Eastern Nevada Transmission Project
Finding of No Significant Impact LC-14-30

Lower Colorado Region, Boulder City, Nevada
Finding Of No Significant Impact (FONSI)

LC-14-32
for
Final Environmental Assessment for Eastern Nevada Transmission Project

Boulder City, Nevada

Based on a thorough analysis of the potential environmental impacts presented in the Environmental Assessment (EA), the Bureau of Reclamation (Reclamation) finds that implementation of the Proposed Action will not significantly affect the quality of the human environment within or adjacent to the project area, therefore an Environmental Impact Statement will not be prepared.

Accordingly, this FONSI is submitted to document environmental review and evaluation of the Proposed Action Alternative in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Prepared: ____________________________ Date: __________________
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Recommended: _________________________ Date: __________________
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Approved: ____________________________ Date: __________________
Chief, Resources Management Office
Background

The Silver State Energy Association (SSEA) has submitted applications to the Bureau of Land Management’s (BLM) Las Vegas Field Office and Reclamation’s Lower Colorado Region for the construction, operation, maintenance, and decommissioning of two separate 230-kilovolt (kV) overhead transmission lines in Clark County, Nevada. The proposed Project, called the Eastern Nevada Transmission Project (Project or Proposed Action), will add infrastructure to support SSEA’s projected electrical load obligations.

The SSEA is a joint-powers association made up of the City of Boulder City, Lincoln County Power District No. 1, Overton Power District No. 5, Southern Nevada Water Authority (SNWA), and the Colorado River Commission of Nevada. Members of the SSEA provide power to residential and commercial customers in Lincoln County, northeastern Clark County, Boulder City, and water system operations by SNWA. SSEA desires to install transmission lines connecting existing major electrical substation hubs of SSEA members to allow for the transport of available electrical resources to meet projected demands, improve system reliability, provide operational flexibility, and to potentially allow for the interconnection of new renewable resources in the future.

In response to SSEA’s applications, BLM and Reclamation determined that an EA would be prepared in compliance with NEPA to assist with the identification of any potentially significant impacts that could result from the implementation of the Proposed Action. The BLM is the lead Federal agency for preparation of the EA and for compliance with the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA). The BLM prepared the Eastern Nevada Transmission Project EA (DOI-BLM-NV0S010-2009-1014-EA) (Final EA). Reclamation participated as a cooperating agency for this effort and hereby adopts the Final EA. The Final EA is incorporated by reference into this FONSI. BLM has approved the Project by signing their FONSI and Decision Record and issuing a Right-of-Way (ROW) Grant. Reclamation’s approval of the Project will be granted by signing this FONSI and by the execution of a Right of Use (ROU) authorization.

Alternatives Considered

A No Action Alternative, the Proposed Action, and Silverhawk to Newport-Alternative 1 were considered. Under the No Action Alternative, the proposed transmission lines would not be constructed. The BLM would not issue a ROW and Reclamation would not issue a ROU. SSEA would not add this new infrastructure to support their projected electric load obligations to meet projected electrical needs for southern Nevada.

The Proposed Action

The Proposed Action consists of the construction, operation, maintenance, and eventual decommissioning of two separate 230-kV transmission lines; each within the boundaries of Clark County, Nevada. The Gemmill to Tortoise transmission line has one proposed ROW corridor
while the Silverhawk to Newport transmission line includes the Proposed Action and the Silverhawk to Newport- Alternative 1 corridor.

Both proposed transmission lines are located within existing utility corridors to the extent feasible. The Gemmill to Tortoise ROW corridor is approximately 21 miles long, with 8 miles of transmission line within the existing Lincoln County Conservation, Recreation, and Development Act (LCCRDA) utility corridor, approximately 2.5 miles adjacent to an existing power line to minimize ground disturbance and avoid conflicts with the highway ROW, and approximately 9.5 miles parallel to but between 700-2600 feet north of the LCCRDA corridor to avoid conflict with private and tribal lands.

