Energy System Modeler

Vibrant Clean Energy, LLC (VCE®) is a software and consulting company based in beautiful Boulder, Colorado. VCE is at the forefront of a seismic shift in optimization modeling for electricity and energy systems. The team at VCE have produced a product known as WIS:dom®. It is a software package that simulates the electricity and energy system across the United States (with expansions available for the global economy). It does this using sophisticated and detailed weather datasets, electricity grid topology datasets, electric and energy demand datasets, power flow models, weather forecasts, economic drivers, and more. For such a large-scale model – it solves at 3-km, 5-minute out to 2050 – there are many opportunities for improvement and studies. To that end VCE wants to grow its team to include interested, motivated, and talented employees to push our goals to the next level.

We want you to come and join us if you are passionate about clean energy, have an interest in modeling, building datasets, or weather science, and if you want to make a real difference to the future of our economy! VCE was founded to make a real difference to the electricity and energy sectors by developing and implementing the highest fidelity modeling of the energy grid that incorporates big data from the outset. VCE believes that exceptional employees are critical to making the biggest difference across the globe. We have a fast-paced, intellectually stimulating environment, as well as a varied portfolio of work that provides new challenges every day.

Due to the dramatic growth VCE is experiencing, we are looking for a number of different positions.

This job posting is for an energy system modeler. The ideal candidate will have the opportunity to work in a close-knit team, as well as individually. The role will require learning new skills quickly and implementing them successfully. Some important areas that are touched upon within VCE are weather, atmospheric science, modeling, computing, economics, policy, and electrical engineering. The candidate will be involved in all these areas to develop their skill set within the company.

Main Responsibilities:

- Producing visualizations and interactive interfaces for the modeling;
- Execute simulations using the WIS:dom® modeling suite (working with existing modelers);
- Debug & work with team to improve execution performance;
- Working with the team to disseminate the work and product to the public and clients;
- Attending conferences and meetings to network and liaise with clients.

Qualifications Minimum:

- Masters/BSc in a physical science;
- Strong mathematics background;
- Interactions with power system modeling;
- Interest in clean energy future pathways;
- Proficient with computer programming (especially GAMS, Python & Linux);
- Background working with Linux (large computing).

Preferred/ideal Experience:
• PhD in an energy related field (or experience in lieu);
• Knowledge of the energy market helpful;
• Knowledge and use of python, NCL, GAMS, MatLab, IDL, or other programs desirable.

Other Details:

• Competitive salary to be based upon experience ($95-120K per annum);
• Generous vacation schedule (25 days of vacation + 11 federal holidays);
• SIMPLE retirement plan with employer contributions of 2%;
• Medical Insurance for employee and up to 50% for dependents;
• Boulder location, with possible remote flexible working schedule;
• Small team with huge impact and opportunity;
• Expansion of role inevitable as the VCE grows.

For more details, please send a copy of CV and cover letter to info@vibrantcleanenergy.com. We are seeking to fill the position as soon as possible. Please provide contact information in the email, so that a VCE representative can get in touch if an interview is warranted.

If you have any questions, please email the address above.