Final
Initial Study
and
Mitigated Negative Declaration

for

PacifiCorp
Lassen Substation Project
(Application No. A.15-11-005)

May 2017

Prepared for:
California Public Utilities Commission
Energy Division
505 Van Ness Avenue
San Francisco, California 94102

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ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
AB	Assembly Bill
ACSR	aluminum conductor steel-reinforced cable
APLIC	Avian Power Line Interaction Committee
APM	applicant proposed measure
APN	Assessor's Parcel Number
AST	aboveground storage tank
ASTM	American Society for Testing Materials
BMP	best management practice
BSA	biological study area
C&D	construction and demolition
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH_4	methane
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2E	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water act
dBA	A-weighted decibel
DPR	Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone

Acronym	Meaning
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
H_2O	water vapor
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HCFC	hydrochlorofluorocarbon
HDD	horizontal directional drilling
HFC	hydrofluorocarbon
HMP	Hazard Mitigation Plan
I	Interstate
IEEE	Institute of Electrical and Electronics Engineers
kcmil	thousand circular mil
kV	kilovolt
LBP	lead-based paint
L_{eq}	equivalent sound level
LSAA	Lake and Streambed Alteration Agreement
MGD	million gallons per day
MHz	megahertz
MMT	million metric tons
MM	Mitigation Measure
mpg	miles per gallon
MSDS	material safety data sheet
MT	metric tons
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Unit
O_3	ozone
Pb	lead
PCB	polychlorinated biphenyl
PFC	perfluorocarbon
PGA	peak ground acceleration
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition

Acronym	Meaning
ROW	right-of-way
RWQCB	Regional Water Quality Board
SB	Senate Bill
SCAPCD	Siskiyou County Air Pollution Control District
SF_6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SO_4	sulfates
SPCC	spill prevention, control, and countermeasure
SR-89	State Route 89
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TMDL	total maximum daily load
US-97	U.S. Route 97
UST	underground storage tank
VdB	vibration decibel
WEAP	worker environmental awareness program
WWTP	Wastewater Treatment Plant

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PREFACE

Introduction/Overview

The California Public Utilities Commission (CPUC) distributed the Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the PacifiCorp Lassen Substation Project (proposed project) for public review on November 23, 2016, with the public review period ending on December 23, 2016. During that time, 59 comment letters were received.

This Final IS/MND was prepared pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) and in accordance with the Guidelines for Implementation of CEQA (14 CCR 15000 et seq.). This Final IS/MND will be used by the CPUC (as the lead state agency), in conjunction with other information developed in the CPUC's formal record, to act on PacifiCorp's application for a Permit to Construct for the proposed project. Under CEQA requirements, the CPUC will adopt this Final MND if, based on the whole record, including the IS and comments received, it determines that there is no substantial evidence that the project will have a significant effect on the environment (14 CCR 15074(b)).

On December 23, 2016, the CPUC filed a Notice of Completion with the Governor's Office of Planning and Research (State Clearinghouse), published a Notice of Intent to Adopt a Mitigated Negative Declaration, and released the Draft IS/MND for a 30-day public review period. The Draft IS/MND was distributed to federal, state, and local agency representatives; property owners within 300 feet of the proposed project; and other interested individuals. Additionally, in compliance with CEQA, a public notice was published in the general circulation newspaper announcing the availability of the Draft IS/MND for public review. In accordance with Section 15105(b) of the CEQA Guidelines, the public review and comment period began on November 23, 2016, and ended on December 23, 2016. The CPUC established a comment phone line at 844.379.3477, fax line at 844.386.5633, email address at LassenSubstation@dudek.com, and website at http://www.cpuc.ca.gov/environment/info/dudek/LassenSub/PacifiCorpLassenSub.htm to enable the public to ask questions, provide comments, and obtain additional information on the proposed project analyzed in the Draft IS/MND. The CPUC also held a public meeting on Wednesday, December 7, 2016, at Mount Shasta Elementary School (501 Cedar Street, Mount Shasta, California, 96067) between 6:00 p.m. and 8:00 p.m. Comments were received during this public meeting, and copies of all written comments received on the Draft IS/MND are contained in Section 7 of this Final IS/MND.

