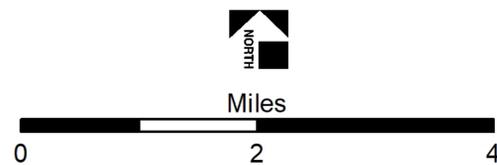


Legend

- Sterling Solar 1 Project
- Private
- State Trust
- Bureau of Land Management
- Fort Mojave Indian Reservation
- Havasu National Wildlife Refuge
- Existing Transmission Line



Project Overview

Western Area Power Administration (WAPA) is responding to a large generator interconnection request from Sterling Solar 1, LLC (Sterling Solar 1). Sterling Solar 1 is proposing to interconnect a proposed photovoltaic (PV) solar energy generation facility to WAPA’s electrical transmission system via a new 230-kilovolt (kV) switchyard, looping in the existing Topock-Black Mesa 230 kV transmission line. The proposed Sterling Solar 1 Project would include the construction, operation and maintenance (O&M), and eventual decommissioning of an approximately 225-megawatt (MW) PV solar energy generation and battery storage facility on a 2,077-acre parcel of private land.

Based on the analysis in the Draft Environmental Assessment (EA), the WAPA Desert Southwest Regional Manager would approve, approve with modifications, or deny Sterling Solar 1’s application for interconnection. WAPA’s decision is limited to deciding whether the Sterling Solar 1 facility can be interconnected with the transmission system. Sterling Solar 1’s solar generation facility is not part of WAPA’s Federal action, but its potential impacts are presented alongside that of the Federal action as part of a comprehensive analysis in the Draft EA.

