

Mixed prospects for nuclear in South-Eastern Europe

There are many plans for the expansion of nuclear power production in south-eastern Europe, but also just as many obstacles. 'Most countries have not looked into the details yet.'

| by Ioannis Michaletos

The Greek public, traditionally strongly opposed to nuclear power, is getting increasingly worried about the plans for new nuclear capacity in their neighbouring countries. The leftist Greek member of the European Parliament, Dimitros Papadimoulis, has asked the European Commission for information on its and the EU's position 'with respect to these developments'. GUE/NGL, the leftist bloc in the Parliament, has lodged a complaint about 'the nuclear ring in which Greece could find itself with the construction of nuclear reactors in its neighbouring countries'. The Commission replied that 'every member state is free to use nuclear energy or not as it sees fit'.

Various countries in south-eastern Europe have more or less far-reaching plans to expand nuclear capacity. The region is headed for production capacity shortages.

Public opinion is dead set against nuclear power

It has little oil or natural gas. There is the climate problem. All of this has led to the prospect of a 'nuclear revival'. Luis Echavarri, Director-General of the OECD Nuclear Energy says, 'The basic reason why countries in the region seek to produce nuclear energy is the steep global

rise in energy prices in combination with a highly increased demand.'

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Bulgaria is furthest ahead. The Kozloduy nuclear power plant operated four nuclear reactors until the end of 2006, when two of them were shut down. To make up for the loss, Bulgaria signed a 4 billion agreement at the beginning of 2008 for the construction of a nuclear energy plant in the Belene area. The project, which has been approved by the EC, will be realised by Russian Atomstroyexport in cooperation with French-German Carsib, a consortium of Areva and Siemens. The plant will have two reactors with a capacity of 1,000 MW each. It is scheduled to commence operations by the end of 2013. According to the Bulgarian Ministry of Finance, 'the cost of the energy to be produced will be 0.036 to 0.037 per kWh.'

Romania also has plans for the expansion of nuclear power. The Romanian state is making preparations to build two additional reactors in its nuclear power plant, Cerna Voda. The electricity company Transelectrica estimates that 'energy production from the plant can be tripled by 2015'. The company does not rule out the possibility of the construction of a new plant after 2020.

In other south-eastern European countries, there is talk of increasing nuclear power but so far very few concrete plans. The

Croatian President, Stjepan Mesi, referred in February to the necessity of constructing a nuclear power plant. The Croatian national electricity company (HEP) owns 50% of the shares of the Krško nuclear plant in Slovenia, the power output of which is shared equally between the two countries.

The Albanian Prime Minister, Sali Berisha, said in November last year that his aim was to make Albania a regional power in the energy sector, supplying its Balkan neighbours and Italy with cheap electrical power from a nuclear plant scheduled to be built near the city of Durres. Currently over 80% of the electrical power consumed in Albania is generated in three aging hydro-electrical plants in the north of the country. Without a significant investment in the energy sector, Albania will not be in a position to retain its current high level of economic growth. Berisha said 'a major French company' was interested in the construction of a nuclear power plant in northern Albania. According to Stavri Markos, a journalist in Tirana, 'this announcement has not yet been corroborated.'

Officially, Greece is not considering the option of nuclear energy production. Even so, rumours abound. Energy analyst Haris Floudopoulos said in January that the Greek Public Power Corporation 'has immediate plans for the construction of a nuclear plant in the area of Thrace'. This



Nuclear Power Plant in Kozloduy, Bulgaria. Photo: Robert Wallis/Corbis

is an area with a low risk of earthquakes and large water pumping units. The Ministry of Development replies that 'there is currently no such intention'. There is no law in Greece that prohibits the construction and operation of nuclear plants, but public opinion is dead set against nuclear power. The former head of the alternative energy division of the national electricity company, Giorgos Karagellos, says, 'Over the last forty years, there have been at least four attempts at introducing nuclear energy production to the country. In the end, political arguments and the fear of potential earthquakes in the country always ended these discussions.'

Environmental organisations in the region are mobilising their forces against the nuclear energy revival. The President of the NGO Mediterranean No Nuclear Neighbourhood, Thanassis Anapolitano, believes that 'nuclear energy is not cheap, nor safe, nor green. Moreover, the geopolitical instability of the region and the high risk of earthquakes are two significant grounds for objection.' Aliko Stefanou of the private environmental organisation Oikologiki Paremvasi states that 'the Balkans are united against the use of nuclear energy'.

But there are other obstacles as well. Ulrik Stridbaek, Senior Policy Advisor, Electricity Markets, of the International Energy Agency (IEA), says, 'relatively small

countries such as Albania and Croatia do not have the capability to develop nuclear power plants. They do not have the know-how and cannot guarantee adequate

Slav Slavov, World Energy Council Manager for Europe, is more optimistic about the chances of the nuclear renaissance. 'This is the best time for

This is the best time for the development of nuclear plants in South-Eastern Europe

safety conditions.' Romania and Bulgaria do meet the conditions, he says, 'but it cannot be overstated that the approval of the population is a deciding factor for the construction of such plants'.

Further, Stridbaek points out that 'the construction of a nuclear plant takes up to ten years and can therefore not be expected to cover any short term needs. These plants require specialised personnel and there is the issue of integration between the existing networks and the new plants. But these countries are not looking into the details yet.'

Optimistic |

Luis Echavarri similarly emphasises the inability of small countries to overcome the challenges, and does not believe they should even try. Conversely, 'Bulgaria and Romania do have the capability and the OECD considers their plans a highly positive development,' he says. He is very sceptical of the plans of the other countries.

the development of nuclear plants in south-eastern Europe,' he says. 'Even countries that are traditionally opposed to using nuclear energy, like Austria, have largely revised their positions now.' Theodoros Tsakiris, a security energy analyst at the IENE institute, thinks that the additional capacity in Bulgaria will 'establish Bulgaria as a major exporter of electricity in south-eastern Europe'.

Nikos Katsaros, Research Manager of the radioactive materials division of the Democritus Nuclear Research Centre in Greece, says, 'The main concern if we do decide to build these plants is that we install automated safety systems, especially considering the risk of earthquakes.' That the government of the Republic of Macedonia is considering getting involved in nuclear energy has Katsaros worried. 'They do not have the required technology. If they go through with their plans, Greece must immediately appeal to the International Atomic Energy Agency.' ■