Contents of the Final IS/MND

This Final IS/MND was prepared pursuant to the CEQA Guidelines, which outline all aspects of the preparation of a Draft IS/MND and its review, as well as the subsequent steps to preparing a Notice of Decision. This document incorporates comments received during the public review period, and contains responses from the lead agency (CPUC) to those comments (Section 7).

In addition, minor technical changes or additions were made to clarify information presented in the Draft IS/MND. These changes and additions to the Draft IS/MND do not raise new, important issues related to significant impacts on the environment. The Final IS/MND has been completely reprinted from the Draft IS/MND, and changes made since public review are signified as replacements, additions, or revisions to existing text. Revisions to existing text are signified by strikeout text (i.e., ~~strikeout~~) where text was removed, and by underlined text (i.e., underline) where text was added for clarification.

This Final IS/MND is an informational document prepared by the CPUC to be used by decision makers before approving or denying a proposed project. It consists of the following:

- An updated version of the Draft IS/MND that incorporates text changes to address public comments.
- A list of persons, organizations, and public agencies that commented on the Draft IS/MND (Section 7).
- Comments and recommendations received on the Draft IS/MND either verbatim or in summary, and the responses to those comments (Section 7).

Public Review Process

On November 23, 2016, the CPUC mailed a notice to relevant agencies, organizations, and individuals residing in the proposed project area announcing that the Draft IS/MND was available for public review. The CPUC established a comment phone line, fax line, email address, and website (see above for details) to enable the public to ask questions, provide comments, and obtain additional information on the proposed project analyzed in the Draft IS/MND.

Additionally, the CPUC held a public meeting on Wednesday, December 7, 2016, at Mount Shasta Elementary School (see above for details).

In accordance with Section 15105(b) of the CEQA Guidelines, the public review and comment period for the Draft IS/MND began on November 23, 2016, and ended on December 23, 2016. All comments received are presented and discussed in this document.

References Cited

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

MITIGATED NEGATIVE DECLARATION

PacifiCorp
Permit to Construct
A.15-11-005
Lassen Substation Project

INTRODUCTION

Under Rules 2.4 and 2.5 of the California Public Utilities Commissions (CPUC) Rule of Practice and Procedure, on November 2, 2015, PacifiCorp (PacifiCorp or the applicant ~~Applicant~~) filed an application (15-11-005) that included a Proponent's Environmental Assessment (PEA) and required fee with the CPUC for an Authority to Construct and for Deviation from Public Utilities Code Section 320 for the Lassen Substation Project (proposed project). On July 15, 2016, the applicant ~~Applicant~~ filed an amended application and an updated PEA to reflect proposed changes to the original filing. Accordingly, the amended application and PEA describes the proposed project.

Under the CPUC's Rules, approval of the proposed project must comply with the California Environmental Quality Act (CEQA), including assessment of the potential environmental impacts of the proposed project. This Mitigated Negative Declaration (MND) has been prepared based upon the assessment of the potential environmental impacts outline in the attached Initial Study (IS).

Pursuant to CEQA (California Public Resources Code, Section 21000 et seq.), the CPUC must prepare an IS for discretionary projects such as the proposed project to determine whether the proposed project may have a significant adverse effect on the environment. The IS uses the significance criteria outlined in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.).

Article 6, Section 15070, Decision to Prepare a Negative Declaration or Mitigated Negative Declaration, of the CEQA Guidelines states the following:

> A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:
>
> a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
>
> b) The initial study identifies potentially significant effects, but:
>
> 1) Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment (14 CCR 15070).

Based on the analysis in the IS, it has been determined that all project-related environmental impacts would be reduced to a less than significant level with the incorporation of feasible applicant proposed measures (APMs; i.e., measures adopted by the applicant as project features) as well as four mitigation measures. Therefore, adoption of an MND will satisfy the requirements of CEQA.