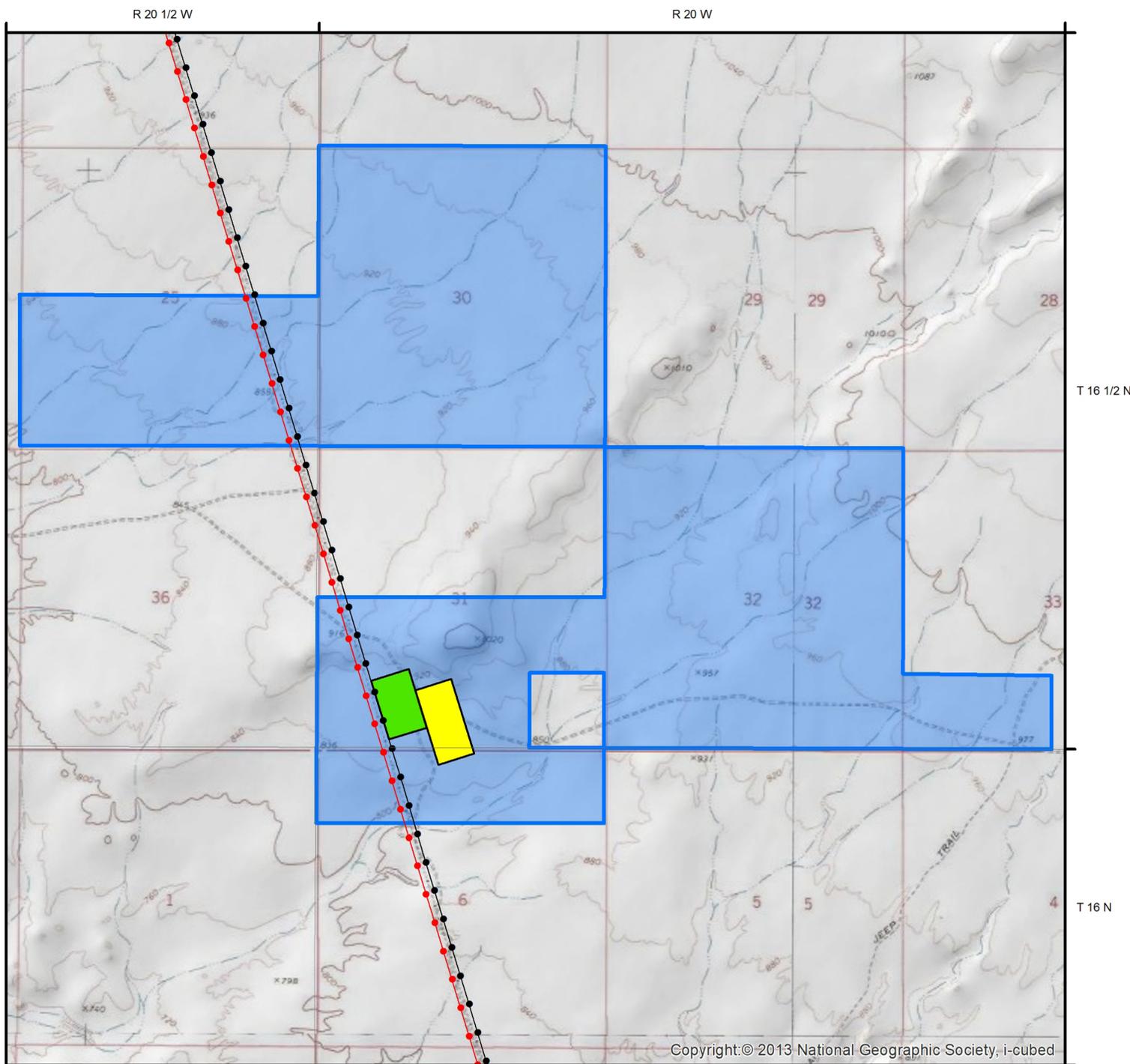
Project Proponent

Sterling Solar 1, LLC

Project Location

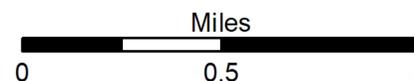
East of Golden Shores/Topock in Mohave County, AZ





Legend

- Sterling Solar 1 Project Area
- Sterling Solar Substation
- WAPA Switchyard
- Bureau of Reclamation Transmission Line
- Western Area Power Administration Transmission Line



WAPA's Proposed Action

WAPA's Proposed Action consists of approving a large generator interconnection request, entering into an interconnection agreement, and implementing project-related transmission system upgrades. The transmission system upgrades would include:

- Four three-pole structures (total of 12 new poles) up to 100 feet tall, made of galvanized steel
- Upgraded terminals at WAPA'S Topock and Black Mesa substations
- Build, maintain, and decommission a new switchyard and an interconnection looping in the new switchyard to the existing Topock-Black Mesa 230 kV transmission line
- Approximately 38 miles of new overhead fiber optic grounding wire installed on the existing transmission line between the Topock and Black Mesa substations, looped through the interconnection switchyard

Sterling Solar 1's Proposed Project

Sterling Solar 1 proposes to build, operate, maintain, and decommission an approximately 225 MW photovoltaic (PV) solar energy generation facility on private land. An additional up-to 225 MW battery energy storage system would be added based on market considerations. Construction of the solar facility would include the following components:

- Installing solar panels
- Installing underground collection lines from each panel to a collection point switchyard
- Constructing access roads within the facility for construction and maintenance
- Constructing an on-site collection point substation covering up to 20 acres
- Installing and maintaining an onsite aerial connection from the Sterling Solar 1 substation to the WAPA switchyard via a single structure
- Installation of up to 225 MW of battery storage

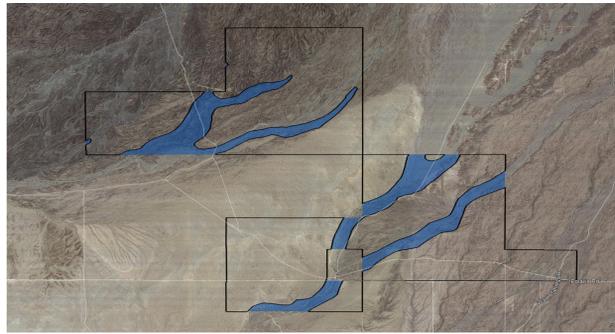




Visual Resources



Cultural Resources



Floodplains



Water Resources and Quality (Drinking/Surface/Groundwater)

