

Kevin L. Jackson, Ph.D.

Legal Relevant Experience

(includes Depositions, Expert Witness work, and Root Cause Analysis efforts that were resolved before dispute)

Dr. Jackson has been active in technical support legal actions that sometimes accompany wind turbine component failures. On multiple occasions he has prepared fatigue life estimates for wind turbine components using measurements obtained from an operating turbines. He has provided expert technical opinions in an arbitration regarding wind turbine performance and energy production. On several projects he has provided analysis and opinions related to wind turbine design, manufacturing quality, operational lifetime, and remediation cost. Examples of Dr. Jackson's project work to have included: blade edgewise vibration, lightning damage analysis, panel buckling failure, fatigue failure, surface cracking, blade structural cracking, web debonding, tower strike, spar/shell debonding, root integrity failure, oil incursion / degeneration, tower fastener fatigue failure, and blade root fastener fatigue failure. His experience covers a broad swath of wind turbine types and sizes, giving a unique perspective on the realities of field operations. His specific litigation and arbitration support has included written opinions, oral depositions with opposing counsel, and expert witness testimony before an arbitrator.

Broader Wind Turbine Experience

Kevin Jackson began his wind energy career during graduate study at the University of California in 1982. In 1985, he began to provide engineering consulting services to California's emerging commercial wind power industry. Over the years, Dr. Jackson has managed a variety of wind turbine repair, retrofit, and performance enhancement projects. He has been responsible for blade geometry definition and structural design, drive train component analysis, yaw system design, and tower structural analysis. He has also completed dynamic and fatigue analyses using measurements obtained from field testing of wind turbines.

Dr. Jackson has worked extensively with field test data sets gathered from operational turbines. He was a key participant in field testing of Micon 65 and 108, Enertech 40 and 60, Kenetech 56-100, Mitsubishi 250, Wind Eagle 300, NedWind 500, and Zond 750 wind turbines. Interpretation of large data sets has been a major focus of career effort, and Dr. Jackson developed computational tools to speed processing and enhance analysis accuracy. This work included development of methodologies for evaluating fatigue damage rates and estimating the lifetime of wind turbine equipment. He has developed methods for scaling design loads from existing test data for use in the analysis of similar turbines for which no test data are available, and analysis tools for wind turbine performance assessment using site SCADA data. This software has been used to calculate power curves, expected energy, and expected revenue for large wind plants.