The information contained in the proposed project's PEA and additional information requested by the CPUC during the PEA review were fully considered during the preparation of this Draft IS/MND.

Copies of the project application, PEA, and supporting technical studies are available on the project website at:

http://www.cpuc.ca.gov/environment/info/dudek/LassenSub/PacifiCorpLassenSub.htm

PROJECT DESCRIPTION

Following is a summary of the proposed project; the attached IS presents more details in Section 4, Project Description.

The following are key components of the proposed project:

- Construction of Lassen Substation, which would be built on parcels adjacent to the existing Mount Shasta Substation, located at 504 South Old Stage Road, Siskiyou County, California.
- Replacement of 36 transmission poles along a 1.5-mile segment of the existing 69 kilovolt (kV) power transmission system with wood-framed poles to comply with current California regulations. The system would initially operate at 69 kV, but would be built to allow future operation at 115 kV.
- Connection of the existing transmission lines to the proposed substation. Connection of the new Lassen Substation to the existing distribution system.
- Construct one new distribution line and reconductor two existing distribution lines, which would include the partial reconductoring of the existing 4.16 kV distribution system to 12.5 kV, and the undergrounding of approximately 1,200 feet of the existing overhead distribution line.
- Addition of three banks of 12.5 kV to 4.16 kV stepdown transformers to be added on the 12.5 kV distribution feeders near the existing 4.16 kV load.
- Removal of the existing above-ground Mount Shasta Substation facilities. The site's fence would remain as well as the gravel base and it will continue to be utilized for material storage on a temporary basis as future project needs require.

Project construction is expected to require approximately 12 months to complete.

PROJECT OBJECTIVE

The primary objectives of the proposed project are as follows:

- Ensure that all equipment and structures comply with current company, state, and federal standards, including the replacement of aging and non-standard equipment and the removal of sulfur hexafluoride (SF_6) distribution breakers.
- Ensure a reliable ongoing electricity supply to the area currently served by the Mount Shasta Substation.
- Facilitate regional bulk transmission voltage stability and improve bulk power transfer across the region.

~~MITIGATION MEASURES AND~~ APPLICANT PROPOSED MEASURES

The PEA details project protocols that would be followed during project-related activities (PacifiCorp 2015). Project protocols are specific to environmental issue areas and are herein termed "APMs." Table 1 lists APMs proposed as project design features. These APMs are analyzed as part of the proposed project.

Table 1
Applicant Proposed Measures

APM Number	Description
	Air Quality
APM-AQ-1	**Construction Pollutant Reduction Measures:** Particulate matter emissions shall be controlled by implementing standard construction dust control measures including, but not limited to, the following: • Minimize soil disturbance. • Regularly water disturbed areas, including on-site vehicle/equipment travel routes and soil stockpiles. Watering should be sufficient to prevent airborne dust from leaving the site. • Curtail earthmoving activities on windy days. • Ensure that the engines of all construction equipment are properly tuned. • Limit the maximum speed to 15 miles per hour on unpaved surfaces. • Replant vegetation in disturbed areas as quickly as possible. • Implement other effective particulate matter control measures, as needed. Greenhouse gas emissions generated during project construction shall be minimized by implementing the following measures: • Use California Air Resources Board-certified construction equipment, where available. • Use alternative fuel types for construction equipment where feasible. • Use local building materials. • Limit construction vehicle idling time. Other criteria pollutant emissions generated during project construction shall be minimized by implementing the following measures: • Use California Air Resources Board-certified construction equipment, where available. • Use alternative fuel types for construction equipment where feasible. • Use local building materials. • Limit construction vehicle idling time.

