



Civil & Environmental Consultants, Inc.

# Solar Project Development

**CEC has a firm understanding of the solar project development process. We provide a range of engineering and permitting services to support projects from concept through operation.**

CEC's solar project development services cover the project life cycle from critical issues analysis, through conceptual design and permitting, to construction and project completion. We have experience with canopy, rooftop, ground-mount, ballasted, and single- and dual-axis tracker systems for community to utility-scale projects. Our solar development experts work with developers, owners/operators, investors, regulators, utility companies, and other stakeholders to support diverse projects nationwide.

## CRITICAL ISSUES ANALYSIS

Involving a professional consulting team in the early stages of a project, ideally before a project site is being negotiated with the land owner, can help you avoid missteps. CEC taps a vast network of knowledge, data, and contacts to provide early-stage solar project development services to help you qualify and compare prospective sites. Key service offerings include a desktop analysis of the following:

- Wetlands and Floodplains
- Threatened and Endangered Species
- Preliminary Cultural Resources
- Environmental Conditions (Phase I ESA Desktop Screening)
- Geohazards
- State and Local Land Ordinances and Zoning
- Topography
- Sight Distances
- Permitting Requirements
- Brownsfields, Mine Lands, Landfills, and other Non-Greenfields

## FIELD INVESTIGATION SERVICES

CEC also offers several field investigation services that provide you with boots-on-the-ground information you can use for planning purposes.

- Streams and Wetlands (including delineations)
- Threatened & Endangered Species Surveys
- Cultural Resources
- Environmental Conditions (Phase I/II ESA)
- Geospatial Conditions (Topographic, ALTA, and Boundary)
- Existing Vegetation and T&E Species
- Geotechnical Conditions
- Rooftop Conditions







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## DESIGN AND PERMITTING

Challenges associated with local ordinances, state and federal regulations, community concerns, and design constraints have the potential to impact solar development projects. CEC's team works effectively with stakeholders to help our clients develop and navigate productive strategies. CEC provides the following services to help streamline the design and permitting process.

- Civil Engineering
- Geotechnical Engineering
- Land Use Permitting and Variances
- Erosion and Sediment Control
- Stormwater Management
- Landfills, Mine Lands, and Other Disturbed Site Engineering
- Landscape Architecture and Visual Screening
- Public/Community Outreach
- Solar Array Decommissioning Plans



## CONSTRUCTION-PHASE SERVICES

CEC understands that the success of a solar development project hinges on maintaining schedule, efficiency, and cost control during the late stages of a project. From bidding to project closeout, CEC can help you maximize project return on investment with construction-phase services such as:

- Management Support
- Details and Bid Specifications
- Inspection, Oversight, and Monitoring
- Materials Testing and Oversight
- As-built Surveys



*CEC assisted with this solar farm located on a 28-acre project site in Peru, IN. It now produces 3 MW of power.*