



UCTE LIFE

EDITORIAL

Preparation of electrical integration of Turkey has started

A major study on the possible electrical integration of Turkey into Europe was kicked-off on 28 September 2005 in Brussels after several years of preparation of the project. The study will be performed by UCTE as the body in charge of assessing any extension of the interconnected system. It is actively supported and financed by the European Commission. This project is of major political importance, especially in the light of intensive political debates both within Europe and in Turkey on the country's political and economic integration.

This study is fully in line with the EU policy enlarging the Internal Electricity Market beyond the perimeter of the European Union.

This project will investigate the technical conditions enabling a future synchronous interconnection of the electricity transmission systems of UCTE and Turkey to be realized. The physical interconnection of the European synchronous interconnected electrical system via the interconnection lines with Bulgaria and Greece would mean a further step towards the integration of neighboring electricity markets with the Internal Electricity Market of the European Union.

The aim of the project is to investigate and identify, from the system security point of view, all technical challenges and solutions related to a future synchronous operation.

This requires:

- determination of the conditions for system stability of the entire UCTE system in the event of contingencies
- determination of the power exchange capacity between Turkey and the UCTE system
- identification of any technical risks and possible counter-measures to be proposed (if necessary)
- capability of UCTE to monitor the Turkish power system as required by the UCTE procedures.

UCTE delegates the implementation of the study to an Association of UCTE members - RWE TSO (Germany) and HTSO (Greece) being the leaders of the investigations together with E.ON Netz (Germany), HEP (Croatia), NEK (Bulgaria) and RTE (France). TEIAS - the transmission system operator of Turkey - will play an active role in the study by providing certain data and specific knowledge of the Turkish power system. The results of the study are planned to be available at the beginning of 2007.

The Turkish power system is currently not set up for synchronous operations with other countries, but there are many interconnections such as to Azerbaijan, Armenia, Bulgaria, Georgia, Iran, Iraq and Syria.

Turkey's rapid growth in electricity demand, which has led to almost a doubling of installed generating capacity over the past decade, is expected to continue for the foreseeable future. This could lead to building a total installed generating capacity of as much as 65,000 MW by 2010. In order to cover the future peak-demand of electricity, synchronous operation of the Turkish and UCTE systems would be helpful from a system adequacy point of view, and would integrate "electrical" Turkey into a market of more than 500 million electricity consumers.



MEMBER NEWS

UCTE AGENDA

UCTE STEERING COMMITTEES

November 22, 2005 in Serbia & Montenegro

January 19, 2006 in Croatia

March 23, 2006 in Slovakia

May 3, 2006 in Austria

June 22, 2006 in France

ASSEMBLY

May 4, 2006 in Austria

Common WG meeting

September 8, 2006 in The Netherlands

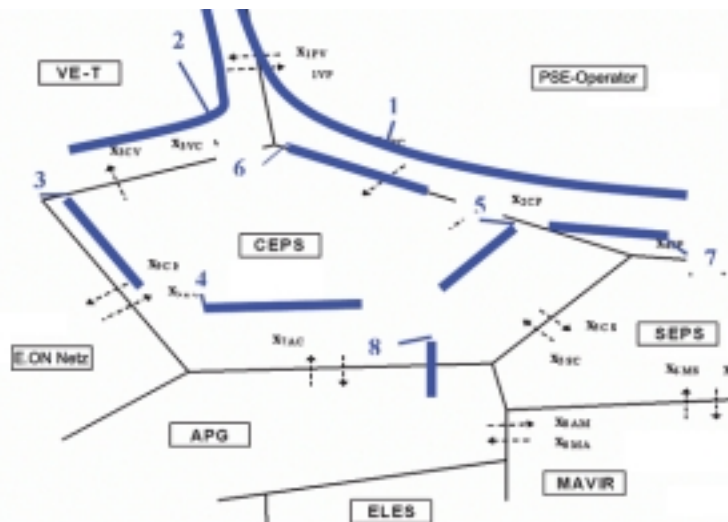
CEPS

Coordinated Auction in the Region of Central-Eastern Europe



At the beginning of 2005 a project of Coordinated Auction started with a participation of CEPS, a.s., PSE-Operator S.A. and Vattenfall Europe Transmission. The capacities on cross-border transmission profiles among those TSOs are explicitly auctioned by the one common Auction Office provided by CEPS, a.s. The Auction Office operates the yearly, the monthly and the daily auction, administers the capacity rights register including the electronic capacity transfers until D-2 (2 days before the business day) on the self-service principles and supports the scheduling data exchange for profiles where this was mutually agreed by the respective TSOs. The daily auctions are operated on e-Business basis via Internet-based e-Trace application. The e-Trace supports the automated data exchange between the TSOs and the Auction Office respecting the ESS standard. This solution has been working efficiently from the beginning of 2005 until now. The main advantage of the coordinated auction is a principle of a technical limit. The technical limit is a set of cross-border profiles which are physically affected; the capacity limits are defined by the respective TSO. Each TSO is responsible for defining its own technical profiles to ensure the operational security.