Table 1
Applicant Proposed Measures

APM Number	Description
	Biological Resources
APM-BIO-1	Focused pre-construction surveys for special-status plant species shall be conducted in appropriate habitat and at the time of year when species are both evident and identifiable (typically when the species is flowering or fruiting), according to U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) protocols for species having a specified protocol, or according to standard, scientifically accepted systematic surveys appropriate for each species. Surveys ~~will~~ shall be conducted in areas of planned ground disturbance prior to such disturbance occurring. If special-status plant species are located during focused surveys within the project footprint area, avoidance of these plants shall be the first priority and can include such measures as modifications in the placement of transmission poles, access and spur roads, and of various marshalling and staging areas in accordance with the final project design and needs. If avoidance is not possible, relocation efforts, including topsoil salvage and relocation, if necessary, will be implemented. If PacifiCorp proposes any changes to the current construction plan or pole replacement sites after focused surveys for special-status species are conducted, additional field surveys shall be required prior to construction activities. Pre-construction biological clearance surveys shall be conducted to avoid or minimize potential impacts to special-status wildlife species. This includes surveys for bat species, which shall be conducted by a qualified bat biologist and shall include focused searches for daytime and maternal roost sites appropriate for the bat species most likely to be roosting within the project right-of-way. If active bat roosts are discovered during pre-construction surveys, the qualified bat biologist shall coordinate with CDFW on appropriate avoidance/minimization measures, including the type and timing of such measures, to be implemented. If active special-status mammal burrows are located during surveys, avoidance measures shall be incorporated and the Environmental Monitor shall proceed as described in APM-BIO-6. Any special-status plant or wildlife species observed during pre-construction surveys shall be recorded, and such observations shall be reported to the California Natural Diversity Database.
APM-BIO-2	Prior to first use, the undercarriages, wheels, and bodies of construction and operations equipment previously used outside of the project area shall be thoroughly washed in maintenance yards by high-pressure jets to eliminate any soil buildup that may contain invertebrates, such as insects and insect eggs, or the seeds of exotic plant species.
APM-BIO-3	Every reasonable effort shall be made to minimize temporary and permanent removal of native vegetation at work areas. If required, native vegetation shall be flagged for avoidance. If native vegetation cannot be avoided, it will be crushed or cut rather than bladed or rooted out. A project revegetation plan shall be prepared for areas of native vegetation temporarily affected by project construction activities. The revegetation plan shall be prepared by a qualified botanist or revegetation specialist and submitted to the California Department of Fish and Wildlife for review prior to any construction or ground disturbance of the area that will be temporarily impacted. The plan shall include, at a minimum, a discussion of the following: qualifications and experience of individuals performing the revegetation; methods (including soil preparation, seeding, planting, irrigating) to be used to revegetate the impacted area; monitoring methods and data to be collected on the revegetated area; success criteria; steps to be taken if the revegetation is not successful; and adaptive management to be implemented.
APM-BIO-4	Construction crews shall avoid affecting the streambeds and banks of any streams along the route, to the extent feasible. If necessary, a Lake and Streambed Alteration Agreement (LSAA) will be ~~secured from the CDFW~~ prepared and submitted to the California Department of Fish and Wildlife for review and approval prior to construction in the affected area. Impacts ~~will~~ shall be mitigated based on the terms of the LSAA. No streams with flowing waters or those capable of supporting special-status species would be expected to have permanent adverse impacts from project implementation.
APM-BIO-5	To avoid impacts from temporary access to wetland areas, existing access roads and temporary access methods (e.g., high density polyethylene (HDPE) driving mats, portable road platforms) shall be used to access pole replacement sites. Results of the wetland delineation (Appendix D of the Proponent's Environmental Assessment) shall be incorporated into vehicle access routes, which shall be designed to avoid

