

# Electrical engineering services

Applus+ power engineering services help companies achieve their objectives and meet their budget, quality, planning milestones, execution time, safety, and environmental compliance forecasts. Our electrical engineering services range from electrical consulting, engineering, and testing services of electrical power systems to basic and detailed engineering of all types of electrical installations at all voltage levels, up to 400 kV. We have experts in design, calculations, and topography, as well as the latest-generation technical means and software for the correct performance of our electrical services.



## THE Applus+ SOLUTION

Applus+ electrical power engineers provide studies and projects for new or existing power lines, in high, medium, and low voltage, underground, or overhead, as well as basic engineering and detailed engineering of substations providing comprehensive solutions for conventional, GIS, and hybrid installations.

Our power systems engineering services team carries out all the necessary studies for the correct electrical design of the facilities, from the initial phase of the project to its connection to the network.

We offer electrical studies, training, and technical consulting in the fields of electrical engineering and electrical power systems using the most advanced design programs (TOWER, PLSCAD, AUTOCAD), calculation software (CYPE), and simulation (PSS, ETAP, DIGSILENT, SKM POWER TOOLS). Furthermore, we boast a comprehensive range of classic topography equipment, including classic instruments, GPS, and LiDAR, which our team of expert surveyors utilizes to conduct line and substation topography services.

Substation engineering services include the definition of basic criteria for each installation, and evaluating solutions according to the specific needs of each project. We



also offer technical advice for the definition and acquisition of main equipment, selectivity studies and coordination of electrical protections, start-up protocols, substation layout design, review and verification of basic and detailed engineering, technical specifications, and particular designs.

Power line engineering services include technical-economic feasibility studies, environmental studies, repowering, studies of route alternatives, and modifications of existing routes through PLSCAD modelling based on LiDAR technology. We also offer basic and detailed engineering for overhead and underground lines for voltages up to 400 kV.

On the other hand, we provide a comprehensive MV and LV network engineering service from the study phase or initial report to the commissioning of the installation: Initial technical report, topography, project development, permits and procedures, management and work supervision, safety coordination and management of final work information.

## Target customers

Our power engineering and electrical consultancy services are adapted to each client. We have a team of highly qualified professionals with extensive experience in projects for new construction or reform of electrical infrastructures for both the transmission and distribution networks, electrical infrastructures for the evacuation of renewable energies, and power supply for industrial or railway facilities. We work with all the main companies in the sector, which gives us a clear competitive advantage.

## Key customer benefits

Applus+ counts on electrical power engineers and electrical engineering consultants with wide experience and the ability to manage large-project scale. By partnering with Applus+, our clients can ensure quality, adhere to deadlines, reduce the costs of their projects, and achieve enhanced efficiency in their relations with public administrations.