



Ironwood Consulting

Silverstate South and Stateline Solar Projects

CLIENT: First Solar / STATUS: Currently under Construction

Pre-project protocol surveys, plan development, permitting, and implementation of biological resources compliance activities for two large solar projects near Primm, Nevada

THE PROJECTS

The 250-MW Silverstate South and 300-MW Stateline projects are approved solar energy facilities currently under construction on approximately 2,400 acres and 1600 acres of BLM-managed public lands roughly 50 miles south of Las Vegas, Nevada.

THE SERVICES

Ironwood has worked with First Solar at the Silverstate South and Stateline projects since 2009, completing pre-project surveys, management plans, and permitting requirements in preparation for construction. Ironwood is now actively performing desert tortoise clearance surveys, construction monitoring, and other biological compliance activities directed towards safely ensuring minimal delays during construction, while providing maximum protection for biological resources on the site and in adjacent public lands.

Data is collected on hand held smart phones and tablets and synched daily to provide up-to-date access for clients and land managers. Data also undergoes a rigorous quality control process so that data products are accurate and reliable.

THE RESULTS

Using an innovative approach of working with state and federal wildlife agencies to determine the importance of assessing desert tortoise movement and home ranges allowed for successful project outcomes for both First Solar in achieving permitting and agency approvals, and desert tortoise, by enabling a better informed translocation process with the aim of achieving higher survival rates.

- Coordinated all biological resources for First Solar, from planning and permitting, to project implementation
- Biologically cleared 2,100 acres of the Silverstate South project on time and ready for construction
- Biologically cleared 500 acres of the Stateline project, on time and ready for construction, plus an additional 400 acres 6 months ahead of schedule
- Implemented unique agency approved pre-project collection of regional tortoise movement patterns
- Performed project clearance in three phases to prevent expensive re-clearing and construction delays
- Acquired all agency concurrence and approvals in a timely manner, enabling adaptation of project management plans without delays
- Acquired USFWS Authorized Desert Tortoise Biologist authorizations for 63 expert biologists and contracted dozens more to quickly adapt to construction schedules and avoid delays
- Managed biological resources within two segmented, large scale project footprints on difficult terrain
- Monitored biological resource compliance of construction activities in coordination with 4 construction subcontractors
- Established on-site nurseries for salvaging on-site plants and marked over 5000 additional plants for required plant salvage mitigation
- Provided transparent budgeting and financial accountability to support our high-quality work products



Ironwood Consulting Inc. (Ironwood), an environmental consulting firm founded in 2008, specializes in biological resource management, environmental impact assessment, regulatory permitting, and monitoring services. The combined experience of Ironwood's partners is extensive, representing over 35 years of environmental consulting for a range of industries including military, utility, engineering, commercial, and residential infrastructure.

www.ironwoodbio.com | 909.798.0330