

## Project Overview

Western Area Power Administration (WAPA) is responding to a large generator interconnection request from Sterling Solar 2, LLC to interconnect a proposed photovoltaic (PV) solar energy generation facility to WAPA's electrical transmission system via an existing switchyard, looping in the existing Topock-Black Mesa 230 kV transmission line. The proposed Sterling Solar 2 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 2,219-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 2, LLC's application for interconnection. WAPA's decision is limited to either approving or denying the interconnection request from Sterling Solar 2, LLC to its transmission system. The Sterling Solar 2 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.

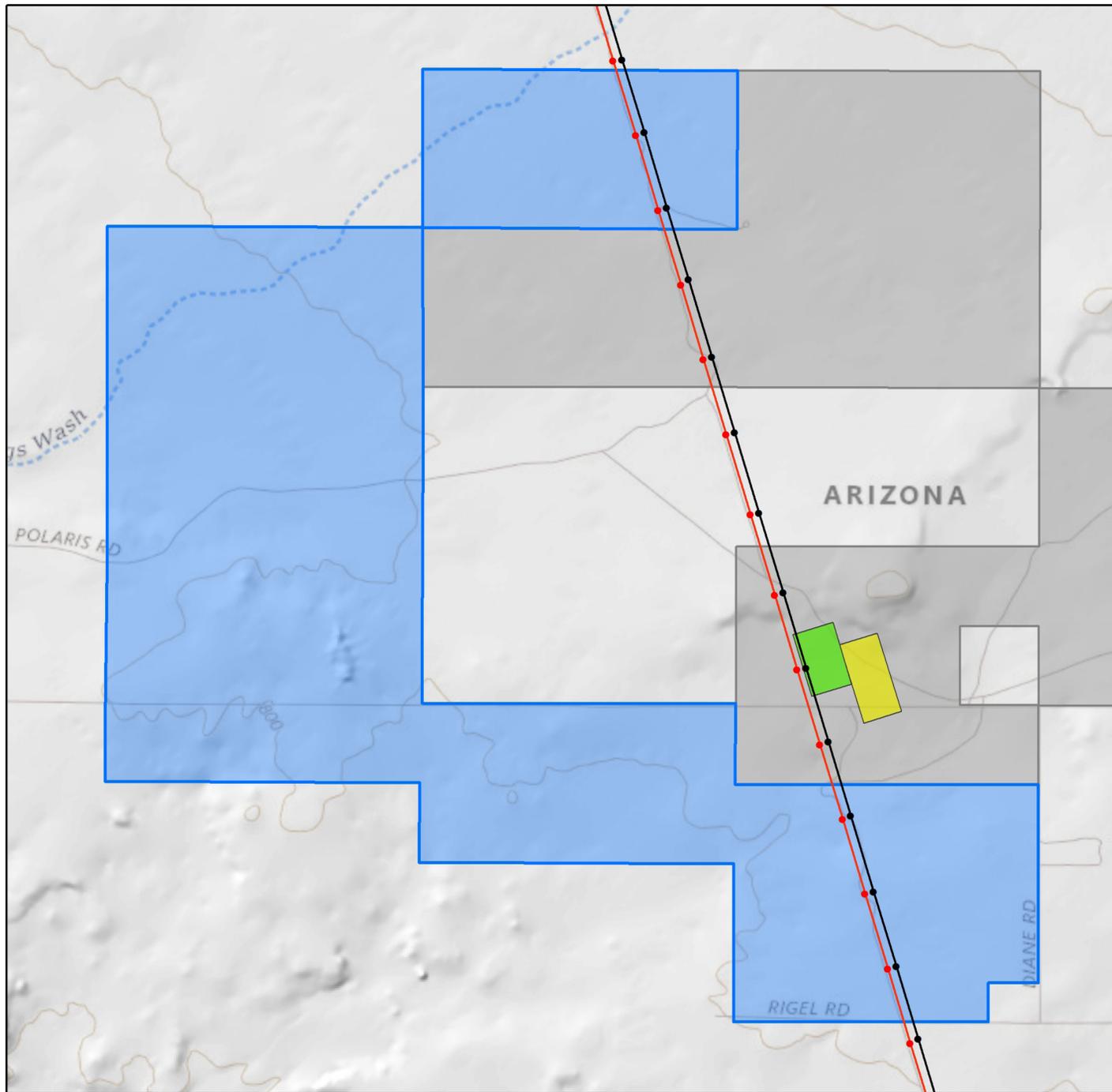
## Project Proponent

Sterling Solar 2, LLC

## Project Location

East of Golden Shores/Topock in Mohave County, AZ





Source: USGS The National Map

### Key

- Bureau of Reclamation Transmission Line
- Western Area Power Administration Transmission Line
- Sterling Solar 2 Project Area
- Sterling Solar Substation
- WAPA Switchyard
- Sterling Solar 1 Boundary

Sterling Solar 2  
Project Area

## 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:

- Removing and replacing four disconnect switches and their associated foundations and support structures at the Black Mesa Substation
- Performing switching of the existing disconnects at the WAPA Sterling Solar 1 switchyard to ensure proper synchronization of the proposed solar facility with WAPA's electrical transmission system

## Sterling Solar 2's Proposed Project

Sterling Solar 2, LLC 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. Because the proposed Sterling Solar 2 solar facility would loop through the Sterling Solar 1 substation and interconnection, a new substation would not need to be constructed for Sterling Solar 2. Construction of the solar facility would include the following components:

- Installing solar panels
- Installing underground collection lines from each panel to an existing collection point switchyard
- Constructing access roads within the facility for construction and maintenance
- Installation of up to 225 MW of battery storage





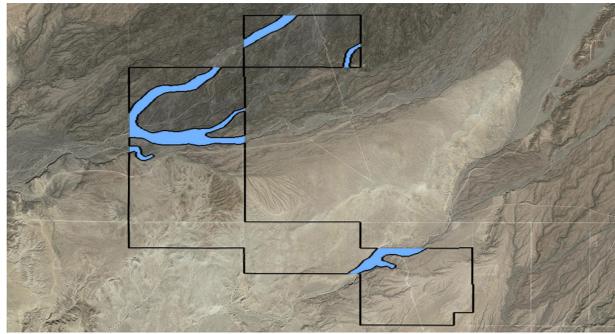
## Visual Resources

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to visual resources would occur from the **WAPA Proposed Action**.
- The **Sterling Solar 2 Proposed Project** would reduce the overall scenic quality of approximately 2,044 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 2 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 2 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 2 Proposed Project**.



