# **Record of Decision (ROD)**

## Final Environmental Impact Statement

for the

Aiya Solar Project

U.S. Department of the Interior Bureau of Indian Affairs Western Regional Office Phoenix, Arizona

U.S. Department of the Interior Bureau of Land Management Southern Nevada District Las Vegas, Nevada

#### DEPARTMENT OF THE INTERIOR

Record of Decision for an up to 900-acre, long term lease for the development of a 100 MW solar generation facility and approximately 26 acres of associated rights-of-way (ROW) for access roads, transmission line, and a temporary water pipeline on the Moapa River Indian Reservation, and approximately 17 acres of ROW on Bureau of Land Management managed land in Clark County, Nevada.

AGENCY: Bureau of Indian Affairs and Bureau of Land Management

**ACTION**: Record of Decision

SUMMARY: This document constitutes the United States Department of the Interior (DOI), the Bureau of Indian Affairs (BIA), and the Bureau of Land Management's (BLM) Record of Decision (ROD) for the Aiya Solar Project (Project). This ROD represents BIA's conditional approval of the Moapa Band of Paiute Indians' (Tribe) solar energy ground lease with the Aiya Solar Project, LLC (Applicant) and the associated easements for a transmission line, access road, and temporary water pipeline rights-of-way (ROWs) for up to 50 years on the Moapa River Indian Reservation (Reservation), for the purposes of constructing and operating a 100 megawatt (MW) photovoltaic (PV) solar generating project and associated infrastructure. The ROD also approves the BLM's issuance of a ROW grant for a 230 kilovolt (kV) transmission (gen-tie) line and associated maintenance road on BLM-managed public land. The Project is analyzed in the Final Environmental Impact Statement (EIS) (BIA 2016). Cooperating agencies for development of the Final EIS included the BLM, the Tribe, the EPA, and the U.S. Fish and Wildlife Service (USFWS).

ADDITIONAL COPIES: Copies of the Final EIS and Record of Decision are available at the project web site <a href="www.aiyasolarprojecteis.com/">www.aiyasolarprojecteis.com/</a> as well as via links on the BIA and BLM websites. Additionally, copies will be available in the following locations: BIA Western Regional Office, 2600 North Central Avenue, 12th Floor, Suite 210, Phoenix, Arizona; U.S. Bureau of Land Management, 4701 N. Torrey Pines Drive Las Vegas, NV 89130; BIA Southern Paiute Agency, 180 North 200 East, Suite 111, St. George, Utah; and Moapa River Indian Reservation Tribal Hall, One Lincoln Street, Moapa, NV 89025-0340. The BIA issued a *Federal Register* notice regarding the availability of the Final EIS on March 10, 2016. The Environmental Protection Agency (EPA) issued a notice of availability in the *Federal Register* on June 10, 2016. Notices were also published in the Moapa Review and Las Vegas Review Journal newspapers.

**FOR FURTHER INFORMATION CONTACT**: Mr. Chip Lewis, BIA Western Regional Office, Branch of Environmental Quality Services, 2600 North Central Avenue, Phoenix, Arizona 85004–3008, telephone (602) 379–6782; or Mr. Garry Cantley at (602) 379–6750.

## **Table of Contents**

1.	Intro	Introduction				
	1.1	Backgro	ound	1		
	1.2	Decisions Being Made				
		1.2.1	BIA	3		
		1.2.2	BLM	3		
2.	Alter	natives	•	3		
	2.1	Conside	ered and Carried Forward for Detailed Analysis	3		
		2.1.1	Proposed Project (BIA's Proposed Action/Selected Alternative)	3		
		2.1.2	Alternative Gen-Tie Route	4		
		2.1.3	Alternative Water Supply	4		
		2.1.4	No Action Alternative	5		
	2.2	Alterna	tives Considered but Eliminated from Detailed Analysis	5		
		2.2.1	Alternative Reservation Locations	5		
		2.2.2	Alternative Off-Reservation Locations	6		
		2.2.3	Alternative Interconnection Options	6		
		2.2.4	Concentrated Photovoltaic (CPV) Technology	6		
		2.2.5	Distributed Solar Generation	6		
3.	Perm	nits and Approvals				
4.	Com	ments on the Final EIS				
5.	Mitigation Measures					
	5.1	Soils		8		
	5.2	Water Quality				
	5.3	Air		10		
	5.4 Biolog		ical Resources	12		
		5.4.1	General	12		
		5.4.2	Desert Tortoise	16		
	5.5	Cultura	al Resources	17		

## **Table of Contents**

	5.6	Transportation	18				
	5.7	Public Health & Safety	18				
	5.8	Mitigations Measures Not Adopted	19				
	5.9	Mitigation Compliance Monitoring and Reporting	19				
6.	Public	e Involvement	t 19				
	6.1	Public Scoping Period	19				
	6.2	Draft EIS Preparation and Distribution	21				
	6.3	Final EIS Preparation and Distribution	21				
7.	Decisi	on Rational	212				
8.	Final	Agency Action	255				
	8.1	Bureau of Indian Affairs	255				
	7.2	Bureau of Land Management	26				
9.	Refer	ences 277					

## **Attachments**

- A. List of Anticipated Permits for the Aiya Solar Project
- B. Final Bird and Bat Conservation Strategy (BBCS)
- C. Biological Opinion
- D. Final Memorandum of Agreement (MOA)

#### 1. Introduction

This document constitutes the DOI, BIA, and BLM's ROD for the Project. This ROD represents BIA's conditional approval of the Tribe's solar energy ground lease and the associated easements for a transmission line, access road, and temporary water pipeline ROWs on the Reservation for the purposes of constructing and operating a 100 MW PV solar generating project and associated infrastructure. The ROD also approves the BLM's issuance of a ROW grant for a 230 kV transmission line and access road on BLM-managed public land.

This ROD provides background on the solar project, summarizes the decisions being made, summarizes the alternatives evaluated, discusses the mitigation measures to be implemented, and summarizes the public participation process used in reaching a decision.

## 1.1 Background

The Applicant is proposing to construct a 100 MW solar PV generation facility and associated infrastructure on the Reservation. The Proposed Project will be located approximately 40 miles northeast of Las Vegas, in Clark County, Nevada, with the solar field (and ancillary facilities) on up to 900 leased acres within the Reservation. These lands are currently vacant except for roads, pipelines, and transmission line ROWs.

The gen-tie line will be located on Reservation lands, Federal lands managed by the BLM south of the solar site, and private lands (owned by NV Energy) adjacent to the Reid-Gardner Substation. The temporary water pipeline associated with the Proposed Project will be located on the Reservation south of the solar site.

