



Reliability, Market Efficiency, and Renewable Integration

Renewable Interconnections, Performance Assessment, capacity Expansion, FERC 1000, Integrated Resource Planning, Modeling and Control Tuning, Probabilistic T&D Planning

The planning of transmission grids is increasingly challenged due to proliferation of distributed energy resources and the need to find economic solutions to integrate large renewable plants without excessive permitting and approval cycles.

Quanta Technology serves the transmission analysis needs of electric utilities and developers. These range from siting analysis and interconnection studies for renewable developers to long range master planning and integrated resource planning (IRP) to support a future renewable target.

Quanta has the expertise necessary to design, manage, and run a variety of traditional planning tasks and studies including power-flow development and solution, contingency analysis, short circuit analysis, load forecasts, voltage stability analysis, transient stability analysis, SSR analysis, EMF Interference studies and other related studies. Our methods, processes and procedures are designed to be consistent with the planning principles identified by FERC in Orders 890 and 1000. Our services include needs assessment, project alternative assessment, long range master planning, project justification, stakeholder management, due diligence review, system impact level studies, capital budgeting, and other related services.

Service Offerings

Interconnection Studies

- Siting Analysis to determine available FCITC at a specific POI, or throughout a State or region.
- Interconnection studies and application.
- Critical review of transmission plans in a region.
- Steady State and Dynamic (PSSE and PSLF) and transient (PSCAD) model development.
- feasibility assessment, system impacts studies and facilities studies
- Upgrade & Construction Cost Estimates
- Congestion and Curtailment Studies
- Protection Schemes

Competitive Transmission Analysis and Planning

- Validate system need assessment.
- Identify potential transmission system enhancements to address the transmission needs in the various regions.
- Estimation of benefits of transmission system projects through production cost analysis as well as estimate the costs and expenses to calculate the benefit/cost ratio of the project.
- Develop the submittal form(s) for project developers to provide sufficient documentation of those necessary and essential costs and expenses for projects to be submitted to the RTOs/ISOs.
- Quanta Technology along with other Quanta Services companies provide an independent review to help validate proposed estimates and cost containment strategy.
- Project development support studies.





Grid Planning:

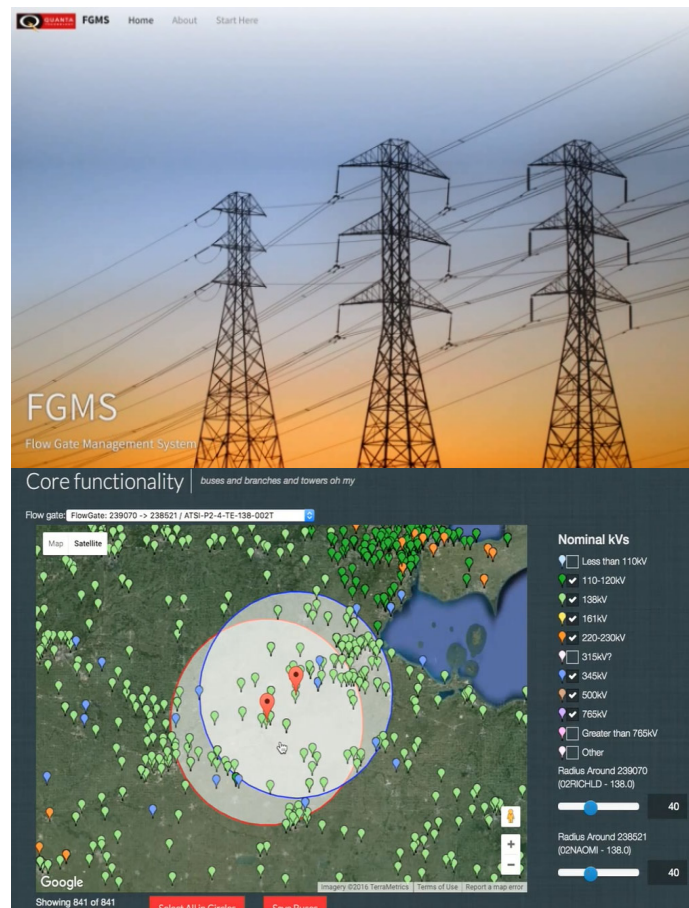
- Interconnection Studies
- Competitive Transmission
- Transient Studies
- Model Development
- Control Tuning
- Integrated Resource Planning
- Probabilistic T&D integrated planning

Why Quanta Technology?

Quanta Technology is a trusted transmission consultant with deep regional knowledge of the planning and operational practices and challenges.

Robust Solutions

Quanta use the applicable industry leading software tools that are adopted by each region. In addition, Quanta built powerful productivity tools to help process and design optimal solutions efficiently. These include siting tools, N+1 expansion analysis, pre and post processors.



About Quanta Technology

Quanta Technology is an independent technology, consulting, and testing company providing business and technical expertise, along with advanced methodologies and processes, to utilities and others in the power and energy industries. Our mission is to provide unparalleled value to our clients in every engagement across the value chain by using advanced software and hardware, laboratories, and custom tools for a holistic approach to practical service and the most insightful thought leadership in the industry.

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Smart Solutions Practical Results

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