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Re: CA A.15-11-005
CPUC Data Request 1.0 – Lassen Sub PEA Completeness Review

Please find enclosed PacifiCorp's Responses to CPUC Data Request 1.0. The Company was granted an extension on several subparts as noted within the response document. Responses to those sections will be provided by February 8, 2016.

The following attachments are provided on the enclosed disc: 1.7a, 3.1a, 3.1b, 3.4.1e, 3.4.1f, 3.4.1h, 3.4.3, 3.5a, 3.6d, 5.0, Admin a attachments, and Admin b attachments.

If you have any questions, please call me at (503) 813-5934.

Sincerely,

Cathie Allen

Cathie Allen
Manager, Regulation

ATTACHMENT A
Permit to Construct
PacifiCorp Lassen Substation Project
Proponent's Environmental Assessment (PEA) Completeness Review
Data Request 1.0

Data Request 1.0 reviews the PEA and accompanying appendices. This data request mirrors the layout of information in the PEA and the appendices. Consequently, requests may be duplicated or cross-referenced between sections, and resource specialist may be required to address data requests that originate from both the PEA and the associated appendices.

ADMINISTRATIVE

a. Provide all agency and public involvement contacts and correspondence to date, including names, addresses, phone numbers, and email addresses.

RESPONSE

PacifiCorp hosted a public open house on July 8, 2010 from 6:00 to 8:00 p.m. at the Community Building in Mt. Shasta to inform area residents, property owners, businesses, local officials and other interested parties of the Project. Postcards were mailed to the property owners and current occupants in the immediate vicinity of the proposed Project to inform them of the open house. An ad was also placed in the local newspaper in June 2010 to inform the public of the upcoming open house. On June 30, 2010 a press release was issued to encourage interested local parties to attend the public open house to review the proposed project. See PEA at page 2

Please refer to the following attachments for all other agency and public involvement contacts and correspondence to date:

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments: PEA_Admin_a-1-7_Contacts_Correspondence

- PEA Admin a -1 – Pre-Filing Agency Letter
- PEA Admin a -2 – Pre-Filing Agency List
- PEA Admin a -3 – PacifiCorp's (U 901 E) Declaration 11-23-2015
- PEA Admin a -4 – PacifiCorp's (U 901 E) Amended Declaration 12-07-2015
- PEA Admin a -5 – Post-Filing Landowner List
- PEA Admin a -6 – Post-Filing Agency List
- PEA Admin a -7a – 2015 Gold Emails Part 1
- PEA Admin a -7b – 2015 Gold Emails Part 2
- PEA Admin a -7c – 2015 Gold Emails Part 3

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Please note that although the letter provided in PEA Admin a -1 asked the agencies for their position on the Project, no position statements were received.

PacifiCorp has also had discussions with City of Mt. Shasta and County of Mt. Shasta officials regarding the Project.

Also refer to the Company's response to Section 1.7 a. regarding Public Outreach Efforts.

b. Provide the native files (word, excel, etc.) for the PEA including appendices, requested references (see below) and the Application.

RESPONSE

Please refer to the following attachments for the PEA native files:

- PEA Admin b -1 – Lassen Substation PEA
- PEA Admin b -2 – Figures
- PEA Admin b -3 – GIS Data
- PEA Admin b -4 – Appendix A – Visual Simulations
- PEA Admin b -5 – Appendix B – Bio Tech Report
- PEA Admin b -6 – Appendix C – Cultural Resources
- PEA Admin b -7 – Appendix D – Jurisdictional Delineation
- PEA Admin b -8 – Appendix E – Geotech Report
- PEA Admin b -9 – Appendix F – Phase I ESA
- PEA Admin b -10 – EMF Management Plan

Note that the PEA and appendices files are posted as PDFs on the webpage under the heading **Application and Proponent's Environmental Assessment (PEA)**. Native figure and GIS data files are not posted on the website.

Provide all GIS files used to analyze resources within the project area and develop figures within the PEA.

