



Nuclear plant in Romania. Photo: Peter Turnley/Corbis

## South Eastern Europe's electricity markets

# *A long way to integration*

The South East European Electricity Market is highly fragmented, with most national markets too small to support a regional market that's liquid and efficient. There is some reform in the electricity sector, but with many rates still below cost and people not used to paying their electric bills it is not enough to make the region attractive to investors.

| by Erik Steen Sorensen

With the exception of Romania's, none of the national electricity markets in southeast Europe is sufficiently large to sustain an efficient and fluid regional market. Most countries are still dominated by one national company, privately or state-owned, which has no interest in promoting trade and competition. To create a regional market, there must be easy access to cross-border interconnections. But that will take time, as traders will have to wait until 2010 for a coordinated auctioning system. For the moment, it seems that the national markets will have to go it alone.

The former Yugoslavia is a case in point. The collapse of the federation in the early 1990s created new political borders – and new electricity borders. From having been self-sufficient and reasonably well-operated, the Yugoslav

electricity sector split into isolated national systems, each having its own generation plants not designed to meet local needs. Furthermore, the electricity links between the individual republics, as well as to other parts of Europe, were insufficient or destroyed.

Since the wars ended in 1999, reconstruction efforts focused on rebuilding this devastated sector, concentrating on three broad groups of activities: re-establishing and strengthening transmission systems and interconnections; upgrading existing power plants and building new ones; and market reform and integration.

Although many countries and organisations contributed to the reconstruction efforts, the World Bank and the European Bank of Reconstruction and Development (EBRD) played a crucial role from the start, later supplemented

by the European Investment Bank. On the political front, the EU-inspired Stability Pact for South Eastern Europe also worked on reconstruction as part of the peace process.

Under the umbrella of the EU Commission, help was channelled through the so-called Athens Process. Countries in the region agreed on overall policy objectives and reform paths. An important political element was accepting the *aquis communautaire* – the EU's internal market rules for gas and electricity. This includes gradual market opening, ending with full liberalisation; third party grid access; unbundling; and regulation. These commitments were formalised in the Energy Community Treaty, which entered into force in 2006. Its signatories include the EU, Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Montenegro,



Dam in Romania. Photo: Adam Woolfitt/Corbis



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Romania, Serbia, Kosovo through UNMIK. In addition, Austria, Greece and Italy participate politically, while the rest of the neighbouring countries play an observer role.

### EU membership |

There is wide variation in the South Eastern European countries with regard to EU ascension. Slovenia has been a full member since 2004, Romania and

for some countries. But the prospect of EU membership has been a carrot for accepting the EU aquis. Another carrot, or perhaps a stick depending on who's looking at it, has been donor coordination, embedded in both the Athens Process and the Energy Community. Bilateral assistance and financing of energy investments by the World Bank, EBRD, and the European Investment Bank are coordinated to secure optimal use of

the exploitation of large power plants, creating opportunities for phasing in more nuclear power and lignite plants instead of gas plants.

While some countries have made legal progress in implementing the EU rules in their internal electricity markets, real implementation is another story. Only EU candidate Croatia comes close to implementing the standards. While all of the Energy Community countries have at least partially opened their markets for the large wholesale users, several countries are still drafting the regulations to make a switch of supplier possible.

The results of EBRD's latest comparative evaluation of reform and restructuring in the electricity sector of South Eastern Europe's transitional economies are not surprising. EU members Romania and Bulgaria, along with next in line Croatia, score the highest. Implementing EU rules for internal electricity markets is, after all, a pre-condition for membership. What is striking is the lack of reform in other countries, particularly in Serbia, Albania, Montenegro, and Bosnia and Herzegovina. And Kosovo, if separated out from Serbia, would score even lower than it already does.

Before the war, Yugoslavia was an integrated

## *There is a long way to go before the region will have a liquid electricity market*

Bulgaria since 2007, and Croatia is on its way to becoming the region's newest member. As for Albania and the rest of the ex-Yugoslav republics, only Macedonia has a reasonably clear schedule for membership.