The Silverhawk to Newport ROW corridor, which is approximately 33 miles long, is within a utility corridor and will generally parallel three other existing transmission lines. The Silverhawk to Newport transmission line will begin at the Silverhawk substation, west of I-15 and U.S. Highway 93, and will extend south for approximately 33 miles and terminate at the Newport substation in southeast Henderson, Nevada, at the River Mountains Treatment Plant. The entirety of the proposed ROW corridor is located within an existing BLM utility corridor or a utility corridor identified on Reclamation land.

Reclamation’s action is limited to the Silverhawk to Newport transmission line and is for the issuance of an approximately 5 mile long, 130 foot wide ROU for new 230-kV overhead transmission line, associated access roads, temporary construction yard, and preliminary geotechnical investigations. The specific locations of these Project features will be determined when final design is complete.

**Silverhawk to Newport- Alternative 1**

This alternative was considered for the Silverhawk to Newport transmission line to avoid crossing an area formerly designated as the Sunrise Mountain Instant Study Area (ISA). The ISA was legislatively released from this status in 2014, allowing the consideration of a full range of multiple uses within that area. This alternative crosses a portion of the Lake Mead National Recreation Area.

**Environmental Commitments**

SSEA is required to comply with the environmental commitments, mitigation measures, and terms and conditions included in the following documents which are incorporated by reference into this FONSI:

- *Eastern Nevada Transmission Project EA (DOI-BLM-NV0S010-2009-1014-EA)*, March 2014, including the Environmental Protection Measures (EPMs) and mitigation measures listed below.
- *Final Biological Assessment (BA) for the Eastern Nevada Transmission Project (N-86357).*
- *SSEA append to the Southern Nevada District Office Programmatic Biological Opinion (BO), (File No. 84320-2010-F-0365/84320-2015-F-0386)* issued by U.S. Fish and
Wildlife Service (USFWS) as set forth in the stipulations contained in Exhibit A to the BLM’s ROW Grant N-86357

- **Programmatic Agreement among the Las Vegas Field office of the Southern Nevada District office of the BLM, the Bureau of Reclamation, the National Park Service, the Advisory Council on Historic Preservation, SSEA, and The Nevada State Historic Preservation Officer Regarding the Eastern Nevada Transmission Project (PA), April 2016.**

- All stipulations contained in the BLM’s Decision Record (DR) and Exhibit A to the BLM’s ROW Grant N-86357.

SSEA has incorporated Environmental Protection Measures (EPM) as standard mitigation procedures for the proposed Project. These measures apply Project-wide unless modified by the BLM or Reclamation, or superseded with more stringent requirements under permits granted by federal, state, or local agencies. These EPMs apply to construction, operation, and maintenance as appropriate. The EA also includes mitigation measures that are specific to resources. The EPMs, mitigation measures, stipulations from the BLM’s DR, and other requirements are listed by resource below.

**General**

SSEA shall be responsible to ensure their contractors and employees implement EPMs, mitigation measures, stipulations from the BLM’s DR, and all other requirements specified by the BLM and Reclamation. SSEA shall provide a Compliance Inspection Contractor (CIC) who will provide ongoing compliance inspections and monitoring during the construction of the Project. The BLM will appoint the CIC with the concurrence of Reclamation.

The ROU will contain a stipulation requiring SSEA to prepare a Plan of Development (POD) for Reclamation’s review and approval prior to issuance of a notice-to-proceed with construction. All plans required in the POD shall be developed in cooperation with BLM and Reclamation. The POD will include the following details:

- A comprehensive map set which includes:
  - The location of all physical Project facilities.
  - The location of planned temporary construction yards, including transmission structure work pads, pull and tension sites, conductor splicing sites, and other work areas.
  - The location of sensitive resource areas for use in planning the route of new access roads.

