

# FINDING OF NO SIGNIFICANT IMPACT (FONSI)

LC-14-33

## Southern Nevada Intertie 500 kV Transmission Line Project Great Basin Transmission, LLC

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

This Finding of No Significant Impact has, therefore, been prepared and is submitted to document environmental review and evaluation of the Proposed Action in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Prepared:	Faye Stre	ien	Date:	<u>November</u> 25, 201
	Natural Resource Specialist			,
Recommended:	Manager, Environmenta	al Compliance Group	Date: _	11/25/2014
Approved:	Chief, Resources Mana	gement Office	Date: _	11/25/14



U.S. Department of the Interior Bureau of Reclamation Lower Colorado Region Boulder City, Nevada

## **BACKGROUND**

Great Basin Transmission, LLC (GBT), has filed a right-of-way (ROW) application with the Bureau of Land Management (BLM) and a right-of-use (ROU) application with Reclamation for the construction, operation, and maintenance of a new 500-kilovolt (kV) overhead transmission line known as the Southern Nevada Intertie Project (SNIP). The transmission line would stretch approximately 60 miles between a northern terminus at NV Energy's 500 kV Harry Allen Substation (approximately 20 miles northeast of Las Vegas) and a southern terminus at the existing 500 kV Eldorado Substation in Eldorado Valley; both in Clark County, Nevada. The project alignment will generally follow existing transmission facilities and designated utility corridors, including the West-Wide Energy Corridor (WWEC), a 3,500-foot-wide multimodal corridor that passes through most of the project area. The proposed project will be located primarily on public and Federal lands managed by the BLM and Reclamation. Approximately six miles of the line would be located on Reclamation managed lands just inside the eastern boundary of the city limits of Henderson, Nevada.

Reclamation's purpose and need for the proposed project is to respond to GBT's application for a ROU application on Reclamation managed lands. It is Reclamation's responsibility under the Act of Congress of June 17, 1902 (32 Stat.388), the Act of Congress approved August 4, 1939 (53 Stat. 1187), Section 10, and 43 Code of Federal Regulations (CFR) Part 429 to respond to a request for ROU authorization on Reclamation-administered federal lands. The proposed project will create (1) new access in Southern Nevada to the regional electricity market for existing and proposed power generation facilities; (2) economical transmission service to foster the development of new renewable energy resources; (3) a new energy pathway to reduce congestion on the existing transmission grid, increasing regional transmission system reliability; and (4) increased import and export capacity for regional transmission systems to help place downward pressure on electricity prices. The need for this project is further guided by the Energy Policy Act of 2005 (EPAct), which recognized the need to improve domestic energy production, develop renewable resources, and enhance the infrastructure (e.g., transmission lines) for collection and distribution of energy resources across the nation.

In response to GBT'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. Reclamation participated as a cooperating agency for this effort and hereby adopts the final EA.

## **ALTERNATIVES CONSIDERED**

The Proposed Action, Alternative 1, and the No Action Alternative were all considered in detail in the EA. A brief summary of each alternative is provided below.

**The Proposed Action** 

The Proposed Action consists of either a single-circuit or double-circuit 500 kV transmission line approximately 60 miles in length, as well as the required access roads, temporary work areas, fiber optic communication equipment, series compensation equipment, geotechnical investigations, and all other components of the Proposed Action as described in the EA. The

northern terminus will be located at the Harry Allen Substation in Section 35, Township 17 S., Range 63 E., and the southern terminus will be located at the Eldorado Substation in Section 2, Township 25 S., Range 62 E., M.D.B. & M. The transmission line will be located inside a 200-foot-wide (100 feet on either side of center) ROW, with the majority of the line to be constructed 200 feet from the closest parallel transmission line. Engineering constraints may require deviations from this 200-foot separation in certain areas along the transmission line, the details of which will be specified in the Final Plan of Development (POD).

