Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Right-of-Way Construction				
ROW-1 PSREC BMP	All design; material; and construction, operation, maintenance, and termination practices would be in accordance with safe and proven engineering practices.	Follow safe construction procedures	During construction	RUS/BLM/CSLC
ROW-2 PSREC BMP	PSREC would survey and clearly mark the centerline and/or exterior limits of the ROW, where applicable. On state- or federally administered lands, this may be determined by the respective authorized officer.	Adhere to ROW boundaries by construction equipment	During construction	BLM/CSLC
ROW-3	Access routes would be flagged with a highly visible marker. The route must be approved by the landowner or authorized officer in advance of use. Reference Table 2-4 in the EA for specific details. All construction vehicle movement outside of the ROW would be restricted to pre-designated access routes, contractor-acquired access routes, or public roads.	Adhere to ROW boundaries by construction equipment	During construction	BLM/CSLC
ROW-4 PSREC BMP	The limits of construction activities would be pre-determined, with activity restricted to those limits. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate survey or construction activity limits. The access route would be flagged to avoid environmentally sensitive areas.	Adhere to ROW boundaries by construction equipment	During construction	BLM/CSLC
ROW-5 PSREC BMP	PSREC would limit excavation to the areas of construction. No borrow areas for fill material would be excavated on the ROW. Waste material resulting from construction, operation, or maintenance would be removed from the site.	Minimize surface disturbance and refuse	During construction	BLM/CSLC
ROW-6 PSREC BMP	Waste rock from structure foundation construction would be used on site.	Minimize offsite transport of materials	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW-7 PSREC BMP	PSREC would ensure the safety of the public entering the ROW. This would include, but would not be limited to, barricades for open trenches, flagmen with communication systems for single-lane roads without visible turnouts, and attended gates for blasting operations, as appropriate.	Follow safe construction procedures	During construction	BLM/CSLC
ROW-8 PSREC BMP	PSREC would protect all survey monuments found within the ROW. Survey monuments include, but are not limited to, General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of disturbance or destruction of any of the features summarized above, PSREC would report the incident, in writing, to the federal or state authorized officer and the respective installing authority, if known. If General Land Office or BLM ROW monuments or references were damaged during operations, PSREC would secure the services of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monuments and references using surveying procedures from the *Manual of Surveying Instructions for the Survey of the Public Lands of the United States*, latest edition. PSREC would record such survey in the appropriate county and forward a copy to the BLM authorized officer, if on BLM lands. If the BLM cadastral surveyors or other federal surveyors were used to restore a disturbed survey monument, PSREC would be responsible for the survey cost.	Minimize surface disturbance and associated features	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW-9	Prior to construction, all construction personnel would be instructed on protection of cultural and ecological resources. To assist in this effort, the construction contract would address (a) federal and state laws on antiquities, fossils, plants, and wildlife, including collection and removal and (b) the importance of these resources and the need to protect them.	Minimize or prevent impacts to cultural and ecological resources	Prior to and during construction	RUS/BLM/CSLC
ROW-10	Where warranted, modified structure design would be utilized to minimize ground disturbance, operational conflicts, visual contrast, or avian conflicts.	Minimize potential project impacts to biological and human resources	During construction and operation	RUS/BLM/CSLC
ROW-11	In designated areas, structures would be placed to avoid sensitive features such as riparian areas, water courses, and cultural sites, or to allow conductors to clearly span the features, within limits of standard tower design. Structure placement would minimize the amount of disturbance to sensitive features.	Minimize potential project impacts to biological and human resources	During construction and operation	BLM/CSLC
ROW-12	During transmission line construction, operation, or maintenance, the ROW would be maintained free of construction-related, non-biodegradable debris generated by PSREC-related activities.	Ensure refuse is collected and transported off site	During construction and operation	BLM/CSLC
ROW-13	All existing roads would be left in a condition equal to, or better than, their condition before construction of the transmission line.	Ensure roads and transportation are not impacted	During operation	BLM/CSLC
ROW-14	Fences and gates, if damaged or destroyed by construction activities, would be repaired or replaced to their original pre-disturbed condition, as required by the landowner or land management agency. Temporary gates would be installed only with permission of the landowner or the land management agency.	Ensure no damage to fences and gates	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW-15	Existing roads and trails on federal or state lands that would be blocked as a result of construction would be rerouted as directed by the applicable authorizing officer.	Ensure roads and transportation are not impacted	During construction	BLM/CSLC
ROW-16	The agency's authorized officer or the landowner would be consulted from construction through rehabilitation and reclamation.	Facilitate reclamation and revegetation	During and after construction	BLM/ CSLC/CDFG
ROW-17	PSREC would apply necessary mitigation to minimize problems of induced currents and voltages to conductive objects sharing the ROW.	Minimize potential for impacts to people or animals from induced currents	After construction	RUS
Reclamation				
Reclamation-1 PSREC BMP	In construction areas where re-contouring is not required and as requested by the landowner, vegetation would be left in place wherever possible to avoid excessive root damage and allow for re-sprouting.	Minimize surface disturbance and impacts to vegetation	During construction	BLM/CSLC/ CDFG
Reclamation-2 PSREC BMP	In construction areas where ground disturbance requires more extensive re-contouring and surface restoration, PSREC would communicate with the landowner or land management agency on the techniques to be used before ground-disturbance activities begin. The method of restoration typically consists of returning disturbed areas to their natural contour (to the extent practical), installing cross drains for erosion control, placing water bars in the road, and filling ditches.	Minimize surface disturbance and facilitate reclamation and revegetation	Before and during construction	BLM/CSLC
Reclamation-3 PSREC BMP	At pole locations, disturbed areas to be reclaimed would be stabilized by redistribution of topsoil, reseeding, and placement of a chopped, certified weed-free straw, reinforced with paper or synthetic netting to hold the matting in place.	Minimize surface disturbance and facilitate reclamation and revegetation	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Reclamation-4 PSREC BMP	A silt fence would be installed along the perimeter of temporary topsoil stockpile areas where runoff from a storm would be filtered for sediment prior to its release into a natural drainage. It is anticipated that no material would be spoiled or hauled off site. Excavated materials would be re-graded to maintain the general drainage profile.	Minimize surface disturbance and ensure no off-site transport of soils	During construction	BLM/CSLC
Reclamation-5 PSREC BMP	Following construction, PSREC would minimize residual rubble or debris that could provide microhabitats for small and medium-sized mammals. This measure would limit the potential increase in the site's prey base that may attract raptors or other predators.	Minimize future predation on small mammals by aerial predators	After construction	BLM/CSLC
