



Operations Research Analyst/Energy Modeler

Job Description

OnLocation, Inc. is recognized as a leading energy consulting firm providing objective quantitative analysis of energy, environmental, and climate change policies to a diverse set of stakeholders since 1984. Our mission is to use quantitative analytical methods to objectively inform strategic players in energy and related industries to improve the outcome of business and policy decisions as the U.S. strives for a balanced and sustainable energy future. To help our clients understand the implications of the challenges facing the energy system, we develop, modify, and apply a variety of systems models and data analysis tools to examine energy trends, impacts of proposed government policies, and the associated financial and economic impacts of energy investment decisions. Visit our website at <https://www.onlocationinc.com> for additional information and background.

We are seeking operations research analysts/energy modelers with strong analytical skills to join our team.

****This position does not provide visa sponsorship.**

Key Responsibilities

- Design and implement changes for existing energy models for new capabilities (represent new legislation or policies, add new technologies, improve interfaces between models, enhance model convergence, etc.); special projects may also entail the design and implementation of new models.
- Apply programming skills and knowledge of energy industries and markets to design and develop mathematical models (e.g., matrix algebra, linear and non-linear set of equations) to represent these industries and markets; and analyze resulting data.
- Work with large data sets, including historical market information, detailed forecasting model results, and modeling inputs; analyze data quality and identify options for resolving quality issues.
- Develop industry expertise with the goal of becoming an industry expert in one or more areas.
- Participate in conference calls and meetings with clients.
- Assist in the development and execution of a broad range of analyses related to energy markets and policy design.
- Keep current with changes in energy industries and markets, including the effects of new and emerging technologies, rapidly changing industry practices, new legislation and regulations, and other changes affecting energy production, pricing, supply and distribution patterns.
- Keep current with advances in quantitative analysis techniques.
- Work as part of an analytical team as well as at times independently on technical activities.

Required Minimum Qualifications

- Undergraduate degree in Operations Research, Economics, Engineering, Finance, Mathematics, Statistics, or Energy Policy (or closely related field); advanced degree in Operations Research or related field preferred.

- **5-10 years of technical work experience in operations research or energy economic modeling; or equivalent.**
- Knowledge of the application of standard quantitative techniques, applied linear algebra, linear and non-linear programming; experience with mathematical programming, optimization, and economics (e.g., GAMS, AIMMS, Matlab, R). Highly desirable to have evidence of skill in programming in a higher-level programming language (e.g., C, C++, JavaScript, Python, FORTRAN).
- Excellent technical, analytical, and quantitative skills.
- Strong Microsoft Excel, Word, and PowerPoint skills.
- Creative problem-solving abilities.
- Interest in and knowledge of energy issues and policy analysis.
- Strong oral, written, and presentation skills including the ability to communicate research issues, approaches, and findings with non-specialists as well as with scientists, engineers, and executives.

Additional Desired Qualifications

- Excellent organizational skills including documentation of assumptions and processes.
- Excellent attention to detail and QA/QC habits.
- Quantitative understanding of mathematical economics, econometrics, and statistics.
- Familiarity with Federal, and State energy and environmental policies.
- Interest in adding technical depth and breadth to become an energy subject matter expert.

Application Closing Date: January 31, 2022

Job Location: Office in Vienna, VA with remote-work opportunities

Compensation: Commensurate with experience and qualifications

To Apply: Please submit resume and the information below by email to Jasmine Greene at jgreene@onlocationinc.com. This position is also posted on LinkedIn and Indeed.

- 1) Have you completed a Bachelor's Degree? (y/n)
- 2) Are you legally authorized to work in the United States? (y/n)
- 3) Do you have knowledge of standard quantitative techniques, applied linear algebra, linear/non-linear programming; mathematical programming, optimization, and economics (e.g., GAMS, AIMMS, Matlab, R)? (y/n)
- 4) Are you willing to undergo a background check, in accordance with local law/regulations? (y/n)
- 5) How many years of Analyst experience do you currently have?
- 6) How many years of experience do you have in operations research or energy economic modeling?
- 7) Do you have skill in programming in a higher-level programming language (e.g., C, C++, JavaScript, Python, FORTRAN)? (y/n, identify which languages if yes)