The EA also analyzed two short routing alternatives associated with the Proposed Action. One routing alternative, known as the Dutchman Pass Alternative Routing Area, is located on BLM administered lands. The other routing alternative, known as the River Mountains Alternative Routing Area, is located on Reclamation administered lands. For the River Mountains Alternative Routing Area; a storm water channel and detention basin (C-1 Detention Basin) have been constructed in the utility corridor adjacent to the existing transmission facilities. The spoil pile created from the construction of the detention basin is currently situated such that the Proposed Action could not be constructed in its preferred alignment 200' from the nearest transmission line. The route alternative in this area would place the Proposed Action alignment on the east side of the detention basin and channel for approximately one mile. The EA demonstrated that either the eastern or western alignment may be constructed without significant environmental impacts.

The specific location of all project facilities will be detailed in the Final POD as discussed below in "Conditions of Approval".

#### **Alternative 1**

For Alternative 1, the EA analyzed an arrangement where GBT would utilize approximately 18 miles of open position on existing double-circuit transmission towers associated with NV Energy's previously approved and constructed Harry Allen to Mead 500 kV transmission line project. This alternative includes the construction of approximately 42 miles of new transmission structures for a total length of approximately 60 miles (the same as the Proposed Action). Approximately 26.5 miles of new transmission alignment would be constructed from the Harry Allen Substation to a point in the Rainbow Gardens Area of Critical Environmental Concern (ACEC) (approximately mile marker 26.5), where the existing Harry Allen to Mead 500 kV transmission line double-circuit structures begin. At this location, the SNIP 500 kV conductors would be placed on the existing double-circuit structures for approximately 18 miles. Upon exiting the Harry Allen to Mead double-circuit structures, approximately 14.5 miles of new transmission alignment would be constructed for the remainder of the route south to the Eldorado Substation. The new structures would parallel, to the extent practicable, the existing electric transmission facilities within the utility corridor, and the line is proposed to be constructed approximately 200 feet from the closest parallel transmission line.

#### **No Action Alternative**

Under the No Action alternative, the new 500 kV electrical transmission line and associated infrastructure would not be constructed, and a new high-voltage electrical transmission line

between the Harry Allen and Eldorado substations would not be constructed as part of this project. Without construction and operation of the proposed project, the conditions of the project area would remain the same and the potential environmental impacts associated with construction, operation, and maintenance of the proposed project would not occur. The new pathway to access the regional electricity market would not be available to foster development of new renewable energy resources and provide the other benefits of the project.

#### **Environmental Commitments**

GBT has committed to an extensive list of generic and selective environmental protection and mitigation measures as outlined in their Preliminary POD, and incorporated into the Proposed Action. The measures are intended to minimize or avoid impacts to resources in the project area, including biological, cultural, soils, land use, air quality, water, visual, and paleontological resources. In addition to those measures incorporated into the Proposed Action, further minimization and mitigation measures were developed during the NEPA and National Historic Preservation Act (NHPA) analysis and consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act (ESA). Adherence to these additional measures will be a stipulation to the grant of any right-of-way or right-of-use document. A brief summary of these measures is given below:

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

- Southern Nevada Intertie Project, Preliminary POD, March 2010.
- Southern Nevada Intertie Project, Biological Assessment (BA), submitted to USFWS in October 2014.
- Southern Nevada Intertie Project, Biological Opinion (BO), issued by USFWS on November 7, 2014.
- Southern Nevada Intertie Project, EA (Attachment A), November 2014.
- Programmatic Agreement (PA) among the Southern Nevada District Office of the BLM, Reclamation, the National Park Service, Clark County Parks and Recreation, GBT, and the Nevada State Historic Preservation Officer, regarding the Southern Nevada Intertie Project, developed pursuant to Section 106 of the NHPA.