Table 1
Applicant Proposed Measures

APM Number	Description
	and minimize wetland disturbance. Access to pole extraction and placement locations that will occur within wetland areas, particularly those north of the existing substation that are more prone to water inundation during wet years, will be conducted when conditions are dry and ground saturation would not pose an issue for vehicle access.
APM-BIO-6	Environmental Monitors shall be assigned to the project, and will be responsible for ensuring that impacts to special-status species, native vegetation, wetlands, wildlife habitat, and unique resources are avoided to the fullest extent possible. The monitor shall delineate and mark for avoidance in the field all known sensitive resource locations and, where appropriate, use flagging to delineate boundaries of areas from where activities are restricted to protect wetlands, native plants and wildlife, or special-status species. If the monitor determines that project activities may adversely affect the species, the monitor shall have authority to halt construction activities until the monitor can consult with the U.S. Fish and Wildlife Service ~~USFWS~~ and/or California Department of Fish and Wildlife ~~CDFW~~ regarding appropriate avoidance measures. These restricted areas shall be monitored during construction to ensure their protection.
APM-BIO-7	PacifiCorp shall conduct all pole installation, conductor installation, tree trimming, tree removal, grading, and clearing of vegetation from September 1 to February 28, outside of the nesting season. The March 1–August 31 nesting season dates are guidelines: nesting season may begin earlier or end later depending on weather conditions; nests will be protected regardless of the calendar date. If construction cannot be completed outside of the nesting season, pre-construction surveys within the project area will be conducted by a qualified biologist for nests prior to ground disturbance, tree trimming, or other construction activities. The nesting bird clearance survey will be conducted within 3 days prior to construction activities. For passerines, a 50-foot buffer will be installed around the nest and maintained around the nest until the young have fledged. A larger buffer may be required if nesting birds appear stressed. Nesting raptors require a larger buffer area than passerines. If a raptor nest is observed, a 300-foot buffer will be installed. If a nesting raptor is observed within 300 feet of the project area prior to the start of construction, a qualified biologist will determine whether or not construction activities could potentially disturb nesting raptors and implement appropriate measures (e.g., on-site monitor, timing restriction) to adequately protect nesting raptors. Any special-status bird species observed during pre-construction surveys shall be recorded, and such observations shall be reported to the California Natural Diversity Database.
APM-BIO-8	A Worker Environmental Awareness Program (WEAP) shall be prepared and all construction crews and contractors shall be required to participate in WEAP training prior to starting work on the project. The WEAP training shall include a review of the special-status species and other sensitive resources that could occur in the project area, the locations of any existing sensitive resources, their legal status and protections, and measures to be implemented for avoidance of these sensitive resources. A record of all personnel trained shall be maintained.
APM-BIO-9	Migratory bird flight paths in the project area are currently unknown. An impact assessment study and bird observation surveys shall be conducted according to the Avian Power Line Interaction Committee's (APLIC 1994) survey protocol. The surveys shall be conducted in wetlands along both sides of the existing transmission line within the study area. The surveys shall be done in consultation with the California Department of Fish and Wildlife. ~~CDFW.~~ Results of the bird observation surveys will determine potentially impacted species and locations to mark wires to increase their visibility to flying birds. Line markers should be designed to be raptor-safe in accordance with the Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2012 (APLIC 2012), evaluated and approved by PacifiCorp engineers prior to implementation.
APM-BIO-10	Vehicles shall be restricted to previously established roadways and access routes.
APM-BIO-11	Trash, dumping, firearms, open fires, hunting, and pets shall be prohibited in the project area.
APM-BIO-12	If construction within and near potential willow flycatcher (*Empidonax traillii*) habitat (riparian scrub and surrounding wet meadow) cannot be completed outside of the willow flycatcher nesting season (June 1 through ~~to~~ August 31), broadcast surveys shall be conducted to determine presence/absence of the species prior to construction activities. If absence is determined, construction may begin within the potential willow