Reclamation-6 PSREC BMP	PSREC would uniformly spread topsoil over disturbed areas for site reclamation. Spreading would not be done when the ground or topsoil is frozen or wet.	Facilitate reclamation and revegetation	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Reclamation-7 PSREC BMP	As part of PSREC's project reclamation plan, local native seed would be used to the extent possible, in accordance with the California Native Seed Policy, focusing on using native plant species common to the project area for surface reclamation following construction activities (including *Eriogonum* sp.). However, this seed mixture would not apply to Section 8 of the Doyle SWA parcel crossed by the Proposed Action, as discussed below. The Doyle SWA Mitigation Plan is presented in detail in Appendix B3, specific to construction Option B. In areas disturbed by either Option A (helicopter use) or Option B (standard construction) on Doyle SWA, the seed mixture(s) would be planted in the amounts specified in pounds of pure live seed per acre. There would be no primary or secondary noxious weed seed allowed in the seed mixture. Seed would be tested and the viability testing of seed would be done in accordance with state law(s) and no more than 6 months prior to purchase. Commercial seed would be either certified or registered seed. The seed mixture container would be tagged in accordance with state law(s) and available for inspection by the federal and state authorized officers.	Facilitate reclamation and revegetation	During construction	BLM/CSLC/ CDFG
Reclamation-8 PSREC BMP	Seed would be planted in an economic and efficient manner, using techniques such as hydroseeding, broadcasting, or pre-planted seed mats. The seed mixture would be evenly and uniformly distributed on the disturbed area. When broadcasting, the pounds per acre noted below would be doubled. On federal and state lands, seeding would be repeated a maximum of 2 years, if necessary. Evaluation of growth would not be made before completion of the second season after seeding.The authorized officer would be notified at least 14 days prior to seeding.	Facilitate reclamation and revegetation	During and after construction	BLM/CSLC
Reclamation-9	PSREC would develop a construction environmental monitoring program per communications with the	Minimize potential soil erosion and	Prior to, during, and	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
	applicable landowner or land management agency that includes: • Ensuring compliance with the requirements of the project EA, the mitigation measures and BMPs proposed by PSREC, and other environmental permits and approvals. • Identifying, documenting, and overseeing corrective actions, as necessary, to bring an activity back into compliance. • Verifying that the limits of all authorized construction work areas and locations of access roads are properly marked before clearing. • Verifying the location of signs and highly visible flagging that mark the boundaries of sensitive resource areas, drainages, water bodies, or areas with special requirements along the construction work area. • Identifying erosion/sediment control and soil stabilization needs in all areas. • Ensuring that subsoil and topsoil are tested to measure compaction and determine the need for corrective action. • Advising the construction contractor when conditions (such as wet weather) make it advisable to restrict construction activities to avoid excessive vehicle rutting. • Ensuring restoration of contours, replacement of topsoil, and monitoring of revegetation efforts.	facilitate reclamation and revegetation	after construction	

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Reclamation-9 continued	• Verifying that any soils or materials imported for use have been certified free of noxious weeds. • Determining the need for erosion control measures and ensuring that these measures are properly installed, as necessary, to prevent sediment flow into drainages, water bodies, and sensitive areas and on to roads. • Inspecting and ensuring the maintenance of temporary erosion control measures at least: · on a daily basis in areas of active construction or equipment operation; · on a weekly basis in areas with no construction or equipment operation; and · within 24 hours of each 0.5-inch rainfall. • Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification. • Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase.	Minimize potential soil erosion and facilitate reclamation and revegetation	Prior to, during, and after construction	BLM/CSLC
Air Quality				
Air Quality-1	All requirements of the Lassen County Air Pollution Control District (LCAPCD) in California, and the Washoe County District Health Department, Air Quality Division, in Nevada, as applicable, would be followed and any necessary permits for construction activities would be obtained. Consultation with LCAPCD in June 2009 indicated no air quality permits would be required. A permit is required to operate a portable engine in excess of 50 horsepower; however, PSREC typically would obtain a statewide permit to do so.	Minimize exhaust emissions	Prior to and during construction	BLM/CSLC/ Lassen County/ Washoe County
Air Quality-2 PSREC BMP	PSREC would furnish and apply water on construction areas for dust control.	Minimize fugitive dust	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Air Quality-3 PSREC BMP	PSREC would be responsible for controlling dust by reducing travel speed and/or applying dust suppressants (e.g., magnesium chloride or other materials approved by the landowners or land managers). Dust would be considered a nuisance or hazard when a visible dust plume extends more than 300 feet from the source and has an estimated opacity exceeding 20% (objects are partially obscured). Additional methods of dust control that may be used by PSREC include, but are not limited to: • Application of water or magnesium chloride to access roads or sections of the ROW. • Application of water to specific activities on the ROW that generate dust plumes (i.e., trenching or blasting). • Curtailing of dust-generating activities during high winds. • Implementation of speed limits on vehicles using access roads or traveling the ROW. • Limitation of number of vehicles allowed on the ROW.	Minimize fugitive dust	During construction	BLM/CSLC
Air Quality-4	All requirements of those entities having jurisdiction over air quality matters would be followed and any necessary permits for construction activities would be obtained. Open burning of construction debris (cleared brush, etc.) would not be allowed.	Minimize effects to air quality	Prior to and during construction	BLM/CSLC/ Lassen County/ Washoe County

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Air Quality-5 LCAPCD BMP	Reasonable precautions would be taken to prevent PM from becoming airborne including, but not limited to, the following provisions: • Covering open-bodied trucks when used for transporting materials likely to cause airborne dust. • Installation and use of hoods, fans, and other fabric filters to enclose and vent the handling of dusty materials. Containment methods may be employed during sandblasting and other similar operations. • The application of asphalt, oil, water, or suitable chemicals to dirt roads, material stockpiles, land-clearing activities, excavation, grading, or other surfaces that can give rise to airborne dusts. • The prompt removal of earth or other material from paved streets that have been deposited by earth-moving equipment, water, or other means.	Minimize exhaust emissions	During construction	BLM/CSLC
Cultural Resources				
Cultural-1	An intensive cultural resources inventory survey has been conducted. In addition, supplemental surveys of the access routes have been undertaken, as needed. A Memorandum of Agreement (MOA) was developed by the federal agencies, RUS and BLM, to comply with section 106 of the National Historic Preservation Act (see Appendix B4).	Ensure that cultural resources are protected and properly managed	Prior to construction	RUS/BLM
