

The interconnection of all the Balearic Islands, a boost to the energy transition in the archipelago

- The new cable commissioned by Red Eléctrica between Menorca and Majorca has enabled all the islands of the Balearic archipelago to be electrically interconnected, meaning that the entire Balearic Islands electricity system is now also connected to the Spanish peninsula and Europe.
- The coverage of the islands' demand with renewable sources increased from 6.5% to 15% thanks to the contribution of the interconnection with the peninsula, which last year covered nearly 28% of the total demand on the Balearic Islands.
- The commissioning of the link also makes an essential contribution to strengthening the security, stability and quality of Menorca's electricity supply.

Menorca, 13 July 2020

Red Eléctrica de España, as the sole transmission agent and operator of the Spanish electricity system, has successfully completed the electricity interconnection of all the Balearic Islands following the commissioning of the new link between Menorca and Majorca. Now all the islands are interconnected which also means that the Balearic Islands electricity system as a whole is connected with the Spanish mainland and with the European transmission grid. This new milestone represents a great leap forward in the energy transition in the archipelago, which in 2019 increased its demand coverage with renewable sources from 6.5% to 15%, thanks to the contribution of the interconnection with the peninsula.

For the Chairwoman of Red Eléctrica, Ms. Beatriz Corredor, "this is, without doubt, one of the projects in which the Company has put most effort and commitment. Thanks to this new link, Menorca is no longer an electrical island". This was made clear during the institutional ceremony held today in Ciutadella, which puts the finishing touches to so many months of work. The event, with Ms. Corredor, was also attended by the fourth Vice-President and Minister for the Ecological Transition and the Demographic Challenge, Teresa Ribera; the President of the Regional Government of the Balearic Islands, Francina Armengol; the President of the Island Council of Menorca, Susana Mora; the Vice-President and Minister of Energy Transition and Productive Sectors, Juan Pedro Yllanes; and the Mayoress of Ciutadella, Joana Gomila.

The commissioning of this new link is the result of the uninterrupted work carried out since the Council of Ministers declared its public utility on 2 November 2018 and granted the administrative authorisation for its construction. Thus, within a period of 18 months, Red Eléctrica has completed the various phases of the project, even continuing the work during the period of greatest paralysis of the economic and business activity due to the COVID-19 pandemic state of emergency, this was possible as a result of the competent authorities declaring this infrastructure to be essential for the electricity system. The efforts made by Red Eléctrica, in coordination with different administrations, state, Autonomous Community and local administrations, as well as with the state



security forces, have even allowed the originally agreed deadlines to be brought forward in spite of the exceptional nature of the world health emergency.

In the words of the fourth Vice-President of the Spanish Government and Minister for the Ecological Transition and the Demographic Challenge, Ms. Teresa Ribera, "this infrastructure strengthens the quality and security of the electricity supply in Menorca; it immediately reduces the emissions associated with the Balearic Islands' electricity system and prepares the archipelago to move towards a fully renewable future before the middle of the century. In fact, this path has already begun. In 2019, and thanks to the existing interconnection with the peninsula, the archipelago's renewable consumption doubled to 15%".

The President of the Regional Government of the Balearic Islands, Ms. Francina Armengol, thanked both the Spanish Government and Red Eléctrica for their response to speed up the installation of the new infrastructure in collaboration with the other administrations. "The situation required us to act as quickly as possible and meet the deadlines for a project that was very complex from a technical standpoint, and this has been achieved despite the difficulties", said Ms. Armengol. Regarding the new connection, she also highlighted that "In addition to offering security of supply to Menorca, it will give more stability, guarantees and quality to the entire Balearic Islands' electricity system".

For Mr. Juan Pedro Yllanes, Vice President of the Government of the Balearic Islands and Regional Minister for Energy Transition and Productive Sectors, "with this cable the two islands are united in both directions. It provides energy from Majorca to Menorca but also, as soon as the commitment we have to boost renewables is in place, it will allow the surplus produced during the winter days to be transferred to Majorca. Therefore, the cable not only interconnects, but also gives more stability to the two systems and greater guarantee and quality to the electricity supply".

