RECORD OF DECISION

Salt Wells Energy Projects:

Sierra Pacific Power Company Fallon 230-kV Transmission Line

Decision to Grant Right-of-Way NVN 087795

Environmental Impact Statement [FEIS 11-12]

Case File Number: BLM/NV/CC/ES/11-10-1793

Lead Agency:

United States Department of the Interior

Bureau of Land Management

Carson City District – Stillwater Field Office

5665 Morgan Mill Road

Carson City, Nevada 89701-1448

Cooperating Agencies:

U.S. Bureau of Reclamation, Churchill County, City of Fallon, Naval Air Station Fallon, Nevada Division of Minerals, and Nevada Department of Wildlife

September 2011
# Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Phrase</th>
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<tbody>
<tr>
<td>BLM</td>
<td>United States Department of the Interior, Bureau of Land Management</td>
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<td>BMP</td>
<td>best management practice</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>EIS</td>
<td>environmental impact statement</td>
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<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<td>FEIS</td>
<td>final environmental impact statement</td>
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<td>FLPMA</td>
<td>Federal Land Policy and Management Act</td>
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<tr>
<td>POD</td>
<td>plan of development</td>
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<tr>
<td>Ormat</td>
<td>Ormat Technologies</td>
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<tr>
<td>Reclamation</td>
<td>Bureau of Reclamation</td>
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<tr>
<td>ROW</td>
<td>right-of-way</td>
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<td>SHPO</td>
<td>State Historic Preservation Office</td>
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<td>SPPC</td>
<td>Sierra Pacific Power Company</td>
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<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USACE</td>
<td>United States Army Corps of Engineers</td>
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<tr>
<td>USC</td>
<td>United States Code</td>
</tr>
<tr>
<td>USFWS</td>
<td>United States Fish and Wildlife Service</td>
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<tr>
<td>Vulcan</td>
<td>Vulcan Power Company</td>
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Record of Decision

I. Decision

1. Background

NV Energy (also known as Sierra Pacific Power Company [SPPC]) submitted an application in August 2009 with the (BLM) for a right-of-way (ROW) grant under Title V of the Federal Land Policy and Management Act (FLPMA), 43 United States Code (USC) 1761-1771, for the construction and operation of a 22-mile 230-kV electric transmission line, two 60-kV electric line folds, one substation and two switching stations on private and public land in Churchill County, Nevada (See Figure 1, included as Attachment A).

Concurrent with the SPPC submittal, the Bureau of Land Management Stillwater Field Office (BLM) received two separate geothermal plans of utilization and applications for facility construction permits for Ormat Technologies (Ormat) and Gradient Resources (formerly known as Vulcan Power Company [Vulcan]) in Churchill County, Nevada. The BLM determined that because of similar timing, geography, and types of actions, the three proposals would be analyzed in one Environmental Impact Statement (EIS), together known as the Salt Wells Energy Projects EIS. Although the projects have been analyzed in one EIS, each proposed project requires a separate, stand-alone record of decision (ROD) from the BLM. This ROD is for the SPPC project and associated facilities on public land managed by the BLM.

Cooperating agencies for the EIS are the United States (US) Bureau of Reclamation (Reclamation), Churchill County, City of Fallon, Naval Air Station Fallon, Nevada Division of Minerals, and Nevada Department of Wildlife. BLM and SPPC personnel presented the proposed project and the EIS process at several public venues to solicit comments on the EIS.

Title V of the FLPMA, 43 USC 1761-1771, authorizes the BLM, acting on behalf of the Secretary of the Interior to issue an ROW grant on, over, under, and through the public lands for systems for generation, transmission, and

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distribution of electric energy. The BLM's implementation of its statutory direction for ROW authorizations is detailed in 43 Code of Federal Regulations (CFR) Part 2800. The Authorized Officer administers the ROW authorization and ensures compliance with the terms and conditions of the ROW grant. The Authorized Officer means any employee of the Department of the Interior to whom has been delegated the authority to perform the duties described in 43 CFR Part 2800. In respect to this specific ROW grant, this authority has been delegated to the Manager of the Stillwater Field Office, BLM.

1.2 INFORMATION DEVELOPED SINCE THE FEIS
Easement data has been updated from what was shown in Figure 2-17 in the Final EIS (FEIS) based on additional discussions with and between Churchill County and Naval Air Station Fallon. The correct figure is included in Attachment A.

