Engineering Division References
Electrical

Ecointegral Ingeniería

References Electrical Engineering Division

ELECTRICAL SUBSTATIONS

- Framework contract for engineering services for electrical infrastructure projects consisting of Substations in the territorial scope of Castilla la Mancha, Madrid and Castilla León.
- Engineering framework contract for electrical substation projects corresponding to the investment and maintenance plan for the electrical infrastructure in Spain.
- Detailed engineering project of the Cerrato 400 kV Substation. Construction engineering project of civil, electromechanical and protection and control works for a 400 kV extension of the new EvRE position.
- Detailed engineering project for the Perafort 220 kV Substation.
- Construction engineering project of civil, electromechanical and protection and control works for a 220 kV extension of the new EvRE position.
- Detailed engineering project for the 400 kV Montesa Substation.
- Constructive protection and control engineering project for a new EvRE position extension. Preparation of As-Built drawings for civil and electromechanical works
- Basic and executive project administration, and detailed engineering project for the Almudévar Reservoir Dam Substation 132/6.6 kV (Huesca), for the connection of the reversible hydraulic power plant of the Almudévar Reservoir Dam for the production and storage of energy in the municipality of Almudévar (Huesca), through two 25 MVA 132/6.6 kV transformers.
- Constructed surface area 11,574 m2.
- Transmission capacity 50 MVA and rated voltage: 132 kV.
- Basic project, Technical Administrative Project, Construction Project and Protection and Control Project of the San Martin II 45/15 kV Substation.
- MV park shielding. The project consists of shielding the existing 15 kV outdoor wind farm by constructing a new 15 kV cell building with SF6 gas.

- Earthworks, pipelines, manholes, foundations.
- Construction of a new road to connect the old road to the new building.
- Connections between cells and the two existing transformers; connections between cells and the existing 45 kV building.
- Basic project, Technical Administrative Project, Construction Project and Protection and Control Project for the El Olivar 132/45 kV Substation.
- Execution of a 45 kV indoor wind farm.
- 45 kV cells with SF6 gas.
- 132 kV outdoor wind farm composed of two line positions and one transformer position.
- Execution of the 132/45 kV 30 MVA transformer and all the corresponding 132 kV switchgear.
- Basic project, Technical Administrative Project, Construction Project and Project for Protection and Control of the Pantoja 45/15 kV Substation
- MV park shielding. The project consists of shielding the existing 15 kV outdoor wind farm by constructing a new 15 kV cell building with SF6 gas.
- Earthworks, pipelines, manholes, foundations.
- Construction of new road to connect the old road to the new building
- Replacement of T-I transformer with a new 45/15 kV 25 MVA transformer.
- Basic and executive project administration, and detailed engineering project for the Torreluenga 30/220 kV Substation (Seville), for the opening input - output of a 220 kV double circuit line and connection of 4 photovoltaic plants with a combined rated power of 170 MW, through four independent 30/220 kV transformers of 55 MVA each.
- Constructed surface area 10,300 m2.
- Transmission capacity 220 MVA.
- Rated voltage: 220 kV.
- Feasibility study and executive project administration for the modification of the Los Llanos Substation by installing a new 40 MVA transformer and transformer position using HIS technology. Includes modification of medium voltage cell and restoration of access roads.
- Constructed surface area 5,800 m2.
- 40 MVA Transmission Capacity Expansion.
- Rated voltage: 66 kV.

- Basic and executive project administration, detailed engineering project and construction management of the new 220 kV substation with double GIS bar and two new 120 MVA positions for the SEAT megafactory in Martorell, including:
- 2 underground HV lines.
- 1 new transformer park with 2 new 245 kV IA positions and 2 new 120 MVA power transformers with double secondary 220 kV/20- 20 kV.
- 20 kV connections to the 4 power plants that SEAT has inside the megafactory.

POWER LINES

- Briesa - Astillero 220 kV High Voltage Power Line, Technical Administrative Project for the development of 50 kilometres of 220 KV overhead line in the community of Cantabria.
- Josmanil - Torreluenga 220 kV High Voltage Power Line, with a length of 42,302 km and single circuit Lattice type supports. Triplet arrangement, to interconnect the Josmanil 220/66/30 kV PE collector Electrical Substation with the Torreluenga 220/30 kV Electrical Substation.
    - Technical-Administrative Project.
    - Detailed Engineering.
- Torreluenga - Dos Hermanas 220 kV High Voltage Power Line, consisting of two overhead sections and two underground sections for connection to the Dos Hermanas 220 kV Electrical Substation.
    - Technical-Administrative Project.
    - Detailed Engineering.
- Haro - Casafuerte 220 kV Underground High Voltage Power Line, Detailed Engineering and Project Management for Underground Transmission Line.
    - Detailed Engineering.
    - Project management.

- Interconnection between the Perejil and Esparragal Substations, by means of a 132 kV double circuit, with a partially underground and overhead route by means of a double LA-380 conductor. This project is complemented by the Marqués – Morisca – Esparragal 132 kV High Voltage Overhead Line and the Esparragal - Jordana 400 kV High Voltage Overhead Line projects.
    - Layout design and impacts.
    - Executive project.
    - List of Assets and rights affected.
- Garraf and Eliana Wind Clusters Medium Voltage Power Line, consisting of a length of 26 km in underground sections.
    - Preliminary projects.
    - Technical-Administrative Projects.
- Administrative Technical Project, detailed engineering, and administrative support for Los Zancones – Villafranca de los Barros Electrical Substation Medium Voltage FV Line of 15 kV, consisting of two overhead sections and three underground sections.
    - 6.00 MW rated power
    - 2,852.31 m in length
- Layout design and impacts, Technical Administrative Project and reform of Medium Voltage Line between Sábada – Uncastillo – Luesia. The plan is to replace 194 supports, thus improving the service provided to customers and reducing the impact on the local environment. This affects Red Natura 2000 spaces and the area protected by the Bearded Vulture Recovery Plan, classified as Endangered.
    - 30 km of line
    - 68 crossovers and/or parallels
- Layout design and impacts, Technical Administrative Project and administrative support for the Project to change the voltages of the SALVATIERRA, ENAQUESA, GARDE and RONCAL .
    - Reform of 4 complete MV lines, from 10 kV to 15 kV.
    - More than 94 km of lines.
    - 39 TS lines and 44 supports to be adapted.

- Project for the reconstruction of the infrastructure of the Medium Voltage ring closure between the South and North lines of the Island of La Palma, as well as the Medium Voltage network for the evacuation of the new thermal power plant located in the Hermosillas area and the mobile power plant in Las Manchas; both affected by the eruption of the 2021 volcano.

    - Preliminary Technical Study

    - Executive project

    - Processing of permits.

    - Site Management

- Project carried out for a leading group in the Electric Mobility sector. Supply of 3,300 kW in the Province of Teruel. In order to make the supply, there are plans to reform and modify a 20 kV Medium Voltage Overhead Power Line.

    - Uninstallation of 30 supports (5 metal towers and 25 HAV) and 3,148.68 meters of medium voltage overhead line.

    - New installation of 28 new lattice supports and 3,137.36 meters of medium voltage overhead line.