

REE Control Center for Renewable Energies

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Abstract

In the last few years, renewable energies have experienced a huge development in Spain; especially, wind energy has become one of the main generation technologies in the Spanish peninsular system, being necessary updates both of the technical requirements and of the economic framework.

This such a large amount of renewable energy also represents a great impact on the ancillary services, especially in the spinning reserves, which must be sized large enough in order to ensure the security of supply, but keeping in mind the economic efficiency and the ecological footprint. The calculation of the required running reserves become even more critical during the off peak-load hours.

All of these challenges are carried out from the control centre of renewable energies (CECRE), a worldwide pioneering initiative to monitor and control these energy resources, with the prime objective of integrate the maximum amount of renewable energy.