Table 1
Applicant Proposed Measures

APM Number	Description
	flycatcher habitat. If presence is determined, flycatcher ~~detections~~ nests ~~will~~ shall be buffered by ~~150~~ 500 feet, or as otherwise determined in consultation with the California Department of Fish and Wildlife, and construction activities ~~will~~ shall not occur within the buffer area for the remainder of the nesting season. Any willow flycatcher observed during surveys shall be recorded, and such observations shall be reported to the California Natural Diversity Database.
APM-BIO-13	Operation and maintenance activities that must occur in or near potential willow flycatcher habitat (riparian scrub and surrounding wet meadow) ~~will~~ shall be conducted outside of the willow flycatcher nesting season (June 1 through ~~to~~ August 31), whenever practicable. If project construction occurs within habitat occupied by nesting willow flycatcher, because the species is state listed as endangered, a state Incidental Take Permit would be required.
Geology and Soils	
APM-GEO-1	The project will be designed and constructed in accordance with recommendations included in the project-specific geotechnical investigation: site grading, excavation and utility trenches, foundations, mitigation of soil corrosivity on concrete, seismic design criteria, and unpaved site access road.
Greenhouse Gas Emissions	
APM-AQ-1	**Construction Pollutant Reduction Measures:** Particulate matter emissions shall be controlled by implementing standard construction dust control measures including, but not limited to, the following: • Minimize soil disturbance. • Regularly water disturbed areas, including on-site vehicle/equipment travel routes and soil stockpiles. Watering should be sufficient to prevent airborne dust from leaving the site. • Curtail earthmoving activities on windy days. • Ensure that the engines of all construction equipment are properly tuned. • Limit the maximum speed to 15 miles per hour on unpaved surfaces. • Replant vegetation in disturbed areas as quickly as possible. • Implement other effective particulate matter control measures, as needed. Greenhouse gas emissions generated during project construction shall be minimized by implementing the following measures: • Use California Air Resources Board-certified construction equipment, where available. • Use alternative fuel types for construction equipment where feasible. • Use local building materials. • Limit construction vehicle idling time. Other criteria pollutant emissions generated during project construction shall be minimized by implementing the following measures: • Use California Air Resources Board-certified construction equipment, where available. • Use alternative fuel types for construction equipment where feasible. • Use local building materials. • Limit construction vehicle idling time.

Table 1
Applicant Proposed Measures

APM Number	Description
	Hazards and Hazardous Materials
APM-HAZ-1	**Health and Safety Plan.** A health and safety plan ~~Health and Safety Plan~~ shall be prepared and made available once a contractor is procured for the construction of the proposed project. The plan should include, and not be limited to, information on the appropriate personal protective equipment to be used during construction. All transport of hazardous materials would be in compliance with applicable laws, rules and regulations, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations.
APM-HAZ-2	**Hazardous Substance Control and Emergency Response Plan.** PacifiCorp shall prepare and implement a Hazardous Substance Control and Emergency Response Plan as needed. The procedures identify methods and techniques to minimize the exposure of the public and site workers to potentially hazardous materials during all phases of project construction through operation. The plan would include, but not be limited to, worker training appropriate to the site worker's role in hazardous substance control and emergency response. The procedures also require implementing appropriate control methods and approved containment and spill-control practices for construction and materials stored on site. If it is necessary to store chemicals on site, they would be managed in accordance with all applicable regulations. Material safety data sheets would be maintained and kept available on site, as applicable. All hazardous materials and hazardous wastes would be handled, stored, and disposed of in accordance with all applicable regulations, by personnel qualified to handle hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following: • Proper disposal of potentially contaminated soils. • Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources. • Emergency response and reporting procedures to address hazardous material spills. • Stopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual contamination or chemical odors are detected. Work will be resumed at this location after any necessary consultation and approval by the Hazardous Materials Unit. PacifiCorp will complete its Emergency Action Plan Form as part of project tailboard meetings. The purpose of the form is to gather emergency contact numbers, first aid location, work site location, and tailboard information.
APM-HAZ-3	**Spill Prevention, Countermeasure, and Control (SPCC) Plan.** An SPCC plan shall be prepared and certified by a professional engineer; a complete copy would be maintained on site. The SPCC plan would include engineered and operational methods for preventing, containing, and controlling potential releases and provisions for a quick and safe cleanup.
	Hydrology and Water Quality
APM-WQ-1	**Stormwater Pollution Prevention Plan (SWPPP) or Erosion Control Plan Development and Implementation.** An erosion and sediment control plan would be developed prior to construction and included as part of the required SWPPP. The goal of the SWPPP will be to remove sediment and wastes from runoff before the runoff is discharged from the project site. This would be accomplished by: • Minimizing the acreage of disturbed and exposed soil during the construction phase and implementing stabilization measures where necessary. • Removing sediment from runoff before it leaves the site. • Complying with specific erosion and sediment control measures specified within the erosion and sediment control plan. Methods may include preservation of existing vegetation or use of geomats, straw wattles, straw bale barriers, or silt fencing, which would be placed at construction boundaries. Gravel ramps may be installed at access points to public roadways to prevent or minimize the tracking of mud, dirt, sediment, or similar materials onto

