## Project: Solar Farm, USA

### Client:
Confidential

### Project Description:
Conducted a pre-construction energy assessment for a 300+ MWp solar project, located in California.

### Services Provided:
Natural Power performed a solar resource assessment, energy production estimate and an uncertainty analysis for the project. Annual energy production estimates at the P50, P75, P90, P95 and P99 probability exceedance levels were provided for each year over the life of the power plant.

The assessment was conducted using the commercial software PVsyst. Natural Power developed modeling assumptions as well as loss factors for the analysis, which included estimations and derivations of key variables including:

- Weather file selection
- Module and inverter component files
- Shading losses
- Soiling losses
- Component mismatch
- DC wiring
- AC wiring
- Auxiliary loads
- Transformer losses
- System availability
- Curtailment losses

### Added value:
Worked with the client to deliver results on a compressed schedule and provided engineering judgment to fill in gaps in the available information.

### Date of Project:
2017