For her part, the Mayoress of Ciutadella, Ms. Joana Gomila, said that "the City Council truly values the commissioning of the electricity link between Menorca and Majorca as it can guarantee the power supply to avoid blackouts like the one that occurred in October 2018. She reiterated the commitment of the City Council to sustainability and the Menorca 2030 Strategy and concluded by emphasising "we are committed to a model based on renewable and clean energy, respectful of the environment and that should ensure the maximum energy autonomy as an island Biosphere Reserve".

REE, committed to the Balearic Islands

This new link is another example of the commitment that Red Eléctrica has been making to Menorca, and the Balearic Islands as a whole, in recent years. With it, the island's transmission grid is sized and prepared to absorb, under safe conditions, a highly significant amount of new renewable generation, also enabling renewable energy developments on the island of Menorca to evacuate generation through the transmission grid.

In this regard, the President of the Island Council of Menorca, Ms. Susana Mora, stated that "the re-installation of this cable interconnection provides and strengthens the security, stability and quality of the electricity supply in Menorca and allows us to continue advancing in our project on Menorca regarding renewable energy and the



decarbonisation process, as this cable will also allow the energy produced on the island to be exported abroad. A key element in our island project, for the 'Menorca 2030 Strategy'".

The 84 million euros invested in this subsea interconnection is in addition to the more than 55.5 million euros that, since 2010, the year in which Red Eléctrica assumed the management of the grid assets in the Balearic Islands, has been allocated to the maintenance of Menorca's electricity system and to adapt it to the best standards: with the installation of new control systems and auxiliary services in 100% of the substations; the renovation of all the line protection systems or the replacement of 66% of the 132 kV towers, among other improvements introduced to provide the electricity grid on Menorca with the necessary levels of warranty, reliability and safety.

With this new infrastructure, the Company is taking a further step forward. For Ms. Beatriz Corredor "we have made a great effort to put at the service of Menorcan society, its citizens, its companies and its services an infrastructure that, at such a significant time as the one we are living after the pandemic, will also be a support for the economic recovery of the archipelago, promoting its energy transition process".

With regard to the Balearic Islands system as a whole, since 2010, Red Eléctrica has invested more than 1 billion euros in its maintenance and development and especially in subsea interconnections. Thanks to these investments, the quality of service in the Balearic Islands is now equivalent to that of the peninsular and European systems. In addition, we have avoided the annual emission of more than 500,000 tonnes of CO₂ into the atmosphere, mainly due to the contribution from the link with the mainland, which last year contributed to covering nearly 28% of the total demand on the Balearic Islands, thus reducing generation in the archipelago. In fact, since 1 January, coal-fired generation has literally disappeared from the Balearic Islands' generation mix in application of European directives.

A technological challenge

The new link between Menorca and Majorca is comprised of a three-core 132 kV submarine-underground cable, weighing about 2,300 tonnes (56.5 kg per metre) which connects the substations of Ciudadela and Cala Mesquida, in Menorca and Majorca, respectively. The underwater route is 41.7 km in length, running at a maximum depth of 86 metres, and the land-based route runs for 12.5 km in Menorca and 742 metres in Majorca. The land sections of the link on both islands are buried underground.

The shore landing points at both ends of the link are carried out by means of horizontal directional drilling, a technique that allows the installation of an underground conduit with absolute control. In this way, it is possible to avoid the obstacles posed by the terrain and guarantee the minimum environmental impact, especially by safeguarding *Posidonia Oceanica* and other phanerogam meadows that are present in both coastal areas where the landing points are located.

In the case of Cala en Bosc, the section for which horizontal directional drilling was used has a total length of 310 metres with a maximum depth of 25 metres, while in the case of Cala Mesquida, it has a length of 800 metres, with an underwater route that runs at a maximum depth of 20 metres and a land-based section of 276 metres under the beach.