red eléctrica

A Redeia company

Press Release

Investments in the Community of Madrid

Red Eléctrica commences construction of the Torrejón de Velasco substation to support high-speed rail power supply, system security, and renewable integration

Red Eléctrica has earmarked €13.5 million to invest in this project to enhance the security of the electrical system, promote territorial cohesion, and support the region's ecological transition.

The substation will improve the supply to the high-speed rail corridor connecting Madrid, Albacete, and the Levante region, one of the busiest for train demand and frequency.

Madrid, 04 September 2025

Red Eléctrica, Redeia's subsidiary responsible for the operation and transmission of electricity in Spain, has commenced construction of the new, 400 kV Torrejón de Velasco substation. This multifunctional installation will serve to bolster the power supply for the high-speed rail corridor towards the Levante, improve system security, and facilitate integration of renewable energies.

Red Eléctrica intends to invest €13.5 million in this project, which includes, in addition to the aforementioned substation, a line connecting it to the existing transmission grid via the Morata-Villaviciosa 400 kV corridor.

The substation comprises nine bays, enabling it to achieve the various objectives of the project. On the one hand, it will supply the Madrid-Albacete-Alicante-Valencia corridor, one of the busiest corridors and a crucial logistical hub for central and eastern Spain. On the other hand, it will continue to support the reliability of the electrical system in the area through the installation of a new reactor. Lastly, it will allow for the integration of new renewable energy sources, helping to advance the ecological transition within the Community of Madrid.

This initiative falls within the 2021-2026 Electrical Planning, approved by the Council of Ministers, and which encompasses other key projects for the region's transmission grid. Among these are the expansions of the Anchuelo, Arroyo de la Vega, Morata, Aena, and Parla substations, already constructed by Red Eléctrica. These enhancements significantly strengthen the transmission grid and facilitate the integration of new renewable energy sources.