RESPONSE

Please refer to GIS files provided with attachments PEA Admin b -3 – GIS Data.

1.0 PEA SUMMARY

1.7 Public Outreach Efforts

a. Provide a summary of any community's feedback that has been received to date through public outreach.

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RESPONSE

Please refer to the following attachments for the community's feedback that has been received to date through public outreach:

- PEA 1.7.a -1 – List of Emails from Citizens
- PEA 1.7.a -2 – Copies of Emails from Citizens
- PEA 1.7.a -3 – Protest Victoria Gold
- PEA 1.7.a -4 – Protest Mt. Shasta Tomorrow

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments: PEA_1.7.a-1-4_PublicOutreach

Based on a December 30, 2015, Ruling issued by ALJ Makita, Mt. Shasta Tomorrow has been directed to properly file and serve its protest by January 20, 2016.

Also refer to the Company's response to the Administrative section part a.

2.0 PURPOSE AND NEED

a. Explain how future 115 kV operation will serve the needs of the wider system. When does PacifiCorp expect to convert the existing 69 kV system to 115 kV? Provide information on how this project fits in with WECC path criteria mentioned in the PEA.

RESPONSE

As of 2014, the existing 69 kV transmission conductor supplying the Mount Shasta service area was capable of carrying approximately 6 MW of additional load. The addition of new load by the bottling plant is expected to utilize much of that available line capacity. Further growth of the Mount Shasta service area load would eventually require reinforcement of the transmission line by larger conductor operating at 115 kV, which would consequently provide a stronger alternate transmission supply for the Dunsmuir region to the south.

PacifiCorp will convert the 69 kV system to 115 kV only when load measurement and load growth trends clearly indicate that the improvement is necessary in order to continue maintaining reliable electric service to the Mount Shasta service area.

The future conversion of Lassen Substation and its transmission supply to 115 kV operation would consequently benefit the transmission supply for Dunsmuir. It would allow the Dunsmuir service area load to be removed from the WECC bulk transmission path and would improve the management of transmission voltage in the Dunsmuir region.

Removing the Dunsmuir service area load from the WECC transmission path would allow the path to use its full capacity to transport scheduled bulk power across the region.

b. Will the Lassen transformers have windings capable of operation at both 69 kV and 115 kV?

RESPONSE

The first transformer installed at Lassen Substation will have windings capable of operation at both 69 kV and 115 kV to make it capable of operation initially from the existing 69 kV supply and later at 115 kV. Before the rated capacity of the first transformer at Lassen is fully utilized by customer load growth in the Mount Shasta service area, the load would exceed the rating of the 69 kV transmission circuit wire, making the conversion to 115 kV operation necessary. Since the transmission voltage conversion to 115 kV is required in order to supply more than one transformer at Lassen Substation, the second and possibly third future transformer would need windings to operate only from a 115 kV supply.

c. Confirm the date of service for the bottling plant. Provide a contingency table with forecasted loads in presence and absence of the bottling plant. Describe the ability of the existing system to accommodate growth other than the bottling plant.

RESPONSE

PacifiCorp cannot confirm the date of service for the bottling plant. The Proposed Project is not tied to the proposed upgrades to the existing bottling plant in Mt. Shasta. While PacifiCorp will serve the electric load at the bottling plant, the new substation and associated transmission and distribution line upgrades will not be dedicated to serve the bottling plant, but will serve the entire area load.

When the Proposed Project was first conceived in 2009, the service area was experiencing load growth of approximately 3 percent per year which, if not accommodated through system upgrades, would have quickly outpaced the transformer capability of Mt. Shasta Substation. While this load growth has slowed in the past few years during a recessionary period, PacifiCorp must be prepared to accommodate a return to higher growth in order to provide all its customers with safe and reliable service.

d. State whether upgrading the 4,160-volt service to 12.47 kV for improved service with less voltage fluctuations and lower power losses is a purpose of the project.