- Compliance Monitoring Plan including but not limited to:
  - Compliance monitoring personnel and responsibilities
  - Overall strategy for compliance monitoring
  - Methods for determining compliance/non-compliance
  - Reporting methods
  - Timeframes for BLM and Reclamation review of reports and requests

- Final engineering plans and drawings of Project facilities.
- Health and Safety Plan
- Restoration Plan
• Noxious Weed Plan and Weed Risk Assessment
• Raven Management Plan (if a Project specific plan is required by the BLM)
• Paleontological Resources Monitoring and Mitigation Plan
• Stormwater Pollution Prevention Plan (SWPPP)
• Other plans required by the BLM or required permits (i.e. Dust Mitigation Plan)

Air Quality

All requirements of those entities having jurisdiction over air quality matters will be adhered to and any permits needed for construction activities will be obtained. Open burning of construction trash will not be allowed.

SSEA will obtain a Clark County Department of Air Quality (DAQ) Dust Control Permit (Dust Permit) for Construction Activities and develop a related Dust Mitigation Plan. As part of the Dust Permit SSEA will establish and implement Best Management Practices (BMP) for dust control in order to stay compliant with the permit.

In compliance with the Dust Permit, all roads and structure pads will be watered prior to and during all construction activities. All Project personnel will be educated on the site dust mitigation plan.

Construction and operation vehicles will be properly maintained to reduce emissions. All Proposed Project construction activities shall comply with relevant provisions of the DAQ. Site-appropriate BMPs will be implemented. This will typically include:

• All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, a BLM/Reclamation-approved chemical stabilizer/suppressant, or vegetative ground cover.
• All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or BLM/Reclamation-approved chemical stabilizer/suppressant.
• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
• When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained.

Geology and Soils

In accordance with the National Electrical Safety Code, SSEA will design and construct Project facilities to withstand geological hazards by taking seismicity and fault locations into consideration.

Existing roads and previously disturbed areas will be used for the Project alignments to the extent feasible to minimize surface disturbance. Access roads will be selected to minimize the clearing of vegetation and re-contouring of the land surface.
Potential grading requirements will be identified during final engineering design. Grading needs will be minimized wherever possible.

As feasible, segregation of the soil horizons will be conducted where soils will be disturbed. At a minimum, the initial 3 inches of the surface horizon will be separated and stockpiled from lower horizons. This soil containing seed bank will be used for restoration.

Towers and access roads would be placed such that Project construction and facilities do not restrict access to mineral resources within the Project area.

The placement of tower sites and temporary access roads would be selected to avoid soils that are moderately or highly sensitive to accelerated rates of water or wind erosion.

**Water Resources**

In compliance with Clark County and the Federal Clean Water Act, all necessary permits relating to water resources will be obtained. To the extent practical, SSEA would span all segments along the proposed transmission corridor that cross washes or the 100-year floodplain. If spanning would not be feasible, and if jurisdictional waters of the U.S. are identified through onsite delineation, SSEA would secure the appropriate permits and authorizations from the U. S. Army Corps of Engineers prior to construction activities.

The appropriate National Pollution Discharge Elimination System (NPDES) permits for construction activities will be obtained, and all NPDES permit requirements will be met. This includes implementing and maintaining appropriate BMPs for minimizing impacts to surface water.

**Water Resources, Soils**

A site-specific SWPPP will be developed and modified as necessary to account for changing construction conditions.

The SWPPP will identify areas with critical erosion conditions that may require special construction activities or additional BMPs to minimize soil erosion.

Stormwater BMPs will be maintained on all disturbed lands during construction activities, as described in the SWPPP. Approved sediment and erosion control BMPs will be installed and maintained until disturbed areas meet final stabilization criteria.

Damaged temporary erosion and sediment control structures will be repaired in accordance with the SWPPP.

Upon completion of construction, permanent erosion and sediment BMPs will be installed along the transmission line within the ROW, at substations, and at related facilities in accordance with the SWPPPs.
**Biological Resources**

All appropriate Nevada Department of Wildlife (NDOW) and USFWS permits will be obtained prior to initiation of the Project.