1.3 DECISIONS BEING MADE (40 CFR 1505.2(A))
Based on the analysis of the FEIS, I have determined that the implementation of the Agency Preferred Alternative, described in the FEIS as SPPC Alternative 3 (see Attachment A), will not cause unnecessary or undue degradation of public land. This alternative is comprised of all components of the Proposed Action but with a modified transmission line route to minimize impacts to the environment and local residents. The route was developed in consultation with the cooperating agencies and addresses concerns about bisecting land parcels south of Macari Lane and bisecting the Corkill Ranch conservation easement. By this decision and as Authorized Officer of the Stillwater Field Office, BLM, I approve issuance of FLPMA ROW grant NVN 087795 to SPPC for the public land portion of the project, including the electric transmission line, two switching stations, and associated facilities as described in SPPC Alternative 3, subject to compliance with all pertinent federal, state, and local laws or requirements and the mitigation measures described in this ROD. The ROW grant will have widths varying from 60 feet to 125 feet, with additional temporary construction widths varying from 100 feet to 300 feet.

1.4 ROW REQUIREMENTS (43 USC 1764; 1765)
The ROW grant will be issued for a 30-year term and may be renewed if appropriate and will be subject to the regulations under 43 CFR 2800. The following permits or plans and associated conditions of approval are adopted by the BLM and incorporated into this ROD (See Attachments B through D):

- Avian Protection Plan (Attachment B)
- Programmatic Agreement for the Salt Wells Energy Projects (Attachment C)
- 1959 Agreement (Attachment D)
The Notice to Proceed under the ROW will be granted later in the process and will be based on a revised, more site specific plan of development (POD) for actions covered under the FEIS.

Actions proposed on BLM-administered lands must comply with FLPMA, whose statutes require the BLM to analyze the Proposed Actions to ensure the following:

- Adequate provisions are included to prevent undue or unnecessary degradation of public lands;
- Measures are included to provide for reasonable reclamation of disturbed areas; and
- Proposed Actions will comply with other applicable federal, state, and local laws and regulations.

BLM’s authority to grant a ROW is limited to that portion of the route that is on public land. Because most of SPPC’s proposed ROW will occur on non-BLM land, the Proposed Action will be subject to permit approvals from Reclamation as well as the affected local jurisdictions, including Churchill County (See Table 1-1 of the FEIS). Reclamation will prepare a separate ROD for the action to address activities and facilities proposed on Reclamation-administered lands. The Reclamation ROD may include additional stipulations and or conditions of approval.

Other federal, state, and local agencies have jurisdiction (including inspection responsibilities) over certain aspects of the Proposed Actions. The FEIS, Table 1-1, Potential Regulatory Responsibilities, lists additional federal, state, and local permits, policies, and actions that may be required and lists the agencies that may use the information presented in the FEIS to make decisions about issuing permits or approvals.

2. **ALTERNATIVES**

The FEIS analyzed the no action alternative, Proposed Action, and four action alternatives as summarized below. A full description of each alternative can be found in Chapter 2 of the FEIS.

2.1 **PROPOSED ACTION**

SPPC proposes to build two switching stations, one 230-kV transmission line, two 60-kV electric line folds, and one substation, as follows:

- Construction of a new Bass Flat Switching Station at the junction of the existing Fort Churchill to Austin 230-kV transmission line and the ENEL 230-kV transmission line;
- Construction of a new Pony Express Switching Station adjacent to the existing ENEL Geothermal Power Plant;
• Construction of a new Greenwave Substation;
• Construction of a 230-kV transmission line from the proposed Pony Express Switching Station to the Greenwave Substation; and
• Installation of two 60-kV electric line folds on four single-pole structures connecting the proposed Greenwave Substation to the existing 60-kV transmission lines which are connected to the existing Fallon Substation north of Sheckler Road.

The major components of SPPC’s Fallon 230-kV Source Project are described in Table 1, Proposed Fallon 230-kV Source Project Facilities. SPPC will implement the BMPs, as defined by the Nevada Division of Environmental Protection (2008), which include accepted measures identified in the POD and outlined in Appendix E of the FEIS, Environmental Protection Measures and Best Management Practices, during construction and operation of the project.