The locations of the portions of the Proposed Project on Tribal and federal land are described below (all locations are in Mount Diablo Meridian):

- Tribal Land
  - o Solar Lease Area Township 14 South, Range 66 East, Sections 29, 30, 31, and 32
  - o Gen-Tie Line Sections 29 and 32 of Township 14 South Range 66 East
  - Temporary Water Pipeline Sections 30 and 31 in Township 14 South, Range 66
     East and Section 6 of Township 15 South and Range 66 East
- Federal Land managed by the BLM

#### **Record of Decision**

Aiya Solar Project

 Gen-Tie Line and associated maintenance road - Section 5 of Township 15 South and Range 66 East

The BIA's mission is to "enhance the quality of life, to promote economic opportunity, and to carry out the responsibility to protect and improve the trust assets of American Indians, Indian Tribes, and Alaska Natives." The Project will create an economic development opportunity for the Tribe by providing a long-term economically viable revenue source (lease income) and creating new jobs and employment opportunities for Tribal members, and will generate clean renewable electricity from the Tribe's solar resources. That electricity can be efficiently connected to the regional grid to assist the Federal Government, the State of Nevada, and neighboring states and companies to meet their renewable energy goals. The Proposed Project will also help meet the goals of the Federal Government to eliminate or reduce greenhouse gas (GHG) emissions and promote the deployment of renewable energy technologies.

The Tribe identified the Proposed Project as a viable opportunity to meet its economic development goals, because the lease would provide much needed revenue to the Tribe while occupying a small portion of the Reservation. Construction and operation of the Project will also afford employment opportunity to tribal members. The Proposed Project is consistent with the Tribe's tradition of respect for the land and would fulfill the purposes for which the 70,000 acres were restored to the Tribe by the Federal Government in 1980 (Moapa Paiutes, n.d.).

The Proposed Project will also assist in addressing the management objectives in the Energy Policy Act of 2005 (Title II, Section 211) and Secretarial Order 3285A1 (March 11, 2009), which established the development of environmentally responsible renewable energy as a priority for the DOI.

The Proposed Project is analyzed in the Final EIS (BIA 2016), for which the Environmental Protection Agency (EPA) published the notice of availability in the *Federal Register* on June 10, 2016. The BIA also published its notice of availability of the Final EIS in the *Federal Register* on March 10, 2016. Cooperating agencies for development of the Final EIS included the BLM, the Tribe, the EPA, and the USFWS.

#### 1.2 Decisions Being Made

#### 1.2.1 BIA

The BIA has a trust responsibility to protect and preserve the Tribe's land, assets, and resources while promoting tribal self-governance. The BIA, pursuant to 25 U.S.C. § 415, has decided to conditionally approve the solar energy ground lease for the generation facility and associated ROW agreements between the Tribe and the Applicant for the temporary water pipeline, portions of the gen-tie line, and access roads (temporary and permanent) located on the Reservation.

#### 1.2.2 BLM

The BLM has decided to issue a ROW grant to the Applicant under Title V of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. § 1761(a)) for the construction, operation, maintenance, and decommissioning of the portion of the proposed gen-tie line that is on BLM-managed public lands. The casefile number for the gen-tie ROW is N-093564. This ROW is being issued and will be maintained in compliance with FLPMA, BLM ROW regulations (43 C.F.R. § 2800), and other applicable Federal laws and policies.

#### 2. Alternatives

## 2.1 Considered and Carried Forward for Detailed Analysis

#### 2.1.1 Proposed Project (BIA's Proposed Action/Selected Alternative)

Under the Selected Alternative (Proposed Action Alternative), also identified as the environmentally preferable alternative (40 C.F.R. 1505.2(b)), the Applicant will construct, operate, maintain, and decommission a 100 MW solar PV power plant on Tribal lands within the Reservation located in Clark County, Nevada. Major on-site facilities will include the solar field (blocks of PV panels mounted on fixed tilt or tracking systems and associated equipment), a project substation, and operation and maintenance (O&M) facilities. The off-site facilities will include a 230 kV transmission line located on the Reservation, BLM-managed public lands, and private lands owned by NV Energy. Additional offsite facilities will include short access roads to connect the Project to State Highway 168, and a temporary intake in the Muddy River and corresponding temporary water delivery pipeline, all of which will be located on the Reservation.

The Project facilities and related facilities will disturb an approximate total area of 647 acres on the Reservation. The solar arrays, substation, and operations building and parking will disturb approximately 625 acres within a 900-acre lease area on the Reservation. The 230 kV transmission line corridor (up to 150-foot wide) connecting the solar facility to the nearby Reid-Gardner Substation will disturb approximately 40 acres and will be approximately 2.5 miles in length (about 1.1 miles on the Reservation, 0.9 miles on public land, and 0.5 miles on private land). The temporary water line will impact approximately 5 acres and will be approximately 2 miles in length, and the short access roads from Highway 168 will impact approximately 1 acre of land.

The current Proposed Project site was identified as the best location for the proposed solar project for a number of reasons: it was identified by the Tribe as a viable solar site; it is close to transmission interconnection points at or near the Reid-Gardner Substation (which offer near-term interconnection opportunities); it has nearby road access; it has relatively low quality habitat for desert tortoise; and it has limited anticipated impacts to surface water or groundwater.

A more detailed description of the Selected Alternative can be found in Chapter 2 of the Final EIS.

#### 2.1.2 Alternative Gen-Tie Route

The BIA analyzed an alternative gen-tie transmission line route in the Final EIS that would originate on tribal lands at a solar project substation location south of Highway 168. From this substation, it would cross about 0.8 miles of Reservation land following an existing ROW on the Reservation south-southeast for about 0.4 miles to a point where it would turn southeast and enter BLM-managed public lands at a location similar to where the proposed gen-tie route will enter public lands.

#### 2.1.3 Alternative Water Supply

The BIA analyzed an alternative source of construction water in the Final EIS that would use groundwater from existing water rights owned by the Moapa Band of Paiutes. Under this alternative a well would be drilled on the Project site and water would be delivered from the well to the temporary storage tanks via a temporary pipeline constructed aboveground.

If the well alternative is used to provide construction water, the well would be drilled on the solar site to a depth of 1,000 feet or more using a truck-mounted drilling rig with supporting equipment for water supply and drilling fluid management.

#### 2.1.4 No Action Alternative

The No Action Alternative assumes that the lease agreement is not executed, the utility ROWs are not issued, and the solar project is not built. Under the No Action Alternative, the agencies' purpose and need for federal action would not be met. The Tribe would not benefit economically from the energy production that can be obtained from their prime solar resources and trust lands, and the development of sustainable renewable resources would not occur. The Federal government, Nevada, and neighboring states and companies would not be assisted in their efforts to meet their renewable energy goals. The No Action Alternative forms the baseline against which the potential impacts of the Proposed Action and other Alternatives are compared.

## 2.2 Alternatives Considered but Eliminated from Detailed Analysis

The National Environmental Policy Act (NEPA) requires federal officials to rigorously explore and objectively evaluate all reasonable alternatives, and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail. 40 C.F.R. § 1502.14. Specific alternatives that were eliminated from detailed analysis are discussed below, along with the rationale for their elimination.