Minimal construction of new roads or upgrading of existing access roads will occur in areas identified as sensitive plant habitat.

In areas where the BLM determines sensitive plant species may occur, pre-construction surveys will be conducted during the blooming or fruiting season as needed to verify plant identification. Sensitive plants and/or habitat will be flagged or mapped for avoidance, salvage, or seed collection.

The Project would be designed as much as feasible to reduce the acreage of rare plant habitat that would be converted to permanent disturbance by construction of the Project. Structures will be placed to allow spanning of these features, where feasible, within limits of standard structure design. Orange snow fencing will be used to mark any avoidance areas, including a reasonable buffer, alerting construction personnel to avoid the area. The onsite CIC will ensure these areas are properly monitored and protected.

For those acres of rare plant habitat that cannot be avoided, SSEA would pay a $20,000 per acre mitigation fee to implement actions to mitigate the unavoidable loss of rare plant habitat. In lieu of the mitigation fee and with BLM approval, SSEA may propose mitigation actions commensurate with the mitigation fee.

Restoration will be in accordance with a BLM and Reclamation-approved Restoration Plan developed for the Project.

If sensitive plant species cannot be avoided, SSEA will implement plant and/or seed salvage prior to the start of construction if this method is selected as mitigation. Seeds will be collected from sensitive plants that are located within the ROW. Collection, storage, and handling of seeds will be in accordance with commonly accepted scientific practices. Collected sensitive plant seed will be used to either grow additional plants from seed or applied with the seeding program as part of restoration at the completion of construction, and in the same general area as the seeds were initially collected. Specific special status plant species and collection methods will be identified in the Restoration Plan.

No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate limits of survey or construction activity.

As outlined in the Restoration Plan, temporary disturbance will be restored using grasses, forbs, cacti, and yucca originally salvaged from the site. The material will be salvaged by an experienced contractor, stockpiled in an area approved by the land manager within the ROW, and then transplanted to reclaimed sites.
If cacti and/or yucca are required to be removed from the Project area and not replaced within the ROW, consultation with the BLM and the Nevada Department of Forestry (NDF) would take place to ensure full compliance with State statutes. The plants will be handled with BLM and NDF guidance and in accordance with the Restoration Plan.

Terms and conditions of the BO will be implemented during all Project related activities. These mitigation measures include, but are not limited to: education in desert tortoise protection measures for construction personnel; surveys to remove tortoises from construction zones immediately before construction; implementation of a litter control program; construction monitoring by qualified biologist; and habitat compensation within the Las Vegas Field Office of the BLM.

In designated areas, structures will be placed to avoid sensitive wildlife and/or to allow conductors to clearly span the features, within limits of standard structure design.

If construction of the Project does not begin until after the commencement of burrowing owl breeding season (mid-March-August), all burrows, holes, crevices, or other cavities on the construction site will be collapsed after a qualified biologist thoroughly checks them for inhabitants. This will discourage owls from breeding on the construction site. If authorization for the plan is not provided until after the commencement of breeding season and burrowing owls can be seen within the area during surveys, behavioral observations will be done by a qualified biologist to determine their breeding status. If breeding behavior is observed, an area large enough to prevent disturbance to the adults will be avoided until the chicks fledge to ensure the chicks do not abandon the nest.

In compliance with Nevada Administrative Code regarding protection of the Gila monster, standard NDOW protocols will be followed if a Gila monster is encountered during construction activities.

Surveys will be conducted if suitable habitat for the Federally listed riparian birds southwestern willow flycatcher (Empidonax traillii extimus), yellow billed cuckoo (Coccyzus americanus), and Ridgway’s rail (formerly known as Yuma clapper rail) (Rallus obsoletus yumanensis) is identified in the construction ROW. If the species are found, USFWS protocol surveys will be conducted for these species. Construction activities will be restricted in the area where the species were found until protocol surveys are complete. If the species are determined to be breeding, construction activities will be restricted until all young have fledged and the birds have left the nesting area.

