



WORKGROUP COORDINATED PLANNING

During the year 2008 major progresses have been made in the improvement of the coordination of planning activities between TSOs. These improvements have been materialized by the first release of the UCTE Transmission plan and by the completion of the common data basis for network planning studies. Works on system adequacy have been continued with the release of the System Adequacy Forecast and System adequacy retrospect reports. In addition preparatory works in order to change the current UCTE data exchange format to a CIM-based format have been undertaken; these developments will improve the flexibility of data exchanges and allow for more detailed modelling in planning studies

Release of UCTE First Transmission Development Plan (June 2008)

For the first time UCTE has released a UCTE Transmission Development Plan. This document is a survey of investments in the transmission grid that UCTE TSOs have either approved or are considering. It has been prepared on the basis of the inputs provided by the TSOs in the different regional for a.

Most of those investments have already been presented in the TSOs' respective Transmission Development Plans. The document provides a detailed list of cross-border investments and an overview of the internal investments forecasted in each country.

It is obvious that in order to meet the European energy policy objectives, the transmission grid must be developed while maximizing security and allowing an efficient use of the generation and by this way minimise total cost(from generation to retail).

Grid development is influenced by two interrelated parameters: consumption and generation. If consumption is expected to follow a rather low growth rate as a result of improved energy efficiency, generation

is affected by major changes resulting from the development of renewable energy sources and the renewal of the oldest thermal plants.

It results that the projects already submitted to the TSOs over the next 10 years should result in a net increase (including expected decommissioning of existing plants) of installed generation capacity in UCTE of approximately 220 GW (including 80 GW of wind power).

As consumption over the same period is forecasted to increase by only approximately 90 GW, it results that part of the generation projects should not be realised, that creates high uncertainties in the identification of future network development needs.

Globally, this means that UCTE TSOs should dedicate a total investment of around 17 000 M€ to the development of interconnections and the main internal transmission grid over the coming 5 years. Remarkable is that most of these projects refer to overhead lines. If due to external pressure, a more extensive use of underground cables would have to be considered, the investment costs would dramatically increase.

The materials gathered in this report, especially the status of the main cross border transmission projects will be regularly updated in order to make a real monitoring of these projects.

SAF (2009–2020)

UCTE has published its annual report on the future reliability of the synchronous power system. The UCTE System Adequacy Forecast report aims at providing all players of the European power market with an overview of generation and demand in the UCTE system by 2020, assessing the ability of the power system to supply electricity in standard and in most of the situations (system adequacy), for individual countries, Regional Blocks and UCTE as a whole, stressing the role of transmission capacities.

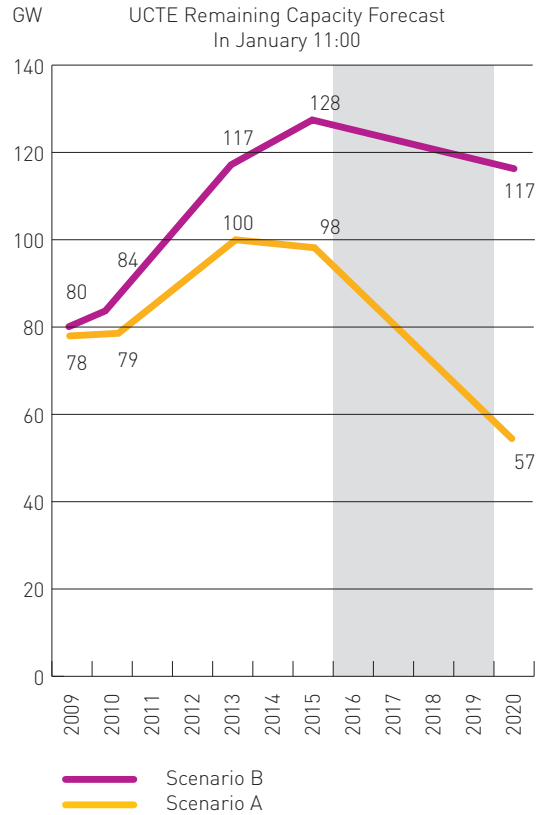
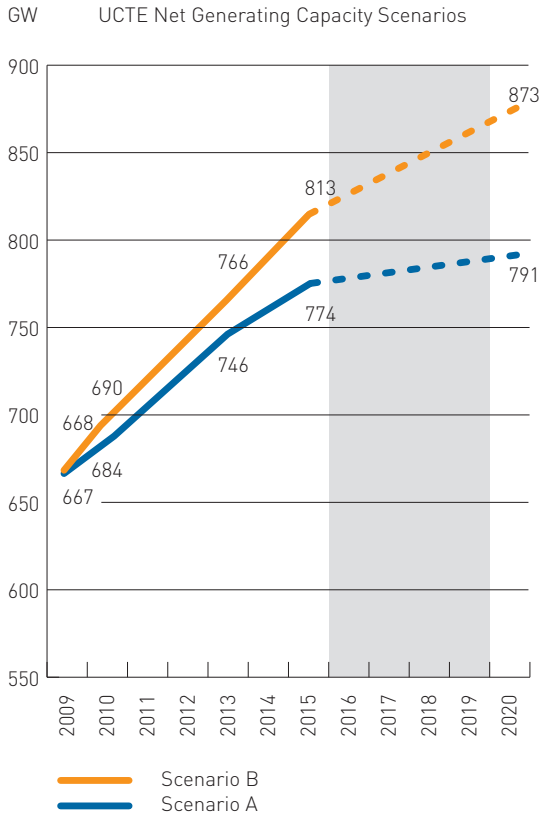
The main outcome of the "System Adequacy Forecast 2009-2020" is that investment in generating means is more than required to sustain the present level of power system security, even with the growing importance of Load Management.