Cultural-2	Any cultural resources inadvertently discovered during construction by PSREC or any person working on PSREC's behalf on private, state, or federal land would be reported immediately to the authorized officer and environmental monitors. The MOA identifies the protocol and treatment of inadvertent discoveries of cultural and historic properties on federal and private lands. For inadvertent discoveries on land owned by the state of California under the jurisdiction of the CSLC, the RUS shall notify CSLC staff concerning	Ensure that cultural resources are protected and properly managed	Prior to and during construction	RUS/BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Cultural-2, continued	the actions it proposes to take to implement avoidance measures or mitigate significant impacts. The notification will include an assessment of whether the discovery is eligible for listing in the California Register of Historical Resources (California Pub. Resources Code § 5024.1 and Cal. Code Regs., tit. 14, §. 4850 et seq.) or is a "unique archaeological resource" (California Pub. Resources Code § 21083.2(g)). Mitigation may include data recovery through excavation, if avoidance is not practicable. RUS shall make a recommendation to CSLC staff for curation of artifacts collected from sites on state land under the jurisdiction of the CSLC that are determined to be significant. RUS shall submit a written request to transfer title to the artifacts from the CSLC to a museum or curation facility that has been reviewed by the California SHPO and that agrees to accept the artifacts for curation at no cost to the CSLC. Artifacts from sites that are determined not to be significant will be returned to the CSLC for return to the culturally affiliated tribe(s).	Ensure that cultural resources are protected and properly managed	Prior to and during construction	RUS/BLM
Cultural-3 PSREC BMP	If an area proposed to be disturbed (e.g., off-site reclamation parcel), has not been surveyed for cultural artifacts, a cultural resources inventory survey would be conducted before reclamation or construction activities begin, in accordance with the MOA developed for this project.	Ensure that cultural resources are protected and properly managed	During construction	RUS/BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Cultural-4 PSREC BMP	During construction, three archaeological monitors would be onsite. One monitor would represent the Native American tribes, one monitor would be a qualified independent archaeologist, and one monitor would represent the Proposed Action applicant. If human remains are discovered, PSREC would immediately suspend construction and any further disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains, notify the county coroner, notify the applicable landowner or land management agency, and follow the applicable California/Nevada state law. In California, if the county coroner determines the remains to be Native American, the coroner shall contact the California Native American Heritage Commission within 24 hours of the discovery (California Health & Safety Code sec 7050.5(c). Work shall not resume in the area until the remains have been treated or disposed of, with appropriate dignity, as provided in California Public Resources Code section 5097.98.	Ensure that cultural resources are protected and properly managed	During construction	RUS/BLM/CSLC
Cultural-5 PSREC BMP	No surface disturbance or construction activity would be allowed within 100 feet of any eligible cultural sites, as specified by the federal or state authorized officer. Any deviation from this requirement would be negotiated with the authorized officer under the terms and conditions of the MOA or with CSLC personnel.	Ensure that cultural resources are protected and properly managed	During construction	RUS/BLM
Soils				
Soils-1 PSREC BMP	Temporary erosion and sediment control devices for the new Herlong Substation, including sediment barriers, would be installed promptly after soil disturbance, in accordance with the NPDES requirements. These devices would be inspected on a daily basis in areas of active construction; on a weekly basis in areas with no active construction; and	Minimize soil erosion	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Soils-1 PSREC BMP, continued	within 24 hours of each 0.5-inch or greater rainfall. PSREC would install temporary sediment barriers (e.g., staked straw bales) on either side of a water body channel, across the width of the substation construction site, and around spoil and topsoil stockpiles. Sediment barriers would be maintained, as necessary, to ensure effectiveness during construction. In steep terrain, temporary sediment barriers would be installed during clearing to prevent the movement of disturbed soil off the substation construction site. Temporary slope breakers consisting of wattles or compacted soil would be installed across the substation construction site, as necessary.	Minimize soil erosion	During construction	BLM/CSLC
Soils-2	Following structure placement, PSREC would place fill around each pole, using the soil excavated from the pole holes. PSREC would tamp the soil into place and mound the soil around each pole base. Approximately 1 cubic yard of excavated soil would be placed around each pole, resulting in an estimated 247 cubic yards of soil excavated for the project. Most of the soil would be used as fill and mounding around the poles; the remaining amount, no more than 0.5 cubic yard per pole, would be spread in the ROW so as to not destroy any existing vegetation.	Minimize effects to soils and vegetation	During construction	BLM/CSLC
Soils-3	In site-specific areas where soils are sensitive to disturbance, no widening or upgrading of existing access roads would occur during project construction or operation, except for repairs necessary to make roads passable.	Minimize effects to soils	During construction	BLM/CSLC
Soils-4 PSREC BMP	No construction activities would be performed when the soil is too wet to adequately support construction equipment. If equipment creates ruts more than 6 inches deep, the soil would be deemed too wet and construction would cease in that area.	Prevent soil compaction	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Soils-5 PSREC BMP	No soil removal is anticipated. If soil removal is deemed necessary, however, before soils are removed, PSREC would ensure soil storage sites are located within the appropriate areas along the ROW to prevent impacts to cultural and biological resources.	Minimize effects to cultural and biological resources	Prior to and during construction	BLM/CSLC
Water Resources				
Water-1	If damaged or destroyed by construction activities, water sources or facilities (e.g., tanks, developed springs, water lines, wells) would be repaired or replaced to their pre-disturbed condition, as required by the landowner or land management agency.	Protect water features	During construction	BLM/CSLC
Water-2	All construction and maintenance activities would be conducted to minimize disturbance to vegetation, drainage channels, and intermittent and perennial stream banks.	Minimize impacts to vegetation and natural water sources	During construction	BLM/CSLC
Water-3 PSREC BMP	Surface water quality would be protected from construction impacts by use of sediment barriers that would be maintained until satisfactory reclamation is established.	Protect water quality	During construction	BLM/CSLC
Water-4 PSREC BMP	PSREC would not refuel equipment within 500 feet of any live water source.	Prevent water contamination	During construction	BLM/CSLC
Noise				
Noise-1	The proposed hardware and conductor would limit the audible noise (AN), radio interference, and television interference due to corona. Tension would be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution would be used during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.	Minimize operational noise near sensitive receptors	During and after construction and during operation	RUS

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Noise-2	If interference occurs, PSREC would respond to any complaints of line-generated radio or television interference by investigating the complaints and implementing appropriate mitigation measures. The transmission line would be patrolled on a regular basis to repair or replace damaged insulators or other line materials that could cause interference.	Minimize operational noise near sensitive receptors	During operation	RUS
Noise-3 PSREC BMP	Construction activities would occur during daylight hours, or from 7 a.m. to 7 p.m.	Reduce impacts to sensitive residential receptors by ensuring compliance with local noise ordinances	During construction	BLM/CSLC
Noise-4	Residents located along the project ROW would be notified 5 days prior to construction occurring within 500 feet of their residence.	Reduce impacts to sensitive residential receptors by ensuring compliance with local noise ordinances	During construction	BLM/CSLC