Table 1
Proposed Fallon 230-kV Source Project Facilities

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Location/Description</th>
<th>Temporary Disturbance</th>
<th>Permanent Disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Bass Flat Switching Station</td>
<td>Approximately 20 miles southeast of Fallon.</td>
<td>500 x 500 feet (+/- 5.75 acres)</td>
<td>500 x 500 feet (+/- 5.75 acres)</td>
</tr>
<tr>
<td>Proposed Pony Express Switching Station</td>
<td>On public land adjacent to ENEL’s Salt Wells Geothermal Power Plant (approximately 16 miles southeast of Fallon, Nevada).</td>
<td>500 x 500 feet (+/- 5.75 acres)</td>
<td>500 x 500 feet (+/- 5.75 acres)</td>
</tr>
<tr>
<td>Proposed Greenwave Substation</td>
<td>South side of Sheckler Road in Fallon, Nevada.</td>
<td>11.5 acres</td>
<td>11.5 acres</td>
</tr>
<tr>
<td>Proposed 60-kV Electric Line Folds</td>
<td>Installation of two 60-kV electric line folds on four single-pole structures from the proposed Greenwave Substation to the existing 60-kV transmission lines across the street.</td>
<td>Length: 250 feet Width: 100-foot ROW Total Disturbance: 0.6 acres</td>
<td>Length: 250 feet Width: 100-foot ROW Total Disturbance: 0.6 acres</td>
</tr>
</tbody>
</table>

Total Estimated Disturbance: 813 acres 352 acres
2.2 **Alternatives Fully Analyzed**

**Alternative 1**
From the Macari Switching Station, Alternative 1 will travel south of the Proposed Action route, following the Carson Lake and Pasture Title Transfer boundary from east to west, and then run north of the Corkill Ranch on Cushman Road. This Alternative was proposed to minimize the impact on existing conservation easements that are either bisected or bordered by the Proposed Action. Deeds to the conservation easements include an 80-foot height restriction and restrict uses to those that support agriculture.

- Length of Alternative 1 Transmission line: 22.4 miles (118,272 feet)
- Total Temporary Disturbance under Alternative 1: 838 acres

**Alternative 2**
The route will be the same as the Proposed Action except the initial portion from the Macari Switching Station will continue west along Macari Lane for an additional 2 miles before going south for one half mile along Schaeffer Lane and connecting back into the Proposed Action route. This Alternative was developed to address concerns about bisecting land parcels south of Macari Lane.

- Length of Alternative 2 Transmission line: 21.7 miles (114,576 feet)
- Total Temporary Disturbance under Alternative 2: 789 acres
- Total Permanent Disturbance under Alternative 2: 329 acres

**Alternative 3 (Preferred)**
At the April 14, 2011, cooperating agency meeting, a newly preferred alternative was developed through a collaborative process that modified SPPC Alternative 2 by rerouting about two miles of the transmission line. This third alternative was added to the FEIS with additional analysis.

The route will the same as Alternative 2 except one half mile west of Pasture Road the route will jog south then head west one half mile along the southern boundary of the Corkill Ranch conservation easement before going north one half mile along the Carson Lake Drain and the western boundary of the conservation easement before connecting back into the Proposed Action/Alternative 2 route. This alternative was developed to address concerns about bisecting the Corkill Ranch conservation easement. This alternative will also include an option to include the Macari Fiber Optic Alternative for a backup fiber optic communication connection.

- Length of Alternative 3 Transmission line: 21.9 miles (115,632 feet)
- Total Temporary Disturbance under Alternative 3: 796 acres
- Total Permanent Disturbance under Alternative 3: 332 acres
**Macari Fiber Optic Alternative**

Under this Alternative, SPPC will construct an additional fiber optic line to connect communications from Highway 50. This alternative could be applied as an option to all alternatives if SPPC is not able to get authorization to complete the transmission line from the Macari Switching Station to the Greenwave Substation. This Alternative from Macari Lane will involve trenching about one mile along Macari Lane to Highway 50. The fiber optic communications cable from the 230-kV transmission line will be routed underground east along Macari Lane via two four-inch PVC conduits. The conduits will pass beneath the Fallon Canal, or over the canal in association with the Ormat-proposed geothermal pipeline crossing, and will continue 1.25 miles to Highway 50. A bore will be performed under Highway 50, and the conduits will then continue approximately 150 feet west and intercept an existing company-owned communication conduit system. The trench will be a maximum of 1-foot wide and 42 inches deep and will use native fill unless required otherwise. Two four-inch PVC conduits will be placed in the trench with a minimum of 36 inches of native cover. Along with the two four-inch conduits, four 2-foot by 4-foot by 3-foot deep pull boxes will be constructed. Aboveground marker posts (approximately 3 to 4 feet tall) will be placed at 400-foot intervals; these marker posts will display a company logo depicting buried fiber optic cable.

The conduit path will have cable pulling vaults set at 600-foot intervals and on either side of the canal and highway crossings. Additionally, an existing communications vault 3,500 feet east along Highway 50 will be excavated for splicing.

