	<b>JOB DESCRIPTION</b>		<b>Page:</b> 1 of 2	
	<b>Position Title:</b> PV Engineering Intern		<b>Version:</b> A	<b>PC:</b> 1123
	<b>Department:</b> Engineering		<b>FLSA Status:</b>	
	<b>Reports to:</b> Engineering Manager		<b>Review Date:</b> 04/02/17	

**JOB SUMMARY:**

The PV Engineering Intern provides conceptual design deliverables to support commercial and/or utility-scale solar electric system project development. He/she will execute engineering and technical tasks of assigned projects primarily regarding early stage site evaluation, conceptual design development and sensitivity analysis of design variables for optimization. The PV Engineering Intern will identify the most appropriate technical and material solutions for each prospect as well as perform preliminary design calculations for project scoping and feasibility analysis. Deliverables include equipment specifications, conceptual design drawings, site evaluation reports, completed interconnection forms, energy production estimates, and single line electrical diagrams. The PV Engineering Intern will also support Project Engineers in system design efforts for contracted projects. Additionally, the PV Engineering Intern will be asked on occasion to support special projects related to research, data entry and analysis, and updating policies and procedures.

**ESSENTIAL DUTIES & RESPONSIBILITIES:**

- Conduct detailed site evaluations for targeted projects, including but not limited to, due diligence review, proposal development and pre-engineering support to Sales, Finance and Construction.
- Learn to use AutoCAD, PVsyst, HelioScope, Google Sketch-up, and Microsoft Excel
- Gain an understanding of the National Electrical Code (NEC), the International Building Code (IBC), the International Fire Code (IFC), and the National Electrical Safety Code (NESC)
- Perform detailed energy production modeling calculations, string sizing, PV array to inverter matching, voltage drop, as well as orientation and inter-row spacing analysis.
- Perform electricity tariff analysis, electricity bill analysis, and load versus energy generation analysis.
- Engage in Request for Proposal (RFP) review, technical writing, and response coordination
- Maintain constant communication with key members of Sales and other departments as needed to ensure optimal system design, including but not limited to, design workload reporting for use in forecasting and scheduling.
- Develop necessary customer deliverables such as conceptual module layouts, single line diagrams, equipment or material specifications, engineering validation, 3-D renderings and photo simulations.
- Provide engineering and/or technical input and direction relevant to site evaluation and characterization, and related project development tasks.
- Manage and work closely with equipment vendors to identify technical challenges and create new solutions
- Work with appropriate electric utilities to prepare and process interconnection paperwork; provide technical support and aid in management of interconnection process.
- Meets and/or exceeds established performance objectives of assigned duties as defined and communicated by management.

<b>STANDARD SOLAR JOB DESCRIPTION</b>	<b>PAGE: 2 of 2</b>	<b>DEPT: Engineering</b>
<b>TITLE: PV Engineering Intern</b>		<b>VERSION: A</b>

**SUPERVISORY RESPONSIBILITIES:**

The PV Engineering Intern does not currently supervise any staff members.

**MINIMUM EDUCATION, SKILLS & EXPERIENCE:**

High school diploma and three years progress towards a Bachelor of Science degree in Engineering required. Graduating seniors with a BS degree in Engineering will be given priority. Conceptual understanding of solar photovoltaic technology and grid tied solar PV systems. Understanding and working familiarity with current AutoCAD software version is a plus, as well as MS Office suite.

**POSITION ROUTINELY INTERFACES WITH:**

- Customers and the general public
- Engineering team
- Sales and Business development team
- Construction and estimating department
- All employees, including Senior and Executive Management

**PHYSICAL DEMANDS:**

Conducts work in both a field-type environment or in a professional office setting with local travel to jobsites to conduct inspections.

Physical working conditions may involve the following:

- Lifting up to 50 pounds.
- Extended periods of sitting, walking, standing, reaching, and/or bending.
- Extended periods of reading fine print on a computer or in paper-based format.

**NON-PHYSICAL DEMANDS:**

Routine aspects of this position may require the following non-physical demands:


- Analytical and logical reasoning.
- Problem solving and researching skills.
- Time management and organizational skills.

**POTENTIAL HAZARDS:**

Routine aspects of this position may place the incumbent in situations where they may be susceptible to potential hazards from the following:

Signature below signifies receipt and review of this Position Description.

_____	_____
Employee Name (Please print)	Date
_____	_____
Employee Signature	Manager Signature

	<b>JOB DESCRIPTION</b>		<b>Page:</b> 1 of 2	
	<b>Position Title:</b> PV Engineering Intern		<b>Version:</b> A	<b>PC:</b> 1123
	<b>Department:</b> Engineering		<b>FLSA Status:</b>	
	<b>Reports to:</b> Engineering Manager		<b>Review Date:</b> 04/02/17	

- Trips, slips and/or falls while on customer property.
- Chemical abrasives used in office and kitchen cleaning.
- Lifting items up to 50 pounds in weight.
- Other hazardous conditions on customer premises, not otherwise defined here.

**POTENTIAL CAREER PATH:**

Upward

- Project Engineer
- Senior Project Engineer
- Engineering Manager
- Director of Engineering