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RESPONSE

Changes to the 4.16 kV system is a result of the Lassen Substation Project and is not a purpose of the project. Lassen Substation will not have a 4.16 kV source. The majority of the existing 4.16 kV system will remain at 4.16 kV. The source for the 4.16 kV system will come from the 12.47 kV system through three 1500 kVA 12.47 kV to 4.16 kV transformer banks.

3.0 PROJECT DESCRIPTION

a. Per the PEA checklist, provide GIS (or equivalent) data layers for the proposed project preliminary engineering, including estimated locations of all physical components of the proposed project as well as those related to construction. For physical components, this could include but is not limited to the existing components (e.g., ROW, substation locations, poles) as well as the proposed pole locations, transmission lines, substations, etc. For elements related to construction, include the following: proposed or likely lay-down areas, work areas at the pole sites, pull and tension sites, access roads (e.g., temporary, permanent, existing), areas where special construction methods may need to be employed (e.g., where temporary access routes are required), and areas where vegetation removal may occur, areas to be heavily graded, etc.

RESPONSE

Please refer to GIS files provided with attachments PEA Admin b -3 – GIS Data.

3.1 Project Location

a. Provide an overview map showing location of detailed project component maps 3-5A through 3-5G.

RESPONSE

Please refer attachment PEA 3.1.a.

b. Provide city and county boundary lines on overview map as well as on proposed new Lassen substation site map.

RESPONSE

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City and county boundaries were illustrated on Figure 3-1, Regional Location. City and county boundary lines or labels have been added to all appropriate figures. Please refer to the following attachments for the updated figures:

- PEA 3.1.b. -1 – Figure 3-2 Project Overview
- PEA 3.1.b. -2 – Figure 3-4 Proposed Lassen Substation
- PEA 3.1.b. -3 – Figures 3-5 A-G Project Components
- PEA 3.1.b. -4 – Figure 4.2-1 Project Viewpoint Locations

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments: PEA_3.1.b.1-4_Figures

c. Provide a general description of the site (e.g., undeveloped) and site topography, including elevations, general vegetation type, etc.

RESPONSE

The Lassen Substation Project covers a large area of land located in Mt. Shasta, Siskiyou County, California, including APNs 036-220-170 and 036-220-280, as well as overhead and underground distribution line locations located in the City of Mt. Shasta. The proposed Lassen Substation Site currently contains two vacant residences identified as 504 and 506 South Old Stage Road, a garage, two well sheds, storage sheds, and chicken coops. The distribution lines are located in areas containing residences, a mobile home park, a hotel, a senior apartment community, undeveloped land, Interstate 5, a power substation, a gasoline station, and commercial buildings.

The overall topographic gradient in the vicinity of the property slopes gradually downward towards the southwest. The elevation of the property ranges from approximately 3,680 feet above sea level at the northern end to approximately 3,400 feet above sea level at the southern end.

The Project area is bound on the northeast by Mount Shasta, on the west by Mount Eddy and the Coast Ranges, and to the southwest by Lake Siskiyou. To the north lie Shasta and Scott valleys, just south of the California and Oregon state line. Elevations within the Mount Shasta area range from 14,162 feet on Mount Shasta summit to 3,280 feet at the southern end of Strawberry Valley, near Lake Siskiyou. Vegetation communities in the Project area include non-native grassland, wet montane meadow, dry montane meadow, fen, riparian scrub, and fragmented lower montane coniferous forest.

The proposed substation site is situated on two residential parcels, which support fragmented lower-montane coniferous forest and ornamental vegetation within a rural residential area. Existing transmission lines currently cross over several habitat communities, including non-native grassland, wet and dry montane meadow, transmontane freshwater marsh, riparian scrub, and fragmented lower montane coniferous forest. Open space within the Project area along the transmission line has been

heavily disturbed by cattle grazing. The Project site primarily provides forage habitat for common and sensitive species that may migrate through the area.

3.4 Proposed Project

3.4.1 Proposed New Lassen Substation)

a. The PEA states that the perimeter will be enclosed using chain-link fencing. Please describe height and treatment.

