



Role

Senior Wind Analyst

Location: Montana or Chicago

Job Specification:

Data and Yield Assessment

- Process and analyse wind data recorded on all sites in order to establish measured wind speed and direction, shear and turbulence.
- Estimate the long-term wind regime on site. If available use measured site data and, if appropriate, available sources of long-term reference data.
- Conduct wind flow simulations of the sites using the industry standard WAsP or other models, in order to establish expected variations in wind speed across proposed turbine locations.
- Calculate the long-term predicted energy production of proposed wind farms, including calculated and assumed losses.
- Estimate the uncertainty in each stage of the analysis, and derive appropriate energy production confidence limits.
- Comment on turbine suitability and any issues that turbine suppliers may have with the site from a meteorological perspective.
- Carry out layout optimisations and micro siting
- Carry out site visits

Operations and Maintenance

- Design and Co-ordinate wind measuring campaigns for all of projects in USA using conventional cup anemometry and advanced technologies such as LIDAR or SODAR.
- Reduce uncertainties as much as possible, while keeping to the budget
- Co-ordinate purchase and installation of all wind measuring equipment including power supplies and telecommunication equipment.
- Operate all equipment effectively. Resolve problems quickly to minimise data loss and co-ordinate repair and replacements with contractors and suppliers
- Carry out site visits

Data Management

- Co-ordinate and carry out quality control for all incoming data
- Write and introduce scripts and algorithms to streamline data processing

Reporting

- Produce regular comprehensive reports outlining the wind measuring operations and up to date results.
- Produce ad hoc energy yield reports similar in format to Garrad Hassan's bankable reports, when requested
- Initialise and co-ordinate third party yield assessments
- Analyse and critically comment on third party yield assessments
- Initiate relevant procedures