**Monitoring:** Monitoring activities will occur as specified by BLM, Reclamation, State of Nevada, and Clark County agencies, in accordance with applicable laws, regulations, and permit conditions. These monitoring activities include, but are not limited to:

- Requirements included in a Historic Properties Treatment Plan, developed pursuant to the PA in compliance with Section 106 of the NHPA.
- All monitoring that is stipulated in the BO, BA, EA, and POD.
- A Compliance Inspection Contractor (CIC) will provide ongoing compliance inspections and monitoring during the construction of the project. BLM will appoint the CIC with the concurrence of Reclamation.
- An authorized Desert Tortoise biologist, as qualified and approved by the USFWS, will be onsite during project activities within Desert Tortoise habitat.
- A biological monitor will be present during the migratory bird nesting season.

**Final Plan of Development:** The ROU will contain a stipulation requiring GBT to prepare a POD for Reclamation's review and approval prior to issuance of a notice-to-proceed with construction. The POD will include the following details:

- A comprehensive map set which includes:
  - The location of all physical project facilities, including transmission structures, fiber optic communication equipment, series compensation equipment, and other project facilities.
  - o The location of planned temporary work areas, including transmission structure work pads, pull and tension sites, conductor splicing sites, and other work areas.
  - o The location of sensitive resource areas to use in planning the route of new access roads.
- Right-of-Way Preparation, Rehabilitation, and Restoration Plan
- Flagging, Fencing, and Signage Plan
- Noxious Weed Management Plan
- Biological Protection Plan
- Paleontological Monitoring and Treatment Plan
- Fire Protection Plan
- Hazardous Materials Management Plan

## **ENVIRONMENTAL IMPACTS AND FINDINGS**

It is Reclamation's determination that the implementation of the Proposed Action would not significantly impact the human environment, and an EIS will not be required. The reasons for this determination are given below.

#### Consideration of criteria from 43 CFR 429

Reclamation is required to review criteria contained in 43 CFR 429.14 "Use of Bureau of Reclamation Land, Facilities, and Waterbodies; Final Rule" when reviewing ROU applications. This review is summarized below.

(a) Compatibility with authorized project purposes, project operations, safety, and security. The Proposed Action is located on lands withdrawn by Reclamation for the Robert B. Griffith Water Project. The Proposed Action is compatible with the purposes and operations of the water conveyance and treatment facilities associated with the Robert B. Griffith Water Project. The Proposed Action will be located in a WWEC which was designated across these lands pursuant to the EPAct. There are currently multiple existing electrical transmission lines, substations, pipelines, storm water collection infrastructure, and other utility facilities within the utility corridor and immediately adjacent to the alignment of the Proposed Action. Locating the Proposed Action in this consolidated and well-planned utility corridor is compatible with project purposes and operations. In addition, the design, construction, and operation of the project will be required to be in compliance with the National Electric Safety Code and all other applicable health and safety regulations and requirements. Applicable security standards and regulations set forth by the North American Electric Reliability Corporation (NERC) will ensure the Proposed Action is implemented in a safe and secure manner.