Hazardous Materials and Waste				
Hazardous Materials-1 PSREC BMP	Construction sites would be maintained in a sanitary condition at all times; waste materials generated by construction at those sites would be disposed of promptly at an appropriate waste disposal site (e.g., Herlong Transfer Station, Lassen County Bass Hill Landfill). 'Waste' means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.	Ensure refuse is collected and transported off site	During construction and operation	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Hazardous Materials-2	Totally enclosed containment would be provided for all trash and hazardous materials (if needed). All construction waste including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials would be removed to either the Herlong Transfer Station or Lassen County Bass Hill Landfill.	Ensure refuse is collected and transported off site	During construction and operation	BLM/CSLC
Hazardous Materials-3 PSREC BMP	PSREC would comply with all applicable federal, state, and local laws and regulations, existing or hereafter enacted or promulgated, with regard to any hazardous materials, as defined in this paragraph, that would be used, produced, transported or stored on or within the ROW or any of the ROW facilities or used in the construction, operation, maintenance, or termination of the ROW or any of its facilities. "Hazardous material" means any substance, pollutant, or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended in the U.S. Code, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste," as defined in the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, 42 U.S.C. 6901 et seq. and its regulations. The term "hazardous material" also includes any nuclear material or byproduct as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.	Reduces potential for unauthorized or accidental release or contact with hazards	Prior to and during construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Hazardous Materials-4 PSREC BMP	PSREC, as cited by BLM ROW Grant No. CA 350-2008-27, application CACA48916, agrees to indemnify the U.S. against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined by CERCLA or RCRA) on the ROW unless the release or threatened release is wholly unrelated to PSREC's activity on the ROW. This agreement applies without regard to whether a release is caused by PSREC, its agent, or third parties.	Removes liability for unauthorized or accidental release or contact with hazards	Prior to and during construction	BLM
Vegetation				
Vegetation-1 PSREC BMP	PSREC would ensure the appropriate biological resource surveys have been conducted before construction begins, per coordination with the federal and state agencies.	Identify sensitive plant resources	Prior to construction	RUS/BLM/CSLC/ CDFG
Vegetation-2	Where possible, PSREC would trim (rather than cut) brush, and would cut (rather than blade) brush. Blading would be allowed only if terrain and brush present a clear hazard to personnel and equipment.	Minimize vegetation removal and disturbance	During construction	BLM/CSLC
Vegetation-3	To minimize the potential to spread invasive weeds, PSREC would clean off-road equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts before moving equipment onto the project lands.	Minimize spreading of noxious weeds or other invasive species	During construction	BLM/CSLC
Vegetation-4	In site-specific areas where vegetation is sensitive to disturbance (and has been identified as such by the landowner or land manager, prior to construction), no widening or upgrading of existing access roads would occur during project construction, except for repairs necessary to make roads passable.	Minimize vegetation removal and disturbance	Prior to and during construction	BLM/CSLC
Vegetation-5	The BLM's Eagle Lake Field Office pamphlet on noxious weeds (BLM 2000) would be provided to all contractors and PSREC personnel. The terms and conditions of the CSLC lease also would be met relative to minimizing the potential spread of invasive plant species.	Minimize spreading of noxious weeds or other invasive species	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Vegetation-6	Prior to construction activities, PSREC would identify and provide a list of any noxious weeds present.	Minimize spreading of noxious weeds or other invasive species	Prior to and during construction	BLM/CSLC
Livestock Grazing				
Livestock-1 PSREC BMP	Construction excavations left open overnight would be covered to prevent injury to livestock. Covers would be secured in place and would be strong enough to prevent livestock from falling through the opening.	Prevent injury to livestock	During construction	BLM/CSLC
Recreation				
Recreation-1	PSREC would restrict construction activities in the Fort Sage OHV SRMA during the biannual spring motorcycle races to prevent potential impacts to race participants on BLM-administered lands.	No impacts to OHV race event	During construction	BLM
Recreation-2	PSREC would coordinate with the BLM after project construction to verify actual structure and guy wire placement would not conflict with established trails and to mitigate any safety hazards to OHV users on designated trails. Potential mitigation could include minor trail route changes by the BLM.	Minimize safety issues for OHV users	After construction	BLM
Wildlife				
Wildlife-1 PSREC BMP	PSREC would ensure the appropriate biological resource surveys have been conducted prior to the initiation of construction, per coordination with the federal and state agencies.	Identify sensitive wildlife resources	Prior to construction	RUS/BLM/CSLC/ CDFG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Wildlife-2	Structures would be constructed to conform to RUS raptor-friendly specifications. Additional resources used in design would be the Avian Power Line Interaction Committee's (APLIC's) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and *Mitigating Bird Collisions with Power Lines: The State of the Art in 1994*, scheduled to be updated in 2011.	Minimize impacts to resident and migratory birds	Prior to construction	RUS/BLM/CSLC/ CDFG
Wildlife-3 PSREC BMP	Construction excavations left open overnight would be covered to prevent injury to wildlife. Covers would be secured in place and would be strong enough to prevent wildlife from falling through the openings.	Prevent injury to wildlife	During construction	BLM/CSLC/ CDFG
Wildlife-4	With the exception of emergency repair situations, ROW construction, restoration, and termination activities in designated areas would be modified or discontinued during sensitive periods (e.g., nesting and breeding periods) for target animal species. Species would be identified during the preconstruction surveys (e.g., raptor nest clearance survey, bank swallow breeding survey), and potential restricted areas would be species dependent and approved in advance by the authorized officer of the BLM and CDFG, as noted in the MMRP. This measure would apply to target bird species either documented in the project area or potentially occurring. As assessed in Section 4.17, Special Status Wildlife Species, these species could encompass any of the following: • Golden eagle, red-tailed hawk, Swainson's hawk, prairie falcon, American kestrel, Cooper's hawk, sharp-shinned hawk, northern harrier, great horned owl, long-eared owl, burrowing owl and bank swallows along Long Valley Creek	Protect special status wildlife species, where applicable	Prior to and during construction	BLM/CSLC/ CDFG
Wildlife-5	If project construction activities were to occur during the raptor breeding season (February 1 - August 31), raptor nest clearance surveys would be conducted in proximity to the project (e.g., transmission line ROW, access roads) by	Identify active nest sites and protect nesting raptors, eggs, and young	Prior to and during construction	BLM/CDFG/ CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