- Length of Macari Fiber Optic Line: 1.5 miles
- Temporary disturbance width of Macari Fiber Optic Line: 8 feet
- Permanent disturbance width of Macari Fiber Optic Line: 6 feet
- Total Temporary Disturbance under the Macari Fiber Optic Alternative: 63,360 square feet (1.45 acres)
- Total Permanent Disturbance under Macari Fiber Optic Alternative: 47,520 square feet (1.09 acres)
- Total Permanent Disturbance under Alternative 1: 362 acres

### 2.3 Alternatives Not Fully Analyzed

As part of the EIS process, the BLM, cooperating agencies, and SPPC coordinated to develop alternative transmission line routes to address issues and concerns identified in scoping and in meetings with the cooperating agencies. Those alternatives that were carried forward are discussed in Section 2.2 of the FEIS. The following alternatives were considered but eliminated from further consideration.
Allen Road to Greenwave Substation: An alternative was considered to extend either the Proposed Action or Alternative 1 routes to Allen Road and then north along Allen Road to the Greenwave Substation. This alternative was eliminated due to constraints with ditches and canals, that it would have impacted 12 to 15 more homes, and that it would have required disruption of service during construction.

Along Highway 50: An alternative was considered to route the power line from Macari Lane along Highway 50 and across Wildes Road to the existing Fallon Substation. This alternative was eliminated for numerous reasons including that the route would not meet a planning requirement to be within one mile of the existing Fallon 60-kV substation; it would have negative visual impact on the Grimes Point Archeological Site; and it would have been within an area classified in the BLM land use plan as No Surface Occupancy Area.

Macari Lane Alternative: An alternative was considered that would have continued the line along Macari Lane and met up with Proposed Action route at Pasture Road. This alternative was eliminated because the portion of Macari Lane west of Beach Road has a number of existing encumbrances including a buried Paiute Pipeline Company natural gas pipeline, a Navy transmission line delivering power to the Navy facilities toward Dixie Valley, an SPPC distribution line, and private water delivery systems.

South of Carson Lake: An alternative was considered to route the line south of Carson Lake. This alternative was eliminated due to potential impacts on the Pony Express National Historic Trail, the fact that a second 230-kV transmission line would have been hard to protect electrically, and it would have resulted in changes to cost responsibility between utility and geothermal generators, which could have jeopardized project feasibility.

CJ Drive to HWY 95 and CJ Drive-West Alternatives: The CJ Drive to HWY 95 Alternative would have been the same as Alternative 1 up until one mile east of Pasture Road, where the route would have turned south to CJ Drive and then continue west to Pasture Road south and around to Highway 95. At Highway 95 the route would have gone north to Depp Road and then cut across at an angle to the Proposed Action route. The CJ Drive-West Alternative would have followed the same route as the CJ Drive-HWY 95 Alternative except instead of going north on Highway 95 to Depp Road, this route would have only extend one and one half miles north on Highway 95 then gone west and north to meet up with the Proposed Action route to the Greenwave Substation. These alternatives were eliminated due to greater impacts to private landowners, greater impacts to natural resources, and closer proximity to Carson Lake, which provides important bird habitat.

2.4 Environmentally Preferable Alternative
Although the EIS analyzes the entire route(s) of the electric transmission line, certain portions will cross private lands and are under the authority of Churchill
County. The National Environmental Policy Act, as interpreted through the regulations promulgated by the Council for Environmental Quality, requires that the ROD for any federal action also identify the ‘environmentally preferable’ alternative. The No Action Alternative, as described in the FEIS, would result in no disturbance to the environment. The Proposed Action and all action alternatives would result in disturbance to the environment. Therefore, the No Action Alternative is the environmentally preferable alternative.
3. **Management Considerations**

The ROW approved by this ROD provides for the construction of an electric transmission line and two electric switching stations in an area where construction is in conformance with the *Carson City Field Office Consolidated Resource Management Plan (BLM 2001)*. Approval of the ROW grant responds to BLM’s purpose and need by responding to SPPC’s application under Title V of the FLPMA (43 United States Code [USC] 1701) and is in compliance with the FLPMA, BLM ROW regulations, and other applicable federal laws.

The Proposed Actions and Alternatives are in conformance with the terms and conditions in the BLM Consolidated Resource Management Plan page ROW 1: National Policy, Section 1 and are consistent with the National Environmental Policy Act analysis supporting these decisions.

Under Section 7 of the Endangered Species Act, as amended, a federal agency that authorizes, funds, or carries out a project that “may affect” a listed species or its critical habitat must consult with the US Fish and Wildlife Service (USFWS). No listed species will be affected by the ROW grant and subsequent development, therefore, consultation was not conducted.