- (b) Environmental compliance. The Proposed Action is in compliance with Federal, State, or local law or requirements imposed for the protection of the environment. All applicable permits will be acquired prior to project activities commencing. The methods identified in the POD to implement the construction and operation of this project have been utilized in similar projects in the region and have been compliant with environmental regulations. The analysis of the Proposed Action in the EA was performed in compliance with NEPA, and demonstrated that no significant environmental impacts would result from the implementation of the project.
- (c) Compatibility with public interests. Implementation of the Proposed Action will benefit the public by providing new access to the regional electricity market, reducing congestion and increasing reliability on the existing transmission grid, and increasing import and export capacity for regional transmission systems, all of which will place downward pressure on electricity prices. The project will also enable economical transmission service to foster the development of new renewable energy resources. The Proposed Action will benefit these public interests without unnecessary or undue degradation to Federal lands.
- (d) Conflicts with Federal policies and initiatives. The Proposed Action is consistent Federal policies and initiatives, including the EPAct, the President's Energy Policy and Climate Action Plan, and the Department of Interior Secretarial Orders 3283, 3285, and 3285A1, which encourage projects that facilitate renewable energy delivery, reduce congestion, strengthen system reliability, and enhance efficiency.
- (e) Public health and safety. Implementation of the Proposed Action would not result in potentially substantial or adverse impacts to public health and safety. As mentioned above, the design, construction, and operation of the project will be required to be in compliance with the NERC and all other applicable health and safety regulations and requirements. Applicant-committed safety measures incorporated into the construction and operation phases of the Proposed Action would further reduce the potential for adverse public health or safety impacts due to project activity. Transmission lines and associated electrical facilities are routinely studied, approved, and operated on public and Federal lands. In general, the effects of these facilities are not considered to be highly uncertain or involve unique risks, especially when constructed within utility corridors. The analysis in the EA has not shown that there would be any unique or unknown risks to the human environment.
- (f) Availability of other reasonable alternatives. The EA demonstrated that the Proposed Action, Alternative 1, and the No Action Alternative would not result in significant environmental impacts. Implementation of Alternative 1 would require consideration of private commercial arrangements, cost, and the anticipated build-out of the utility corridor.
- GBT's ability to utilize the existing transmission structures in Alternative 1 is provided in a time-limited commercial arrangement, which carries the risk of expiration prior to implementation of the project. Authorization of the Proposed Action provides more certainty that the project can be built to meet the objectives of the purpose and need. Also, given the substantial interest in siting utility facilities within the designated corridor, it is anticipated that the existing transmission structures studied as part of Alternative 1 will eventually be utilized as part of a future project. The No Action Alternative would not provide new access to the regional electricity market for existing and proposed power generation facilities, may potentially inhibit the development of new renewable energy resources, would not reduce congestion on the existing transmission grid

or increase reliability, and would not increase the import and export capacity of the regional transmission system.

(g) Best interests of the United States. The analysis of the Proposed Action has demonstrated that the project (1) is intended to serve a purpose that is consistent with Federal policies and initiatives, and will be in the public interest; (2) is located in an utility corridor that was designated pursuant to Federal law for this intended purpose; (3) can be constructed, operated, and maintained in compliance with applicable environmental, health, safety, and security laws and regulations; (4) has been appropriately considered against reasonable alternatives; and (5) can be implemented without significant environmental impacts. These factors all demonstrate that the project is in the best interests of the United States.

#### Resources Evaluated in the EA

Implementation of the Proposed Action will not result in significant impacts to any of the resources evaluated in the EA. The impacts are summarized below:

Air Quality: Air emissions associated with the Proposed Action are primarily short-term and chiefly associated with engine exhaust due to combustion of fossil fuel in construction equipment and fugitive dust during the construction period. While vehicles will be used to drive the transmission line ROW for periodic maintenance, impacts to air quality from vehicle emissions will be negligible. Before construction can commence, GBT would need to obtain a Clark County Department of Air Quality (DAQ) Dust Control Permit for Construction Activities, and related Dust Mitigation Plan. As a result of the temporary nature of air emissions and through adherence to Clark County DAQ regulations, impacts to air quality will be minimal. Cumulative impacts to air quality were determined to be minimal as construction impacts from the Proposed Action would be short-term in duration and would not occur simultaneously with any other projects proposed in the area.

Geology and Minerals: The Proposed Action may produce small amounts of mineral materials through excavation for structure foundations. Any excess materials will be used as backfill and spread around structure locations or put to use within the right-of-way. Impacts on mineral resources would be mitigated through the placement of towers and access roads, such that project construction and facilities do not restrict access to mineral resources within the project area. Since impacts to mineral resources would be mitigated, no cumulative impacts to geology and minerals were identified.

