

GREEK-ALBANIAN COOPERATION IN THE ENERGY SECTOR

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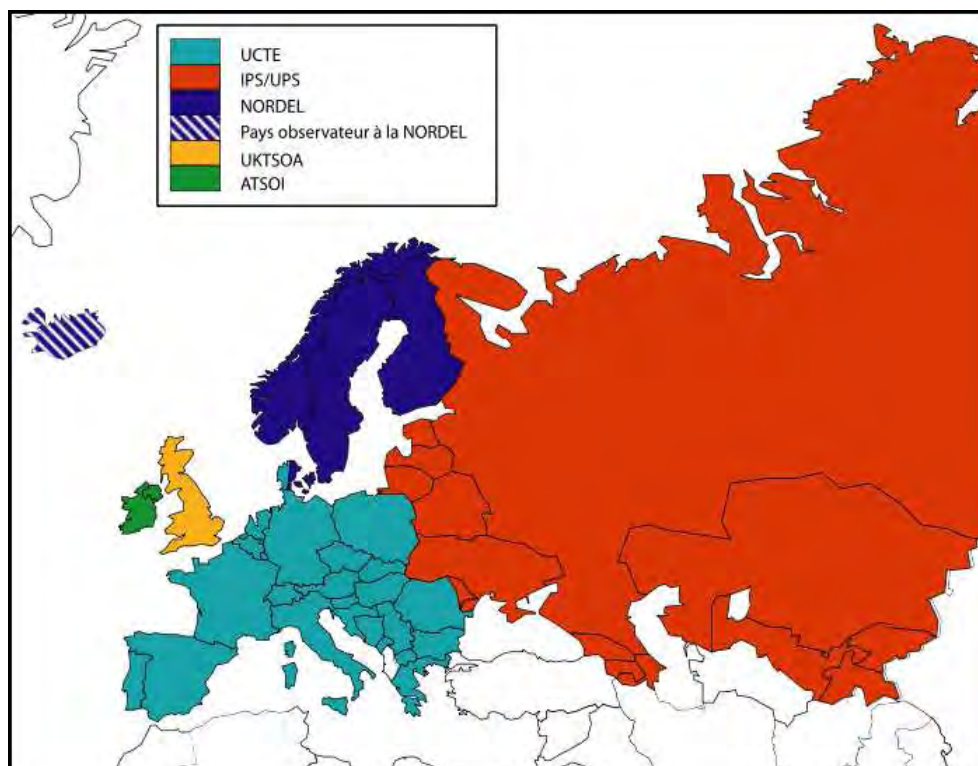
ELECTRICITY TRANSMISSION PROJECTS IN THE SEE REGION

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1. General overview

At present, the power systems of South East European (SEE) countries (Albania, Bulgaria, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Greece, Montenegro, Romania, and Serbia including Kosovo), operate in parallel and synchronous mode with the UCTE network.

The Turkish system operates independently from both UCTE and IPS/UPS systems. Turkey has applied to become a member of UCTE and recently a study has been carried out investigating this possibility. An islanded operation of a part of the Turkish system (in Babaeski) with the Greek system is now possible, following the commissioning in June 2008 of the new interconnection line between the two countries, until the whole Turkish system is finally accepted to operate in full synchronous mode with UCTE.



Regarding the synchronization of the Turkish power system with the UCTE power system we note that the complementary technical studies to that effect have been performed from 11/2005 up to 3/2007. They were followed by the presentation to the UCTE Steering

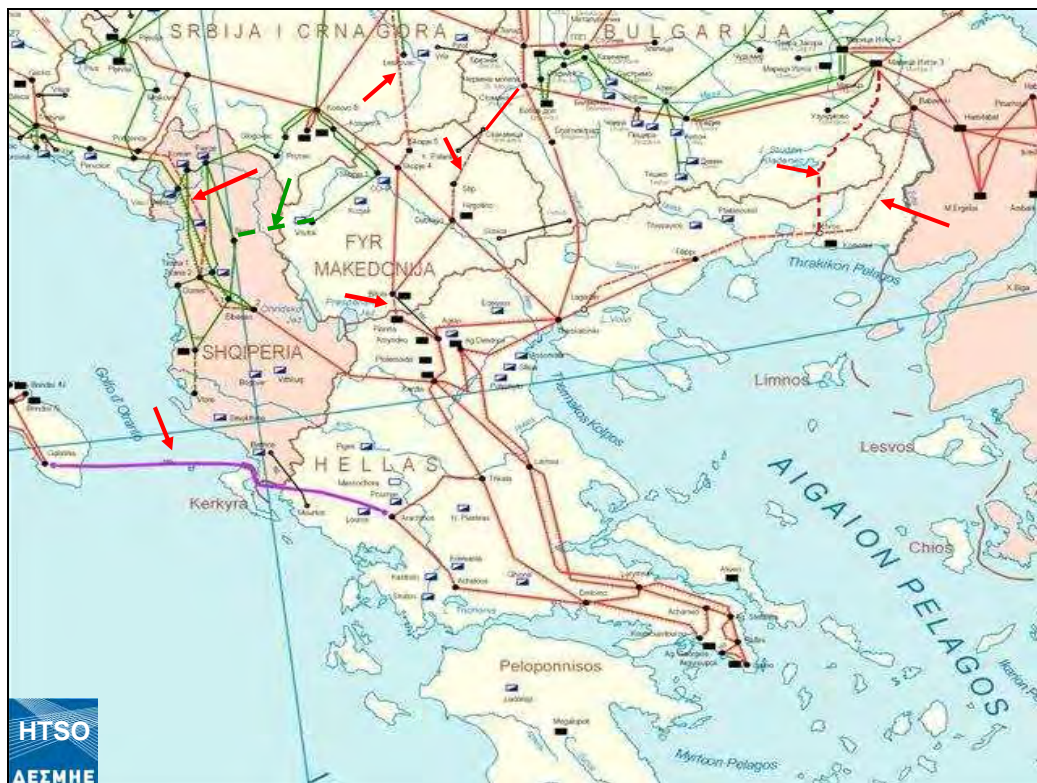
Committee of a catalog of technical measures to be taken by the Turkish TSO. Assuming the Turkish side applies these measures promptly, a test synchronization period is foreseen before the definitive synchronization. Consequently we can probably expect that the Turkish power system will be synchronously connected to the UCTE power system in a couple of years (~2010) and that the power exchanges with the Turkish power system will take place only within the UCTE power system.

