



# CASE STUDY

## INSPECTION OF **ELECTRIC TRANSMISSION LINES** IN SPAIN

SGS won a public tender issued by the Government of Catalonia and was able to complete the inspection of 550 kilometres of high voltage electric power transmission lines in a span of three months.

### **REGULATORY COMPLIANCE AND CONDITION ASSESSMENT FOR CATALONIA**

Regular inspections ensure the safe use of electrical power and improve the efficiency of electric power transmission. Aside from international standards such as the IEEE standard on power delivery, there are a variety of other requirements, including national standards and regulations.

Every year, the Government of Catalonia arranges independent third-party inspections for a number of power transmission lines to assure that operators are providing appropriate maintenance.

Inspections have to be carried out in accordance with local government regulations which include 29 visual checkpoints. On top, of these statutory terms, the public tender requires 7 additional visual checkpoints and a variety of measurements like contact resistance measurements, step and touch voltage measurement and thermographies.

### **KNOWLEDGE AND EXPERTISE TO ASSURE QUALITY, COST EFFECTIVENESS, SAFETY AND RELIABILITY**

This year, SGS was awarded the contract to inspect 550 kilometres of electric power transmission lines through the mountains of Spain. The power lines are operated by Endesa S.A., currently the largest electric utility company in Spain, with more than ten million customers in Spain and Portugal. Internationally, it serves another ten million consumers and provides over 80,100 GWh of electricity per annum.

SGS proved to have the knowledge and expertise to assure quality, cost effectiveness, safety and reliability throughout the inspection task. All inspections were carried out within three months to the perfect satisfaction of the customer. However, in addition to the ordinary inspections, SGS committed itself to document all pylons with photos, and archived them in a dedicated web tool. As well, daily reports were sent to the Government of Catalonia, detailing the progress of inspections.

“Now we have around 5,000 pictures of pylons and a website with all the field reports. It was not an easy mission for our teams as during the three winter months, we had to deal with rain, cold and snow in the mountains,” added Pere Camprubí i Baiges, project leader in SGS Spain.



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## EXPERTS FOR ELECTRICAL INSTALLATIONS AND FACILITIES

SGS Electrical Installations Certification Services cover the complete life cycle of electrical equipment. In addition to the services during operation such as first-time and periodical inspections, SGS can help in verifying the design of electrical installations and in supervising the construction and installation phase. With the numerous accreditations SGS holds all over the world, we are able to identify conditions that could precede power failures and short circuits in electrical installations and facilities.

**SGS IS THE GLOBAL LEADER AND INNOVATOR IN INSPECTION, VERIFICATION, TESTING AND CERTIFICATION SERVICES. FOUNDED IN 1878, SGS IS RECOGNIZED AS THE GLOBAL BENCHMARK IN QUALITY AND INTEGRITY. WITH OVER 59,000 EMPLOYEES, SGS OPERATES A NETWORK OF OVER 1,000 OFFICES AND LABORATORIES AROUND THE WORLD.**