Soils: The proposed project area contains certain soils that are moderately to highly susceptible to water and wind erosion. Proper mitigation measures would be required during construction of the proposed project in order to avoid or minimize damage resulting from erosion and prevent acceleration of natural-erosion processes. 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. Significant cumulative impacts to soils are not anticipated because construction impacts from the Proposed Action would be short-term in duration and would not occur simultaneously with any other projects proposed in the area.

Water Resources: After implementation of site-specific BMPs, impacts to surface water, groundwater, and water quality are expected to be negligible to minimal. Impacts related to floodplains for individual structures and roads would be negligible. The Proposed Action would not have a measurable contribution towards cumulative impacts to water resources as the amount of water needed for construction and operation and maintenance is minimal.

Vegetation: Applicant-proposed environmental protection measures were developed to avoid and minimize potential impacts to botanical resources from construction, operation, and maintenance of the proposed project. Existing roads and previously disturbed areas would be used for the proposed project alignments to the extent reasonably possible to minimize new surface disturbance. Five sensitive plant species were observed along the proposed alignment. Preconstruction surveys would be performed to flag sensitive plant species for avoidance, as well as to flag work areas. As part of the mitigation for impacts to sensitive plant species, GBT will contribute to a BLM administered compensatory mitigation fund that is intended to reduce the level of project specific impacts to special status plant species throughout the project alignment. While project activities may facilitate the introduction or spread of noxious weeds and invasive plants, a Noxious Weed and Invasive Plant Management Plan would be prepared in consultation with BLM and Reclamation to minimize the likelihood of noxious weed propagation.

Significant cumulative impacts are not anticipated because impacts to vegetation would be concentrated in the previously disturbed WWEC, and protection measures incorporated into the Proposed Action as well as other reasonably foreseeable projects would minimize impacts.

Wildlife: The Proposed Action has the potential to impact several wildlife species that are protected under the ESA. Formal consultation with the USFWS was requested pursuant to Section 7 of the ESA regarding the project's potential impact to the Mojave desert tortoise. USFWS appended this action to the programmatic BO that determined the project is not likely to jeopardize the continued existence of the Mojave desert tortoise and no critical habitat will be affected. Through a combination of applicant proposed protective design features, avoidance and minimization measures set forth in the BA, and the terms and conditions of the BO, impacts to the Mojave desert tortoise shall be avoided or minimized. Examples of these protective measures include the requirement for preconstruction surveys, active monitoring of construction activities, limits on the speed and movement of project vehicles, an employee education program, protocols for handling encounters with desert tortoise, and other specifications.

Informal consultation with USFWS pursuant to Section 7 of the ESA was also requested for concurrence that the proposed project may affect but is not likely to adversely affect the southwestern willow flycatcher and the western yellow-billed cuckoo. Habitat for these two avian species occurs in the Las Vegas Wash which is part of the action area for the project. Since the project features will span the Wash and no habitat will be affected, and certain monitoring and avoidance protocols will be implemented, the USFWS concurred that the project may affect but is not likely to adversely affect the southwestern willow flycatcher or western yellow-billed cuckoo.

For those portions of the project that are located on non-Federal lands, the applicant will be required to comply with the applicable measures set forth in the Clark County Multi-Species Habitat Conservation Plan.

Various other wildlife species may be impacted in the project area due to construction activities. Implementation of protective design features and minimization measures such as use of existing access roads and work areas, preconstruction surveys, monitoring during construction, and post-construction restoration should effectively minimize or avoid impacts.

Significant cumulative impacts are not anticipated because impacts to wildlife would be concentrated in the previously disturbed WWEC, and protection measures incorporated into the proposed action as well as other reasonably foreseeable projects would minimize impacts.

