

Structural / Finite Element Analysis Engineer

The Company

Hydro Green Energy, LLC is a for profit renewable energy project developer and integrator that designs, builds, and operates kinetic hydro power projects that generate electricity exclusively from moving water (river currents, tidal currents, and ocean currents) without having to construct dams, impoundments, conduits, or other infrastructure projects.

Our headquarters are in Houston, TX. For more information, visit our website at www.hgenergy.com

Job Description

In this position, the applicant will perform assignments designed to develop professional work knowledge and abilities, requiring application of standard techniques, procedures, and criteria in carrying out a sequence of related engineering tasks. Limited exercise of judgment is required on details of work and in making preliminary selections and adaptations of engineering alternatives.

Activities will include preparation of structural designs for metal and reinforced plastic structures for hydropower & hydrokinetic projects. Preparation of technical specifications, drawings, quantity estimates, and proposals as well as review of contractor and vendor submittals will also be required. In addition, applicant will assist technical staff in field activities including site inspections, monitoring and other fieldwork. Travel to project sites will be required up to 20% of the time.

Qualifications

- Structural analysis of components, assemblies and test rigs for static, vibration and thermal loads
- By Hand calculations
- By Finite Element Analysis
- Structural (by ANSYS) 80%
- Fluid Dynamics (by FLOWMASTER/ FLUENT) 20% to resolve current problems and to provide directions to new designs.
- Fatigue calculations
- Structural Optimization (by Altair's Optistruct)
- Coordinate project work with internal and external customers and suppliers
- Coordinate project work with engineers at Hydro Green Energy, LLC
- Document analysis work in Technical Report Formats.
- Present results and recommended actions to the internal and external customers

The Qualified Candidate

Candidates with a M.S. in Mechanical Engineering or Applied Mechanics, with specialization in structural analysis is a plus. FE analysis knowledge and minimum 2 year ANSYS experience. Courses in vibration, modal analysis, heat transfer, finite element analysis. Beginners to Intermediate level of ProEngineer. Computational Fluid Dynamics and Heat Transfer knowledge a plus. Optimization knowledge and experience in OptiStruct a plus. FeSafe knowledge a plus

Salary Benefits

Salary commensurate with experience. In addition to competitive pay, stock options and bonus programs. Hydro Green Energy, LLC offers comprehensive benefits including medical, dental, vision, 401k, paid vacation & holidays and opportunities in advancement.

Hydro Green Energy, LLC offers a drug free, smoke free workplace and is an Equal Opportunity Employer