Currently, we are approaching the 2nd step of the project: E.ON Netz, APG, SEPS and MAVIR TSOs are joining the project and will participate in the coordinated auction starting from 2006. All documents are adopted and completed to be used for 2006 - mainly the Auction Rules which were sent to be discussed by the regulators. The final version of the Auction Rules is expected to be published by the end of October 2005; then the yearly coordinated auction 2006 is expected to take place in the middle of November 2005, and a month later there will be the monthly auction for January 2006. For the configuration proposal of technical profiles, and to imagine the region expected to be covered by the coordinated auction see the attached picture.



Technical profiles configuration of coordinated auction 2006 – working proposal

What are the benefits of the project?

First, coordination within such a scope is a good working experience in transmission capacity allocation in Europe. Coordination in terms of the project means mainly the common clear rules valid for the whole region and all the participating TSOs and auction participants. The principles of coordinated auction allow other TSOs to join easily by creating the respective technical limits. And last but not least, the Auction Office creates one single point for the electricity market where one can get the capacity on a profile in the coordinated region which definitely brings an increase in market operability.

What is supposed to be the next step?

During the project, all participating TSOs discussed the possibility of improving the scheduling process and implementing flow-based methods using the PTDF coefficients as a basis. This is expected to be implemented in 2007. The Slovenian TSO ELES participates in the project and intends to join the coordinated auction during 2007.

For more information visit the official website www.e-trace.biz.

MEMBER NEWS

TenneT

Tennet 

Dutch de-merger Bill: Highlights

The unbundling debate in the Netherlands has entered the next stage by publication of the de-merger Bill, aiming at structurally securing independence of grid management (electricity and gas). The Government wants to achieve maximum transparency and to improve supervision, with the aim of guaranteeing public interest for all consumers. Parliament debate has started.

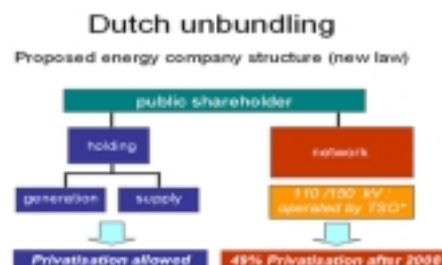
Some main points are given below:

- De-merger will be achieved by a ban for grid managers to form part of a group that also includes supply-, trade- and production companies. In addition, there is a legal ban for grid managers to (directly or indirectly) hold shares in supply-, trade- and production companies, and vice versa. As a consequence of this prohibition, the current integrated energy companies will have to be split into two groups of companies: one for the grid business and another for the supply-, trade- and production companies. Pursuant to the draft Bill, the management of the Dutch TSO, TenneT, will be expanded to the grids of 110 kV and more, thus strengthening the security of supply by bringing the backbone of the supply system under single control. Now 100% state-owned TenneT operates the 220 kV and 380 kV grids.
- The draft Bill ensures the creation of truly independent grid managers. To that effect, the draft Bill stipulates that the grid managers should in principle perform their legal tasks themselves. Only a few tasks may be outsourced: e.g. the performance of maintenance activities and security inspections. The de-merger costs are considered to be normal business risk and will not be compensated.

Privatisation

Immediately after the split, the shareholders (provinces and municipalities) may sell their shares in the commercial companies (production, trade and supply). Privatisation of grid companies shall not be allowed before independent grid management is adequately secured. After this legislation has become effective, the Ministry will initiate regulations allowing (minority) privatisation of network companies. The political debate in Parliament is likely to be finalised early in 2006. The restructuring of companies has to be completed ultimately two years after the legislation entered into force.

* E-law 1998: 220/380 kV operated by TSO



GRTN



Transmission Adequacy in Italy: GRTN power grid development plan

The new plan for the development of the national power transmission grid, yearly approved by GRTN, set up the investments for the development of the high-voltage transmission network in Italy. The highlights of the plan include 3,120 km of new power lines, 57 new electrical stations and 15,250 MVA of additional transforming capacity. The investments to be made in the 2005-2014 period for the implementation of the projects are estimated at about EUR 2.1 billion. The development of the national transmission grid is a priority requirement to provide the country with a secure, modern and efficient power system. GRTN stressed on several occasions the most important problems to be solved: the bottlenecks in the power network and the location of new power plants over the country, two factors that have an impact on the setting of prices in power exchanges. Most of the new power plants are located in grid congested areas and their additional capacity might not be fully exploited. Then the development of transmission lines is the challenge of the future.