The BLM coordinated with the USFWS under the Bald and Golden Eagle Protection Act. This Act provides for the protection of bald and golden eagles by prohibiting, except under certain specified conditions, disturbance or harm of these species. To comply with the Act and in accordance with BLM’s Instruction Memorandum 2010-156, the BLM coordinated with the USFWS and required the preparation of an Avian Protection Plan (See Attachment B).

The National Historic Preservation Act Section 106 process has been completed and is in accordance with the Programmatic Agreement (PA, pursuant to 36 CFR 800.14[b]) executed by signature through the BLM and the Nevada State Historic Preservation Officer (SHPO) (See Attachment C).
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4. **STATEMENT OF NO UNNECESSARY OR UNDUE DEGRADATION**

The BLM is responsible for the development of energy resources on public lands in an environmentally sound manner (43 USC 1701). The BLM’s purpose for this project is to direct and control the use of public lands for the orderly development in a manner that will allow other existing uses to continue, protect the natural resources, minimize resource conflicts and prevent unnecessary or undue degradation to the public lands (see 40 CFR 2801.2). The Agency Preferred Alternative will not cause unnecessary or undue degradation to public lands.

A portion of the Agency Preferred Alternative falls within the jurisdiction of Reclamation. Regulations at 43 CFR 429 will be included in the Bureau of Reclamation ROD, including approval of use authorizations. However, licenses and concurrence letters authorizing the specific crossings will be granted later in the process and will be based on a revised, site-specific POD for actions covered under the FEIS analysis.

The Agency Preferred Alternative falls within the jurisdiction of Churchill County and requires a Special Use Permit for construction of the electric transmission line and all associated facilities.

The Naval Air Station Fallon, as a fully participating cooperating agency in the development of the Salt Wells Energy Projects EIS, has not raised objections to the transmission line as described in the FEIS dated July 2011 (See Attachment D). The projects, with the operator-committed measures, mitigation measures, and grant and lease stipulations were found to not interfere with Naval Air Station Fallon operations.
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5. **Mitigation and Monitoring**

This ROD incorporates mitigation and monitoring measures, and conditions and stipulations prescribed by the BLM. Considering the pertinent factors, the Agency Preferred Alternative provides for the construction of an electric transmission line and associated facilities in the least impacting manner. All practicable methods to avoid or minimize environmental harm from the selected alternative have been adopted.

Prior to start of the project, a POD will be developed by SPPC and reviewed by the BLM to outline the specifics of how the project will be constructed and operated and will list monitoring measures to ensure commitments are fulfilled. Approval of the project is contingent upon SPPC’s acceptance and compliance with measures to be imposed by cooperating agencies in their ROD and permits, whether already final or still pending.

The BLM will have the continuing authority to make changes to mitigation measures or create new ones if needed under adaptive management principles (43 CFR 46).

The following mitigation and monitoring measures, identified in the FEIS, have been developed by the BLM and the cooperating agencies to reduce potentially adverse impacts:

5.1 **Land Use Authorizations, Airspace, and Access**

- SPPC will coordinate with private landowners to obtain easements and develop a compensation plan as discussed in Section 4.26 of the FEIS.
- SPPC will also coordinate with the Navy and Churchill County to address the height restriction of 80 feet for the conservation easement parcels.
- SPPC will work with the Navy to ensure compliance with the guidance for APZ2 areas.

5.2 **Air Quality**

*Fugitive Dust Control*

SPPC or its contractors will be required to prepare a Fugitive Dust Control Plan at least 30 days prior to the start of construction. This plan will be approved by the Nevada Division of Environmental Protection, Bureau of Air Pollution, or, if designated by Nevada Division of Environmental Protection, by Churchill County. This plan will include best management practices (BMPs) defined by the Nevada State Conservation Commission in its Best Management Practices Handbook (1994), best practical methods included in the Dust Control Handbook for Churchill County (2010), and other measures that must be implemented during construction to reduce fugitive dust emissions. Specific
measures will be developed as part of the construction planning and permitting processes; however, the Fugitive Dust Control Plan will include, at a minimum, the following measures:

- Stabilize open storage piles by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour. Limit speed of earthmoving equipment to 10 miles per hour.

Other BMPs and best practical methods that could be employed to control fugitive dust emissions and visibility impacts during construction could include the following:

- Apply water or dust suppressant to all active construction and site preparation work areas at least twice daily and more often during windy periods;
- Apply water or dust suppressants on all unpaved access roads and staging areas;
- Gravel access roads and staging areas;
- Reclaim (revegetate) disturbed areas as soon as possible after surface disturbance;
- Train construction personnel to recognize excessive fugitive dust conditions and implement dust control during these times;
- Install trackout control devices at paved access points to control fugitive dust from leaving the project site via trucks and motor vehicles;
- Use construction equipment that meets applicable Environmental Protection Agency (EPA) standards for criteria pollutants from diesel engines and maintain this equipment per manufacturer’s specifications; and
- Sweep paved access roads with water sweepers.