## Cultural Resources

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to cultural resources would occur from the **WAPA Proposed Action**.
- Within the **Sterling Solar 2 Proposed Project** area there is one site that is recommended eligible for inclusion in the National Register of Historic Places (NRHP).
- A 50-foot buffer would be established around the perimeters of this site boundary. All project-related ground-disturbing construction activities would avoid this site. No impacts to NRHP-eligible cultural resources are expected from the implementation of the **Sterling Solar 2 Proposed Project**.



## Floodplains

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to floodplains would occur from the **WAPA Proposed Action**.
- Construction activities associated with the **Sterling Solar 2 Proposed Project** within the 100-year floodplain would be limited to access road and underground collection line crossings.
- There would be no modification of a floodplain due to the **Sterling Solar 2 Proposed Project** 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 2 Proposed Project** would have short-term, negligible, localized, adverse impacts to floodplains from the construction of the Sterling Solar 2 roadway system and underground collection lines. There would be no long-term permanent impacts to the floodplains.



## Water Resources and Quality (Drinking/Surface/Groundwater)

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to water resources and quality would occur from the **WAPA Proposed Action**.
- The **Sterling Solar 2 Proposed Project** is located within two hydrologic subbasins: the Havasu-Mohave Lakes subbasin (HUC 15030101) and the Sacramento Wash subbasin (HUC 15030103). All large ancillary facilities (e.g., O&M building) would be located outside of the 100-year floodplain. Some PV supports could be placed within ungraded drainages where technically feasible.
- Water for the **Sterling Solar 2 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 2 Proposed Project** construction activities (up to eight months in duration) would use an anticipated maximum of 233 acre-feet of water (2.9 percent of annual guarantee), and O&M would use an anticipated 8.5 acre-feet of water per year (0.1 percent of annual guarantee). **WAPA's Proposed Action** implementation, O&M, and decommissioning activities would use substantially less water than what is anticipated for Sterling Solar 2's facilities.
- The **Sterling Solar 2 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 2 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.