#### 2.2.1 Alternative Reservation Locations

Other sites on the Reservation were evaluated for potential solar development. This evaluation considered a variety of factors including up to 1,000 contiguous developable acres, favorable topography, drainage, potential impacts to sensitive resources (including special status species and cultural resources), and proximity to transmission interconnection points and highway access.

This process was designed to identify areas with the greatest potential for development while minimizing potential adverse impacts or permitting issues. This included making use of existing infrastructure to minimize disturbance and impacts associated with the access roads and gen-tie lines. Large portions of the Reservation were eliminated from further consideration by applying these criteria. The other solar sites on the Reservation, including the K Road Moapa Solar Project site, the Moapa Solar Energy Center site, and other sites on the Reservation previously studied and

eliminated by the K Road Moapa Solar Facility EIS (BIA 2012) were also eliminated. In addition, the 6,000 acre desert tortoise relocation areas associated with the K Road Moapa Project are not available for development.

#### 2.2.2 Alternative Off-Reservation Locations

The Proposed Project is, by the terms of its purpose, limited to locations on the Moapa River Indian Reservation, held in trust by the BIA for the Tribe. Accordingly, the BIA did not consider off-reservation alternatives.

#### 2.2.3 Alternative Interconnection Options

Alternatives were considered that would interconnect the Proposed Project directly into the Reid-Gardner Substation. However, direct connection alternatives were determined to be technologically infeasible because NV Energy has determined that this and any other potential generation projects that might be developed in the area must interconnect to a new switchyard that could be located northeast of the existing Reid-Gardner Substation.

## 2.2.4 Concentrated Photovoltaic (CPV) Technology

CPV technology uses layers of wafers to absorb different wavelengths of sunlight and provide more power conversion efficiency than typical PV panels. This requires dual tracking technology to provide critical alignment with the direct sunlight in order to be efficient. CPV is generally mounted on taller structures than traditional PV (as high as 40 feet above the surface). Because this technology is relatively new, there are risks for long-term performance reliability, and manufacturing capacity to supply large-scale utility projects has not been proven to date. Therefore, this alternative has not been carried forward for detailed analysis, because it is technologically unproven.

#### 2.2.5 Distributed Solar Generation

The concept of distributed solar generation is to locate smaller projects near the demand for electricity. Generally, these projects generate power using PV panels (similar to all PV technologies). The PV panels could be installed on private or publicly owned residential, commercial, or industrial building rooftops or in other disturbed areas such as parking lots or disturbed areas adjacent to existing structures such as substations. To be a viable alternative to the

Proposed Project, there would need to be sufficient locations where new distributed solar generation could be installed to cumulatively generate 100 MW of capacity and sufficient local demand for this electricity. In order to meet the Proposed Project's purpose, generation would need to be located on the Reservation, and there are insufficient rooftops or other disturbed areas on the Reservation to make this option viable. For these reasons, the BIA determined that distributed solar generation would not meet the agencies' purpose and need, and thus, this alternative was eliminated from detailed analysis.

## 3. Permits and Approvals

Attachment A provides a synopsis of the permits and approvals that the Applicant has obtained or will need to obtain prior to beginning construction activities.

#### 4. Comments on the Final EIS

Comments on the Final EIS were received from EPA Region 9. The comments consisted of commendations and recommendations. No errors in fact were pointed out and no corrections were provided. Therefore, the comments from EPA did not require a response, and no revisions or clarifications are being made to the Final EIS.

#### 5. Mitigation Measures

As required by CEQ's NEPA regulations, 40 CFR § 1505.2(c), BIA and the BLM have identified and adopted all practicable mitigation measures to avoid or minimize environmental harm from the Selected Alternative (Proposed Action Alternative) according to federal laws, regulations, and policies. The construction of the Project will also incorporate adaptive management principles to mitigate unforeseen impacts. Adaptive management is a structured, iterative process of optimal decision making in the face of uncertainty with an aim to reducing uncertainty over time via system monitoring.

The mitigation measures below, as analyzed in the Final EIS and required by this decision, represent best management practices (BMPs) and technologies, and the most current regulatory guidance to reduce adverse impacts to environmental resources such that the overall Project will pose minimal significant impact. The complete language of the mitigation measures, as well as design modifications and terms and conditions, are provided in the Final EIS.

#### 5.1 Soils

The Proposed Project could result in adverse impacts to soils as a result of increased erosion rates and reduction of soil productivity from removal of vegetation and grading activities. The Applicant is required to implement the following mitigation measures to reduce overall impacts to soil resources:

- Grading on the solar site will be minimized to only those areas where necessary to meet the
  construction and operational requirements of the Project. Where the till-and-roll technique is
  used on nearly all the site, the soil surface will be prepared using conventional farming
  equipment and the natural contours, soil profiles, and native seed bank materials will be
  maintained.
- Construction and operational activities will be conducted in compliance with a stormwater
  pollution prevention plan (SWPPP) that will include BMPs and other erosion-control
  measures designed to minimize soil erosion and limit sheet flow and downstream
  sedimentation. The SWPPP will also incorporate adaptive management of actions if erosion
  and sedimentation control measures are found to be insufficient to control surface water at
  the site.
- To minimize wind erosion, all construction activities will comply with the Fugitive Dust Control Plan that will be developed and implemented for the Proposed Project. Measures such as watering and "stop work" periods during high winds will be incorporated into the plan.
- A Site Restoration and Revegetation Plan will be implemented to limit impacts to temporary disturbance areas as much as practicable. The Plan will define temporary disturbance areas and BMP measures for soil restoration and re-planting and establish monitoring and success criteria.

#### 5.2 Water Quality

Potential adverse impacts to water are related to soil erosion and downstream sedimentation as well as water transport of hazardous material through soil erosion. As mentioned above, soil erosion will be managed via the SWPPP and erosion controls within ephemeral washes to reduce velocity of flood flow and limit downstream sedimentation. Impacts to jurisdictional waters of the US are minimal, totaling 0.27 acre for the solar site and 0.14 acre for the gen-tie line. The Applicant is required to implement the following measures to reduce overall impacts to water quality:

