

Renewables integration in the electricity system. The case of Spain

Spanish electricity system has been a pioneer in the integration of renewables, beginning in the early years of this century a very important and successful deployment of wind generation, accompanied a few years later by the incorporation of solar generation. This incorporation of renewable energy occurs when the Spanish TSO, Red Eléctrica de España, is fully established since 1985, being the first TSO in the world. Red Eléctrica's vision of the electricity system meant that the new renewable energy was incorporated into the system like the rest of the generation, being observable and controllable by the system operator according to its size, and not according to its connection point. This is an important part of the key to success that will allow this year 2023 a renewable close to 50% in a system with much less interconnection with the rest of the continent than the British Isles or the Nordic countries.