



4

UCTE ACTION IN THE SOUTH AND EAST OF EUROPE

In early 2001, UCTE assigned a top priority to the re-interconnection of the two UCTE synchronous zones existing since 1991.

In the wake of this action, UCTE committed itself to take all adequate measures to include Romania and Bulgaria as well as the so-called Burshtyn island in West-Ukraine in the reconnection scenario.

The political changes in Eastern Europe that came about in the early nineties earmarked the evolution of a period of radical geopolitical transformations in the broader European region. Based on their motivation for European integration, many countries in the area were seeking interconnection to UCTE, but the long and painful process that led to the emergence of new states in the South-Eastern part of the European continent caused in 1991 serious damages to the high-voltage grid infrastructure at the 400 kV and 220 kV voltage levels.

In April 1996, UCTE had set up a priority list concerning the interconnections in the South-Eastern part of its network: first, completion of trial operation with CENTREL countries; second, re-interconnection of UCTE members in Bosnia-Herzegovina, Yugoslavia and Greece, and third extension of the network to the Bulgarian and the Romanian systems, possibly with the southwest sub-system of Ukraine. Later, the interconnection process for the Turkish system was lined-up in this queue.

After the war damages that caused unavailability of the 400 kV link between Croatia and the Former Republic of Yugoslavia (from *Tumbri station* over *Ernestinovo* to *Mladost*) on the one hand, and the 400 kV link between Croatia, Bosnia-Herzegovina and the Former Republic of Yugoslavia (so-called »Adriatic line« from *Konjsko station*, over *Mostar*, *Gacko* and *Trebinje* to *Podgorica*) on the other hand, UCTE faced the separation of an important part of the synchronous UCTE grid (extending to the networks of Serbia, Montenegro, Former Yugoslav Republic

of Macedonia, Greece, a part of Bosnia-Herzegovina (Republika Srpska) – and indirectly Albania) which had to be operated asynchronously from the remainder of the UCTE system.

This situation had obvious adverse effects primarily on the countries directly affected but also on the European and international community, given the close historical, cultural and economic ties between the countries of Eastern and Western Europe.

However, over the years, the main obstacle for the reconstruction of the infrastructure remained the lack of funds. In fact, the realization of the different projects is strongly linked with the incentives and benefits associated with each particular project. Since UCTE does not intervene in the investment strategy of its members, its role was to assess and support the validity of projects whose implementation was dependent on an active financial support by the European Union and international financial institutions.

In the time following the split-up of the UCTE network, usable parts of the grid infrastructures in the separated area were operated partly at a lower voltage level and were connected with parts of the grid operated at this lower voltage level; thus, the local electric energy supply was resumed but the re-establishment of the full UCTE interconnection was still submitted to the repair of the above mentioned key 400 kV infrastructure.

During that time, UCTE focussed its activities on two axes: continuity and flexibility. <<<



Continuity – Keeping contacts

UCTE maintained active contacts and working structures gathering system operators in both synchronous areas in order to rejoin the full community of system operators in the upgrading and/or the development of new UCTE standards and having them participate in the updating and re-foundation of the association's internal structure. What was at stake in this process was to adequately respond to the upcoming challenges of the liberalized markets in Continental Europe.

Meanwhile, UCTE also intensified its efforts to finalize the interconnection of CENTREL started in September 1995. A 400 kV line between Hungary and Croatia was put into operation in November 1999 which also led to a significant change of operating conditions. <<<

Flexibility - A pragmatic approach

Aiming at a further stabilization of the operating conditions in the separated part of the UCTE network, UCTE was required in 1993 to allow a temporary connection to the second synchronous area of the electric systems of Romania and Bulgaria that is operated today through four lines: *Thessaloniki – Blagoevgrad* (Greece – Bulgaria), *Nis – Sofia* (Former Republic of Yugoslavia – Bulgaria), *Djerdap – Portile de Fier* (Former Republic of Yugoslavia – Romania), *Sandorfalva – Mintia* (Hungary – Romania). The line *Subotica – Sandorfalva* (Former Republic of Yugoslavia – Hungary) is operated in radial mode, but also intended to provide a substantial contribution to improve the operating status after the reconnection of the separated zone.

UCTE recommended to the system operators directly involved to keep running the separated

systems according to UCTE standards in order to prepare and ease the way to their re-integration into the interconnected UCTE system for the benefits of the entire region.

Finally, UCTE responded positively to the request for an additional clamp between CENTREL and Romania through a part of the West-Ukrainian network surrounding the power plant *Burshdyn* and the *Mukachevo* substation, which operates through the links *Kapusany – Mukachevo* (Slovakia – Ukraine), *Sajósöged – Mukachevo* (Hungary – Ukraine), *Rosiori – Mukachevo* (Romania – Ukraine). Finally, the submarine cable Italy – Greece commissioned in mid-2001 was the first new link opened between Greece and the centre of the UCTE network towards what should become a permanent and reliable synchronous interconnection. <<<