Table 1
Applicant Proposed Measures

APM Number	Description
	the roadway. Selection of appropriate erosion control materials will be based on soil properties, steepness of the slope, and anticipated surface flow or runoff. Diesel fuel, gasoline, oil, and other lubricants, as well as adhesives and sealants, would be utilized during the construction of the transmission line and substation. Bulk quantities may be stored in the designated construction yard/staging area. Vehicle fueling and maintenance activities would be restricted to staging areas or approved areas away from drainage channels and sensitive habitats. All construction vehicles would be monitored for leaks and receive regular off-site preventive maintenance to reduce the chance of leakage. A copy of the SWPPP and of Receipt of the Letter of Intent, including the project's Waste Discharge ID Number, will be provided to the California Public Utilities Commission prior to construction to certify compliance with Order 2009-0009-DWQ Construction General Permit. The SWPPP will be updated during construction as required by the State Water Resources Control Board.
APM-WQ-2	**Restoration.** To reduce visual contrast and siltation in construction where ground disturbance is substantial, surface preparation and reseeding shall occur during the last phase of construction. The method of restoration would normally consist of loosening the soil surface, reseeding, installing cross drains for erosion control, placing water bars in the road, and filling ditches. These actions shall occur in areas of exposed soils large enough that, if they remain unremediated once construction is completed, they could exceed water quality objectives of receiving waters (e.g., for sediment, turbidity, temperature, and dissolved oxygen) set forth in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins.
APM-WQ-3	**Pole Placement Minimization/Avoidance.** To minimize the amount of sensitive features disturbed in designated areas, poles would be placed so as to avoid sensitive features and/or to allow conductors to clearly span the features, within limits of standard pole design. If the sensitive features cannot be completely avoided, poles would be placed so as to minimize the disturbance.
Transportation and Traffic	
APM-TT-1	**Traffic Management Plan.** Prior to the start of construction, PacifiCorp shall prepare a Traffic Management Plan. The Plan would define the use of flag persons, warning signs, lights, barricades, cones, etc. to control construction traffic. The Plan would include but not be limited to the following: • All property owners and residents of streets affected by construction shall be notified prior to the start of construction. Advance public notification shall include postings of notices and appropriate signage of construction activity. Access to all residences and properties near the project shall be maintained at all times. • All construction activities shall be coordinated with local law enforcement and fire protection agencies. Emergency service providers shall be notified of the timing, location, and duration of construction activities. • Road use-related wear and tear shall be documented during construction of transmission line facilities and PacifiCorp shall repair any damaged roadway sections, as applicable.

Sources: PacifiCorp 2015, 2016a.

MITIGATION MEASURES

The following mitigation measures (Table 2), agreed to by the applicant ~~Applicant~~, would reduce project-related impacts to a less than significant level.

