DEVELOPMENTS OF THE UCTE SYNCHRONOUS AREA

For the last fifty years, UCTE has contributed to building one of the largest synchronous interconnected power systems in the world, supplying hundreds of millions of customers in a safe and reliable way.

However, TSOs around the world and in the UCTE system have experienced power outages during the last few years which have had dramatic consequences. This experience confirms that the main focus of UCTE is, must be and will remain the security and adequacy of the interconnected system.



The focus on security applies particularly to the issues of the extension of the UCTE synchronous zone. The effort of UCTE in these matters, as it has been in the process of creation of the present system, is to investigate all possible consequences that an extension may have on the system. UCTE has always pursued its efforts to develop the synchronous area while observing objective criteria and procedures in order to prevent a deterioration of the present level of reliability and stability.

## Turkey

The potential connection of Turkey to the UCTE system through lines between Turkey and Bulgaria and a future line between Turkey and Greece follows the same rules of the UCTE process, i.e. ensuring overall security and reliability. The Terms of Reference of the feasibility study have been finalized and a solution for funding of the study has been found between UCTE, the European Commission and the Turkish Ministry of Energy and Natural Resources.

The Turkish feasibility study will be performed by a consortium of UCTE members led by RWE Transportnetz Strom for the stability study and by HTSO for the loadflow study. The preparation of the contract was well advanced at the end of 2004. The study will last 15 months and is likely to start in mid-2005. In addition to the study, UCTE is reviewing its catalogue of measures in order to define the necessary provisions on field tests to check the behaviour of the Turkish electric system.

## Tunisia-Libya

The closure of the 220 kV lines between Tunisia and Libya would lead to the connection of the following five countries: Libya, Egypt, Jordan, Syria and Lebanon (LEJSL), to the already synchronously connected countries Morocco, Algeria and Tunisia.

Although the total installed capacity of these eight countries represents roughly 40,000 MW only (approx. one third of the French capacity) UCTE pays great attention to the possible impact of this connection on the UCTE system. The main issue is related to potential interarea oscillations between the generators of the two systems.

Taking account of the studies already implemented, UCTE decided to proceed to a series of measurements that will help UCTE to take a decision. These measurements, first on the LEJSL system alone, are in preparation and could start in mid-2005. After a two-month campaign, UCTE will decide whether a second threeday measurement campaign with the link closed can be envisaged. The in-depth analysis of the results will help to define the final UCTE position on this issue.

As regards these two projects, UCTE is following the process that is imperative to keep reliability and stability of the whole system at the high quality level known. As the most recent developments of the UCTE system have shown, this attitude is beneficial to all grid users, both on the UCTE side and on the applicant side. <<<