- The **WAPA Proposed Action** would slightly reduce the overall scenic quality of approximately 50.6 acres of the landscape due to the cultural modification of the site by the four galvanized steel three-pole structures.
- The magnitude of change in landscape character associated with the **WAPA Proposed Action** would be moderate due to the strong color and form contrast of the 100-foot galvanized steel poles when compared to the undulating and rolling landforms, low stature vegetation, and wireframe transmission structures found in the existing landscape.
- The **WAPA Proposed Action** would be visible and may attract attention from I-40, Topock, and Golden Shores.
- There would be a minor to moderate change in the characteristic landscape and a minor to moderate change in the scenic quality of the project area from the **WAPA Proposed Action**.
- The **Sterling Solar 1 Proposed Project** would reduce the overall scenic quality of approximately 1,641 acres of the landscape as a result of the cultural modification represented by the proposed solar facility and ancillary components.
- The magnitude of change in landscape character associated with the **Sterling Solar 1 Proposed Project** would be major due to the dominant and expansive scale of the PV solar panel array when compared to the undulating and rolling landforms, low stature vegetation, and minimal built features found in the existing landscape.
- The **Sterling Solar 1 Proposed Project** would be visible and attract attention from I-40, Topock, and Golden Shores.
- There would be a major change in the characteristic landscape and a moderate change in the scenic quality of the project area from the **Sterling Solar 1 Proposed Project**.

- There are no known cultural resource sites that would fall within the disturbance footprint and/or the 50-foot-wide buffer of the disturbance footprint of the **WAPA Proposed Action**.
- Within the **Sterling Solar 1 Proposed Project** area there are four sites that are recommended eligible for inclusion in the National Register of Historic Places (NRHP) and there are two sites where a formal determination of eligibility could not be made based on surface observations.
- A 50-foot buffer would be established around the perimeters of these six site boundaries. All project-related ground-disturbing construction activities would avoid these sites. No impacts on NRHP-eligible or potentially eligible cultural resources are expected from the implementation of the **Sterling Solar 1 Proposed Project**.

- The **WAPA Proposed Action** would have no impact on existing floodplains.
- Construction activities associated with the **Sterling Solar 1 Proposed Project** within the 100-year floodplain would be limited to access road crossings and underground collection lines at ephemeral washes.
- There would be no modification of a floodplain that would impede or redirect flood flows or result in property damage on- or off-site. Neither the flood-carrying capacity of the floodplain, nor the pattern or magnitude of flood flows would be affected. The **Sterling Solar 1 Proposed Project** would have short-term, negligible, localized, adverse impacts to floodplains from the construction of the Sterling Solar 1 roadway system and underground collection lines. There would be no long-term permanent impacts to the floodplains.

- The project area* is located within two hydrologic subbasins: the Havasu-Mohave Lakes subbasin (HUC 15030101) and the Sacramento Wash subbasin (HUC 15030103).
- No ephemeral washes occur in the **WAPA Proposed Action** area and, as such, no impacts are anticipated to jurisdictional waters. There are several ephemeral washes in the **Sterling Solar 1 Proposed Project** area that would be avoided, except for the sites of the underground collection line trenches and four at-grade concrete ford crossings.
- Water for the **WAPA Proposed Action** and **Sterling Solar 1 Proposed Project** would be provided from a privately owned well. The water rights to the well are under an Analysis of Adequate Water Supply by the Arizona Department of Water Resources guaranteeing in excess of 8,000 acre-feet per year for 100 years.
- The **Sterling Solar 1 Proposed Project** construction activities (up to eight months in duration) would use an anticipated maximum of 189 acre-feet of water (2.4 percent of annual guarantee), and O&M would use an anticipated 6.9 acre-feet of water per year (less than 0.1 percent of annual guarantee). **WAPA's Proposed Action** construction, O&M, and decommissioning activities would use substantially less water than what is anticipated for Sterling Solar 1's facilities.
- The **Sterling Solar 1 Proposed Project** would avoid impacts to waters of the United States to the extent practicable, and at full build-out, total impacts to jurisdictional washes are anticipated to be less than 0.50 acres. As the facility design is finalized, Sterling Solar 1 would request a jurisdictional determination and obtain any necessary permits from the US Army Corps of Engineers (i.e., Nationwide Permit 51 for Land-Based Renewable Energy) for impacts to jurisdictional waters.

*Project area refers to both the WAPA Proposed Action and Sterling Solar 1 Proposed Project areas, unless otherwise noted.





