red eléctrica
Una empresa de Redeia

Press release

Red Eléctrica commissions the new link between Ibiza and Formentera six months ahead of schedule

The link will allow 100% of the energy demand of Formentera (the smaller of the two islands) to be covered at all times while guaranteeing the electricity supply under optimum safety and quality conditions, thus representing a giant leap forward in the energy transition on Formentera.

The new inter-island subsea connection between Ibiza and Formentera has represented an investment of 96 million euros.

Ibiza, 9 June 2023

Red Eléctrica, the Redeia company responsible for electricity transmission and the operation of the national electricity system, has successfully commissioned the new submarine electricity link between Ibiza and Formentera six months ahead of schedule. Thus, the new inter-island link is now operational for the summer season, guaranteeing supply under optimum safety and quality conditions in the months of greatest electricity demand in the Balearic Islands and, specifically, on the islands of Ibiza and Formentera.

The development of this infrastructure, which entailed an investment of €96 million, was completed in a record time of 21 months. This is noteworthy if we consider the work stoppages agreed to with the various local island administrations involved, which sought to minimise the impact the works might have on the summer/holiday tourist season - especially considering that this year should show the recovery of tourist activity after the impact on the sector derived from the effects of the COVID-19.

The execution of the project for the new interconnection between the two islands consisted of the enlargement of the existing 132 kV Torrent substation in Santa Eulària on Ibiza, the construction of a new 132 kV substation on Formentera and the underground cable-laying works for the land-based section (5.2 km on Ibiza and 4.8 km on Formentera). Additionally, the project included the laying of a subsea cable section (27.1 km) between the islands that today makes it possible for the islands to be electrically interconnected.

The new subsea cable connecting Ibiza and Formentera is a three-core 132 kV HVAC double circuit link, with each circuit having a transmission capacity of 53 mega-volt amps (MVA). The inter-island connection incorporates fibre optics for the appropriate remote management and real-time operation of the interconnection and its associated facilities. The surplus fibre capacity is also made available to third-party telecommunications carriers

gabinetedeprensa@ree.es
www.ree.es/en> Press office
Tel. +34 91 453 33 33 / 32 81 - +34 91 728 62 17

redeia

to improve connectivity on the islands, a task carried out by Reintel, a Redeia subsidiary that operates as a neutral provider of telecommunications infrastructure in Spain.

Horizontal directional drilling was used for the sea-coast approach of the link and for its connection to the land section. A technique that allows the installation of an underground conduit that avoids land-based obstacles and guarantees a minimum environmental impact, safeguarding the Posidonia oceanica seagrass meadows and other phanerogams in the proximity of the landing points.

The new interconnection between the islands of Ibiza and Formentera will represent a giant leap forward in guaranteeing the electricity supply on both islands, especially in the latter (the smallest island), as it will enable 100% coverage of the demand at all times under safe conditions for the system, thus minimising the need for local generation and, therefore, reducing costs for the system and favouring the energy transition through the equivalent reduction of CO_2 emissions.

At present, all the islands of the Balearic archipelago have an electricity interconnection with each other via at least one 132 kV submarine electricity link, forming a single interconnected electricity system. Furthermore, the Balearic Islands system is connected to the Spanish mainland system, and thus to the European electricity system, via the subsea link with the peninsula (Majorca-Sagunto). This interconnection provides the islands with service quality and security indexes comparable to any Central European country. Most importantly, this new interconnection between the islands and the one with the mainland means savings for the electricity system as a whole of around 100 million euros per year and an annual reduction of 500,000 tonnes of CO_2 emissions.

The development of the infrastructure contemplated in the current Transmission Grid Planning, and specifically the bolstering of the electricity inter-island connections in the Balearic Islands – in addition to the Balearic Islands' submarine electricity connection with the mainland – will provide outstanding benefits to the system as a whole, as it will more than double the current annual savings, with a yearly cost reduction of approximately 149 million euros and an additional reduction in emissions of 905 kT/year of CO_2 in the Balearic Islands derived from a greater presence of renewable energy coming from the mainland system. This reduction is also due to the definitive closure of coal-fired and gas-oil-fired, and, thus, their share in the Island's energy generation mix, and also as a result of the effective reduction in the operation of gas-based thermal generation.

gabinetedeprensa@ree.es
www.ree.es/en > Press office
Tel. +34 91 453 33 33 / 32 81 - +34 91 728 62 17