

TRANSMISSION-01

Modelling wind power for probabilistic transmission planning

BUSINESS NEED

Accurate modelling of wind farm production and demand are required for system development studies to assess future power flows the need for transmission expansion and flexibility services. Improved modelling methods, of which the better modelling of wind power will be a key part, will give stakeholders and Ofgem greater confidence that the investment plans being brought forward are the 'right' ones.

PARTNERS INVOLVED

- SSE: Bless Kuri, Roddy Wilson (SSEN Transmission)
- SP: David Adan, Eric Leavy (SP Energy Network)

THE SOLUTION

Reconstruction of wind power production at existing and planned wind farms based on over 40 years of historic weather data. Development of statistical methods to accurately estimate wind power production at locations where no direct measurements are available, and to integrate large datasets with existing planning tools.

BUSINESS BENEFITS

Next step

Integration of wind power time series into existing planning tools.

“Modelling wind power is important to understand the potential future utilisation of the electricity network and target network investment where it will give most benefit in facilitating the decarbonisation of electricity production”

*Bless Kuri
Head of System Planning and
Investment at SSEN Transmission*