	a qualified biologist. If active raptor nests (i.e., containing eggs or young) are documented, PSREC would coordinate with the BLM wildlife biologist and CDFG environmental scientist to determine if construction activities should be restricted near active raptor nests for a specified distance (e.g., 0.25 or 0.5 mile) and for a specified period. The potential construction buffer and extent of the seasonal restriction would be determined on a case-by-case and species-specific basis in conjunction with the BLM's established buffer zones and seasonal restrictions for raptor species outlined in Table 4-9 and the Eagle Lake Field Office RMP and ROD (BLM 2007, 2008). On state lands, PSREC would coordinate with the designated CDFG biologist to assess and protect nesting raptors within 0.5 mile of the project ROW on a site-specific basis. Some raptor species are more tolerant of human presence and disturbance than other species and whether a nest is within line-of-sight of the construction activities is integral to determining whether protection measures would be warranted. The applicable buffers and seasonal restrictions can vary and should take into account the species affected, topography, habitat suitability, degree of existing disturbance, associated prey base, breeding phenology, and degree or extent of proposed disturbance. Protection of active raptor nests would apply during project construction and the breeding season period until the young had fledged or if the nesting attempt fails.	in compliance with the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA)		
Wildlife-6	PSREC would design site lighting at the substations to minimize bird attraction or nocturnal insect attraction and swarming. At a minimum, lights would be down shielded to minimize attracting birds or insects. This measure would minimize the potential for nocturnal bird foraging (e.g., nighthawks).	Minimize potential impacts to birds at substation sites	Project operation	BLM/CDFG/ CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Wildlife-7	In conjunction with the pre-construction raptor nest clearance surveys (see *Measure Wildlife-5*), PSREC would contract with qualified wildlife biologists to conduct ground surveys for American badger dens and burrowing owl nest burrows to identify the location of active den or burrow sites for both species, parallel to survey methodology used in 2010. Active burrows within construction areas or access routes would be flagged and avoided during project construction by both pole placement and equipment use to prevent crushing of active den sites. Additionally, a 0.25-mile buffer would be developed around active burrowing owl nests until the young had left the nest burrow.	Prevent impacts to active American badger dens or burrowing owl nest sites.	Before and during project construction	BLM/CDFG/ CSLC
Wildlife-8	In conjunction with the pre-construction raptor nest clearance surveys (see *Measure Wildlife-5*), PSREC would contract with a qualified wildlife biologist to conduct additional nest surveys for active loggerhead shrike nest sites prior to construction initiation. If active nest sites are documented within 200 feet of the ROW, PSREC would coordinate with the BLM wildlife biologist or CDFG environmental scientist to determine if construction activities should be restricted near these nest sites and, if so, determine the applicable buffer area.	Minimize impacts to active loggerhead shrike nest sites.	Before and during project construction	BLM/CDFG/ CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA				
Doyle SWA-1	Assuming traditional construction methods (no helicopter use, Option B), a mitigation plan was developed by PSREC, CDFG, California Wildlife Conservation Board (WCB), and the Wildlife and Sport Fish Restoration Program of the U.S. Fish and Wildlife Service (USFWS) for the ROW easement crossing the Doyle SWA in Section 8 to further support the maintenance and enhancement of wintering mule deer. Detailed measures are outlined in the Final Mitigation Plan (see Appendix B3). Measures unique to Option B construction scenario on the Doyle SWA are reiterated in this corresponding tabular summary and listed below:	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA	During and after construction	CDFG
Doyle SWA-2	On-site reclamation measures applicable to Option B on Doyle SWA would include the following: • Plant antelope bitterbrush seedlings with *Vexar* tubing protection, with the planting density goal to reflect existing bitterbrush cover upon final reclamation. Before planting, PSREC would coordinate with the CDFG to determine the plant density goal. This determination would be based on findings by a qualified botanist and/or reclamation specialist retained by PSREC and approved by the CDFG. • The optimal planting period for bitterbrush is when soil moisture is the highest, which typically occurs during the spring. PSREC would coordinate with the CDFG on this planting period.	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	During and after construction	CFDG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA-2, continued	• During project construction under Option B, three temporary perpendicular access routes would be constructed to the ROW and each of the three structures along this 0.5-mile segment of Doyle SWA, using a culvert and clean drain rock to fill the ditch level at the access road intersections with Fort Sage Road. Following project construction, the fill would be excavated and removed from the area. If necessary, the v-cut in the ditch adjacent to Fort Sage Road would be deepened (processes pending approval from Lassen County) to deter OHV recreationalists from using the two-track access roads to the ROW. To further discourage OHV use, during site reclamation efforts, PSREC would erect temporary orange plastic construction fencing across the three access routes near the existing county road to block access. PSREC would maintain this fencing and subsequently remove it once native vegetation becomes established along these three access roads. • PSREC and the CDFG would communicate and coordinate on these measures to ensure an acceptable success rate at a reasonable cost and effort. Before initiating these measures, PSREC and the CDFG would define the reclamation targets and goals, as described above, with remedial options available in case planting success is not achieved in the pre-determined time frame. Examples of applicable remedial measures may include on-site watering of seedlings during periods of insufficient precipitation on the Doyle SWA parcel, additional plantings of bitterbrush at a density or cost not to	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	During and after construction	CFDG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA-2, continued	exceed that expended by PSREC for the initial plantings, etc., with measures determined by ongoing dialog between PSREC and the CDFG.	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	During and after construction	CFDG
Doyle SWA-3	Off-site enhancement measures applicable to Option B on the Doyle SWA to mitigate the 0.5-mile ROW crossing would include the following: • The CDFG would identify an off-site 1-acre parcel where habitat enhancement of the existing antelope bitterbrush community would benefit area mule deer in the long term. • PSREC would identify a qualified contractor that would be responsible for seeding the off-site parcel in accordance with this enhancement plan. • PSREC would fence the 1-acre parcel with materials approved by the CDFG. These materials may include: o Wooden posts 10 feet above ground surface level used for “H” braces. o 10-foot steel “T” posts used in-line for fence support, not to exceed 20-foot spacing. o Mesh wire at a gauge and mesh size specified by the CDFG up to 6 feet agl. o Two to three strands of smooth wire above mesh wire. o	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	During and after construction	CDFG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA-3, continued	• Prior to fencing, PSREC and the seeding contractor would determine if equipment use within the 1-acre parcel would allow adequate coverage. • Antelope bitterbrush would be seeded at approximately 6 pounds per acre. • The CDFG would provide the bitterbrush seeds to PSREC for this seeding. • The contractor would use a rangeland drill for bitterbrush seeding. • Recommended seeding methods are presented in Clements and Young (2005). • Seeding would be completed during the fall, with October being optimal. • PSREC would monitor the 1-acre parcel annually to determine the relative success rate of the seeding and fencing program. Success is defined as sufficient survival of bitterbrush seedlings at the end of the 5-year monitoring period so that, upon maturity, bitterbrush cover at the enhancement site would be equal to or greater than the density of bitterbrush in the vicinity (as determined by the botanical surveys described above). Before initiating the seeding program, PSREC would implement noxious weed control measures, if warranted, in accordance with methods mutually agreed upon by PSREC and the CDFG.	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	During and after construction	CDFG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA-4	Under the Option B standard construction scenario, PSREC and the CDFG would communicate and coordinate on these measures to ensure an acceptable success rate at a reasonable cost and effort. Before initiating these measures, PSREC and the CDFG would define the reclamation targets and goals, with remedial options available in case planting success is not achieved in the pre-determined time frame. Remedial measures may include additional plantings of bitterbrush at a density or cost not to exceed that expended by PSREC for the initial plantings. As stated above, these reclamation goals would be based on findings by a qualified botanist and/or reclamation specialist retained by PSREC.	Minimize vegetation disturbance and impacts to mule deer winter range on Doyle SWA under Construction Option B	Before, during, and after construction	CDFG