To minimize the likelihood of migratory bird nest abandonment or other impacts to breeding, construction within areas containing active nesting would be conducted, to the extent practicable, outside of typical nesting season (February 15 through August 31).

Where activities are proposed to occur during the nesting season (February 15 through August 31), preconstruction avian surveys will be conducted to locate breeding and nesting bird species in the construction ROW and areas adjacent (up to 200 feet from the ROW edge) to the ROW where access is available. Nest and breeding locations will be surveyed using GPS and flagged
and buffered by an appropriate distance as determined by the appropriate agency. Construction activities will be permitted in surveyed areas with no documented nests. If additional nest(s) are found during construction, the onsite biological monitor will record the nest, flag, and buffer the area for avoidance.

A Noxious Weed Plan will be prepared in consultation with the BLM and Reclamation. The plan will include a discussion on (1) the plan purpose and goals and objectives, (2) the noxious weed inventory, (3) noxious weed management practices, (4) monitoring, and (5) the use of pesticides.

A Weed Risk Assessment would be completed prior to the construction of the proposed Project. Stipulations for weed control typically include the following:
- Vehicles and equipment would be cleaned prior to arrival on the work site.
- If noxious weeds are identified, any cleared vegetation or topsoil would be separately stockpiled and disposed of properly.
- Any seed or organic material used on site would be obtained from a state cleared source free of noxious/invasive weeds.

Any transmission structures constructed for the Project will be in accordance with Avian Power Line Interaction Committee guidelines.

Design features would adhere to the BLM's Common Raven Management Plan or be detailed in a Project-specific Raven Management Plan, which would be approved by the BLM prior to issuance of a Notice to Proceed for the Project.

**Cultural Resources**

The Project shall be constructed, operated, and maintained in accordance with the stipulations of the PA.

In accordance with the PA intensive pedestrian inventory will be conducted for all unsurveyed portions of the selected ROW corridor.

Where avoidance of potentially significant effects is not possible, mitigation of potential adverse effects will be provided in accordance with the PA to the standards prescribed in applicable federal guidelines. Mitigation measures could include a range of treatment options, including (a) detailed recordation, (b) undertaking historic documentary research as a means of preserving the information values of a particular site, or (c) data recovery-level excavation.

If any archaeological remains are unearthed during Project construction, notification, construction avoidance, consultation, and mitigation will occur as described in the approved PA.

**Paleontological Resources**

A Paleontological Treatment Plan (Paleontological Resources Monitoring and Mitigation Plan) would be developed and include: (1) a pre-construction survey in areas containing known fossil
localities or geological units with a PFYC of 3, 4, or 5; (2) determination of areas that may require on-site paleontological monitoring during construction; and (3) mitigation of paleontological resources that may be discovered during construction; primarily through paleontological monitoring, fossil collection, curation, and deposition in a federally-approved repository (as stated in BLM Manual 8270 and BLM Handbook H-8270-1).

In addition, an in-field worker education program would be implemented to train construction personnel on awareness and protections for paleontological resources. The education program would be approved by the BLM, and may be provided in conjunction with the education programs for desert tortoise and cultural resources.

If fossil materials are discovered during Project construction, all surface-disturbing activities in the vicinity of the find will cease until notification to proceed is given by the authorized officer. The site will be protected to reduce the risk of damage to fossils and context. Appropriate measures to mitigate adverse effects to significant paleontological resources will be determined by the authorized officer.

**Land Use**

SSEA will consult with local planning agencies during the Project review process in order to identify applicable land use policies and related concerns.

SSEA will consult with potentially-affected land owners along proposed Project ROW corridor, and will incorporate Project design features as required to minimize potential land use conflicts.

Fences and gates will be repaired or replaced to their preconstruction condition prior to disturbance as required by the landowner or the land management agency if they are damaged or destroyed by construction activities. Temporary gates will be installed only with the permission of the landowner or the land management agency and, if required, will be restored to original condition prior to disturbance following construction.

