

Interview Dominique Maillard (RTE)

‘No technical obstacles for Mediterranean ring’

The French electricity transmission system operator RTE (Réseau de Transport d'électricité) would like to see the European grid connected to the countries on the southern shore of the Mediterranean. Thus a 'Mediterranean ring' would be created which would be 'hooked up' to the EU. Dominique Maillard, chairman of the Executive Board of RTE, former chairman of the Governing Board of the International Energy Agency, explains the idea behind the ring.

| by Yves de Saint Jacob

RTE pleads for the creation of a “Mediterranean electric ring”. What does this ring represent?

All European countries, including the Balkan Peninsula, which is outside the 27-country European Union, are interconnected. This is a movement that goes back to as early as February 1951, even before the signing of the Treaty of Paris, which created the European Coal and Steel Community (ECSC), and before the Treaty of Rome in 1957. European electricity operators founded the UCPT (Union for the Coordination of Production and Transmission of Electricity), which still supervises the proper operation of the interconnected grid. At the dawn of Europe, energy – even electrical energy – had therefore already preceded politics. (Editor’s note: UCPT should merge with ETSO, the European Transmission System Operators, at the end of the year to form ENTSO-E, the European Network of Transmission System Operators for Electricity. The European Commission also proposes to establish ENTSO-G for gas.)

The issue now is to set up an electric interconnection with our southern Mediterranean neighbours to form a “Mediterranean ring”. It will consist of Turkey on one side and with two other groups on the other: Morocco-Tunisia-Algeria, which have already been interconnected for the last ten years through Spain, and the Libya-Egypt-Jordan-Syria group. In addition, the former vice-president of the European Commission, Ms Loyola de Palacio, succeeded in bringing together the Israeli and

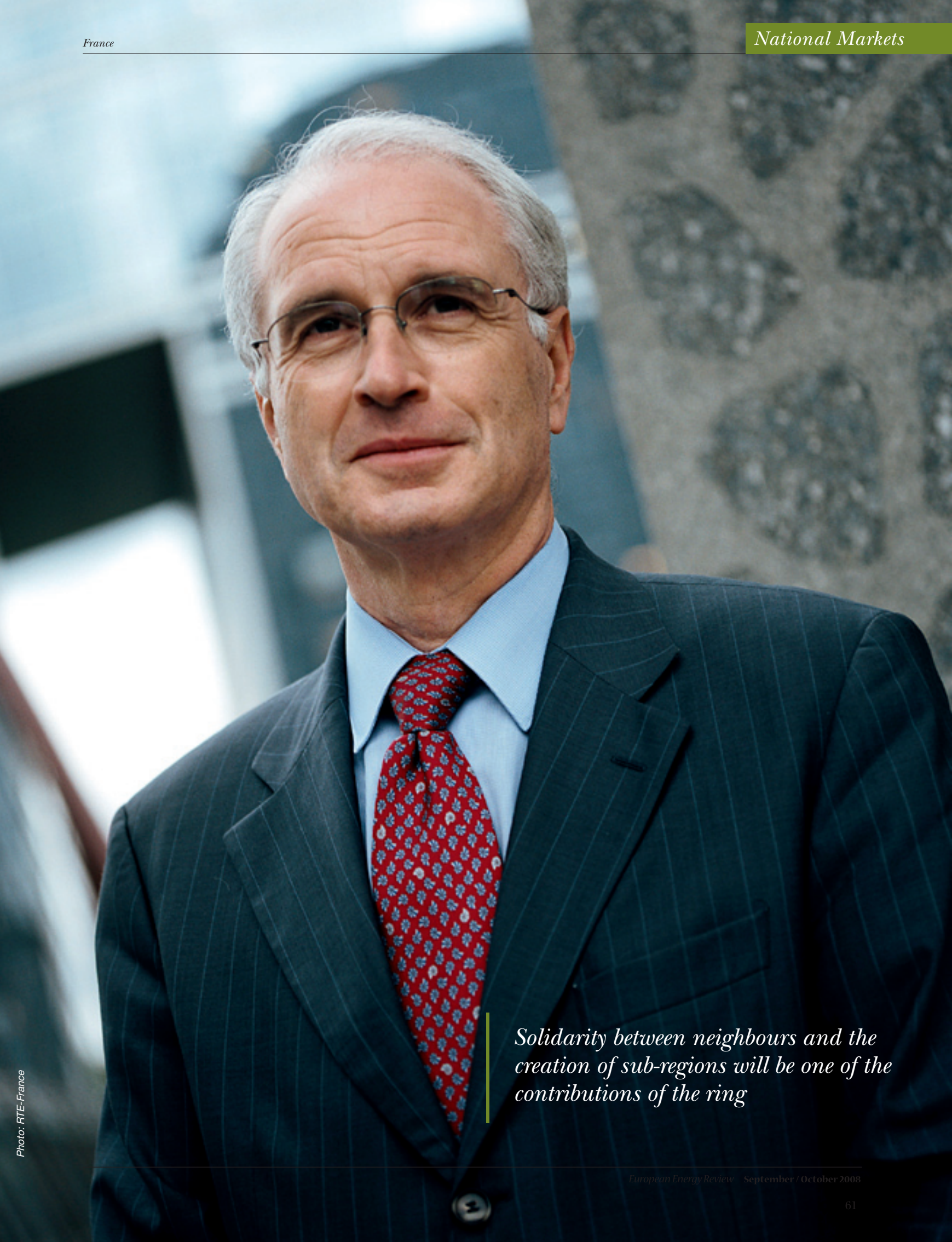
Palestinian ministers in 2003 to work on this major project to create a common electrical ring.