**Equipment Emissions Mitigation Plan**

To reduce diesel particulate, carbon monoxide, hydrocarbon, and NOx emissions associated with construction activities, SPPC or its contractors will prepare an Equipment Emissions Mitigation Plan as an appendix to the POD.
This plan will be approved by BLM and will include, at a minimum, the following measures requiring that all construction-related engines adhere to the following:

- Are tuned to the engine manufacturer’s specification in accordance with an appropriate time frame;
- Do not idle for more than five minutes (unless, in the case of certain drilling engines, it is necessary for the operating scope);
- Are not tampered with in order to increase engine horsepower;
- Include particulate traps, oxidation catalysts, and other suitable control devices on all construction equipment used at the Project site;
- Use diesel fuel having a sulfur content of 15 parts per million or less, or other suitable alternative diesel fuel, unless such fuel cannot be reasonably procured in the market area; and
- Include control devices to reduce air emissions. The determination of which equipment is suitable for control devices should be made by an independent Licensed Mechanical Engineer. Equipment suitable for control devices may include drilling equipment, generators, compressors, graders, bulldozers, and dump trucks.

### 5.3 WATER QUALITY AND QUANTITY

- As described in Chapter 2 of the FEIS, SPPC will implement plans for the protection of streams, wetlands, springs, and canals. These plans include BMPs that minimize potential for soil erosion, including a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention plan will be included as an appendix to the POD and will include measures to prevent erosion of disturbed soil. All areas subject to temporary disturbance will be recontoured, decompacted, and seeded, or left in-place as directed by the BLM or private landowner.

- During construction of facilities, designated personnel will visually monitor disturbed areas for evidence of soil erosion and associated impacts on surface water. Appropriate actions will be taken to correct any identified problems such as excessive erosion or accidental spills.

### 5.4 FLOODPLAINS, WETLANDS AND RIPARIAN ZONES

Implementation of the POD and associated protection plans as well as environmental protection measures for facilities within the floodplain will reduce impacts on wetlands, riparian zones, and floodplains.

The following mitigation measures will also be necessary to reduce impacts:
- While the boundary of wetland vegetation associated with Newlands canals was determined to be outside the construction ROW, if any wetlands are encountered during construction they must be avoided. **OR** A wetland delineation of wet meadows associated with the Newlands canals will be conducted to determine the boundaries, acreage, and types of wetlands that could be affected by the Proposed Action. The project proponent will comply with any mitigation measures determined by the USACE to ensure no net loss of wetlands.

- Sediment and erosion control BMPs will be implemented in accordance with state and local guidelines, including filter fencing, coir logs, etc., as needed;

- Construction within any wet meadow areas will be conducted when relatively dry conditions exist, in order to minimize soil erosion and potential impacts on vegetation and wildlife;

- There will be the ability to deploy standby sediment control BMPs, as needed, to protect all exposed portions of the site within 48 hours of a predicted storm event (a predicted storm event is defined as a National Weather Service forecasted, 50 percent chance of rain);

- Slopes along the roadways will be revegetated with native or suitable species as appropriate; and

- SPPC will obtain and comply with provision of a State of Nevada Section 401 Water Quality Certification permit.

### 5.5 Vegetation

- The aridity of the desert lowers the resilience of many land areas when disturbed, thus reducing revegetation success and potentially allowing for weed invasion and causing permanent loss of ecological function. As such, regular vegetation monitoring and adaptive management measures will be included in a revegetation plan.

- The boundary of wetland vegetation associated with Newlands canals was determined to be outside the construction ROW, however, if any wetlands are encountered during construction they must be avoided.

No additional mitigation will be necessary, since revegetation, invasive, nonnative species management, and dust control plans will be implemented as part of the POD.
5.6 **INVASIVE, NONNATIVE VEGETATION**

No additional mitigation measures are necessary with implementation of the invasive, nonnative species management plan, and revegetation plan.

5.7 **WILDLIFE**

Impacts on wildlife will be reduced through implementation of BMPs. Mitigation measures to reduce wildlife impacts, where feasible, will be detailed in the POD.

