

Wind

Strategy, Planning and Operational Improvement for the Wind Sector

Navigant Wind Services

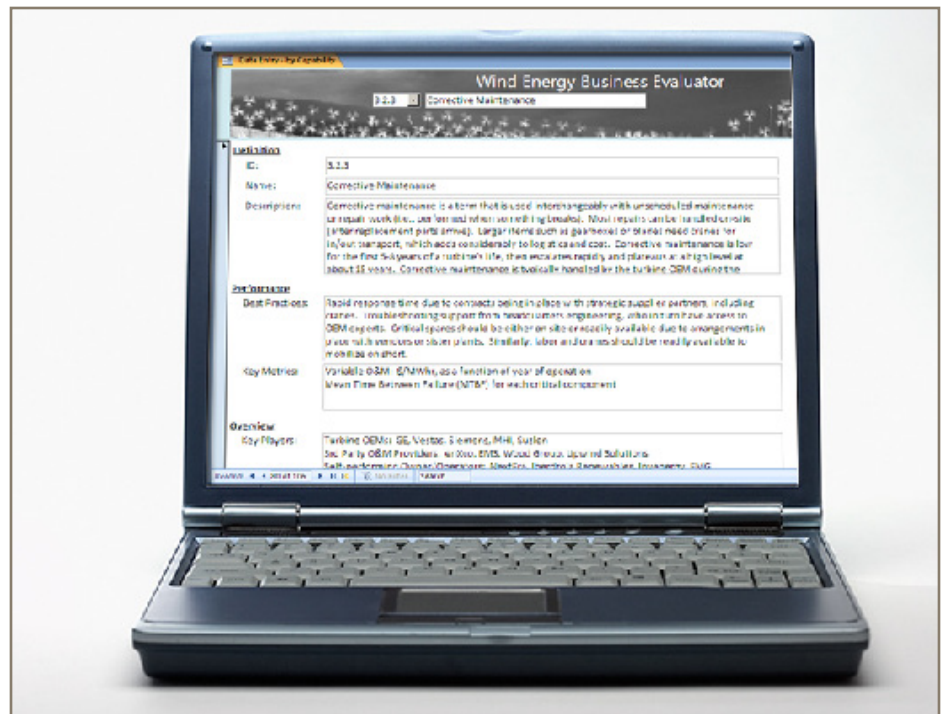
Strategy and Planning

Navigant's experts provide strategy and planning support to multiple wind energy participants. Our clients include developers and contractors working to determine which segments of the value chain to compete in, investor-owned utilities seeking to optimize their renewable portfolio compliance strategies, and manufacturers developing a coordinated plan to identify and implement renewable energy opportunities across their facilities.

At Navigant, we use a structured, issue-based approach to these assignments, using thorough analysis and tools such as the

Wind Energy Business Evaluator. This approach allows us to provide integrated solutions and address critical client questions, such as:

- » What will it take for us to become a leader in the wind industry?
- » Where do we need to improve our business to stay competitive?
- » How do we go about implementing improvements?
- » Which improvement areas offer the most "bang for our buck"?
- » What are the most profitable activities in the wind value chain? Should we shift our focus?



The Navigant Wind Energy Business Evaluator is the single point repository of our cumulative wind industry knowledge.



Operational Improvement

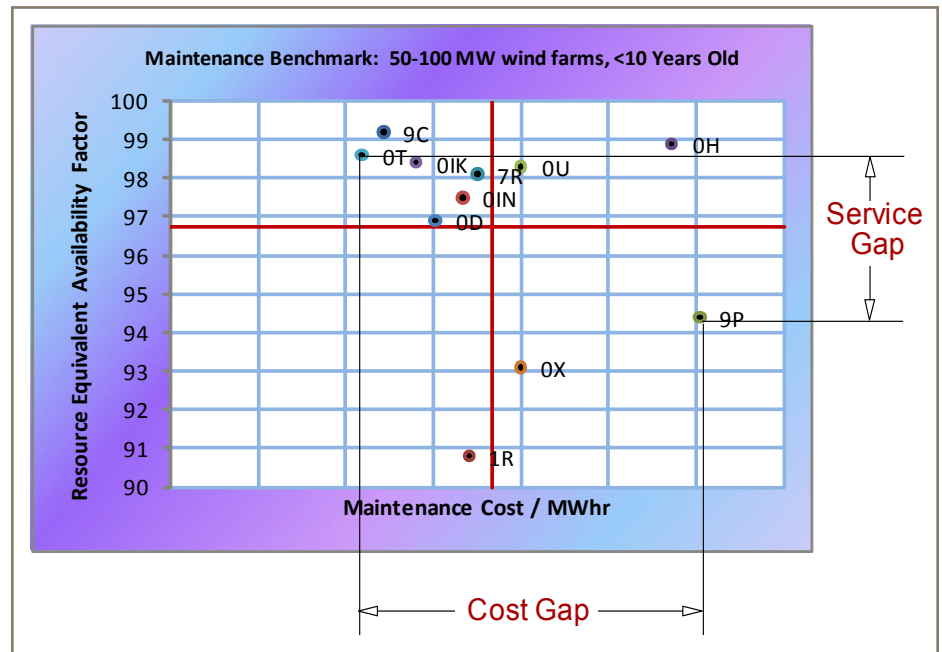
We assist wind developers and asset owners in improving performance in various functional areas including preparation for the transition of a wind turbine fleet from the development phase through post-warranty commercial operations. Our proprietary Generation Knowledge Service (GKS®) Wind Benchmarking allows us to identify and focus on specific areas of improvement for our clients.

