



INTEGRATION OF RENEWABLES – EWIS PROJECT

In 2008 the 15 electricity Transmission System Operators (TSOs) participating in EWIS have submitted their interim report to the European Commission (EC). The interim report has been approved by the EC and is ready to download from www.wind-integration.org. The EWIS interim report describes the chosen methodologies and study activities now in progress. To fulfill the objectives of the study and to offer recommendations that better facilitate the integration of wind generation in Europe, it is important that the study's activities are relevant to the present situation and that they address the expected future challenges. The interim report seeks to summarize the present context for the study so that stakeholders can offer their views on the suitability of the approach and the priorities which have been identified.

With significant growth in wind generation underway, European TSOs are already active in addressing the issues associated with efficiently accommodating wind onto the transmission networks:

- Establishing direct connections to large wind farms both onshore and offshore.
- Planning the connections and interfaces with increasingly active distribution networks connecting wind generation.
- Reinforcing network pinch-points within and between national networks.
- Participating in market developments, such as establishing intraday markets, market coupling, and forming regional markets.
- Developing balancing arrangements through enhanced control arrangements and commercial mechanisms.
- Developing appropriate grid codes to facilitate large scale wind entry.

TSOs are working with stakeholders to best understand the service required from the transmission networks and to identify and transfer best practice. However, to successfully reach the EU's 2020 targets, TSOs recognise that more initiatives are required. Given the characteristics of wind energy and its interaction with other generation sources, there are particular benefits to TSOs coordinating in order to address wind conditions across Europe. Such coordination can maximise the carbon reduction benefits of wind production by displacing the most carbon intensive energy sources when wind is available. It can also minimise the costs of managing the variability of wind by harnessing diversity and optimising the required flexibility and backup sources. The approach taken by EWIS anticipates that such coordination will be achieved by developing an efficient internal electricity market.

To deliver these developments, a wide consensus and political support is needed. TSOs hope that EWIS will provide a positive and constructive input to the process and look forward to stakeholder feedback on the interim report.

Earlier EWIS work has successfully identified the mitigation methods needed to accommodate renewables in a secure manner onto the existing European transmission network. For the remainder of the study, EWIS is engaged with in-depth and extensive investigations of scenarios representing 2015, where the implementation of measures requiring new investments, control systems and market incentives can be considered. This analysis will permit the implications of the 2020 renewables targets to be assessed. The EWIS Final Report is expected towards the end of 2009.