Doyle SWA-5	Under both construction options A and B and to prevent hunter conflicts, PSREC would cease construction activities along the project ROW during the period immediately before and during the CDFG's M3 Doyle Muzzleloading Rifle Buck Hunt. Specifically, construction activities would not occur from the second Saturday in November (1 week prior to the start of this hunt), through the end of the 9-day hunt. Construction would be allowed to continue at the Herlong and Fort Sage substations during this 16-day period.	Minimize impacts to hunters	During construction	CDFG
Doyle SWA-6	Under both construction options A and B, the BLM's California Native Seed Policy would <u>not</u> apply to the portion of the Doyle SWA crossed by the Proposed Action. The Doyle SWA land would be reseeded with a native seed mix to be determined by the CDFG for the transmission line ROW and along the reclaimed access routes.	Enhance revegetation and reclamation efforts per the CDFG's direction	After construction	CDFG

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
Doyle SWA-7	Under both construction options A and B, PSREC has committed to avoiding bitterbrush vegetation during pole placement on the 0.5-mile segment of the Doyle SWA. This approach will be feasible, based on line design and a manual siting approach.	Avoid bitterbrush disturbance on Doyle SWA from structure placement	During construction	CDFG
Aesthetics / Visual				
Visual-1	Standard structure design would be modified to correspond with spacing of existing transmission line structures, where feasible, to reduce visual contrast or potential operational conflicts.	Minimize visual impacts to aesthetics	Prior to construction and project operation	RUS
BLM ROW Grant and State of California Lands				
The following measures were developed for BLM lands and the associated BLM ROW Grant. Where applicable, these measures also would apply to lands owned by the California State Lands Commission. PSREC would coordinate with the applicable land management agency or state landowner, as warranted.				
BLM ROW Grant				
ROW Grant-1 PSREC BMP	PSREC would submit a Plan (or Plans) of Development (POD) to BLM that describe in detail the construction, operation, maintenance, and termination of the Proposed Action's ROW and its associated improvements and facilities. The degree and scope of these plans would vary depending on 1) the complexity of the ROW or its associated improvements and facilities, 2) the anticipated conflicts requiring mitigation, and 3) additional technical information required by the authorizing officer. The approved POD would become part of the ROW Grant.	Adhere to BLM ROW Grant application process	Prior to construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-2 PSREC BMP	PSREC would construct, operate, and maintain the facilities, improvements, and structures within the BLM ROW Grant in strict conformity with the Plan (or Plans) of Development (POD) as approved and made part of the ROW Grant. Any relocation, additional construction, or use not in accord with the approved POD would not be initiated without the prior written approval of the BLM authorized officer. A copy of the complete ROW Grant, including all stipulations and approved POD, would kept on site during construction, operation, and termination and would be provided to the authorized officer upon request. Noncompliance with the above would be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.	Adhere to BLM ROW Grant and project POD	During construction	BLM
ROW Grant-3 PSREC BMP	On BLM land, PSREC would place slope stakes, culvert location and grade stakes, and other construction control stakes, as deemed necessary by the BLM authorized officer, to ensure construction is completed in accordance with the POD. If stakes are disturbed, they would be replaced before proceeding with construction.	Adhere to BLM project POD	During construction	BLM
ROW Grant-4 PSREC BMP	Specific sites identified by the BLM or state authorized officer where construction equipment and vehicles are not allowed (e.g., archaeological sites), would be clearly marked by PSREC before any construction or surface-disturbing activities begin. PSREC would be responsible for assuring that construction personnel are trained to recognize these markers and understand the equipment-movement restrictions involved.	Protect sensitive resources along ROW	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-5 PSREC BMP	PSREC would contact the BLM's authorized officer at least 10 days before the anticipated start of construction or any surface-disturbing activities. The authorized officer may require, schedule, and attend a preconstruction conference with PSREC within the 10-day period before construction or surface-disturbing activities begin on the ROW. PSREC, PSREC's contractor(s), or agents involved with the construction and surface-disturbing activities on the ROW would attend this conference to review stipulations of the grant, including the POD.	Adhere to BLM project POD	Prior to and during construction	BLM
ROW Grant-6 PSREC BMP	PSREC would designate a representative(s) who would have the authority to implement instructions from the BLM or state authorized officer within a reasonable timeframe when construction or other surface-disturbing activities are underway.	Adhere to BLM project POD and state lands lease	During construction	BLM/CSLC
ROW Grant-7 PSREC BMP	PSREC would not initiate any construction or other surface-disturbing activities on the ROW without prior written authorization of the BLM or state authorized officer. Such authorization would be a written Notice to Proceed issued by the authorized officer. Any Notice to Proceed would authorize construction or use only as expressly stated therein and only for the particular location or use described therein.	Adhere to BLM project POD and ROW Grant process and state lands lease	Prior to construction	BLM/CSLC
ROW Grant-8 PSREC BMP	The BLM or state authorized officer may suspend or terminate (in whole or in part) any issued Notice to Proceed when, in his/her judgment, conditions arise that result in the approved terms and conditions being inadequate to protect the public health and safety or the environment.	In adherence to BLM POD and ROW Grant and state lands lease	During construction	BLM/CSLC
ROW Grant-9	The holder of the BLM ROW Grant or the holder's successor in interest would comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and the regulations of the Secretary of Interior issued pursuant hereto.	In adherence to BLM ROW Grant	During and after construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-10 PSREC BMP	PSREC would conduct all activities associated with the construction, operation, and termination of the ROW within the authorized limits of the ROW.	In adherence to BLM ROW Grant and state lands lease	During construction	BLM/CSLC
ROW Grant-11 PSREC BMP	PSREC would permit free and unrestricted public access to and upon the ROW on lands administered by the BLM for all lawful purposes except for those specific areas designated as restricted by the authorized officer to protect the public, wildlife, livestock, or facilities constructed within the ROW.	Prevent impacts to public use	During construction	BLM
ROW Grant-12 PSREC BMP	PSREC would plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration on BLM and state lands.	Ensure public safety and minimize impacts to transportation	During construction	BLM/CSLC