#### Record of Decision

Aiya Solar Project

- Grading on the solar site will be minimized to only those areas where necessary to meet the construction and operational requirements of the Project such as where leveling is necessary, access ways among the rows of panels, etc. The drainage plan will be designed to allow surface flows upstream of the site to flow to the ephemeral drainages downstream of the site. In some cases, upstream surface flow will be diverted around the solar array and be returned to the ephemeral drainages downstream of the site.
- The final drainage and grading plans will demonstrate that downstream flows will not be adversely impacted due to any proposed changes to natural washes resulting from proposed grading, drainage management measures or the addition of retention ponds.
- The paths for all stormwater flows will be identified and modeled as part of the final grading and drainage plan.
- As part of the minimization of grading in the final design, ephemeral drainages will be avoided to the extent practical. The retention of other smaller drainages will be maximized to the extent practical, where they can remain stable with project operation.
- The number of drainage crossings will be minimized to the extent possible and each will be designed to accommodate adequate flow.
- Adaptive management techniques will be implemented via the SWPPP to maintain BMPs utilized to decrease sediment erosion and downstream transport of sediment during large rain events.
- An annual inspection of jurisdictional drainages receiving flows from the site will be conducted at designated monitoring points to determine if accelerated erosion is occurring. If accelerated erosion is observed, an adaptive management strategy will be employed to correct the situation.
- Weekly and post-storm monitoring of erosion and sedimentation will be conducted during construction. If localized gullies develop or result in increased rates of erosion and sedimentation, repairs will be made and erosion and sedimentation control measures will be updated.
- Placing Project facilities in washes with periodic significant flows will be avoided by all
  alternatives to minimize direct and indirect impacts to the washes from erosion, migration of
  channels and local scour. All larger ancillary facilities will be located outside of drainages.
   Some PV supports could be placed within ungraded drainages where technically feasible.
- Where fencing is built across drainages, if flows through those drainages could impact the fencing, it will be inspected and repaired as needed within 48 hours of large flood events.

- A Spill Prevention, Countermeasure, and Control (SPCC) plan will be developed and
  implemented during construction and the operations phase of the Proposed Project.
  Adequately-sized secondary spill containment will be incorporated around the transformers at
  the on-site substation to ensure proper capture and control measures for potential spills. The
  Plan will also provide for hazardous material spill prevention and clean-up measures, if a
  spill occurs.
- To conserve water, xeric landscaping will be used if applicable.

#### 5.3 Air

The primary air quality impacts will occur during the construction and decommissioning periods from increased vehicle emissions and fugitive dust. The following mitigation measures will be incorporated into construction contracts by the Applicant and will be implemented to reduce overall air impacts that would result from the Proposed Project:

- The Project will obtain a dust control permit from Clark County for activities outside tribal land, including any required supplements.
- The area of grading and vegetation removal will be limited to the area required for Project construction and operation. Where the till-and-roll technique is used, natural contours, soil profiles, and native seed bank materials will be maintained.
- Ground disturbing activities will be undertaken in accordance with the approved dust control plan to minimize the amount of time areas will be exposed to wind erosion.
- Vehicular speeds on non-paved roads will be limited to 25 miles per hour.
- When hauling material and operating non-earthmoving equipment, spillage will be prevented and speeds will be limited to 15 miles per hour. The speed of earth-moving equipment will be limited to 10 mph.
- Grading operations will be phased where appropriate to limit the amount of disturbance at any one time, and water will be used for stabilization of disturbed surfaces under windy conditions.
- Water will be applied to disturbed areas to control dust and to maintain moisture level at
  optimum levels for compaction, as needed. Water will be applied using water trucks and
  application rates would be monitored to prevent runoff and ponding. Approved palliatives
  will be used to control dust as required.
- Exposed stockpiled material areas will be covered during windy conditions (forecast or actual wind conditions of approximately 25 miles per hour or greater).

- Open storage piles and disturbed areas will be stabilized by covering and/or applying water to
  the stockpile to form a crust or organic dust palliative where appropriate, at the completion of
  activity.
- Dust control measures such as watering and the application of palliatives approved by the USFWS and the Tribe will be applied to access roads and other Project roads to adequately control fugitive dust.
- Excavation and grading will be suspended during periods when sustained winds exceed a
  designated speed.
- All trucks hauling soil and other loose material will be covered or at least 2 feet of freeboard will be maintained.
- All paved roads will be kept clean of objectionable amounts of mud, dirt, or debris, as necessary. Gravel or other similar material will be used where non-paved access roads intersect paved roadways to prevent mud and dirt track-out.
- If used, air pollutant emissions from the emergency diesel generators and fire water pump engines will be minimized by an operating limitation of no more than 50 hours per year per engine, for routine testing and maintenance of these components. These engines will be compliant with current EPA tier emission performance criteria.
- Unnecessary idling will be limited, and periodic unscheduled inspections will be performed to ensure that construction equipment is properly maintained.
- A traffic and parking management plan will be finalized to minimize traffic interference and maintain traffic flow.

#### **Recommended Measures:**

In addition to the mitigation measures identified above, additional recommendations for reducing impacts to air quality are outlined below:

- Recommend that all contractors maintain and tune engines per manufacturer's specifications to perform to EPA certification levels, where applicable.
- Recommend that any tampering with engines be prohibited and continued adherence to manufacturer's recommendations be required.
- Recommend that contractors lease new, clean diesel burning equipment. In general, the best available emissions control technology should be used - Tier 4 engines should be used for project construction equipment to the maximum extent feasible.

- Recommend that contractors use EPA-registered particulate traps and other appropriate
  controls where suitable to reduce emissions of diesel particulate matter and other pollutions at
  the construction site.
- Recommend that installation of wind fencing be considered in addition to the primary dust control methods, if needed and applicable to aid in effective minimization of fugitive dust.

## 5.4 Biological Resources

The following measures are required to minimize, reduce, and mitigate impacts to biological resources with implementation of the Project.

#### 5.4.1 General

- Preconstruction surveys will be conducted by qualified biologists according to the most current USFWS, BLM or Nevada Department of Wildlife (NDOW) protocols, where available, by species. These surveys will confirm the presence of special status plants, noxious weeds, and general and special status wildlife species, to help prevent direct loss of vegetation and wildlife and to prevent the spread of noxious plant species.
- Biological monitors will be assigned to the Project in areas of sensitive biological resources and along all roads used by Project personnel. Biological monitors will be in place along the access road during construction, and/or temporary fencing will be utilized during the construction period to minimize any impacts from vehicle traffic during construction. The monitors will be responsible for ensuring that impacts to special status species, native vegetation, wildlife habitat, or unique resources are avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities would need to be restricted to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction.
- The Applicant will implement controls at entry locations to facilitate weed management and
  invasive species control in order to minimize infestation to the Project site from an outside
  source. Trucks and other large equipment will be checked before entering the site for any
  invasive species debris or seed.
- Monitoring for the presence of ravens and other potential human-subsidized predators of
  desert tortoises will be conducted, and a Raven Control Plan will be implemented. BMPs to
  discourage the presence of ravens onsite include trash management, elimination of available
  water sources, designing structures to discourage potential nest sites, use of hazing to