2. Infrastructure

It is obvious that infrastructure across the borders is an important prerequisite for an integration of the electricity markets of the SEE region. Improving the infrastructure can increase the security of supply and contribute to a better environment and increased competitiveness. For these reasons supporting of investments in infrastructure is sine qua non.

Another prerequisite for the successful integration of the electricity systems of our Region is the development of national system operators and regulatory authorities, independent of commercial interests. The operation of the system is one of the key functions in a common electricity market. The system operators are responsible for the security of supply and the reliability and efficiency of the electricity system in a given area and its inter-connectors with other systems.

The collaboration and co-ordination between systems operators is a third sine qua non prerequisite for the development of systems linked together by means of one or more inter-connectors.



The existing transmission lines and interconnections among the national power systems of the SEE region permit transactions ranging from 250 MW to 1600 MW, depending on the origin, destination, path, and time period. However, they are not always sufficient to cover the respective power transfer needs. Lack of interconnections between Albania with either the Former Yugoslav Republic of Macedonia (**Vrutok-Burrel**), or Monte Negro

(**Podgorica-Tirana**), is considered to be a serious obstacle limiting trade in the region because it impedes the bilateral energy exchanges and thus the development of electricity transactions between the aforementioned countries. The importance of the Adriatic interconnection line, i.e. the interconnection line **Elbasan-Tirana-Podgorica**, and the interconnection of the **Former Yugoslav Republic of Macedonia with Nis (Serbia)** are some examples of important interconnections within SEE that have to be implemented in order to enhance trade in the region.

3. New generating capacity

It must be emphasized here that interconnections should not be used as a substitute to missing generating capacity. Interconnections are useful to increase trade opportunities and to secure a high level of reliability of the interconnected systems. As shown in the following figure, the countries having surplus of generating capacity export significant amounts of energy to countries in deficit. Both Albania and Greece are presently in deficit. There is nothing wrong with this per se, but it cannot go on for ever. Therefore it is recommended that new generating capacity is needed in those countries that do not have enough generation to satisfy their own needs.



4. Energy Community

Achieving electricity market integration requires political agreement, as well as technical common understanding of the best ways of interconnection of networks and markets. For this reason, geographically gradual progress in integration across a region appears a pragmatic way to approach these objectives. This idea has led to the creation of what has been called **Energy Community** in SEE. The Treaty establishing the **Energy Community** was signed on the 25th of October 2005 in Athens and was set in force as of July 1st, 2006.

The Energy Community has as its task to organize the relations between the Parties, to harmonize network access rules, to facilitate Cross Border Trading, to mitigate congestion problems that impede free trade, and at the same time to secure the operation of the interconnected systems and create a legal and economic framework in relation to **Energy**. The main goals are to create a stable and regulatory market framework capable of attracting investment; to create a single regulatory space for trade; to enhance security of supply; to improve the environmental situation and to develop electricity and gas market competition on a broader geographical scale in accordance with EU Directives 2003/54 and 2003/55 for electricity and gas respectively.

5. Towards the development of a regional electricity market

The establishment of a regional market in SEE is expected to have immediate positive effects in system reliability, economies of scale in planning, constructing and operating generation and transmission systems, increase system efficiency and encourage inflow of private capital.

However, the development of a regional electricity market is a project far more complicated than the liberalization of a national electricity market. The project is even more difficult and challenging in the region of the SEE countries, for, in this case, one must take into account the following important issues:

- ◆ The SEE region consists of countries with various national, religious and cultural origins.
- ◆ Most countries of the region are going through a transition period that involves structural, political, and economic changes.
- ◆ There are many differences among the national power systems of the region, in terms of size, power mix and even load profiles.
- ◆ There are wide variations between the countries in terms of their existing and future internal electricity market structures, the pace at which reform may take place, the changing demand patterns and the fuel supply situation.
- ◆ Pricing mechanisms adopted are, some times, inadequate to encourage long-term investment in new electricity generation capacity. In most cases this is due to the fact that retail prices, as set by governments, are far below the cost of new entry.

Conclusions

It will be a great challenge for the politicians to provide the conditions for consumers to choose their suppliers, and, at the same time to convince them of the need to raise prices up to the level of real costs. The situation is even more difficult in those countries with economies in transition in which the rates of collecting electricity bills are still very low. It is obvious that such obstacles can only be overcome when the economies of the countries converge. And this needs time.

So the question is: *What do we do in the mean time? Do we remain idle?* The answer is definitely **NO!** We believe that, instead of waiting until all SEE countries converge, we can proceed with bilateral agreements to improve our systems and build –e.g. in the form of joint venture projects- new generation plants, that will improve the situation in those countries that are in deficit. Such a procedure will, certainly, accelerate the convergence of the economies of all countries in the region.

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