Looking at the facts, a total of 8,000 km of connections from Istanbul to Gibraltar are yet to be reinforced and connected, even though some links already exist within the groups previously described. On July 13 and with the help of the Paris Summit, which consecrated the Union for the Mediterranean (UPM), energy had pride of place within the Mediterranean solar plan, which requires the reinforcement of electrical interconnections between the two shores of the Mediterranean.

What are the planned completion dates?

For Turkey, it would be 2010. The link with Greece has been completed; we are now carrying out frequency adjustments and a first test is planned for next year.

For the rest, it’s a bit more complicated. The Maghreb countries and Libya have infrastructures that are still insufficient. In the event of incidents causing major flow variations, there could be risks of imbalances between Europe and Egypt, which is a major generator. As a priority therefore, the networks must be reinforced in these four countries (Morocco, Algeria, Tunisia and Libya) and we must succeed in limiting flow variations using various techniques. The problems ought to be solved in this area by 2011 or 2012.



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The electrical ring should therefore be complete within three to four years. The technical problems will be solved, which is essential because this Mediterranean ring can obviously not be created with any safety risk to consumers. The financial problems are not insurmountable. It remains for a political boost to be given to accelerate the process, reassure the Maghreb countries, which are worried that their grids will be weakened and reinforce the adjacent national grids.

But what is the real advantage for the parties concerned?

The long experience of the UCTE, acquired over 57 years, shows that an interconnected network makes it possible to pool generation and better manage demand peaks. It is therefore a question of reducing additional investment requirements in terms of electricity generation and optimising that which already exists in all its diversity (for example, conventional generation, nuclear and renewables).

While the countries north of the Mediterranean are seeing a reduction in demand for electricity, this is not at all the case for the countries on the southern shore, which are undergoing rapid economic and demographic development, although there is considerable disparity between them. For reasons of economics, geopolitics and solidarity, Europe must continue to take an interest in the conditions of their growth and the risk of a widening “energy gap” between the northern and southern shores.

Creation of a ring allows certain “links” to organise themselves better by setting up sub-regional groups. For example, if one of the Maghreb countries wishes to construct a nuclear power plant, it would be logical for this new generation to be used throughout the Maghreb region in the future. To this end, reinforced regional interconnections combined with the Mediterranean ring are necessary. Solidarity between neighbours and the creation of sub-regions will thus constitute one of the contributions of the ring. In addition, you can see that the same regional interdependence situation exists in northern Europe where the three Baltic States, which are still linked to the CIS’s electrical system, wish to develop a common regional energy policy.

But shouldn’t the first priority be to improve interconnections within Europe itself? These are far from being perfect, as demonstrated on November 4 2006 with the major power outage that started in Germany.

Let’s say that Europe and the Mediterranean are two priorities to be dealt with side by side. In fact, this is the spirit of the summit establishing the Union for the Mediterranean.

Progress is continuing on the European side. At the end of the year we will have passed a very significant stage. At the end of 2008, seven European transporters in central-western Europe

are set to draft an initial joint generation adequacy report on the medium and long-term outlook. (Edior’s note: RTE, Elia, TenneT, ENBW TNG, EON Netz, RWE TSO and Cegedel Net are going to establish a joint, cross-border services company, CASC or Capacity Allocation Service Centre, located in Luxembourg, to manage the bids associated with electrical interconnections.) This report on the balance between electricity supply and demand will take all elements into account, from meteorological hazards to the investments of the various parties via integration of renewable energy. It is a first step towards a European generation adequacy report, which is the cornerstone for the construction of a common electricity policy.

As far as the major outage of November 2006 is concerned, contrary to the pessimistic view circulated since, you fortunately mention that the European networks supported each other. Without the interconnections already in place and the responsiveness of the interlinked European grid, several countries could have been plunged into darkness, with the economic and political consequences that you can imagine.

France has announced the launch of a new EPR (European Pressurised Reactor) nuclear reactor. The UK and Italy, for their part, are set to relaunch nuclear generation while Germany and other countries remain hostile to it. Are these differences between energy mixes a handicap to harmonisation of an electricity market?

I don’t think so. For example, a few years ago, integration of wind-generated electricity into the grid was perceived as posing very serious and practically unsolvable problems. This is less and less true. A country such as Spain, which is the leader in this field and we are monitoring their progress very closely, succeeds in integrating significant quantities (up to 30%) of wind-generated electricity at certain times during the year. We are going to adapt the French network to this type energy since there are plans to increase today’s capacity of 3,000 MW to 20,000 MW by 2020, which is a level close to that currently found in Germany and Spain. Renewable energies are now no longer an obstacle to proper grid operation.

As far as electricity from nuclear sources is concerned, it constitutes a baseload supply that will be shared out according to demand in the different countries of the Union thanks to improved interconnections. It will no longer be a case of export in the old sense of the term, but rather sharing out into a more unified market. The larger the electricity market becomes and different methods of generation are shared and integrated, the more national specificities will disappear. The electricity that circulates will no longer have a nationality, so to speak. This again shows the advantage of progressing towards a widening of interconnections. When you are in an expanding grid, the system as a whole has a natural tendency to balance itself. ■