GRTN emphasised that, from 1995 to date, the rate of utilisation of the grid has been growing by 25%, due to the obstacles in the construction of new transmission lines and the constant increase in Italian electricity consumption. The GRTN transmission grid development plan includes the realisation of 160 projects in the period 2005-2014, where 16 priority projects will be implemented by 2009 including the priority 380 kV Udine-Okroglo interconnection line between Italy and Slovenia. In a shorter time frame, the projects already under way whose completion is scheduled by 2006 are

- 380 kV Rizziconi-Laino power line (Calabria),
- 380 kV Turbigo-Rho power line (Lombardia)
- 380 kV Matera-Santa Sofia power line (between Puglia and Campania)
- the new submarine cable link between Sardegna and Corsica
- the upgrade of the power grid in northern Sardegna.

First results show that after 10 years Italy has started again to build up the network: most of the projects scheduled for 2004 have been completed, with an addition of almost 240 km of new lines.

MEMBER NEWS

REN



Portuguese Transmission Grid withstands forest fires

Last summer, terrible forest fires broke out especially in the centre and in the northern regions of Portugal due to a continuous succession of years with very few rain and high temperatures. Irrespective of the fact that more than twenty extensive simultaneous fires have been raging for days, there has not been a very significant impact on the electricity transmission grid. In general, the grid resisted well suffering only minor damages in marking accessories (spheres installed on cables) for aerial traffic, in bird signing devices and in the fibres of an OPGW cable.

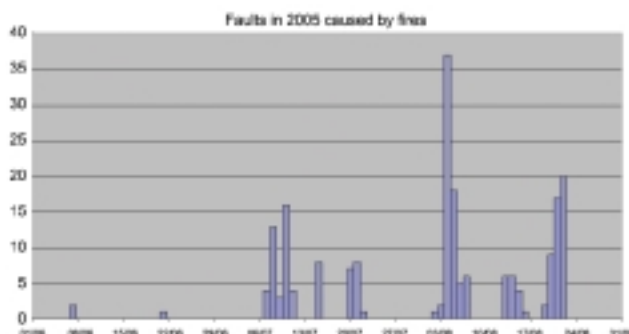
The amount needed to repair the aforementioned damages and to restore poles' anticorrosive protection (galvanization or paint job) and to clean insulators is estimated by REN at 200,000 Euros. But this value seems insignificant when compared to the damages which the fire caused to the population.

To face this catastrophe that has been devastating the country during the past few years, REN reinforced its supervision means for power lines located in the regions most affected by fires. Prevention teams, available 24 hours a day, were created with the aim of rapidly reaching the zones affected, identifying the endangered lines and subsequently establish the link between the firemen on the ground and the Operation Center in Vermoim which is able to disconnect the power lines by remote control, if necessary, in order to ensure a secure fight against fire and to reconnect them as soon as fire conditions allow to do so.

During the summer season, Line Conservation Department teams, from REN's Operation Division, made 68 interventions on the Operation Centre's request, and covered more than 11,000 kilometres by car.

Regardless of their low impact on the network, fires caused 201 short-circuits from 1 June to 31 August. This number is six times bigger than in 2004 and twice bigger than in 2003.

The following graph shows the number of short-circuits in June, July and August.



The worst days were:

- 08 July - 13 short-circuits
- 10 July - 16 short-circuits
- 04 August - 37 short-circuits
- 05 August - 18 short-circuits
- 21 August - 17 short-circuits
- 22 August - 20 short-circuits

During the most critical days, REN had two, and in some cases, three lines simultaneously out of service in the same geographical area, which disturbed the network's performance caused by the loss of the usual n-1 circuits redundancy. On August 21, due to the fires in the Coimbra surroundings, almost all the lines that connect to the Pereiros' substation were affected.



The Portuguese network is designed in such a way that each delivery point is supplied by at least two power lines, thus avoiding that the breakdown of one line leads to an interruption of consumption. There are, though, a few exceptions such as Mogofores in the north that is supplied by one single power line. Due to fires that affected the network lines in that area, Mogofores suffered four blackouts during this period. These were all faults of short duration once alternative lines entered into service to restore supply according to the co-operation plan established with the distribution Company.

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