

Renewable Energy Engineer / Technical Operations Specialist

The Penn Group of Companies (“Penn”) is seeking a qualified candidate to fill the full-time **Renewable Energy Engineer** position based at Penn headquarters in Bala Cynwyd, Pennsylvania.

Penn is an innovative “first mover” renewable energy developer and owner of projects in the USA and abroad. We successfully and creatively apply our core competencies in land acquisition, project development, and tenacious execution. Our renewable energy opportunities require ever increasing technical sophistication and system innovation, and Penn seeks highly creative and insightful talent.

Position Description

The Successful Candidate will possess extraordinary technical capabilities and be an integral part of a small team with responsibility in many aspects of Penn’s project conceptualization, development / design, construction as well as the steady-state operations of the Penn portfolio.

Position Responsibilities

The Renewable Energy Engineer will work alongside Penn’s development, construction, operations and management team members in a variety of capacities, providing general technical and design guidance for both new and operating plants as well as other renewable energy opportunities. He/she will:

- Perform detailed modelling, simulation, and analysis of (renewable) power generation systems that may include solar PV systems, micro-grids, biomass generation facilities, wind farms, and others for greenfield development and responses to RFPs/other solicitations
- Conduct detailed research and investigations into the technical/operational nature of power generation, systems integration, component performance characteristics
- Help develop costing models, tradeoff analysis, and other decision criteria analysis to allow objective selection of winning concepts; regularly apply fundamentals of engineering and electrical know-how to system design concepts
- Provide technical support and participate in equipment procurement, and coordinate with Penn’s suppliers, contractors, engineers, consultants, and other key counterparties
- Check and critique system design drawings for accuracy and effectiveness in meeting the intentions and standards of Penn, customers, regulators, etc.
- Interface with 3rd party engineers, review means/methods/as-built conditions; this may include contributing to successful facility testing/commissioning and performance validations.
- Audit plant and subsystem tests; this may include component factory acceptance, field subsystem, plant performance and other implemented verification tests

- Assist with proposals to potential off-takers (e.g. RFP response), including plant layouts, single-line diagrams, solution visualization, interconnection design and applications, review and research of applicable codes, regulations, and other technical parameters
- Remotely observe, monitor, and troubleshoot (e.g. daily) RE plant generation and behavior among Penn's existing solar farms and future RE assets, using the Penn visualization platform (built on Tableau software) and other monitoring systems
- Coordinate and communicate regularly with Penn's field operations team as well as 3rd party O&M providers to address and resolve plant performance issues (e.g., respond to alarms with appropriate action) and undertake proactive portfolio improvement projects
- Develop rule-based methodologies for detecting plant performance issues; analyze current versus optimal solar farm performance; devise and implement strategies to improve/optimize solar plant performance with an overall goal of maximizing production and plant availability (uptime); could regularly involve query, analysis, and modeling of large disparate RE operational data.
- Liaise directly with Penn's financing and accounting teams on technical topics (e.g. monthly performance reports, production revenue data review, etc.)

Criteria for a Successful Candidate

- Degree in Engineering (*preferably mechanical, electrical, or systems*) or sciences with an excellent GPA. Other fields of study considered in the case of exceptional candidates. Master's degree a plus.
- 3-5 years' experience in renewable energy (RE) field at a relevant company or engineering firm and involving technical responsibilities such as RE electrical engineering or design, technical operations and management (O&M) of RE assets, RE technical analysis, or similar.
 - Experience with solar PV as well as designing or simulating power systems is preferred
 - Experience with interconnecting power generation projects a plus
 - On-site/field experience such as QA/QC, construction management, etc. a plus
 - Civil/foundation design experience is a plus
- Expertise/proficiency in the following areas:
 - Electrical power generation, interconnection (high voltage), and transmission concepts
 - Drawing/interpreting electrical single line diagrams and network drawings
 - Solar PV & plant development expertise, energy storage a plus
 - Proficiency with relevant software and database design (e.g., PVsyst, HelioScope, WindPro, Tableau, etc.)

Characteristics of the Successful Candidate

- A "self-starter" with pride of ownership; enjoys working independently with great follow through.
- Excellent written and oral communication skills and feels comfortable conveying information to a wide variety of audiences.
- Effective and comfortable interfacing regularly with 3rd parties such as consultants, contractors, regulators, utilities, other stakeholders, etc.
- A lifelong learner with an appetite for knowledge and high standards personally and professionally.
- Proven problem solver: capable of properly diagnosing problems and addressing the root causes using elegant and pragmatic solutions.

- Works well under deadline pressure, prioritizes and manages his/her time effectively.
- Ability and willingness to travel, including internationally and as needed (e.g. monthly).

Compensation

Compensation will be competitive and commensurate with experience. Great benefits.

Application Instructions*

If you are interested and qualified for this role, please submit a resume or CV that includes a summary of your relevant experience, education, and qualifications to jobs@PennEnergyRenewables.com for consideration.

*Principal parties only. No 3rd party recruiters, please.