Cultural Resources and Indian Sacred Sites: The Proposed Action will be located adjacent to multiple existing facilities within a previously modified setting. Large portions of the project area have been previously surveyed for cultural resources and there are known National Register of Historic Places (NRHP)-eligible cultural sites within the direct and indirect areas of potential effect for this project. However, as specified in the EA, a Class III cultural resources survey, NRHP eligibility determinations for identified cultural resources, and treatment to avoid and/or mitigate adverse direct and indirect effects to cultural resources, would be required prior to construction. In addition, the PA includes provisions for consultation, unanticipated discoveries, and monitoring of sensitive cultural areas. Given these survey and treatment requirements, as well as the ongoing monitoring requirements of the PA, the Proposed Action is not expected to have a significant adverse effect or cause the loss or destruction of scientific, cultural, or historic resources, including those listed in or eligible for listing in the NRHP. Significant cumulative impacts are not anticipated due to the requirements in the PA to identify cultural resources, consult with stakeholders, and avoid or mitigate impacts to those resources. There will be no impacts to Indian Sacred Sites, including cumulative, as no Indian Sacred Sites have been identified in the ROU/ROW area.

Paleontological Resources: The Proposed Action may impact paleontological resources present in the project area. A Paleontological Resources Treatment Plan will be developed and include: (1) a pre-construction survey in areas containing known fossil localities with a Potential Fossil Yield Classification (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. The scientific and educational value of the fossils and their associated contextual data constitute the chief significance of the resource. Their collection, therefore, mitigates the impacts to paleontological resources. The Proposed Action, in combination with other reasonably foreseeable projects in the area, would not contribute to a cumulatively significant effect to paleontological resources due to the mitigation of impacts.

Land Use, Recreation, and Access: The majority of the length of the Proposed Action is on Federal land, within designated utility corridors, and adjacent to existing utility facilities. Operation and maintenance of the proposed transmission line would not conflict with existing Federal, State, or county land use plans, policies, or regulations applicable to the project area. The proposed transmission line would cross the Rainbow Gardens and River Mountains ACECs within the designated utility corridor. The construction and operation of the proposed

transmission line is not anticipated to interrupt dispersed recreational activities on adjacent public lands. Vacant public lands are used for low-density informal recreation such as hiking, picnicking, off-road driving, and driving on existing paved and unpaved roads. The proposed project would not preclude the use of these areas, but rather would temporarily displace recreational users to surrounding recreation areas if access roads are restricted due to construction.

The Proposed Action and the majority of foreseeable transmission and renewable energy projects in the area would be within or adjacent to designated utility corridors. Cumulative impacts would be minimized and are not expected to be significant because of consolidation of projects within these corridors.

Visual Resources: Sensitivity Levels, distance zones, and Visual Resource Inventory (VRI) Classes would not be affected by the Proposed Action because the local setting in which the project is proposed has been highly modified by existing transmission line facilities. The project added to this modified setting would not affect these components of the VRI, and therefore existing VRI Classes are not expected to be impacted. Impacts to specific Key Observation Points (KOPs) along the alignment are expected to be low.

The proposed transmission line would mostly parallel existing transmission lines within an existing designated 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 designated, visual impacts are already present from the existing transmission lines, and mitigation measures will be implemented to minimize impacts.

Socioeconomics: Given the large and diverse population of the Las Vegas area, the economic effects of constructing the transmission line would have little discernible effect on the overall levels of personal income and employment in the region. However, some positive effects would result during construction, not only in the form of direct employment, but also from procurements of construction materials and services from local suppliers and businesses. More substantially, the project would benefit the economy over the long-term by maintaining reliable electric power service for the growing number of residents, industries, and renewable energy projects in the region. Given the small effect to overall levels of personal income and employment in the region, the Proposed Action was not found to have a measurable cumulative impact to socioeconomics.

**Environmental Justice:** On average, the census tracts along the proposed route do not contain minority or low-income population groups significantly greater than Clark County or the State of Nevada as a whole; therefore, there would be no environmental justice impacts, including cumulative impacts, from implementation of the project.

**Indian Trust Assets**: There will be no impacts, including cumulative impacts, to Indian Trust Assets as no Indian Trust Assets have been identified in the ROW/ROU area.