5.8 **MIGRATORY BIRDS**

Impacts on migratory birds will be reduced through implementation of BMPs. Mitigation measures to reduce migratory bird impacts, where feasible and appropriate, will be detailed in the POD, which will include development of an invasive, nonnative plant species management plan, and revegetation plan. The Avian Protection Plan for golden eagles was developed through coordination with the USFWS (Attachment B). Other measures will be employed, such as installing perch and nest prevention devices and anti-collision devices on all relevant structures, where applicable. A monitoring program, to be detailed in the POD, will be implemented to detect collisions and additional mitigation will be required if necessary. These measures will likely prevent take of migratory bird species, as defined by the Migratory Bird Treaty Act, and will reduce the likelihood of population-level effects.

5.9 **BLM DESIGNATED SENSITIVE SPECIES (ANIMALS AND PLANTS)**

Mitigation and monitoring measures will be the same as those described for Wildlife and Migratory Birds. With implementation of mitigation measures, the SPPC Project will not result in impacts to BLM-designated sensitive bird species' nests and will thus not be in conflict with direction provided in BLM Instruction Memoranda and regulations. Furthermore, the project will not contribute to the need to list any BLM-designated sensitive species.

5.10 **CULTURAL RESOURCES**

Mitigation and monitoring strategies are detailed in the Programmatic Agreement between the BLM, Reclamation, and SHPO and SPPC, Ormat, and Vulcan (Attachment C). If the SPPC Preferred Alternative is approved, the Programmatic Agreement will guide all activities concerning cultural resources and historic properties within the Proposed Action from its origin date, October 5, 2010, until the undertaking is completed or until it is terminated by one or more of the signatories.

Recommended treatment measures for architectural historic properties are also outlined in treatment plans that help mitigate adverse effects on resources eligible to the National Register of Historic Places under criteria A, B, and C. These types of treatment measures may include the following:

- Measures will be taken to minimize the visual impact associated with the proposed action. This may take the form of modifying tower placement, selecting paint colors that diminish the visual
impact of the towers, the planting of trees that will eventually reduce the visual impact of the towers, and/or other measures that may be identified in the future.

- Photo-documentation will be prepared of pre-disturbance viewsheds from all National Register of Historic Places-eligible properties within one-half mile of the power line selected for construction. Emphasis will be placed on documenting viewsheds as seen from the resource looking toward the power line. Also, a representative sample of eligible resources from each property type located within one-half mile of the power line selected for construction will be selected for similar photo-documentation of viewsheds. The documentation will be included in a technical report submitted to the BLM and SHPO.

- Visual/video products intended to document a select number of architectural resources will be prepared. The products will incorporate architectural, historical, and family histories in an integrated manner. Draft products will be submitted to the BLM and SHPO for technical review prior to production. Copies of the final products will be provided to BLM and SHPO for distribution.

- To the extent that access can be secured, a selected sample of specific property types based on standards established by the SHPO for properties of local and state significance will be documented. The documentation will be included in a technical report submitted to the BLM and SHPO.

- Two or more professional articles intended for publication in local or state journals will be prepared. The articles will focus on specific property types, historic periods, and/or centennial ranches. The draft articles will be submitted to the BLM and SHPO for technical review prior to publication. Its content will rely heavily on information developed by the other treatment measures.

It should be noted that the exact type and extent of treatment will be determined based on consultation between the BLM and the SHPO.

5.11 **Native American Religious Concerns**

In order to maintain access to and use of traditional use sites, SPPC will coordinate with local tribes and plan construction activities around traditional use periods during the construction phase of the project to eliminate any impacts.

Ongoing consultation may result in identification of additional Native American Religious Concerns which will be reviewed and, as appropriate and necessary, additional monitoring and mitigation measures will be developed.
5.12 **PALEONTOLOGICAL RESOURCES**

Pleistocene and early Holocene surficial deposits, such as alluvium, colluvium, talus, and playa deposits, have a low paleontological sensitivity ranking. Monitoring during construction will not be required, but spot-checking may be conducted in certain areas at the discretion of the BLM. In the case of the Quaternary deposits, this will ensure that any older underlying fossiliferous sediments were not being affected. If paleontological localities are identified in the SPPC Project Area, the mitigation and monitoring measures outlined in Section 4.16 of the FEIS would be implemented.

5.13 **VISUAL RESOURCES**

- Transmission line poles and cross arms similar in color to surrounding landscapes will be used whenever possible. The H-frame structures and steel single-pole structures will be aesthetically and structurally similar to existing poles. Substation and switching station design will use low profile components. Screening berms or landscaping will surround the substation whenever feasible to make it less visible from Sheckler Road and Highway 95. The fencing materials and structures associated with the substation will be nonreflective when possible. Also, equipment will be painted a BLM-approved color to blend in with predominant vegetation and soil whenever feasible. Existing vegetation on the substation site will be preserved to the extent possible and disturbed areas will be revegetated wherever possible.

