



# Distribution Planning Services

The goal of long-range distribution planning is to ensure that money spent today has value over the long term and is robust across a variety of planning scenarios. Unfortunately, many utilities have not performed rigorous long-range planning for many years, and barely have enough resources to address short-term issues such as capacity overloads, new customer connections, and other “must do” projects. Quanta Technology has many of the world’s top experts in distribution planning, and has helped dozens of utilities address nearly every aspect of the subject. Distribution planning projects are typically customized based on specific customer needs, but the following describe typical engagement areas.

**Load Forecasting.** Load forecasting is the foundation of a distribution plan. Without a good forecast, it is likely that unnecessary projects will be funded and needed projects will go unfunded. Our experts have experience in all aspects of load forecasting including weather normalization, transformer loading, feeder loading, urban re-development, regression models, and spatial land-use models. We have helped many utilities in the U.S. and around the world refine forecasts, develop forecasts, and institute improved load forecasting processes.

**Planning Portfolio Optimization.** Most planning processes end up with too many projects, an inability to prioritize projects, and an inability to dynamically adjust spending plans. Simple benefit-to-cost ranking has failed at many utilities due to excessive blanket budgets, the inappropriate use of mandatory classification, a fixation on single-year budgets, and inappropriate consideration of risk factors. We have a robust and proven approach to planning project portfolio optimization that ensures proper ranking and selection of projects, including the elimination of “gold plating” and the proper application of deferrals.

**System Planning.** Proper system planning ensures that money spent today has lasting value and fits and the system move towards a strategic vision. This is in stark contrast to the “fire fighting,” incrementalism, and year ahead focus that many utilities now find themselves practicing. We have some of the top system planners in the world that can develop justified medium long term plans that satisfy load growth, reliability, and other strategic considerations in a least cost manner.

**Planning Criteria.** Although planning criteria is a major driver of both cost and system performance, many utilities do not have complete and consistent documentation or have not revisited their criteria for many years. We have helped many utilities review, benchmark, and update their planning criteria to reflect best practices, including the impact of new technologies and new analytical tools.

**Rate Case Support.** After many years of relative inactivity, many utilities are pursuing new rate cases and requesting increased spending in a variety of distribution areas. Changes in spending patterns are typically challenged during rate cases, and require a rigorous planning justification to be successful. We have helped many utilities prepare and refine successful testimony. We also regularly provide independent written and oral testimony to both justify rate case requests and to counter intervenor and regulatory staff rebuttal.

**Capital Budget Review.** Capital budgets are coming under increasing scrutiny. Senior leadership is increasingly expecting that all spending is justified by the benefits it will provide. Further, it is expected that estimates of project scope, project cost, and projects benefits are precise and defensible. Our experts have helped a number of utilities review and optimize their capital budgets and improve their capital budgeting processes, lock down scope, justify selected alternatives, and minimize blanket spending. After this process, Quanta Technology will certify capital budgets.

**Training.** Our instructors have taught distribution planning to hundreds of utility planners, engineers, and managers around the world. Training courses can be tailored to the specific needs of each utility, but commonly include one or more of the following topics: load forecasting, criteria, processes, capacity and reliability, substations, feeders, services, planning tools, economic analysis, aging infrastructure, project prioritization, and capital budgeting.

**About Quanta Technology.** Quanta Technology 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 utility union contractor and non-utility contractor in North America.

For more information contact:

James Blackman  
Director of Business Development  
919-334-3044  
jblackman@quanta-technology.com