- discourage raven presence, removal of nesting material prior to egg laying, and active monitoring of the site for presence of ravens.
- To minimize activities that attract prey and predators during construction and operations, garbage will be placed in approved containers with lids and removed promptly when full to avoid creating attractive nuisances for wildlife. Open containers that may collect rainwater will also be removed or stored in a secure or covered location to not attract birds.
- All work area boundaries will be conspicuously staked, flagged, or otherwise marked to
  minimize surface disturbance activities. All workers, equipment, vehicles, and construction
  materials shall remain within the ROW, existing roads, and designated areas. Staging areas
  will be located in previously disturbed areas whenever possible. Crushing of perennial
  vegetation in work areas will be avoided to the maximum extent practicable.
- All transmission towers and poles will be designed to be avian-safe in accordance with the Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006) and Reducing Avian Collisions with Power Lines by the U.S. Fish and Wildlife Service and the APLIC (APLIC 2012).
- Additionally, a post-construction bird study will be implemented to monitor for incidents of
  bird strikes during the operation of the Proposed Project. The scope and protocol of the postconstruction surveys for the monitoring and reporting of bird strikes were determined in the
  Bird and Bat Conservation Strategy (BBCS) developed in coordination with USFWS. A
  draft BBCS was included in the Final EIS as Appendix L and the Final BBCS is attached to
  this ROD as Attachment B.
- If the tubular-H design type transmission pole structures are used, the horizontal member of the structure will be fitted with an inverted-Y bar to discourage perching. Similar measures will be used to deter nesting if lattice structures are utilized.
- The following measures identified in the BBCS will also be put into place:
  - O Areas along the transmission line(s) with a high potential for collision will incorporate flight diverters on the static line to make it more visible. Static lines are the smallest diameter lines, and potentially the most difficult for birds to see and avoid. Where any pole requiring guy wires is located near areas of concentrated bird activity, guy wires will be marked to increase visibility where possible. Post-construction monitoring and adaptive management will clarify areas of concentrated avian and/or bat use as well as areas experiencing a high degree of avian or bat mortality. Flight diverter types and locations will be determined through consultation with the BLM, USFWS, and/or NDOW. The number of structures requiring the use of guy wires would be kept to a minimum.

- To reduce perching along segments of the transmission line, perch deterrents will be installed during construction. Anti-perching and nesting devices are important tools for reducing the risk of avian electrocution and keeping the entire electrical system running smoothly. These deterrents also preclude the use of transmission lines and transmission line towers as hunting perches for raptor species, limiting the predation of other avian species or animals which use surrounding vegetation for foraging and nesting. Exact locations of perch deterrent poles will be determined in consultation with USFWS and NDOW, BLM, or the Tribe depending on land ownership prior to construction of the line.
- o Inspections of lines and other areas where raptor or corvids (e.g., crows and ravens) might nest will be conducted annually. Inactive nests are not protected by the Migratory Bird Treaty Act, and removal will be conducted prior to the next breeding season. Should nesting activity become a long-term issue, alternate measures to discourage nesting activities and removal of nesting materials prior to eggs being laid will be implemented. Prior to removing or relocating any nests, facility personnel will consult with USFWS and when necessary, proper permitting would be obtained. More details are provided in the Raven Control Plan that has been developed for the project.
- Vegetation clearing and ground-disturbing activities will be conducted outside the migratory bird nesting season when practical. If ground-disturbing activities cannot be avoided during this time period, a qualified biological monitor will conduct pre-construction nest surveys.
  - o For all bird species, surveys will cover all potential nesting habitat in and within 250 feet of the area to be disturbed (as landowner access allows). Any disturbance or harm to active nests will be reported within 24 hours to the USFWS and the BLM, if on BLM-managed public lands. The biological monitor will halt work if it is determined that active nests are being disturbed by construction activities and the appropriate agencies would be consulted.
  - For active nests, qualified biologists will relocate or remove bird nests only after young have fledged and perform any mitigation measures necessary to reduce or eliminate negative effects to birds inhabiting the construction area.
- A qualified biologist will conduct pre-construction surveys within 30 days prior to construction for Western Burrowing Owls within suitable habitat during the breeding season (February 1 through August 31). All areas within 250 feet of the Proposed Project will be surveyed (if landowner access allows), per USFWS 2007 Burrowing Owl guidance.
  - o If an active nest is identified, there will be no construction activities within 250 feet of the Burrowing Owl nest location to prevent disturbance until the chicks have fledged or the

- nest has been abandoned, as determined by a qualified biologist. Buffers may be increased or reduced as needed with the approval of the BLM, and USFWS.
- The occurrence and location of any Western Burrowing Owls will be documented by biological monitors in daily reports and submitted to the authorized biologist on a daily basis. The authorized biologist will report all incidents of disturbance or harm to Burrowing Owls within 24 hours to the USFWS.
- Lighting will be designed to provide the minimum illumination needed to achieve O&M objectives and not emit excessive light to the night sky by installing light absorbing shields on top of all light fixtures, and focusing desired light in a downward direction (Reed et al. 1985). This will reduce the visibility of the lights to migratory birds traveling through the area. Downward facing lights will also reduce the number of insects attracted to lights resulting in a decrease of potential concentrated feeding areas for bats. Any additional lighting needed to perform activities such as repairs will be kept to a minimum and only used when these actions are in progress.
- The following measures are intended to mitigate potential impacts to Gila monsters:
  - Field workers and personnel will know how to: (1) identify Gila monsters and be able to distinguish it from other lizards such as chuckwallas and western banded geckos; (2) report any observations of Gila monsters to NDOW; (3) be alerted to the consequences of a Gila monster bite resulting from carelessness or unnecessary harassment; and (4) be aware of protective measures provided under state law.
  - Live Gila monsters found in harm's way on the project will be captured and then detained in a cool, shaded environment (<85°F) by the project biologist or equivalent personnel in a safe containment with a vented lid until a NDOW biologist can arrive for documentation, marking and to obtain biological measurements and samples prior to releasing. Additionally, written information will include identifying the mapped capture location with GPS coordinates in Universal Transverse Mercator (UTM) using the North American Datum (NAD) 83 Zone 11. Date, time, and circumstances (e.g., biological survey or construction) and habitat description (vegetation, slope, aspect, substrate) will be provided to NDOW.</p>
  - O Gila monsters found in harm's way along the gen-tie ROWs, pipeline ROW or access road will be hazed off the immediate disturbance area and monitored. Written information identifying the mapped observation location, GPS coordinates, date, time, and circumstances (e.g., biological survey or construction) will also be provided to NDOW. The Gila monster may be captured using the methods outlined above if hazing

