

**Spire Solar Systems
Services**



Succeed with Spire

Spire Solar has over 30 years of experience in the solar industry and is a recognized leader in the PV Market. With products and services in the development and production of solar cells, modules, concentrator technologies, and system installations the Spire team is uniquely positioned to provide vital assistance to win opportunities in Solar.

Spire has successfully provided the critical consulting and knowledge transfer in turnkey production lines and now offers this to PV Systems. Through the Solar Systems division, Spire provides critical consulting services to new and established players in the main phases of: Proposal/Bid; System Development; and System Installation.

Spire Solar Systems Experience

Spire has provided Solar Photovoltaic (SPV) electric systems to commercial, government, and utility customers since 1999. Our team of highly-trained, professional engineers have designed hundreds of commercial systems—some as large and complex as a 9.3MW single-axis tracking array—collectively designing over 19MW to date. Spire manufactures, designs, and installs high quality SPV systems and components. This experience provides the security needed with comprehensive consulting and engineering services.

Overview

Spire provides the key experience, technology and expertise required at each stage of the PV project bidding and development process to ensure success. This program allows a company to invest as required for each phase of the sales process to win and succeed in the local PV Systems business. Working with Spire concentrates your team and investment on the critical tasks at each stage as well as maximizing effectiveness. Spire works collaboratively with each company's team to ensure focus on the critical aspects of each phase of the project development process.

Spire's experience covers the entire process:

Phase 1 System Proposal Support

Phase 2 Development Services

Phase 3 Installation Services

Phase 1 System Proposal Support

The proposal phase is a critical aspect of a project and defines your position in relation to competitors. During this period, financial and technology choices are shown based upon the requirements of the bid and the location of the PV System. The focus is to earn your business with a winning proposal.

Price Proposal:

- Project Payback
- IRR, NPV
- Cash Flow
- Government Incentives

Technical Proposal:

- Site Analysis
- System Design – Preliminary Vendor Specification & Relationship

Phase 2 Project Development

Having successfully won the business with Phase 1, the next step is to refine and perfect the preliminary designs and review primary decisions with a focus on profitability. A review of preliminary design, project development and preparation to complete the project, Spire works closely with a company's team to ensure proper design coordination. At the end of Phase 2, you are ready to move ahead with the installation.

Final Engineering Design:

- Final Site Selection
- Vendor Decisions & Negotiations
- Review of Key Material Decisions
- Profit Optimization
- Creation of Final Drawings – Installation ready
- Final Project Labor & Expertise

Phase 3 Installation Support

Completion of Phase 1 & 2 signifies the readiness to begin installation of the PV System. The assistance with the installation phase focuses on the key aspects of construction and management of PV System. During this phase, Spire provides critical consulting for core skills and resource planning required for a successful implementation of the plan developed in Phase 2.

Create Project Management System:

- Project scheduling
- Material management
- Project staffing and labor schedules
- Work-site safety measures
- Contracting with sub-contractors

Installation and Commissioning Services:

- Oversight and commissioning of initial project
- Assist with interconnection to local utility
- Assure proper installation and maintenance of a performance monitoring system
- Train on system maintenance, safety, and performance monitoring
- Support technical and marketing needs for educational and promotional programs