



Job Description – Process Modeling Engineer

Title: Process Modeling Engineer

Reports to: CTO

Position Summary

The Process Modeling Engineer will perform thermodynamic power cycle process modeling for GreenFire Energy's downhole heat exchanger product line, which includes gas and liquid flow conditions, both downhole and at the surface. Normal power cycle modeling is expected, including turbines, heat exchangers, pumps, compressors, orifice plates, and pipe flow. Working fluids include water, CO₂, and various ORC type refrigerants. Financial considerations are included in modeling optimization; e.g., power costs, material costs, O&M costs, and LCOE calculations.

Responsibilities

- Communicate with Company and customer personnel to obtain detailed well information for modeling purposes, which may include travel
- Understand, update, modify, optimize, and advance the Company's existing process and financial modeling for the company's geothermal retrofit systems
- Apply the Company's modeling tools to geothermal well data provided by customers to assess the optimal configuration of equipment and processes used to retrofit unproductive or underperforming geothermal wells
- Participate in the preparation of formal customer proposals with other Company personnel and outside consultants and assist in the presentation and sales process for such proposals
- Develop, maintain and enhance all Company modeling tools
- Participate in preparation of additional method and system patents to capture advances in the Company's technology

Education, Experience, Abilities

- Appropriate Degree in Engineering, Mathematics, Applied Computer Science, or closely related field
- Demonstrated experience in advanced quantitative analysis and process modeling
- Exceptionally strong analytical, engineering, and problem-solving capabilities
- Strong personal and interpersonal skills

Respond to:

- Joseph Scherer, CEO
- Email: joseph.scherer@greenfireenergy.com