Table 2
Mitigation Measures

MM Number	Description
	Biological Resources
MM-BIO-1	A topsoil salvage and relocation plan shall be prepared that includes the following information: (1) a description of the methods to be utilized with any topsoil salvage or plant relocation, (2) a description of the receiving location for salvaged topsoil or relocated plants, (3) a discussion of the criteria and measures to be used to determine success of relocated plants, (4) monitoring to be implemented to measure the success of plant relocation, and (5) adaptive management to be used in association with any plant relocation. Any topsoil salvage and/or plant relocation plans shall be reviewed and approved by the ~~CDFW~~ California Department of Fish and Wildlife.
	Hazards and Hazardous Materials
MM-HAZ-1	Prior to demolition of the Mount Shasta Substation and/or the on-site residences, a lead-based paint and asbestos survey shall be conducted by a California Occupational Safety and Health Administration-certified asbestos consultant and/or certified site surveillance technician and a California Department of Public Health-certified lead inspector/risk assessor or sampling technician. The existing Mount Shasta Substation shall also be surveyed for the presence of polychlorinated biphenyls (PCBs), mercury, and other contaminants of concern prior to site demolition activities. A report documenting material types, conditions, and general quantities will be provided, along with photos of positive materials and diagrams. Demolition or renovation plans and contract specifications shall incorporate any abatement procedures for the removal of material containing PCBs, mercury, asbestos, or lead-based paint, including the appropriate soil management protocol and disposition. All abatement work shall be done in accordance with federal, state, and local regulations.
MM-HAZ-2	**Develop and Implement a Lassen Substation Project Fire Plan.** PacifiCorp shall develop a Lassen Substation Project Fire Plan in consultation with Mount Shasta Fire Department, the Mount Shasta Fire Protection District, and the California Department of Forestry and Fire Protection. PacifiCorp shall monitor construction activities to ensure implementation and effectiveness of the plan. The final plan will be approved by the consulted agencies prior to the initiation of construction activities and shall be implemented during all construction activities by PacifiCorp. At minimum, the plan will include the following: • Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions • Proper use of construction equipment • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days • Fire coordinator and fire patrol roles and responsibilities • Emergency fire suppression equipment/tools, including size and documentation of response time capabilities • Worker training for fire prevention, initial attack firefighting, and fire reporting • Emergency communication, response, and reporting procedures • Coordination with local fire agencies to facilitate agency access through the project site • Emergency contact information • Worker education materials, tailgate meetings • Compliance with applicable wildland fire management plans and policies established by state and local agencies • Other information as provided by responsible and consulted agencies
	Hydrology and Water Quality
MM-WQ-1	~~If necessary,~~ **Proper Management of Dewatering Discharges.** Prior to excavation of foundations or horizontal directional drilling pits, or other activity requiring groundwater dewatering, PacifiCorp shall submit a Notice of Intent to the Central Valley Regional Water Quality Control Board (CVRWQCB) for the General Order for Dewatering and Other Low-Threat Discharges to Surface Waters (CVRWQCB Order R5-2013-0074, as amended). PacifiCorp shall describe the activity with sufficient detail to demonstrate the nature, location, and

Table 2
Mitigation Measures

MM Number	Description
	duration of the discharge. PacifiCorp shall send a sample of the groundwater to be discharged to a certified laboratory for analysis of priority pollutants, found in Attachment B of the General Order. If screening levels are exceeded, PacifiCorp shall implement appropriate treatment of the groundwater prior to discharge off site. Dewatering discharges shall comply with the discharge prohibitions, effluent limitations, and receiving water limitations outlined in CVRWQCB Order R5-2013-0074, and in no case shall the discharge impair beneficial uses, violate water quality standards, or cause a possible nuisance condition.

ENVIRONMENTAL DETERMINATION

The IS has been prepared to identify the potential effects on the environment from implementation of the proposed project and to evaluate the significance of these effects. The IS is based on the applicant's ~~Applicant's~~ PEA filed on November 2, 2015, and amended PEA filed on July 15, 2016; proposed project site inspections by the CPUC environmental team; and other environmental analysis for the proposed project. APMs proposed by the applicant ~~Applicant~~ as project design features are incorporated into Section 4, Project Description, of this IS.

Based on the IS, the proposed project, with integration of APMs and mitigation measures where applicable, would result in less than significant effects or have no impacts in the areas of aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, recreation, transportation and traffic, and utilities and service systems.

REVIEW PERIOD

All comments regarding the correctness, completeness, or adequacy of this IS/MND must be received by the CPUC by no later than 5:00 p.m. on December 23, 2016.

The IS/MND, as well as PacifiCorp's application and PEA for the Lassen Substation Project (December 2016), are available at the project's website:

http://www.cpuc.ca.gov/environment/info/dudek/LassenSub/PacifiCorpLassenSub.htm

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11/17/16

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