



Renewable and Sustainable Energy Planning Services

Quanta Technology provides technical and business consulting and planning services:

- Plan for a Sustainable Energy Future
- Renewable and Energy Efficiency Strategic Asset Planning and Management
- Technical and Business Decision Support on Optimal (Renewable) Generation Portfolio
- Addressing Challenges and Opportunities with Increased Penetration Levels
- Renewable Energy Credit and Incentive Management
- Strategic Business Consulting and Business Case Development
- Financing, Asset Owner and Power Purchase Agreements (PPA) Options.
- Carbon Credit Calculations
- SmartGrid and Advanced Metering Infrastructure (AMI) Design and Implementation
- Transmission and Distribution Grid Impact Studies
- Generator Interconnection Studies
- Engineering, Procurement and Construction (EPC) Support Services



Renewable Energy Portfolio Standard Management:

Comprehensive strategic consulting services, utilizing analysis of locally available energy resources that can be utilized in a stand-alone or hybrid nature to fulfill the required renewable energy portfolio standards. Quanta Technology evaluates the renewable energy resources, distributed generation and load, renewable energy technology, existing generation mix, energy storage options, and the transmission and distribution network capacity.

Quanta Technology Analytical Capability:

- Asset management
- System planning, analysis and operations
- Maintenance standards
- Engineering and power quality
- Protection and automation
- Renewable energy portfolio assessment
- Energy efficiency analysis
- Regulatory support and training

Renewable Energy Business Case Development:

Business consulting services assist the client in developing a profitable business case for their renewable energy opportunities. This includes business plan development, partnering and ownership options, financing and Power Purchase Agreements (PPA). Quanta can also help to find the best partnership. Different federal, state, regional and utility specific incentives are clearly used to calculate the return on investment.

Carbon and Emission Calculations:

Quanta Technology provides carbon credit and emission calculations, using specialized tools, for the different renewable and other technologies. These calculations utilize the present mix of power generation technologies and average system heat rates for the different power generation technologies across the different regions of the United States.



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Renewable Energy Design and Analysis. Quanta Technology provides renewable incentive calculations and renewable energy plant production and performance calculations. We also do system designs and application engineering during the planning and construction phases of the renewable energy project.

System Planning and Analysis. Quanta Technology engineers are experienced in many different planning software applications that are common to the electric power industry. These applications include CYME, SynerGee, PSS/E, PSLF, EMTP, PowerFactory, Aspen, SKM, WindMil, and Pole Foreman, among others. Their software proficiency, coupled with practical modeling experience, creates a depth of knowledge and capability that can support any utility or developer's need in determining the system impacts and interconnection requirements for the renewable energy resource. Analysis includes power flow, contingency and power quality analysis, static and dynamic reactive power requirements and optimization, Low-Voltage-Ride-Through analysis, lightning protection, grounding and stray voltage. Interconnection options include DG, HVDC, HVAC, Storage and FACTS.

EPC Services. Quanta Technology plays a pivotal role in helping customers to ensure their renewable energy projects are installed within budget and schedule. In addition, Quanta Technology coordinates with other Quanta Services companies to provide Engineering, Procurement and Construction (EPC) services.

About Quanta Technology. Quanta Technology LLC provides expert-based management and technical consulting for utilities, heavy industry, and related entities. It is a wholly-owned subsidiary of Quanta Services (NYSE: PWR). Quanta Services, employs about 18,000 people and is both the largest union contractor and non-union contractor for the electric utility industry in North America.

For more information contact:

Dr Johan Enslin, Vice President – Renewables
Quanta Technology, Raleigh, NC
919-334-3037, JEnslin@Quanta-Technology.com