

## **ENDESA INVESTS 29.5 MILLION EUROS IN OVERHAULING AND MODERNISING ITS AS PONTES COMBINED CYCLE PLANT**

- **280 professionals from forty companies are involved in the work, which will take about sixty days**
- **Various improvements will make the installation more competitive, reducing start-up times and costs to respond to the growth of renewable energies**

**As Pontes, 24 September 2020.-** Endesa is carrying out a scheduled overhaul of its As Pontes combined cycle power plant. The work, which requires an investment of 29.5 million euros, will take sixty days and have a positive effect on employment, as it will provide jobs to about 280 people from outside the company. Taking advantage of the shutdown, the facility will receive a variety of improvements that will give it more reliability and availability.

The As Pontes combined cycle plant has 850 megawatts of installed power. It consumes natural gas from a gas pipeline that connects it with the Mugardos regasification plant in the port of Ferrol. In addition to its contribution to the national electricity supply, it plays a key role in supporting the numerous wind farms installed in the north of Galicia.

Covid-19 presents an added difficulty for this already complex project, as 280 professionals from forty different companies will be working on-site at the same time. Endesa has therefore added a comprehensive list of measures to the usual guidelines on occupational health and safety hazards to prevent coronavirus infection. The work is expected to be completed by the end of November so that the As Pontes combined cycle plant can resume production.

The maintenance tasks include major inspections of the two gas turbines, on which the blades, combustion chambers and other equipment will be changed, in addition to an inspection of the compressors. It is also planned to carry out a minor inspection of the steam turbine, which will be dismantled and the main turbine and bearing valves checked.

In addition, a robotic inspection of the three alternators is scheduled to check the condition of the stator wedges and to conduct a number of trials and verification tests on the three alternators, one for each turbine. The overhaul includes an inspection of the auxiliary equipment: the circulation, closed circuit, open circuit and vacuum pumps and the generator and motor switches, among others. Drones will be used to inspect the inside of the boiler.

Endesa will take advantage of the overhaul to implement a series of improvements with which the plant will increase its reliability and availability. In particular, it will eliminate the option of consuming liquid fuel as a substitute for natural gas in the event of a shortage of the latter, since this has never occurred. Also, such an option would not be environmentally sustainable. The plant control system will also be updated, endowing it with new capabilities to prevent cyberattacks.

In addition, the turbine excitation systems and their static starters will be updated. The steam bypass valves from the turbine to the condenser are also to be redesigned.

Finally, Endesa will incorporate a series of improvements to make the plant more competitive by reducing start-up times and costs. This will result in a gain in flexibility now that the growth of wind energy requires generators capable of absorbing the production gaps that renewable energies cannot cover. For this same reason, a technology will be implemented that allows the steam turbine to be kept hot during short shutdown periods, so that the next start-up will be faster and more efficient.

After this overhaul, the As Pontes combined cycle plant will be fully available to operate for another 24,000 hours.