**Transportation**

SSEA will obtain encroachment permits or similar authorizations from applicable regional, state, and local transportation agencies when streets are used for more than normal traffic purposes, or where a traffic control plan is required.

**Transportation, Soils**

Dust suppression techniques will be applied, such as watering construction areas or removing dirt tracked onto a paved road as necessary to prevent safety hazards or nuisances on access roads and in construction zones near residential and commercial areas and along major highways and interstates.

Roads identified by SSEA as no longer necessary will be reclaimed as specified in the Restoration Plan.
Noise

SSEA will comply with all county and city noise ordinances.

Visual Resources

The proposed Project would parallel multiple transmission lines within a BLM-designated or identified utility corridor along the entire alignment. Measures that would be implemented as EPMs or mitigation for other resources, including implementation of a Restoration Plan, using existing access roads and previously disturbed areas to the extent feasible, selecting access roads to follow landform contours and minimize the clearing of vegetation and re-contouring of the land surface, salvage and replacement of topsoil, reclaiming unneeded roads, placing structures to avoid sensitive features and to minimize disturbance, and the use of non-specular conductors would offset visual impacts. To further reduce visual impacts, the following additional measures would be implemented for the proposed Project.

- In addition to locating power pole structures to avoid sensitive resources, the structures would be sited to match the spans of existing power lines in the utility corridor, to the extent feasible.
- Any rock cut faces would be treated with Permeon® or other ELM-approved rock-coloring agent to blend in with the background rock color.
- Within the Rainbow Gardens Area of Critical Environmental Concern, when steel poles are necessary instead of lattice towers for power line crossings or other special situations, the poles would be treated to remove glare.

Health and Safety

All proposed electrical facilities will be designed in accordance with adopted SSEA engineering practices or the equivalent.

Workers will be instructed not to drive or park vehicles where catalytic converters can ignite dry vegetation and to exhibit care when smoking in natural areas. Vehicles will carry water and shovels or fire extinguishers during times of high fire hazards.

All necessary precautions will be utilized to minimize safety concerns when working within public road ROWs. Traffic safety cones, construction signage, or other measures will be used to alert drivers to construction activities.

Construction will be performed in accordance with the site-specific SWPPP which addresses proper storage, management, and disposal of construction and hazardous waste. On-site personnel shall be trained in oil spill prevention and control.
Spill supplies and equipment will be readily available at the construction site to respond to and cleanup accidental spills to prevent contamination of soils, surface waters, and groundwater.

To prevent risk of wildfire, protective mats or shields shall be used during grinding or welding, and workers would be instructed to exhibit care when smoking in natural areas.

**Environmental Impacts and Findings**

Implementation of the Proposed Action will not result in significant impacts to any of the resources evaluated in the EA. The reasons for this determination are summarized by resource below.

**Air Quality and Greenhouse Gases**

There will be temporary, minor impacts to air quality during construction associated with engine exhaust from construction equipment and fugitive dust. Impacts to air quality from Project operation and maintenance will be negligible as the only sources will be maintenance vehicles. Adherence to BMPs associated with the dust permits and Dust Mitigation Plan will mitigate air quality impacts to a minimal level.

Cumulative impacts to air quality associated with construction and operation of the two Project transmission lines are anticipated to be minimal as air-related impacts are primarily short-term in duration resulting from the construction of the proposed facilities and limited operation and maintenance activities. If other permitted transmission lines are constructed during the same time period, adherence to air permit requirements, and mitigation measures including dust suppression as outlined in their respective dust control permits will effectively reduce these cumulative impacts. The emissions associated with construction are not expected to have a quantifiable impact on regional greenhouse gas emissions.

**Geology and Geologic Hazards**

The potential for geologic hazards was found to be low. Direct impacts to geologic resources will be minimal as site-specific geotechnical, seismic, and soil conditions will be addressed during the design and construction of the Project. No indirect or cumulative impacts are anticipated.