General Wildlife and Special Status Wildlife Species

- There would be negligible, localized, short- and long-term, direct and indirect, adverse impacts to general and special status wildlife species due to the **WAPA Proposed Action**. There would be a temporary loss of approximately 50.6 acres and permanent loss of approximately 18.5 acres of wildlife habitat as a result of the development of the project.
- There would be minor, localized, short- and long-term, direct and indirect, adverse impacts to general and special status species due to the **Sterling Solar 1 Proposed Project** facilities. There would be a temporary loss of approximately 1,651 acres and permanent loss of about 1,641 acres of wildlife habitat as a result of the development of the project.
- Under both the **WAPA Proposed Action and Sterling Solar 1 Proposed Project**, the loss of wildlife habitat would result in a loss of shelter, nesting habitat, and forage for wildlife species and would result in general and special status species having to rely on habitat outside of the project footprint until restoration has been completed.
- Desert tortoises would be removed from the **Sterling Solar 1 Proposed Project** area before construction by trained biologists. No overnight hazards to desert tortoises (e.g., auger holes, trenches, pits, or other steep-sided depressions) would be left unfenced or uncovered. All excavations would be inspected for trapped desert tortoises at the beginning, middle, and end of the workday, at a minimum, but would also be continuously monitored by a trained biologist.
- Tortoise-permeable fencing would be installed to allow desert tortoises to return to the **Sterling Solar 1 Proposed Project** area during the O&M period. Any tortoises encountered during this time would be handled according to Arizona Game and Fish Department guidelines.

General Vegetation

- The predominant vegetation community in the project area is Mohave Desertscrub and consists of a combination of shrub-dominated upland vegetation and xeroriparian vegetation in ephemeral washes.
- The **WAPA Proposed Action** would result in approximately 50.6 acres of temporary disturbance and approximately 18.5 acres of permanent disturbance. This represents a negligible loss of the Mohave Desertscrub vegetation within the region.
- During construction of the **Sterling Solar 1 Proposed Project**, approximately 1,641 acres would be cleared and graded for construction of the PV solar panel array, with the exception of a 25-foot-wide avoidance buffer on either side of the ephemeral washes in the project area. This represents a negligible loss of Mohave Desertscrub vegetation within the region. The Sterling Solar I Proposed Action would be managed for low-growing vegetation during O&M.

Migratory Birds and Important Bird Areas

- The **WAPA Proposed Action** would permanently remove approximately 18.5 acres of vegetation and potential habitat for migratory birds. As Mohave Desertscrub land cover is common regionally, migratory birds would likely be displaced into other available habitat within or adjacent to the project area, and impacts would be negligible.
- Under the **Sterling Solar 1 Proposed Project** there would be approximately 1,641 acres of permanent surface disturbance and vegetation removal. Within the entire 2,077-acre project area, this would result in an approximately 83 percent reduction in habitat for migratory birds.
- Utility-scale PV facilities may attract migrating waterfowl and shorebirds through the “lake effect”, whereby migrating birds perceive the reflective surfaces of PV panels as bodies of water and collide with the structures as they attempt to land on the panels. According to the Department of Energy “there are many anecdotal events, but to date no empirical research has been conducted to evaluate the attraction of PV facilities to migrating waterfowl or songbirds. Therefore, the **Sterling Solar 1 Proposed Project** would result in long-term, negligible to minor, adverse impacts to migratory birds.
- There are no Important Bird Areas (IBA) within or directly adjacent to the project area. The Havasu National Wildlife Refuge and the Lower Colorado River Valley IBA are approximately 4 miles to the west of the project area and no impacts to these areas are anticipated.

Threatened, Endangered or Candidate Species

- There are no Threatened, Endangered or Candidate Species with the potential to occur in the project area or designated critical habitat for Federally listed species in the project area.

*Project area refers to both the WAPA Proposed Action and Sterling Solar 1 Proposed Project areas, unless otherwise noted.





Lands and Realty

Socioeconomics

Transportation

Air Quality

- The interconnection to the transmission line corridor would be located within the adjacent utility corridor on right-of-way (ROW) owned by the Bureau of Reclamation (Reclamation). Much of the Reclamation ROW is on lands administered by the Bureau of Land Management (BLM). Because there is the potential for the existing transmission lines to be redirected and enter the new substation, the existing authorized ROW agreements and any permit documentation would need to be reviewed by WAPA and the BLM and revised as appropriate to identify any changes in the ROW location.
- No temporary or permanent access limitations or alterations are anticipated to leases/permits outside of the project area.