5.14 **LIVESTOCK GRAZING**

- The BLM rangeland management specialist and SPPC will coordinate with the permittees to locate range improvements within the Preferred Alternative area of disturbance. SPPC will ensure that all temporary road or fence removal creating openings will have barriers across them to prevent the movement of livestock off range. SPPC will repair all damaged or removed range improvements after completion of construction activities.

5.15 **RECREATION**

- Potential safety hazards for the Valley Off Road Racing Association race route will be mitigated by working with the race coordinators and locating power poles a safe distance from the race route where feasible. Use or construction conflicts with the race will be mitigated by timing the transmission line construction to avoid the annual Valley Off Road Racing Association race. Revegetation measures will be outlined in the POD and will be implemented to reclaim temporary roads (see Section 4.9 of the FEIS).
5.16 **Noise**

SPPC will do the following to reduce noise impacts:

- SPPC will meet the EPA noise threshold level of 55 dBA at the property line.

Additional measures to reduce noise may be considered by SPPC through the Churchill County permit application process, and may include:

- Planning the substation layout such that the noise-generating components are set back from sensitive receptors;
- Installation of a wall constructed of materials such as cinder blocks, which may reduce sound levels.
6. **Agency and Public Involvement**

The public scoping period began on September 11, 2009, with the publication of the Notice of Intent in the Federal Register and continued through November 10, 2009 (Scoping Period). The news media and the public were notified of the public meetings and comment period. A public scoping meeting was held on October 21, 2009, at the County Administration Complex in Fallon, Nevada.

The Draft EIS Notice of Availability was published by the BLM and the EPA in the Federal Register on January 28, 2011, for a 60-day comment period. The BLM presented the findings of the Draft EIS and solicited comments at the following two meetings:

- Public Open House on March 3, 2011, at the County Administration Complex in Fallon, Nevada.
- Churchill County Commissioner Presentation on March 4, 2011, in Fallon, Nevada.

During the public review period for the Draft EIS, 30 comment letters were received containing 425 specific comments. Of the 30 comment letters, 20 were hard copy letters and 10 were submitted via electronic mail.

The Notice of Availability for the FEIS was published by the EPA in the Federal Register on July 22, 2011, with a 30-day review/wait period. The BLM received four written comment letters and e-mails.

The following cooperating agencies were involved in the process including development of the alternatives and review of the EIS: Churchill County Planning, City of Fallon, Reclamation, Naval Air Station Fallon, Nevada Department of Wildlife and Nevada Division of Minerals.
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7. **ERRATA**

Figure 2-17 was revised after the FEIS to incorporate new easement data and to show only those parcels with completed easements as a result of discussions with and between Churchill County and Naval Air Station Fallon. The correct figure is included in Attachment A.

Clarifications to the text of the FEIS include removal of any reference to the Top Gun Training Program and the Naval Fighter Weapons School.
8. **Final Agency Action**

It is my decision to approve and authorize a transmission line right-of-way grant (serial number NVN 087795) to Sierra Pacific Power Company, subject to the terms, conditions, stipulations, plan of development, and environmental protection measures developed by the Department of the Interior. In general, a decision of the BLM is not effective during the time in which an adversely affected person may file a notice of appeal (43 CFR 4.21(a)(1)). However, according to regulation, BLM decisions issued under 43 CFR Part 2800 are and remain in effect pending appeal (43 CFR 2801.10(b)). Since this right-of-way decision is issued under 43 CFR Part 2800, it is in full force and effect as of the date of issuance.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and Form 1842-1. If an appeal is taken a notice of appeal must be filed at the Bureau of Land Management, Stillwater Field Office, 5665 Morgan Mill Road, Carson City, Nevada 89701 within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error. This Decision will remain in full force and effect during the appeal unless a written request for a Stay is granted.

If the appellant wishes to file a petition pursuant to regulations at 43 CFR 2801.10 or 43 CFR 2881.10 for a stay of the effectiveness of this decision during the time that the appeal is being reviewed by the Board, the petition for a stay must accompany notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed in this office. If the appellant requests a stay, the appellant has the burden of proof to demonstrate that a stay should be granted. Except as otherwise provided by law or by other pertinent regulation, a Petition for a Stay of a Decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted, and
4. Whether the public interest favors granting the stay.

Teresa J. Knutson  
Manager  
Stillwater Field Office

Date: 9/28/2011
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9. **ATTACHMENTS**

   Attachment A – Figures Errata
   
   Attachment B – Avian Protection Plan
   
   Attachment C - Programmatic Agreement
   
   Attachment D –1959 Agreement