## General and Special Status Wildlife Species

## General Vegetation

## Migratory Birds and Important Bird Areas

## Threatened and Endangered Species

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. The **WAPA Proposed Action** would have negligible, localized, short-term, direct and indirect, adverse impacts due to the potential for collisions with vehicles, disturbance from noise and increased human presence, introduction and spread of noxious and invasive weeds, and increased predation.
- There would be minor, localized, short- and long-term, direct and indirect, adverse impacts to general and special status wildlife species due to the **Sterling Solar 2 Proposed Project**. The **Sterling Solar 2 Proposed Project** would result in the temporary loss of 2,059 acres of habitat and permanent loss of approximately 2,044 acres of habitat. 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 wildlife species having to rely on habitat outside of the project footprint until restoration has been completed.
- Sonoran desert tortoises\* encountered during construction of the **Sterling Solar 2 Proposed Project** would be relocated out of harm's way in accordance with AGFD guidelines. 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 occupy to the **Sterling Solar 2 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.

- 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** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to vegetation would occur from the **WAPA Proposed Action**.
- During construction of the **Sterling Solar 2 Proposed Project**, approximately 2,044 acres would be cleared and graded for construction of the PV solar panel array. This represents a negligible loss of Mohave Desertscrub vegetation within the region. **Sterling Solar 2 Proposed Project** would be managed for low-growing vegetation during O&M.

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. The **WAPA Proposed Action** would have no effect on migratory birds and Important Bird Areas (IBAs).
- The **Sterling Solar 2 Proposed Project** would result in the permanent loss of approximately 2,044 acres of habitat. Within the entire 2,219-acre project area, this would result in an approximately 91 percent reduction in 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.
- 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 2 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 3 miles to the west of the project area and no impacts to these areas are anticipated.

- There are no species listed as threatened or endangered under the Endangered Species Act (ESA) with the potential to occur in the project area and no proposed or designated critical habitat for federally listed species in the project area. Therefore, no impact to threatened or endangered species would result from the **WAPA Proposed Action** and **Sterling Solar 2 Proposed Project**.

\*The Sonoran desert tortoise is an ESA Candidate species, BLM sensitive species, and Arizona species of greatest conservation need.





## Lands and Realty

## Socioeconomics

## Transportation

## Air Quality

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to lands and realty would occur from the **WAPA Proposed Action**.
- The **Sterling Solar 2 Proposed Project** is located entirely on privately owned lands. Although ROWs may be present, impacts to WAPA or other entities would be negligible.
- No temporary or permanent access limitations or alterations are anticipated to lands outside of the project area.

- The **WAPA Proposed Action** does not include any new ground disturbing activities. All transmission system-related upgrades would take place within existing WAPA facilities and would not alter the O&M practices which currently take place. No impacts to socioeconomics would occur from the **WAPA Proposed Action**.
- The **Sterling Solar 2 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 2 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 2 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 implementation, the **WAPA Proposed Action would** use existing unpaved access roads to reach work areas. WAPA does not plan to improve existing access roads beyond blading the existing road prism to create a safe, level surface if the road becomes rutted due to weather or use by others.
- The **WAPA Proposed Action** would not alter the O&M practices which currently take place, and would have no long-term effect on transportation.
- During construction, the **Sterling Solar 2 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; 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 2 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 2 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.

- Short-term, localized, negligible increases in vehicle emissions and fugitive dust from ground disturbance and vehicle travel would be associated with the construction of the **Sterling Solar 2 Proposed Project** and implementation of the **WAPA Proposed Action**.
- The **WAPA Proposed Action** would not alter the O&M practices which currently take place, and would have no long-term effect on air quality.
- Long-term, localized, negligible increases in emissions from a limited amount of maintenance vehicle traffic is expected with the **Sterling Solar 2 Proposed Project**.



# INPUT NEEDED

We are seeking your input and comments regarding the Draft EA through a 45-day public comment period ending on December 18, 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-2.aspx>**

Thank you for your participation and input on the Sterling Solar 2 Interconnection Project EA.

**Comments are due December 18, 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