- is not effective or if the biologist determines that the individual has a high probability of returning to the Project area.
- O Injuries to Gila monsters may occur during excavation, road grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation and appropriate treatment. Rehabilitation or euthanasia expenses will not be covered by NDOW. However, NDOW will be immediately notified of any injury to a Gila monster and which veterinarian is providing care for the animal. If an animal is killed or found dead, the carcass will be immediately frozen and transferred to NDOW with a complete written description of the discovery and circumstances, date, time, habitat description, and mapped location (GPS coordinates in UTM using NAD 83 Zone 11).
- Should NDOW's assistance be delayed, biological or equivalent acting personnel on site should detain the Gila monster out of harm's way until NDOW personnel can respond. The Gila monster should be detained until NDOW biologists have responded. Should NDOW not be immediately available to respond for photo-documentation, a digital camera will be used to take good quality images of the Gila monster in situ at the location of live encounter or dead salvage. The pictures will be provided to NDOW with specific location information including GPS coordinates, date, time, habitat description and mapped location (GPS coordinates in UTM using NAD 83 Zone 11).
- A Facility Decommissioning Plan will be finalized and provided to the Tribe, the BIA, and the BLM addressing the Project facilities under their respective management. This plan will be submitted for approval at least six months prior to commencement of site closure activities.
- Potential closure activities could include re-grading and restoration of original site contours and re-vegetation of areas, including those disturbed by closure activities in accordance with the Site Reclamation Plan. Revegetation seed mixes will be composed of native plant species.
- Any and all additional measures identified in the Biological Opinion dated December 18, 2015 (Attachment C) to mitigate impacts to sensitive species will be implemented as prescribed.

#### 5.4.2 Desert Tortoise

 The BIA, BLM, the Tribe, and the Applicant are required to comply with the Reasonable and Prudent Measures with Terms and Conditions as outlined in the Biological Opinion (Attachment C). The USFWS determined that the Proposed Project is not likely to jeopardize the continued existence or adversely affect the recovery of the Mojave desert tortoise. The Proposed Project is not within designated critical habitat for desert tortoise and is considered to be low quality habitat for desert tortoise.

 All desert tortoises will be relocated in accordance with the Biological Opinion issued by the USFWS.

#### 5.5 Cultural Resources

- A Memorandum of Agreement (MOA) between the Tribe, the BIA, the BLM, the Applicant, and the Nevada State Historic Preservation Officer (SHPO) was executed on June 7, 2016, which BIA and the other consulting parties prepared in accordance with Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. § 306108. The executed MOA and implementation of its terms satisfy the federal agencies' compliance with Section 106 of the NHPA. The MOA sets forth the required steps that shall be taken to resolve and/or mitigate the effects to the three historic properties identified as being eligible for the National Register of Historic Places and adversely affected by the Project. A copy of the executed MOA is attached to this ROD as Attachment D.
- Archaeological and Tribal monitors will be employed during construction to ensure that historic properties are not directly affected by the project.
- Fencing or other protective barriers will be placed to protect historic properties during construction as needed.
- Should the Applicant discover any unrecorded and unanticipated cultural resources during construction, all activities within the immediate area of discovery shall cease. Any unanticipated discoveries of cultural resources or changes to the Project APE will be managed in accordance with an *Unanticipated Discoveries Plan* that would be developed in consultation with the Tribe, BIA, BLM, the Applicant, and the Nevada SHPO. The *Unanticipated Discoveries Plan* would include, among other requirements: Immediate notification to the Chairman of the Moapa Tribal Council, or his or her designated representative, and the BIA Regional Archeologist, and, in consultation with BLM and SHPO as appropriate, arrangements to assess the nature of discovered cultural resources and, if feasible, avoid the resources to the fullest extent practicable. If avoidance is not possible, the BIA will consult with the consulting parties to minimize and mitigate any damages to any unanticipated discoveries before construction could resume in the immediate vicinity of the find/discovery.

## 5.6 Transportation

The Applicant will reduce the short-term impacts to traffic during construction by implementing the following mitigation:

- A Traffic Management Plan will be finalized and approved by the Tribe and BIA that identifies BMPs to minimize construction-related traffic impacts.
- Deliveries of materials will be scheduled for off-peak hours, when practical, to reduce effects during periods of peak traffic.
- Truck traffic will be phased throughout construction, as much as practical.
- Carpooling or mass transportation options for construction workers will be encouraged.
- Before construction, the Applicant and agency representatives will document the preconstruction condition of the access route, noting any existing damage. After construction, any damage to public roads will be repaired to the road's pre-construction condition, as determined by the agency representatives.

## 5.7 Public Health & Safety

The potential for exposure to hazards exists during transportation of materials, direct handling of substances, inadvertent release of hazardous material to the soil and groundwater, and general fire and electrical hazards. In addition to the previously discussed SPCC Plan, the Applicant will implement the following measures to reduce significant impact to public health and safety:

- General Design and Construction Standards The Project will be designed in accordance
  with federal and industrial standards including the American Society of Mechanical
  Engineers (ASME), National Electrical Safety Code (NESC), International Energy
  Conservation Code (IECC), International Building Code (IBC), Uniform Plumbing Code
  (UPC), Uniform Mechanical Code (UMC), the National Fire Protection Association (NFPA)
  standards, and OSHA regulations.
- Health and Safety Program All employees and contractors will be required to adhere to
  appropriate health and safety plans and emergency response plans. All contractors would be
  required to maintain and carry health and safety materials including the Material Safety Data
  Sheet (MSDS) of hazardous materials used on site, and where permitted.
- Emergency Response Plan An Emergency Response Plan will be developed and implemented based on the results of a comprehensive facility hazard analysis.

- Hazardous Waste Storage Plan A Hazardous Waste Storage Plan will describe the storage, transportation, and handling of wastes and emphasize the recycling of construction wastes where possible.
- The Applicant will coordinate with the holders of all existing ROWs that will be crossed or
  paralleled by the Project ROWs (transmission lines, access roads, water pipeline, and gas
  pipelines) to minimize encroachment conflicts and possible effects to existing transmission
  lines and pipelines.

#### 5.8 Mitigations Measures Not Adopted

All mitigation measures analyzed in the Final EIS and recommended by state and federal agencies and the cooperating agencies were adopted for this Project.

#### 5.9 Mitigation Compliance Monitoring and Reporting

All mitigation measures and Plans discussed in the Final EIS will be implemented by the Applicant and monitored by a third party as detailed in BLM's IM 2014-112. Third party monitors will report to the proper agencies as outlined in the Plans, specifically, or directly to the BIA and BLM as determined by the lease and ROW agreements. Reporting procedures will be determined prior to onset of construction activities.

#### 6. Public Involvement

## 6.1 Public Scoping Period

The BIA published a Notice of Intent (NOI) to prepare an EIS for the Proposed Project in the *Federal Register* on November 21, 2014. In addition, notices were placed in local newspapers and two public scoping meetings were held for the Proposed Project - one on the Reservation on January 14, 2015 and the other at the BLM offices located in Las Vegas, Nevada on January 15, 2015.

The identified issues helped determine the appropriate scope of environmental analysis to be addressed in this EIS that are within the scope of the decisions to be made by the BIA, BLM, and other cooperating agencies. The scoping report, found in Appendix A of the Moapa Solar Project Final EIS, summarizes the comments received. The table below provides a summary of issues and/or concerns identified.

