marked in 2012 by the creation of a double Angresse-Mouguerre 63 kV underground cable, the creation of the Frasne 400 / 225 / 63 kV substation to secure the supply to the West of Franche-Comté, as well as pursuing the installation of reactive power compensators in Brittany and in the Cotentin.
- 2.5 The investment expenditure for renewing the regional grids amounts to €291.2m, compared with €266.2m for the 2011 programme.
- 2.6 The investment expenditure relating to the take over of the transmission grids amounts to €1.0m compared with €0.5m in 2011 and corresponds to transfers of assets from ERDF to RTE.
- 2.7 The investment expenditure relating to information systems for the electric system amounts to €34.5m compared with €42.0m for the 2011 programme.
- 2.8 The investment expenditure dedicated to information systems for management and the electricity market is €40.7m, compared with €38.6m in 2011. The share dedicated to information systems to improve customer relations and electricity market management amounts to €17.8m compared with €16.5m in 2011.
- 2.9 The logistics investment expenditure amounts to €59.9m, compared with €63.1m for the 2011 programme.

3. Comments by CRE

CRE makes the following comments on the investment programme submitted by RTE:

- 3.1 The investment expenses intended for the development of regional grids remain at a high level. The primary purpose of these investments is to secure the supply for large regional pockets of consumption and also contribute to the distribution of local generation.
- 3.2 The progress made in terms of investments in the transmission network testifies to the efforts RTE is making in this area in response to the issues of market integration, incorporation of new generation facilities and securing supply.
- 3.3 The implementation of short-term stop-gap measures following the non-completion of the Boute-Broc Carros link finalised in 2010 are essential to temporarily relieve some of the congestion on the grids in the PACA region. These measures are still not sufficient to guarantee secured supply to the region. In response to the region's electric fragility, RTE has undertaken the construction of 225 kV axes planned to be commissioned by 2015, aiming to improve security of supply in the long-term. The extent of these measures will depend on the results of the actions for electricity demand management that will have been implemented locally.
- 3.4 Given the low level of local generation in Brittany (9.5% of its consumption), the region's electricity supply principally relies on remote generation sites, making the region an electricity peninsula. Ever more stressful operating conditions (in particular in the North of Brittany), which are aggravated by the dynamic increase in the electricity consumption in the region, highlight the deterioration in the level of security of supply in Brittany and expose the region to risks of power cuts. In this context, RTE adopted emergency measures in 2010 by constructing a 400/225 kV substation at Calan, in Morbihan aimed at improving the security of electric supply in the South of Brittany, as well as installing a significant number of reactive power compensators, between 2011 and 2013, intended to maintain the voltage at 400 kV and 225 kV. In addition, RTE presented the forecast changes in the security of supply in Brittany according to different power demand and demand management scenarios. The issues revealed by RTE in particular emphasize the dependency on the development of regional generation as well as on the perpetuation and availability of the existing generation facilities, notwithstanding actions for managing electricity demand, that can helpfully lessen the increase in regional consumption, or the grid adaptations that might have been implemented. In particular, the commissioning of a conventional generation facility by 2015 to the West of a Lorient-St Briec axis remains essential. This should be supplemented by carrying out the necessary grid reinforcement to secure the North of Brittany.
- 3.5 The development of interconnection infrastructures constitutes a priority for the European energy policy. The heavy increase of the investment expenses intended for interconnections, by pursuing the France-Italy Optimisation project and the work regarding the France-Spain interconnection through the East of the Pyrenees, bears witness to the efforts undertaken by RTE in this area.
- 3.6 Concerning the France-England interconnection, RTE and its British counterpart signed a financing agreement for feasibility studies in 2010 in particular intended to conclude the research on a submarine layout for a new interconnection in 2012. However, the lack of an English regulatory framework suitable for the development of regulated interconnections seems to be delaying this project. Within this context, the British and French regulators undertook analysis work on the compatibility of the regulatory frameworks. The purpose of these is to provide a clear framework for both operators within the perspective of a decision regarding the project in 2012. From this point of view, the feasibility studies undertaken by RTE and its British counterpart should allow decisions regarding the project to be made by the end of 2012.
- 3.7 In addition, CRE reminds that the level of energy exchanges at the borders still depends on the proper development of the national major transmission grid upstream. This is why CRE pays particular attention to identifying the investments to be made on the grid upstream, without which the efforts put into developing the interconnection infrastructures would only lead to limited gains in terms of capability for exchanges. From this point of view, RTE presented the perspectives as regards the exchange capacities between France and Spain at the beginning of the operation of the new