- **WAPA's Proposed Action** construction and decommissioning activities would have a negligible, beneficial impact to socioeconomics from onsite crews using local services. During O&M, there would be no impact on socioeconomics because they would not employ any local community members.
- The **Sterling Solar 1 Proposed Project** may result in short-term, minor, localized, beneficial impacts to the socioeconomic conditions of the communities of Golden Shores and Topock during construction, when the number of on-site workers would peak at 350 workers per day.
- Permanent jobs associated with **Sterling Solar 1 Proposed Project** would have a negligible effect on overall employment in the two neighboring communities and Mohave County as a whole.
- The development of the **Sterling Solar 1 Proposed Project's** solar facility would subject that land to a potentially higher tax assessment ratio, which would affect the long-term property tax revenue paid to Mohave County.
- Residential home assessors believe that proximity to a solar installation has either no impact or a positive impact on home values. There are many factors that contribute to an alteration in home values with the construction of a utility-scale solar facility, including visual barriers around arrays, appeal of the land before the installation, and home density. Homes beyond one half mile and within three miles of a utility-scale solar project saw an estimated positive property value impact of 0.8 percent, on average.

- During construction, the **WAPA Proposed Action and Sterling Solar 1 Proposed Project** would result in a minor, short-term increase in traffic on Oatman Highway and Polaris Road in the immediate vicinity of the project area as equipment is transported to the site. Delays may occur during delivery of large equipment, such as the substation components; however, deliveries would be directed to the laydown areas within the project area to minimize traffic delays on local roadways or at intersections, even during peak construction.
- The **Sterling Solar 1 Proposed Project** would not require any road closures and delays are not expected to impede the existing use of Oatman Highway or Polaris Road. Construction traffic would also result in a negligible impact to I-40.
- After construction of the **Sterling Solar 1 Proposed Project** is completed, impacts to transportation would be negligible and would not impact traffic flow on local roadways. The solar site would only be visited once per week, on average, and WAPA inspection of their lines may average once a year.

- Short-term, localized, negligible increases in vehicle emissions and fugitive dust from ground disturbance and vehicle travel would be associated with the **WAPA Proposed Action and Sterling Solar 1 Proposed Project** during construction.
- Long-term, localized, negligible increases in emissions from a limited amount of maintenance vehicle traffic is expected with the **WAPA Proposed Action and Sterling Solar 1 Proposed Project**.

*Project area refers to both the WAPA Proposed Action and Sterling Solar 1 Proposed Project areas, unless otherwise noted.



INPUT NEEDED

We are seeking your input and comments regarding the Draft EA through a 45-day public comment period ending on August 24, 2020. Written comments will be accepted during this comment period. Comments should be made as specific as possible. Comments that are not specific to the WAPA Proposed Action will be deemed outside the scope of the analysis and will not be considered.

HOW TO PROVIDE EFFECTIVE INPUT

HELPFUL:

- Provide new information or data.
- Be specific and clearly identify:
 - » How is your input relevant?
 - » Identify the physical location associated with your input, as appropriate.
 - » Explain what the issue is and why you believe this.
- Provide constructive comments with documentation or resources to support your comments.

NOT SO HELPFUL:

- Avoid vague statements or concerns. Vague statements do not give WAPA direction to act.
- Understand that your input is not a vote for or against one of the alternatives. WAPA must rely on supporting information, not on the quantity of information received.
- Avoid using form letters to convey your point. Your unique way of writing or phrasing your input is important for understanding your point of view.

HELPFUL:

"I would like to see the proposed distribution lines located in close proximity to or within the existing transmission line corridor on the west side of the project area. This area currently contains overhead transmission lines and poles, which detract from the natural landscape already."

NOT SO HELPFUL:

"There should be no solar facilities in this area."
Why is this input not helpful?
It does not contain supporting information or rationale, such as why there should be no solar facilities in the area.

The WAPA website can be accessed at:

<https://www.wapa.gov/transmission/EnvironmentalReviewNEPA/Pages/Sterling-Solar-1.aspx>

Thank you for your participation and input on the Sterling Solar 1 Interconnection Project EA.

Comments are due August 24, 2020

Written comments can be submitted by mail or email to:

Western Area Power Administration, HQ
ATTN: Andrew M. Montano,
NEPA Document Manager
P.O. Box 281213
Lakewood, CO 80228-8213
montano@wapa.gov

National Environmental Policy Act (NEPA) Process

WAPA Determination to Prepare EA

Public Scoping

30-day Public Scoping Period

Data Gathering/
Resource Investigations

Draft EA

Public Comment

45-day Public Comment Period

Final EA WAPA Determination

Finding of No Signification Impact or Determination to Prepare an Environmental Impact Statement

We Are Here

