

## Red Eléctrica presents the Chira-Soria pumped-storage project following the latest public information process

- The project will increase the penetration rate of renewable energy, reaching an average annual coverage of 51% of the demand in the island of Gran Canaria by 2026, reduce CO<sub>2</sub> emissions by an additional 20% and generate annual savings of 122 million euros for the Canary Islands' electricity system.
- A new alternative route for the connection line is included, which means that no tower is now located in the Nublo II Special Area of Conservation (SAC) and the overhead section that ran through the area of greatest natural beauty, in the area of the dams, has been eliminated.
- The construction of this infrastructure, designed to strengthen the security of the electricity system and move forward with the energy transition, will generate 3,500 jobs on the island.

Las Palmas de Gran Canaria, 22 July 2020

Red Eléctrica, through its Canary Islands subsidiary REINCAN, has presented the improvements incorporated into the construction project of the Chira-Soria pumped-storage hydroelectric power station, based on the results of the latest public information and consultation process. As part of the environmental procedure, the Company has thus begun the final phase of the administrative permitting process to be able to start the construction works as soon as possible.

The project includes the construction of a pumped-storage hydroelectric power station of 200 MW (which represents around 36% of the peak demand of the island of Gran Canaria) and an energy storage capacity of 3.2 GWh, a seawater desalination plant and the associated marine works, as well as the necessary facilities for its connection to the transmission grid.

The new power station will create an infrastructure that will serve the public of Gran Canaria and will promote blue energy by strengthening the water-energy binomial and will integrate the four functions necessary for the sustainable and ecological development of the island as it stores, desalinates, cares for the natural environment as well as using and producing energy while respecting the natural environment.

The benefits it will provide the Canary Islands' electricity system are the following:

- Increased guarantee of supply for Gran Canaria, by increasing the installed power capacity and strengthening the security of the electricity system; elements that are essential for an isolated electricity system, as is the case of the Canary Islands system, in order to reduce the vulnerability of the system as a whole. In addition, in the event of a supply interruption, this facility will help speed up and drastically shorten the service restoration times.
- An increase in the integration of renewable energies, by having an essential facility to take advantage of the surplus of renewable energies and that will help integrate a greater amount of locally produced energy. In 2026, the power station will increase renewable energy production on the island by 37%, over the estimated energy that would be generated without the existence of this facility, would raise the average annual coverage of the demand



using renewable generation to 51%, which at specific times may be much higher. This will lead to an additional reduction in annual CO<sub>2</sub> emissions of 20%.

- Increased energy independence and savings in variable generation costs amounting to 122 million euros per year by reducing imports of more expensive and polluting fossil fuels.

It should be borne in mind that the Integrated National Energy and Climate Plan (NECP) sets a target for 2030 that requires that 74% of the electricity generated nationally come from renewable sources. For the Canary Islands, the NECP establishes that the contribution of fossil fuel power plants in the electricity generation mix in the year 2030 be reduced by at least 50% with respect to the current situation.

In recent years, the archipelago has tripled its installed wind power capacity, which, added to solar photovoltaic power, makes a total of 615 MW. This has meant that the coverage of the demand with renewables has increased from 7.8% in 2017 to 16.5% in 2019.

For this reason, the construction of the Chira-Soria pumped-storage hydroelectric power station will be key to boosting the energy transition in the Canary Islands and helping move towards a new energy model that is safer, more efficient, decarbonised and environmentally friendly.

As a new innovation for the connection line, following the latest public information and consultation process, the project includes an alternative route which has been optimised and aims to protect local heritage and enhance the landscape and local habitats. The new alternative eliminates the overhead section that was going to run through the area of greatest natural beauty by using an underground gallery for the initial section of the 220 kV connection line that leads up to the tunnel mouth, located in the Arguineguín ravine, so that all the infrastructure and electricity lines in the area of the dams are concealed.

Also, 100% of the towers that would have run through the Nublo II rural park/Special Area of Conservation (SAC), in the area of the dams, have been eliminated completely.

Furthermore, the project contemplates several alternatives that will be assessed following environmental procedures until the final solution is approved.

### **Other benefits of the new infrastructure**

The project presented is accompanied by a socio-economic impact study, according to the methodology used by Red Eléctrica based on the implicit activity multipliers obtained in the Input-Output Tables (prepared by the Spanish National Institute of Statistics), which estimates the creation of employment linked to the construction of the plant at 4,366 jobs, of which 3,518 would be generated in Gran Canaria (1,423 direct jobs, 1,987 indirect jobs and 109 induced jobs), contributing to the economic recovery of the Canary Islands in a sustainable manner and in line with the principles of the European Green Deal and the strategic lines and basic principles of the Green Deal for the Social and Economic Reactivation of the Canary Islands.

The execution of the project ensures the water resources for the pumping operation by means of a new new desalination plant in Arguineguín, takes advantage of the capacity of the dams of the Cabildo, especially that of the Soria reservoir. Furthermore, by maintaining surplus water in the reservoirs it contributes to the regeneration of the aquifer system and also represents a much-needed resource in the fight against forest fires, from points of alert to supply points. Similarly, it will be possible to equip it with technology for monitoring adverse atmospheric phenomena.



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In addition, the Chira-Soria plant will make it possible for the island of Gran Canaria to be showcased as a sustainable and safe destination that offers clean energy and improved air quality.

### **Energy storage capacity**

A true energy transition in the Canary Islands, such as the one proposed in the NECP, will require the displacement of renewable generation from periods when there is abundant energy generation to the remainder of the periods when it is scarce, such as at night or the many seasonal periods when there is a lack of wind. In the absence of energy storage capacity, all these periods will continue to be covered by fossil fuel generation and a large part of the renewable energy that could be produced would be wasted.

In this regard, the replacement of thermal generation by renewable generation technologies will only be possible if it is accompanied by a solution involving an increased level of energy storage, such as that offered by the pumped-storage hydroelectric power plant, which provides security of supply and flexibility, regardless of the time bands and weather conditions that determine the availability of wind and solar energy generation.