## **Record of Decision**

Aiya Solar Project

KI	EY ISSUES IDENTIFIED DURING SCOPING
ISSUE TOPIC	ISSUE/COMMENT
Water Resources	Evaluate the amount of water needed for the Project and all water sources available. Include analysis of water rights, water rights ownership, and potential water availability.
water Resources	Avoid / minimize impacts to desert washes to the extent possible.
	Evaluate whether septic system built for operations and maintenance (O&M)
	building would impact water sources for existing nearby homes.
Soils	Identify and assess soils impacts associated with construction of the berm along Reservation Road.
Vegetation	Consider transplanting cacti.
	Cultural resource monitors should be used to minimize impacts.
Cultural Resources	Determine whether Project would affect viewshed from Old Spanish National Historic Trail.
	Evaluate whether the path/trail on site has cultural significance.
	Need to evaluate the potential impact of development of the Project and associated linear facilities on other existing and planned transmission and pipeline facilities in the area.
Land / Resource Use	Evaluate whether the Proposed Project could interfere with planned housing
	sites on the Reservation. Concern with the project's proximity to existing housing.
	Need to confirm Indian/Tribal preference employment and potential employment opportunities for tribal members.
Socioeconomics	Concern about whether power purchase agreement would be in place to determine where the power would be going.
	Need to evaluate whether there could be potential gaps in tortoise fencing and potential impacts to Moapa dace.
Wildlife	Evaluate impacts to birds from the project transmission line.
	Evaluate whether PV field could be visually similar to a lake to birds and how it could affect them.
Visual Resources	Utilize appropriate lighting, building materials, colors and site placement that are compatible with the natural environment. Consider visual mitigation using vegetation along Reservation Road and SR 168.
	Determine whether Project would affect viewshed from Old Spanish National Historic Trail.
Air Quality	Appropriate mitigation needs to be applied to control fugitive dust during construction.
Climate Change	Evaluate potential effects of climate change to water, air, wildlife, and carbon sequestration.
C. I.I.	Consider the cumulative impacts to tortoises and visual resources from both temporary and permanent development activities.
Cumulative Impacts	Consider cumulative impacts from other solar projects in the area including those in the BLM Solar Energy Zone (SEZ).

#### 6.2 Draft EIS Preparation and Distribution

The BIA and EPA published a Notice of Availability (NOA) announcing the publication of the Draft EIS for the Proposed Project in the *Federal Register* (Vol. 80 No. 94) on May 15, 2015. In addition, notices were placed in local newspapers and two public meetings were held to receive comments on the Draft EIS for the Proposed Project - one on the Reservation on June 17, 2015 and the other at the BLM offices located in Las Vegas, Nevada on June 18, 2015.

The Draft EIS was available on the project website (<a href="www.aiyasolarprojecteis.com/">www.aiyasolarprojecteis.com/</a>) and via link on the BIA and BLM websites, and hard copies were available for review at the BIA Western Regional Office Branch of Environmental Quality Services in Phoenix, AZ; BIA Southern Paiute Agency in St. George, UT; and the BLM Southern Nevada District office in Las Vegas, NV. In addition, a copy was sent, at their request, to any party who wished to provide comments to the Draft EIS and/or requested that they be added to the mailing list.

## 6.3 Final EIS Preparation and Distribution

On March 10, 2016 the BIA published the NOA for the Aiya Solar Project Final EIS in the *Federal Register*, Vol. 81 No. 47. The EPA NOA published in the *Federal Register* (Vol. 81 No. 112) on June 10, 2016. The EPA NOA announced the public availability of the Final EIS, which initiated the 30-day period before which any ROD could be signed.

The Final EIS was made available on the project website (<a href="www.aiyasolarprojecteis.com/">www.aiyasolarprojecteis.com/</a>) and via link on the BIA and BLM websites, and hard copies were available for review at the BIA Western Regional Office Branch of Environmental Quality Services in Phoenix, AZ; BIA Southern Paiute Agency in St. George, UT; and the BLM Southern Nevada District office in Las Vegas, NV. In addition, a copy was sent, at their request, to any party who provided comments on the Draft EIS and/or requested that they be added to the mailing list. The Final EIS took into account and addressed all public comment received on the Draft EIS.

#### 7. Decision Rationale

The BIA and BLM have identified the Proposed Project as the Selected Alternative (Proposed Action Alternative). Overall, the Selected Alternative will accomplish the purpose and need for the federal action, and help in fulfilling the BIA's and the BLM's statutory missions and responsibilities, given consideration to economic, environmental, and technical factors. The

#### Record of Decision

Aiya Solar Project

Project location and the use of PV technology will minimize adverse environmental impacts. The chosen PV panels will be up to 13 feet off the ground and have minimal visibility from a distance. The PV technology also minimizes the use of water resources – up to 500 acre feet during an approximate 15-month construction period. PV consumes no water in operations and uses insignificant amounts of water for dust control and potable uses (up to 5 acre feet per year). The PV technology does not create noticeable noise. PV also is considered a "proven technology," and represents a less expensive technology when compared to other solar technologies.

The Project also will assist in addressing the management objectives in the Energy Policy Act of 2005 (Title II, Section 211) and Secretarial Order 3285A1 (March 11, 2009) that established the development of environmentally responsible renewable energy as a priority for the Department of the Interior.

#### 7.1 BLM Decision

The BLM, after careful consideration of the potential effects of the Proposed Project, has decided to authorize the Applicant's request for a 230 kV transmission gen-tie line ROW as described in the Selected Alternative (Proposed Action Alternative) of the Final EIS, including all associated facilities needed for the construction, operation, maintenance, and termination. The BLM has adopted BIA's Final EIS pursuant to 40 C.F.R. § 1506.3. The transmission line will be located in an existing utility corridor reserved to the BLM under Public Law 96-491 (Dec. 2, 1980). The requirements of the Biological Opinion, the MOA entered into under the National Historic Preservation Act, other mitigation measures and BMP's identified in the Final EIS and described in this ROD will be incorporated into the ROW grant, as well as BLM's standard ROW stipulations.

The authorization of the transmission line meets the BLM's identified purpose and need for federal action to reply to the Applicant's ROW application for a transmission line and to determine whether to approve, approve with modification, or deny the issuance of a ROW grant taking into consideration the provisions of the Energy Policy Act of 2005 and other applicable Federal laws, regulations, and policies. Consistent with applicable requirements, issuance of this ROD does not itself authorize construction activities to commence. Prior to the initiation of those activities the Applicant must obtain a Notice to Proceed from the BLM. Issuance of such a Notice will require among other things, that the Applicant has obtained all other necessary authorizations, including final approval of the lease by the BIA.