GKS Wind™ provides wind operators with the same dynamic benefits as our industry leading GKS Fossil® and GKS Hydro® Benchmarking services, including:

- » A unique, integrated database of engineering design, operating

history, unit characteristics, cost and performance data

- » An easy-to-use, web-enabled product featuring a “point and click” user interface for accessing and analyzing the benchmarking database
- » A high level of data confidentiality
- » Minimal data gathering effort with electronic transfers ensuring timely, accurate data
- » Flexible, customized analysis of generation unit performance versus peer units, as well as the ability to roll-up unit information to a higher level such as turbine group or wind farm



GKS Wind™ identifies cost and performance gaps compared to a selected peer group.

GKS Wind™ takes full advantage of the new North American Electric Reliability Corporation (NERC) standards for reporting wind turbine reliability data to the industry. Navigant's MicroGADS® Wind software allows easy input of wind plant performance data to be fed to either or both NERC and GKS Wind®.

Project Specific Services

Our consultants have the deep expertise required to assist wind clients on project specific tasks such as responding to or evaluating Requests for Proposals for wind energy; due diligence for new technologies or project acquisitions; and negotiating Engineering, Procurement & Construction Agreements or other project documents. Other project-specific services include:

- » Transmission Constraint and Load Flow Analyses
- » Fatal Flaw Analysis
- » Forward Price Curves for RECs and Locational Energy Pricing
- » Construction Compliance Planning
- » Dispute Resolution and Litigation Support

As a leader in providing management, technology, and operations assistance to the North American wind industry, Navigant serves wind clients across the energy spectrum, including developers and contractors, utility companies, equipment manufacturers, federal and state government agencies and trade associations. We have the experience, industry understanding, and state-of-the-art tools needed to meet the demands of this increasingly competitive market space.

How Navigant Helps Our Clients

Wind Strategy Support

For a mid-tier wind developer, Navigant evaluated its wind business and five-year strategic plan. As part of this effort our team: analyzed the market environment for wind in the U.S.; characterized the wind sector value chain from qualitative and financial perspectives; assessed key competitors along the value chain; conducted detailed reviews of 6 states to identify transmission and interconnection issues; developed forward price curves and likely renewable energy certificate values that could impact Power Purchase Agreements; reviewed the client's market position relative to key competitors by performing a skills assessment; developed and utilized a financial model to assess various business models across the value chain; prioritized strategic options based on financials and key findings; recommended strategic options that maximize returns while minimizing capital; and provided high level action plans for 2 – 3 strategic options. Our client used this analysis in the development of its strategic plan.

Post-Warranty O&M Strategy

For a U.S.-based investor-owned utility, Navigant evaluated the strategic options for operating and maintaining the company's 300-500MW of wind turbines that were nearing the end of their warranty period. Options evaluated included continuing with the O&M services provided by the OEM, contracting with a 3rd party O&M provider, self-performing O&M, and hybrid combinations of the other options.

Wind Resource

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About Navigant

Navigant (NYSE: NCI) is a specialized, global expert services firm dedicated to assisting clients in creating and protecting value in the face of critical business risks and opportunities. Through senior level engagement with clients, Navigant professionals combine technical expertise in Disputes and Investigations, Economics, Financial Advisory and Management Consulting, with business pragmatism in the highly regulated Construction, Energy, Financial Services and Healthcare industries to support clients in addressing their most critical business needs. More information about Navigant can be found at www.navigant.com

Interconnection Assessment

Navigant assessed the transmission system impacts of interconnecting several wind projects with up to 300 MW of capacity with the transmission system in the Tehachapi area for enXco. We performed preliminary powerflow studies using summer peak and spring off-peak base cases which were developed to reflect load, resource, and system topology information in the utility's most recent ISO's annual transmission assessment; identified potential system reinforcements or remedial action schemes that are required to mitigate both pre- and post-project system overloads; documented the assessment results in a report to enXco; and subsequently assisted in system impact study and detailed facility study related activities with Southern California Edison and the California ISO.

Wind Feasibility Study

Navigant was retained by the Metropolitan Water District of Southern California to study the feasibility of wind power plant development on southern California lands owned by MWD, the region's primary water provider. Work included land data acquisition, site visit and identification of existing facilities, topology and general wind favored features, performance of wind resource assessment including data acquisition, preliminary turbine selection, siting and capacity factor estimates, evaluation of overall wind potential and identification of sites for additional meteorological towers.



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