

Renewable Energies

Renewable-energy services aim to assist clients through all the phases of a renewables project to verify the correct installation of all the elements. Applus+ services support feasibility assessment, project design and development through to the construction of a new site, and these services are delivered in accordance with existing codes and standards, evaluating the status of the working plant and auditing its maintenance process.



THE Applus+ SOLUTION

Feasibility assessment: Met mast set-up and monitoring; Wind and Solar resources assessments (Energy production studies); Geotechnical studies; Preliminary Feasibilities assessments; Policy and Regulatory guidance HSE (SALEM); and Conceptual Design (Pre-Studies: environmental, basic layout, grid connection point, basic project cost budgeting and planning)

Project design and development: Permitting Studies; Conceptual Design; EIA; Grid connection point; Power Quality; Contractual Support (Energy production studies); Request for Proposal and Terms of Reference definition and review; EPC and OMS contracts support, including technical specification and bidding evaluation; Purchase Power Agreement (PPA) and Liquidated Damages consultancy; Policy and Regulatory guidance HSE (SALEM - Environmental Impact Assessment/ Health and Safety plan); and Grid connection studies, Basic and Detailed Engineering, Technical Due Diligence and Independent-Lender Engineering

Construction and commissioning: Owner Engineering Contract (full management level, site management level or technical staffing level); Quality Assurance/Quality Control services; Storage and Logistical Support; Mechanical, Electrical and Civil works construction supervision; Commissioning technical support; EHS services; Vendor Surveillance; and Technical Due Diligence

Operation and Maintenance: Operations; Historical Operation Review (power, alarms, warning, trips, etc.); Plant Performance Ration assessment; Power Performance Analysis (statistical study or under EN 61400-12); Full Wind Turbines and Blade maintenance inspection; Mechanical inspection (gearbox videos-copy inspections, including oil analysis, general overview inspection, steel structures, welds, paint, corrosion); Predictive maintenance (Generator Isolation Dielectric Testing (TGW), transformers / cables / substations and including Relay Protection Systems and Thermography Inspections); Technical Due Diligences and adhoc technical maintenance inspections; and Technical Audits and Technical Forensics

Target customers

This service is aimed at supporting both owners of and investors in renewable-energy assets (wind farms, photovoltaic plants, concentrated solar plants, etc.), protecting their interests during the construction of an asset as well as in operation. It is also of relevance to engineering and construction companies involved in renewables projects, helping them to improve the final result through a focus on quality control.