#### 7.2 BIA Directive

Based on its review of the form of lease, lease exhibits, term sheet, and Tribal resolution submitted to the Western Region by the parties, and the Final EIS, the BIA has determined that the lease and associated agreements are in the best interest of the Tribe. The Project will create an economic development opportunity for the Tribe, provide lease income as a revenue source for the Tribe, create new jobs and employment opportunities for Tribal members, develop sustainable renewable resources, and provide other benefits by using the Tribe's solar resources.

The Project also will assist large power users in meeting their renewable energy goals and mandates by providing clean renewable electricity generated from the solar resources that may be efficiently connected to existing transmission lines in a manner that minimizes adverse site impacts.

The Project will assist the Federal Government, the State of Nevada, and neighboring states in meeting their renewable energy goals. The Proposed Project would also help meet the goals of the Federal Government to eliminate or reduce greenhouse gas (GHG) emissions and promote the deployment of renewable energy technologies. The Project's scale, technology, and location have been selected to provide substantial amounts of renewable energy to regional utility customers that reside in areas that are not suitable for solar development. The Project is designed to provide solar power at a price that is competitive with other renewable sources of power.

The Project location will allow efficient connection of the energy from solar resources to existing transmission infrastructure. The selected site is well positioned to minimize impacts associated with interconnection into the existing transmission infrastructure. The selected site is located very close to the existing Reid-Gardner Substation with access to the regional transmission system and has available capacity to carry the Project's output to market.

The solar facility will not be within FEMA 100 or 500 year flood zones and impacts to jurisdictional waters of the United States would be limited. The site is bisected by State Highway 168 with direct access to I-15. The Project area has been documented as having limited cultural resource issues and moderate wildlife issues.

The Project will not interfere with day-to-day tribal life and will not interfere with the Tribe's plans for other economic development initiatives. The economic benefits will accrue to the Tribe once the Project is completed.

## 7.2.1 Analysis of Required Factors

The BIA has chosen the Selected Alternative (Proposed Action Alternative) due to minimal short term and long term adverse impacts, beneficial long term impacts for the Tribe and the fact that no significant unmitigated impacts would occur. Adequate consideration has been given of the five approval criteria under 25 U.S.C. § 415(a), as follows:

- 1. The relationship between the use of the leased premises and the use of the neighboring lands. The BIA and the Tribe chose the Selected Alternative (Proposed Action Alternative) after considering alternative sites on the Reservation as well as alternative technologies. Alternative sites and technologies were eliminated from further consideration based on human and natural resource factors as discussed in the Final EIS.
- 2. The height, quality, and safety of any structures or other facilities to be constructed on the leased premises. The chosen PV technology will have a low overall height and will have a low fire risk due to the lack of flammable materials. A fire protection system will be provided for the solar facility.
- 3. The availability of police and fire protection, utilities, and other essential community services. The Final EIS shows that there will be no significant impact on utilities and other community services. In addition to on-site fire protection systems, Clark County is responsible for providing firefighting capability on the Reservation and law enforcement will be managed by the Moapa Tribal Police Department.
- 4. The availability of judicial forums for all criminal and civil matter arising on the leased premises. The parties have informed the BIA that this will be addressed in the executed lease.
- 5. The effect on the environment of the proposed land use. All relevant environmental impacts have been fully addressed in the Final EIS.

## 8. Agency Action

#### 8.1 Interim Bureau of Indian Affairs Decision

It is my decision to conditionally approve the solar energy ground lease and associated easements on Tribal trust lands to Aiya Solar Project, LLC. This decision is based on the form of lease, lease exhibits, term sheet, and Tribal resolution submitted to the Western Region by the parties, and the Final EIS, and is subject to (1) submittal of executed documents to the Western Region with substantively identical terms to the already-submitted documents, and (2) implementation of terms, conditions, stipulations, and environmental protection measures developed by DOI, BIA, and BLM, and consistent with this ROD. This decision will be made final once the documents required by 25 C.F.R. § 162.563 are submitted to the Western Region and the Region has verified that they are substantively identical and include a choice of judicial forum provision, as evidenced by a notice amending this ROD.

Approved By:

- Michael Black

Director

Bureau of Indian Affairs

9/13/2016 Date

## Secretarial Approval of Interim Bureau of Indian Affairs Decision

I hereby approve the interim decision of the BIA, subject to the conditions identified in this ROD. My approval of this interim decision is not subject to appeal under DOI regulations at 43 CFR 4.

Approved by:

Lawrence S. Roberts

Principal Deputy Assistant Secretary-Indian Affairs

U.S. Department of the Interior

## 8.2 Final Bureau of Land Management Decision

It is my decision, based on the BLM's adoption of BIA's Final EIS pursuant to 40 C.F.R. § 1506.3, to approve, subject to implementation and terms, conditions, stipulations, and environmental protection measures developed by DOI, BIA, and BLM, and consistent with this ROD, a ROW grant to Aiya Solar Project, LLC for a 230 kV transmission line and access road on BLM land. This decision is effective on the date this ROD is signed.

Approved By:

Neil Kornze Director

Bureau of Land Management

9 /13 /16 Date

## Secretarial Approval of Bureau of Land Management Decision

I hereby approve the decision of the BLM, subject to the conditions identified in this ROD. My approval of this decision constitutes the final decision of the DOI and, in accordance with the regulations at 43 CFR §§ 4.331(b), 4.410(a)(3), is not subject to appeal under Departmental regulations at 43 CFR 4. Any challenge to the BLM decision, must be brought in federal district court.

Approved by:

Janice M. Schneider Assistant Secretary

Land and Minerals Management

U.S. Department of the Interior

Date

#### 9. References

APLIC (Avian Power Line Interaction Committee). 2006. Suggested practices for avian protection on power lines: The state of the art in 2006. Washington, D.C. and Sacramento, CA: Edison Electric Institute, Avian Power Line Interaction Committee, and California Energy Commission.

Guidelines for the Development of a Project-Specific Avian and Bat Protection Plan for Solar Energy Plants and Related Transmission Facilities. 15 Pages.

Holling, C. S. (ed.) (1978). *Adaptive Environmental Assessment and Management*. Chichester: Wiley. ISBN 0-471-99632-7.

Reed, J.R., Sincock J.L., Hailman J.P. 1985. Light attraction in endangered procellariiform birds: reduction by shielding upward radiation, *The Auk*, 102, 377-383.

Stankey, George H; Roger N. Clark and Bernard T. Bormann (2005). *Adaptive management of natural resources: theory, concepts, and management institutions*. Gen. Tech. Rep. PNW-GTR-654. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. p. 73 p. http://www.treesearch.fs.fed.us/pubs/20657.

USFWS (US Fish and Wildlife Service) Nevada Fish and Wildlife Office. 2007. Protecting Burrowing Owls at Construction Sites in Nevada's Mojave Desert Region. Las Vegas, Nevada.