**Soils**

There will be short-term, moderate impacts to soils during construction from increased wind and water erosion and soil compaction. Adherence to BMPs associated with the SWPPP will reduce potential for wind and water erosion and soil compaction.

Cumulative impacts to soil resources will occur during Project construction if multiple projects are constructed concurrently. The short duration of impacts, required permits, EPMs, and mitigation measures will prevent significant impacts.
**Water Resources**

No direct impacts to surface waters and wetlands are anticipated since all such waters can be spanned with no construction disturbance to the surface water. There will be short-term, minor, indirect effects to water resources during construction from storm water discharge. These impacts will be minor because of the EPMs and mitigation measures. There will be no impacts to groundwater. No measureable cumulative impacts were identified.

**Biological Resources-Vegetation**

The construction and operation of the proposed Gemmill to Tortoise transmission line will result in the permanent loss of approximately 26 acres of vegetation at tower sites and along newly constructed access roads. An additional 93 acres of temporary disturbance will occur at tower sites, pull-and-tension sites, and construction yards. Construction and operation of the proposed Silverhawk to Newport transmission line will result in the permanent loss of approximately 42 acres of vegetation at tower sites (5.98 acres on Reclamation land) and along newly constructed access roads as well as an additional 134 acres of temporary disturbance which will be reclaimed after construction. (23.24 acres on Reclamation land).

The acres of permanent disturbance were not found to be significant as the majority of disturbed acres will be revegetated, the EPMs and mitigation measures will minimize new disturbance, and the area to be disturbed is a common vegetation type which is present throughout much of the Project area.

No Federally listed threatened or endangered plants have the potential to occur within either transmission line. The Las Vegas buckwheat, a Federal Candidate species, was identified as having potential to occur in the Gemmill to Tortoise corridor. Other plant species designed as special status by the BLM were located within the Silverhawk to Newport corridor.

Future construction related to power infrastructure, and other projects could all result in alteration of vegetation. Cumulative impacts from the Proposed Action will be minimal because of the Project mitigation measures.

**Biological Resources- Wildlife**

Impacts to general wildlife will be short-term and minor due to the implementation of EPMs and mitigation measures.

The BLM is the lead Federal agency for compliance with Section 7 of the ESA. Reclamation lands are included in the ESA Section 7 coverage under the BO for the Project, giving BLM the discretion to enforce the measures of the BO on Reclamation land.

Four federally-listed species are known to occur within the vicinity of the Project area: Mojave Desert tortoise (*Gopherus agassizii*), southwestern willow flycatcher, yellow billed cuckoo, and Ridgway’s rail.
The BLM made a *may affect, likely to adversely affect* determination for the Mojave Desert tortoise and requested formal consultation with the USFWS regarding the Project’s potential impact to this species. USFWS appended this action to the BLM’s programmatic BO and determined that the Project is not likely to jeopardize the continued existence of the Mojave Desert tortoise or result in adverse modification of critical habitat for this species. Through a combination of SSEA committed EPMs, and terms and conditions and reasonable and prudent measures set forth the BO, impacts to the Mojave Desert tortoise shall be avoided or minimized.

The BLM made a *no effect* determination for Ridgeway’s rail, and *may effect, not likely to adversely affect* determinations for the southwestern willow flycatcher and the yellow-billed cuckoo.

**Cultural Resources/Traditional Cultural Properties/Sacred Sites**

The BLM is the lead Federal agency for compliance with Section 106 of the NHPA for the Project. A Class I Cultural Resource investigation was completed for the Project areas.

The BLM consulted with local Tribes that may attach religious and/or cultural significance to historic properties that may be affected by the Proposed Action. Gypsum Cave is a historic property located on BLM land approximately 1,640 feet west of the Silverhawk to Newport corridor. It is recognized as a Traditional Cultural Property for its spiritual values to the Nuwu (Paiute) people. There will be no direct impacts to Gypsum Cave from the Project but indirect visual impacts have been identified. Indirect visual impacts to the Old Spanish Trail, a National Historic Trail also located on BLM land, were also identified.