ROW Grant-13 PSREC BMP	Existing roads and trails on public lands that are blocked as the result of the construction project would be rerouted or rebuilt, as deemed reasonable by PSREC and the BLM's authorized officer.	Ensure public access	During and after construction	BLM
ROW Grant-14 PSREC BMP	Construction-related traffic on BLM or state lands would be restricted to routes approved by the BLM or state authorized officer. New access roads or cross-country vehicle travel would not be permitted unless prior written approval is obtained from the authorized officer. Authorized roads used by PSREC would be rehabilitated or maintained when construction activities are complete, as approved by the authorized officer.	Minimize new surface disturbance	During and after construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-15 PSREC BMP	If cross-country access is necessary on BLM land, PSREC would contact the BLM authorized officer for review and authorization. Clearing vegetation or grading a roadbed would be avoided whenever practicable. All construction and vehicular traffic would be confined to the ROW or designated access routes, roads, or trails unless otherwise authorized in writing by the authorized officer. All temporary roads used for construction would be rehabilitated after construction is completed. Only one road or access route would be permitted to each site requiring access.	Minimize new surface disturbance and ensure future public access on federal lands	During and after construction	BLM
ROW Grant-16 PSREC BMP	As directed by the BLM authorizing officer, new road segments on BLM land would be winterized by providing a well-drained roadway by constructing water bars, maintaining drainage, and implementing any additional reasonable measures necessary to minimize erosion and other damage to the roadway or the surrounding public lands.	Minimize erosion on public land access roads	During construction	BLM
ROW Grant-17 PSREC BMP	Excavation and embankment quantities would be balanced as nearly as design and construction considerations allow. Any waste or borrow needs would be specifically identified by PSREC.	Minimize surface disturbance	During construction	BLM/CSLC
ROW Grant-18 PSREC BMP	Excess excavated, unsuitable, or slide materials would be disposed of as directed by the authorized officer.	Follows agency-approved disposal plan	During construction	BLM/CSLC
ROW Grant-19 PSREC BMP	PSREC would construct water bars on all disturbed areas on BLM land to the spacing and cross sections specified by the BLM authorized officer. Water bars would be constructed to: 1) simulate the imaginary contour lines of the slope, ideally with a 1% or 2% grade; 2) drain away from the disturbed area; and 3) begin and end in vegetation or rock, whenever possible.	Minimize erosion on public land access roads	During construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-20 PSREC BMP	Clearing and grubbing debris would not be placed or allowed to remain in or under any embankment sections. Clearing and grubbing debris may be placed under waste material with a minimum of 3 inches of cover, as directed by the authorizing officer.	Follows agency-approved disposal plan	During construction	BLM/CSLC
ROW Grant-21 PSREC BMP	Use of pesticides would comply with the applicable federal and state laws. Pesticides would be used in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to using pesticides, the holder would obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage, disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides would be approved in writing by the authorized officer prior to such use. PSREC would coordinate with the agency, and applications may be made by a Pesticide Certified Applicator (PCA) if warranted.	Follows safe practices and minimizes exposure to humans and animals	During and after construction	BLM/CSLC
ROW Grant-22 PSREC BMP	PSREC would be responsible for weed control on disturbed areas within the limits of the ROW. PSREC would be responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations). Before preconstruction activities commence, PSREC would provide a list to BLM of all noxious weeds present on the BLM land included in the ROW Grant. The authorized officer would determine if any noxious weeds require flagging for treatment.	Minimize spreading of noxious weeds or other invasive species	Prior to and during construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-23 PSREC BMP	If applicable, cattle guards on BLM land would be 5 feet by 16 feet and, at a minimum, would meet the requirements of BLM Manual Section 9113.25. Cattle guards would be set on timber, pre-cast concrete, or cast-in-place concrete bases at right angles to the roadway. Backfill around cattle guards would be thoroughly compacted. A bypass gate would be built adjacent to each cattle guard. Gate materials, dimensions, and construction would conform to the requirements as specified by the BLM authorized officer.	Minimize impacts to livestock and grazing leases	During construction	BLM
ROW Grant-24 PSREC BMP	Fences, gates, and brace panels on BLM land would be reconstructed to BLM standards and specifications, as determined by the authorized officer.	Minimize impacts to livestock and grazing leases	During construction	BLM
ROW Grant-25 PSREC BMP	PSREC would furnish and install culverts of the gauge, materials, diameter, and length indicated and approved by the BLM authorized officer. The minimum diameter for culverts would be specified by a registered engineer. Culverts would be free of corrosion, dents, or other deleterious conditions. Culverts would be placed in channel bottoms on firm, uniform beds that have been shaped to accept them and aligned to minimize erosion. Backfill would be thoroughly compacted. No equipment would be routed over a culvert until backfill depth is adequate to protect the culverts.	Ensure compliance with SWPPP	During construction	BLM
ROW Grant-26 PSREC BMP	As directed by the BLM authorized officer, construction stakes would be set for each culvert to show location, inlet and outlet elevations, diameter, and length.	Ensure compliance with SWPPP	During construction	BLM
ROW Grant-27 PSREC BMP	As directed by the BLM authorized officer, PSREC would submit a complete culvert list to reflect the drainage plan for the associated road. The list would include, but would not be limited to, size, length, and location of each culvert.	Ensure compliance with SWPPP	During construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-28 PSREC BMP	All roads and parking areas would be constructed to provide drainage and minimize erosion. If necessary, culverts would be installed to maintain drainage. All areas used for roads and parking would be surfaced with gravel.	Ensure compliance with SWPPP and minimize soil erosion	During construction	BLM/CSLC
ROW Grant-29 PSREC BMP	PSREC would inform the BLM authorized officer within 48 hours of an accident on federal lands that necessitates reporting to the Department of Transportation, as required by 49 CFR Part 195.	In adherence to BLM POD and ROW Grant	During construction	BLM
ROW Grant-30 PSREC BMP	Construction is not expected to occur from July 1 to Sept. 15; however, if any activities do occur during this time, vehicles, gas-powered equipment and flues would be equipped with spark arresters approved by the BLM authorized officer.	Minimize wild fire danger	During construction	BLM/CSLC
ROW Grant-31 PSREC BMP	During construction, PSREC would maintain a fire watch with fire-fighting equipment at locations and times designated by the BLM authorized officer. PSREC would prepare and implement a Fire Prevention and Management Plan for federal and state lands. The plan would be approved by the BLM's and state's authorized officers, respectively, prior to the issuance of the notice to proceed.	Minimize wild fire danger	During construction	BLM/CSLC