The Athens Process and the Energy Community reflect fundamental EU policy: all non-EU countries in the region have the prospect of becoming members – and the much-needed energy sector reforms help pave the way for that membership. This 'one size fits all' thinking is challenging

international finance and to put a lid on the ex-Yugoslav republics competing for international funding for their favourite national projects.

Investment needs are colossal. According to a World Bank study, South Eastern Europe needs about 16 GW of new generation capacity by 2020 if the countries act independently. If they act as a single interconnected entity, those needs could be reduced to 11 GW, saving €3 billion. The World Bank study shows that system integration has the advantage of allowing

part of the West European synchronous electricity system. In 1991, it became disconnected from the rest of Europe. After the political situation normalized, the international community helped reconstruct damaged high voltage lines and other destroyed infrastructure. It also financed new lines and interconnections. The region was reconnected to Europe in 2004, after HEP constructed lines and substations in Croatia (in late 2003) and work was completed in Bosnia-Herzegovina

must. The EU Commission and national regulators have acknowledged the efficiency of some regional approaches over others. It's clear that 'one size does not fit all'. Among the EU countries with the most developed markets, the current trend is to use implicit capacity auctions at cross-border interconnections, as has been done for many years within the Scandinavian ("NordPool") region and, more recently, between the German market and the NordPool area. A variant

the guidance of the Energy Community Secretariat, a coordinated auctioning office is being created (targeted for 2010) for the Energy Community countries. 'Dry runs' of coordinated auctions are now being held.

Still, there is a long way to go before the region will have a liquid electricity market. Currently, the area's most important energy exchange is OPCOM in Romania. It offers a day-ahead market and one for bilateral contracts. In addition, green certificates are traded. Slovenia, on the other hand, has a relatively small market. Since 2004 Borzen, the Slovenian spot electricity exchange, has worked on establishing a genuine South Eastern European market, the BSP Regional Energy Exchange, or "SouthPool". The SouthPool project is a joint venture with Eurex, an important derivatives exchange and clearing house, which is jointly operated by Deutsche Börse and SIX Swiss Exchange. Initially, Borzen will hold a stake of 51 percent, Eurex 49 percent. The financial sector's interest in developing an electricity pool for South Eastern Europe is a positive sign, but there seems to be a long way to go before a launch. When the joint venture was announced, Damjan Stanek, CEO of Borzen said, 'Together with the partners from the region and our well-known partner Eurex, we have the vision to unify the fragmented market and to create a neutral, regional cross-border energy exchange with one electronic platform, structure and operation.' Perhaps, but not in the near future. ■

## Only EU candidate Croatia comes close to implementing EU standards

(in 2004). For Romania and Bulgaria, it took 10 years of technical and organisational preparations before their electricity systems were deemed to be in compliance with all UCTE (Union for the Co-ordination of Transmission of Electricity) criteria, allowing parallel operation with the rest of the UCTE.

### Bottlenecking

Creating these physical connections is a major achievement and a pre-condition for a genuine regional electricity market. But in South Eastern Europe, as in most other parts of Europe, cross-border interconnections are bottlenecked. This requires that system operators (TSOs) offer capacity allocation mechanisms. The EU mandates that scarce capacities be allocated between participants using market-based principles instead of administrative mechanisms such as 'first-come-first-serve' or 'pro rata' allocations. In recent years, many countries have been moving towards the use of explicit auctions for cross border capacities, though a few have not. The countries most advanced in the reform process (Romania, Bulgaria and Croatia) organise auctions with transparent bidding rounds. But in several other countries, there is a lack of transparency, and secondary capacity markets are often not available.

Regional coordination of the South Eastern European auctioning systems is a

of this 'market splitting' system is also being used to handle bottlenecks between France, Belgium and the Netherlands.

In regions where markets lack liquidity, an intermediate solution is to closely coordinate the national auctioning systems. This is done by system operators in North East Europe, who have agreed to coordinate auctions of cross-border transmission capacities. The cross-border capacities of Eon Netz and Vattenfall Europe Transmission on the German side, and their neighbours CEPS (Czech Republic), PSE-Operator (Poland), and SEPS (Slovenia) in the east, are allocated in auctions organized by a common Auction Office. System operators in the South Eastern European countries, together with the EU, are moving in the same direction. Under

## Who is Erik Steen Sorensen?

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