Mitigation of potential adverse effects to these and other historic properties will be provided in accordance with the approved PA to the standards prescribed in applicable Federal guidelines, including those outlined in Executive Order 13007, *Indian Sacred Sites* and 512 Departmental Manual 3: *Departmental Responsibilities for Protecting/Accommodating Access to Indian Sacred Sites*.

**Paleontological Resources**

Two paleontological localities are located along Silverhawk to Newport. With adherence to proposed EPMs and mitigation measures, minor impacts to paleontological resources will result. If significant fossils were found during construction, they will be mitigated under direction of the BLM by a qualified BLM- permitted paleontologist. Potentially significant cumulative impacts were not identified.

**Land Use, Transportation, and Access**

Construction, operation, and maintenance of the proposed Silverhawk to Newport alignment will largely occur within existing utility corridors already designated or identified for this land use. The construction and operation of the proposed Silverhawk to Newport transmission line is not anticipated to interrupt recreational activities on adjacent Federal and private lands although recreational activities within the transmission corridor may be interrupted during construction.
Impacts to transportation during construction will be temporary and minor but long-term access to the area will not be impacted.

**Socioeconomic**

There will be long-term benefits to the economy from maintaining reliable electric power service for growing demand. No impacts on population, housing, or public services were identified. No cumulative impacts were identified.

**Environmental Justice**

The Proposed Action will not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations. The proposed Gemmill to Tortoise ROW corridor crosses a census tract that contains a minority population of over 50 percent. This is due to the presence of the Moapa River Indian Reservation. The ROW does not cross the boundary of the Reservation and will be located approximately 2 miles from the closest Reservation residences that are located along the Muddy River on the opposite side of State Route 168 from the proposed Project. Due to the location of the proposed Project, impacts to this population from the Project are not anticipated to be disproportionately high or adverse.

None of the census tracts along the proposed Silverhawk to Newport ROW corridor contain predominantly minority or low-income population groups; therefore there will be no environmental justice impacts from implementation of the Project.

No cumulative impacts were identified because no direct or indirect Environmental Justice impacts were identified.

**Noise**

Impacts from noise will be short-term and temporary during construction. The City of Henderson and Clark County have ordinances that specifically restrict construction activities during night-time hours. SSEA will comply with these ordinances which will reduce the short-term noise impact associated with construction noise levels. Operational noise levels will be considered well below regulated thresholds. Because noise from the Proposed Action will be short-term and temporary, minimal cumulative impacts were identified.

**Visual Resources**

The EA documented the potential for the transmission lines to create visual contrasts with the surrounding environment. The majority of impacts from visual contrasts were found to be low overall, with moderate impacts identified for portions of the Gemmill to Tortoise transmission line.

The proposed transmission line will mostly parallel existing transmission lines within an existing designated or identified utility corridor. Additional transmission lines within the designated corridor from reasonably foreseeable projects if constructed, will add further to the visual
impacts in these areas. Cumulative impacts from the Proposed Action were not found to be significant as this concentration of transmission lines was anticipated when the corridor was identified, visual impacts are already present from the existing transmission lines, and mitigation measures will be implemented to minimize impacts.

**Hazardous Materials and Non-Hazardous Waste**

Wastes produced during construction and operation of the transmission lines will be managed in compliance with state and federal regulations and recycled or disposed of in existing, permitted facilities, preventing any direct, indirect, or cumulative impacts from hazardous or solid wastes.

Studies of health effects from electric magnetic fields have not established a direct cause and effect relationship. Direct, indirect, and cumulative impact from electric magnetic fields were not identified due to the magnitude of electric field strengths and the distance of the transmission lines from structures.

**Indian Trust Assets**

The Moapa Indian Reservation was identified as an Indian Trust Land in the vicinity of the Project area. However, the proposed corridor does not intersect the reservation. The proposed Project is not expected to have direct, indirect, or cumulative impacts to Indian Trust Assets.