

Red Eléctrica begins the subsea cable-laying works for the new electricity link between Ibiza and Formentera

The cable laying vessel 'Cable Enterprise' will begin laying the submarine cable tomorrow after carrying out preparatory work in the port of Ibiza

The new link will substantially strengthen the quality and security of the electricity supply, will enable 100% of the demand on Formentera to be covered and will accelerate the energy transition in the Balearic Islands

The cable-laying works are carried out using techniques that ensure the protection of the seabed environment and the safety and integrity of the infrastructure.

Ibiza, 4 January 2023

Red Eléctrica, a company belonging to Redeia, and which is responsible for the operation and transmission of the national electricity system, has begun the cable laying phase for the new submarine electricity link between Ibiza and Formentera. Tomorrow, the cable laying vessel 'Cable Enterprise', owned by Prysmian, is scheduled to begin the laying of the new double submarine electricity circuit between the two islands, which will connect the Torrent substation, in Santa Eulària des Riu, and a new substation built in Formentera, in the Es Ca Marí industrial area. The work will continue until approximately the end of February.

This new interconnection between Ibiza and Formentera will represent a giant leap forward in guaranteeing the electricity supply on both islands, especially Formentera (the smallest of the two), as the new link will always enable 100% coverage of the island's demand under safe conditions for the system. This link will also help to minimise the need for local generation and, therefore, reduce costs for the system. Furthermore, it will contribute to driving the energy transition by reducing CO₂ equivalent emissions.

With a total budget of 96 million euros, the new submarine cable between 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 cable route, which has a total length of approximately 37.1 kilometres, includes a 27.1-kilometre underwater section as well as two land sections, 5.2 kilometres in Ibiza and 4.8 kilometres in Formentera, where the cable is buried underground. The underwater section of the cable will run along the seabed at a maximum depth of 58 metres.

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.

Horizontal directional drilling has been carried out in Sa Punta, located in Talamanca Bay (Ibiza), for a length of 732 metres, and in the area of Penyal des Vi, located between Punta Llarga and Punta Grossa (Formentera), for a length of 529 metres.

The simultaneous laying and protection of the submarine cables are carried out using dynamic positioning systems and remote-controlled vehicles that control and ensure the cable is properly laid and follows the planned route, and by applying techniques that ensure both the protection of the seabed environment as well as the integrity and safety of the infrastructure.

The new link between the two islands is accompanied by the construction of a new 132 kV substation on Formentera and the enlargement of the existing 132 kV substation in Torrent on the island of Ibiza.

The enlargement works on the existing 132 kV Torrent substation consisted of installing and equipping six new substation bays, four with GIS technology (enclosed inside a building) and two with AIS technology (outdoor). Furthermore, four 132 kV reactors, each rated at 9 MVar (Megavolt-Ampere Reactive), have been installed together with all the internal wiring for connections between equipment.

On the island of Formentera, civil works have also been completed on the new 132 kV Formentera substation and the installation and assembly of the substation equipment are currently underway.

The civil works have been completed at both ends of the link and the cable laying process along its land route section has begun.