UCTE countries need to go on investing in electricity generation to face a consumption growth of 1.6 % on average: in order to maintain generation adequacy in most situations in 2020 at the required level, more than 20 GW of additional investments in generating capacity will have to be confirmed and commissioned before 2020 (or even 56 GW to maintain it at the 2009 level).

The comparison of Remaining Capacity and Adequacy reference Margin shows that generation adequacy of the UCTE system should not be at risk up to 2015 in any generation scenario and in 99 % of the situations. However 2015 could mark a temporary peak of capacity as 2016-2019 is a period of uncertainties where decommissioning of older fossil fuel fired power plants could be carried out as a result of increased requirements on emission limitations.

Moreover the analysis of the adequacy per regional block shows, as observed in the UCTE Transmission Plan, that the sum of the generating capacities in the five regional blocks is globally higher than the UCTE forecasted consumption. So one can reasonably expect some market adjustments to make the investment profitable and thus reach a level of adequacy not so high as forecasted in this report. These adjustments may be sped up by the recent economic and financial context, keeping in mind that data was collected before mid-September at a time where there was no clear assessment of the impact of the crisis on the economic activity and its consequences on the electricity consumption as well as on the investments in new generation capacity. These likely adjustments in generation investment policies should lead to stress the role of interconnectors between regional blocks.

Moreover, it is not possible to tell whether the reported trends actually match the EU "20-20-20" targets or not: overall energy savings and cuts in CO₂ emissions may result in an increased electric consumption due to transfers from some primary energies to electricity, depending on national policies. Also, specific RES development and CO₂ emissions targets for the electricity sector itself are not yet defined at EU level.



Methodological improvements

Provision of 4 network models (Winter & Summer 2013 & 2018) for development studies

Preparing consistent network models for some reference times at the scale of the UCTE system will provide a common reference for the TSOs which will enable to perform common studies at the regional or interregional level in a more efficient manner and with improved quality.

This consistent modelling of the European system allows to focus on specific issues or projects while taking into account their potential influence on the surrounding areas. These base cases also provide a sound basis for further variants and scenarios adapted to future issues.

Launching the migration process from the current UCTE data exchange format to a CIM-based format and setting up the collaboration with CIM users and software providers

This change in the data exchange format aim at providing more flexibility in the content of data exchanged while keeping a common framework whatever the time horizon (operation or planning) and the nature of the studies is concerned.

It will allow to adapt the nature and completeness of data exchanged to the objectives of the study, like an increased information on the generating units which will provide a significant improvement for planning studies.

During the year 2008, the UCTE profiles have been defined and the migration tests with the software providers are organized early 2009.