ROW Grant-32 PSREC BMP	When requested by the BLM authorized officer, PSREC would make on-site equipment temporarily available for fighting nearby wildfires. Payment for such services would be made at rates determined by the BLM authorized officer.	Minimize wild fire danger	During construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-33 PSREC BMP	PSREC would be liable for damage or injury to the U.S. to the extent provided by Code of Federal Regulation 43 CFR Section 2803.1-4. PSREC would be held to a standard of strict liability for damage or injury to the U.S. resulting from fire or soil movement (including landslides and slumps, as well as wind- and water-caused movement of particles) caused or substantially aggravated by any of the following within the ROW or permit area: • Activities of PSREC including, but not limited to, construction, operation, maintenance, and termination of the facility. • Activities of other parties including, but not limited to: o Land clearing and logging o Earth-disturbing and earth-moving work o Vandalism and sabotage	In adherence to BLM POD and ROW Grant	During and after construction and during project operation	BLM
ROW Grant-34 PSREC BMP	The maximum limitation for such strict liability damages for any one event and any liability in excess of such amount would be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred. This section would not impose strict liability for damage or injury resulting primarily from the negligent acts or omissions of the U.S.	In adherence to BLM POD and ROW Grant	During and after construction and during project operation	BLM
ROW Grant-35 PSREC BMP	PSREC would be responsible for repairing or replacing any resources lost by BLM grazing permittees or the U.S. as a result of the project. Resources may include, but not be limited to, stock water pipelines, livestock, forage for livestock grazing, spring (water) production, and the ability to graze livestock. Any lost resources would be repaired or replaced in kind or by mutually agreed upon compensation.	Minimize damages to lands, infrastructure, and grazing leases	During construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-36 PSREC BMP	A bond, acceptable to the BLM authorized officer, would be furnished by PSREC before the issuance of a Notice to Proceed or at such earlier date as specified by the authorized officer. The amount of this bond would be determined by the authorized officer. This bond must be maintained in effect until removal of improvements and restoration of the ROW has been accepted by the authorized officer.	Minimize damages to lands and infrastructure and in adherence to BLM ROW Grant	Prior to and during construction	BLM
ROW Grant-37 PSREC BMP	Should the bond delivered under this grant become unsatisfactory to the authorized officer, PSREC would furnish a new bond within 30 days of demand.	In adherence to BLM ROW Grant	During construction	BLM
ROW Grant-38 PSREC BMP	If snow removal from a road on BLM or state lands is undertaken, equipment used for snow removal operations would be equipped with shoes to keep the blade 2 inches off the road surface. PSREC would take special precautions where the ground is uneven and at drainage crossings to ensure the blades do not destroy vegetation.	Minimize impacts to vegetation and soils	During construction	BLM/CSLC
ROW Grant-39 PSREC BMP	PSREC would maintain the ROW in a safe, usable condition, as directed by the BLM authorized officer. A regular maintenance program would include, but would not be limited to, blading, ditching, culvert installation, and surfacing.	In adherence to project POD and BLM ROW Grant	During construction	BLM
ROW Grant-40 PSREC BMP	PSREC would not use the ROW as a road for purposes other than routine maintenance, as deemed necessary by the authorized officer in consultation with PSREC.	In adherence to BLM ROW Grant and state lands lease	During construction	BLM/CSLC

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-41 PSREC BMP	On BLM lands, for the purpose of determining joint maintenance responsibilities, PSREC would make road use plans known to all other authorized users of the road. Within 30 days of the date of the ROW Grant, PSREC would provide the authorized officer with the names and addresses of all parties notified, dates of notification, and method of notification. Failure of PSREC to share proportionate maintenance costs on the common use access road in dollars, equipment, materials, or manpower with other authorized users may be adequate grounds to terminate the ROW Grant. The BLM authorized officer would determine whether this has occurred and whether to terminate the grant. Upon request, the authorized officer would be provided with copies of any maintenance agreement.	In adherence to BLM ROW Grant	After construction	BLM
ROW Grant-42 PSREC BMP	Ninety days prior to termination of the BLM ROW Grant, PSREC would contact the BLM authorized officer to arrange a joint inspection of the ROW. This inspection would be held to agree to an acceptable termination and rehabilitation plan. This plan would include, but would not be limited to, removal of facilities, drainage structures, or surface material; re-contouring; applying topsoil; and reseeding. The authorized officer must approve the plan in writing before PSREC begins any termination activities.	In adherence to BLM ROW Grant	Project operation	BLM
ROW Grant-43 PSREC BMP	PSREC would set up a construction environmental monitoring inspection program for BLM lands that includes: • Ensuring compliance with the requirements of the EA, the environmental conditions of the ROW Grant authorization, the mitigation measures proposed by PSREC (as approved and/or modified by the ROW Grant), and other environmental permits and approvals.	In adherence to project POD and BLM ROW Grant	During and after construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-43 PSREC BMP, continued	• Identifying, documenting, and overseeing corrective actions, as necessary, to bring an activity back into compliance. • Verifying that the limits of all authorized construction work areas and locations of access roads are properly marked before clearing. • Verifying the location of signs and highly visible flagging that mark the boundaries of sensitive resource areas, drainages, water bodies, or areas with special requirements along the construction work area. • Identifying erosion/sediment control and soil stabilization needs in all areas. • Ensuring that subsoil and topsoil are tested to measure compaction and determine the need for corrective action. • Advising the construction contractor when conditions (such as wet weather) make it advisable to restrict construction activities to avoid excessive rutting. • Ensuring restoration of contours and replacement of topsoil. • Verifying that any soils or materials imported for use have been certified free of noxious weeds. • Determining the need for erosion control measures and ensuring that these measures are properly installed, as necessary, to prevent sediment flow into drainages, water bodies, and sensitive areas and on to roads. • Inspecting and ensuring the maintenance of temporary erosion control measures at least:	In adherence to project POD and BLM ROW Grant	During and after construction	BLM

Category	Committed Protection Measure	Effectiveness Criteria	Timing	Responsible Agency
ROW Grant-43 PSREC BMP, continued	(a) on a daily basis in areas of active construction or equipment operation; (b) on a weekly basis in areas with no construction or equipment operation; and (c) within 24 hours of each 0.5-inch rainfall. • Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification. Keeping records of compliance with the environmental conditions of the ROW Grant, and the mitigation measures proposed by PSREC in the application submitted to the BLM. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase.	In adherence to project POD and BLM ROW Grant	During and after construction	BLM
ROW Grant-44 PSREC BMP	PSREC would submit its contingency plan to the BLM or state authorized officer before project initiation on BLM-administered or state lands, respectively. This plan would contain: • Spill control provisions for oil and other pollutants. • The agencies responsible for contingency plans in Lassen County, California or Washoe County, Nevada, which would be among the first to be notified in the event of any transformer failure resulting in a spill of oil or other pollutant. • Provisions to restore of the affected resource. • Provisions that the BLM authorized officer would approve any materials or devices used for oil spill control and any disposal sites or techniques selected to handle oil, matter, or other pollutants. • Separate and specific techniques and schedule outlines for cleanup of spilled oil or other pollutants on land or in water.	Ensure compliance with SWPPP and minimize impacts and minimize or prevent impacts from hazardous materials	Prior to and during construction	BLM/CSLC