interconnection and considering upstream grid reinforcements which could have been implemented in Spain or in France. Most scenarios presented physical capability levels equivalent to the 2,800 MW goal for the export from France to Spain, under normal conditions.

- 3.8 CRE remains attentive to the changes in the conditions for connection in the present context, which is marked by difficulties in completing new grid infrastructures within deadlines comparable to those of generation investments. To this effect, it is important that RTE pursue its efforts to identify which developments are necessary for the upstream grid to be able to integrate generation facilities under transparent and non-discriminatory conditions.
- 3.9 Within a context of changes in the energy mix, effective volumes for commissioning of new generation facilities, as well as their location, have a significant impact on the nature and scale of constraints imposed on the transmission grid. The studies undertaken by RTE specified the constraints imposed on the transmission grid for 2015, considering the increased visibility, for this time horizon, of the generation investments likely to be made. With the exception of the Brittany region, these constraints should not undergo overall bullish changes by this time. In the long term, the uncertainties regarding the effective volumes for commissioning of new generation facilities, as well as their location are still important. In this context, RTE undertook a study, at CRE's request, aiming to show the changes in these constraints based on different scenarios of installation of these new generation facilities, whose main results are expected for the end of 2012. As from 2012 and applying Article L 321-6 of the French Energy Code (transposing Article 22 of Directive 2009/72/CE), a ten year network development plan drafted by RTE will highlight this issue through the main infrastructures necessary within the medium term of ten years.
- 3.10 The public transmission grid of the North France area is crossed by high energy flows related to generation in this area and cross-border exchanges. The changes in generation hypotheses for this area show, with the necessary seriousness, the structural constraints related to the insertion of generation projects that are underway. The studies undertaken allowed RTE to propose a reconstruction project for the 400 kV Avelin-Gavrelle axis, which is the subject of a public debate organised by the *Commission Nationale de Débat Public*. These studies should be supplemented by long term forecasts for this area.
- 3.11 When presenting its investment programme, RTE undertook, upon CRE's request, to achieve precise and quantified quality of service objectives, reflecting the proper development of the grid. These commitments cover safety of the electricity system, security of supply, quality of supply, technical and economic efficiency, connection, and maintaining the grid in an operational condition.

4. Decision by CRE

4.1 CRE approves the 2012 investment programme submitted to it by RTE on November 28th, 2011:

| 2012 | In millions of € |
|---|------------------|
| Major transmission and Interconnections - Development | 556.2 |
| Major transmission and Interconnections - Renewal | 47.4 |
| Regional grids - Development | 348.3 |
| Regional grids - Renewal | 291.2 |
| Take over of Transmission grids | 1.0 |
| Information systems for the electric system | 34.5 |
| Information systems for management and electricity market | 40.7 |
| Logistics | 59.9 |
| Total | 1,379.3 |

4.2 CRE asks RTE to present an interim implementation review of this decision at the beginning of July 2012.

4.3 CRE asks RTE to present, when submitting the investment programme for 2013:

- The results of the studies aiming to decide on investments to increase interconnection capability between France and England;
- An information report on the changes to security of supply in Brittany, as well as on the longer term outlooks;
- The results of the study on the sensitivity of constraints appearing on the grid, depending on the volume and location of future generation facilities which are likely to become operational.

Signed in Paris, December 8th, 2011

For the *Commission de Régulation de l'Énergie*,
Chairman

Philippe de Ladoucette