RESPONSE

PacifiCorp's standard substation fence is a 7 feet high fence made of typical chain link fabric with an additional 1 foot of barbed (security type) wire strung along the top.

b. Indicate whether the project will include landscaping. If it does, please include a conceptual landscape plan and irrigation requirements (source and quantity).

RESPONSE

Generally PacifiCorp does not include any type of landscaping that requires maintenance, so there are no plans for irrigation systems to be installed. During the design process, the civil design engineer will include some level of landscaping designed to match the surrounding terrain. For security reasons tall shrubs, bushes, and or trees are kept to a minimum and planted away from the fence to ensure they would not likely pose a threat to security or safety in or out of the substation.

c. Provide an explanation and timing as to the phased build-out of the proposed substation in relation to constructing the "ultimate arrangement."

RESPONSE

Figure 3-4 in the PEA shows three transformers in the ultimate arrangement of Lassen Substation. The first transformer will be installed at Lassen Substation to operate at 69 kV and provide 12.5 kV distribution to the Mount Shasta service area. At some future point in time when the load in the Mount Shasta service area grows to exceed the rating of the 69 kV transmission supply wire, the conversion of the transmission supply to 115 kV will become necessary. Conversion of Lassen Substation transmission supply to 115 kV will make it necessary to add a transformer at Lassen capable of delivering 69 kV to the south on the existing 69 kV transmission line between the Lassen Substation site and Dunsmuir in order to continue providing transmission supply redundancy for the Dunsmuir service region. At some later point in the future, the Mount Shasta service area

load may grow to fully utilize the capacity of the distribution transformer installed in the initial Lassen Substation construction project, making it necessary at that time to install another distribution transformer.

PacifiCorp will construct each step toward the ultimate arrangement only when load measurement and load growth trends clearly indicate that the improvement is necessary in order to continue maintaining acceptable electric service to the Mount Shasta service area.

d. The PEA describes that one transformer, switch gear, and a capacity bank are proposed to be installed. Please describe any other equipment or facilities, such as communications tower or control house, that would be installed.

RESPONSE

Tubular aluminum bus-work supported on 115 kV insulated posts in a low profile design would be installed to carry the transmission circuit through the substation and to the transformer. Tubular aluminum bus-work supported on 12.5 kV insulated posts in a low profile design would carry the distribution path from transformer to switchgear. The switchgear unit is a weatherproof enclosure that also functions as the control house. The communication method is expected to be similar to what is presently in use at Mount Shasta Substation and does not require a communication tower.

e. Provide a substation typical site plan and profile views illustrating equipment (primarily line terminals, circuit breakers and transformers, communications, control house). Provide height of major equipment.

RESPONSE

Please refer to attachment PEA 3.4.1.e – Lassen Substation Plans

f. Clarify as to whether the substation layout and site plan exhibits and profile include the initial arrangement or ultimate arrangement. In the event the site plan exhibits and profile drawing include the initial arrangement, provide exhibits with the ultimate configuration.

RESPONSE
Both the initial and ultimate arrangements are included in the drawings provided with this response. The first two attachements reflect the initial arrangement and the third reflects the ultimate. Please refer to the following attachments:

- PEA 3.4.1.f -1 – Lassen General Plan Initial
- PEA 3.4.1.f -2 – Lassen General Plan Initial (Aerial)
- PEA 3.4.1.f -3 – Lassen General Plan Future

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments: PEA_3.4.1.f.1-3_GP

g. Please describe lighting plan for the new substation.

RESPONSE

PacifiCorp ensures it complies with all applicable codes city and county codes for lighting requirements in our substation designs. Additionally, PacifiCorp employs dark sky lighting fixtures to minimize the impact of lighting on the surrounding properties. Finally, any emergency lighting deemed necessary for call out repairs/responses would be set up to function on an as needed basis and would be used only when crews are required to work overnight in emergency response situations.

h. Provide a description of typical height and illustration for the three new wood poles to be used to transfer power to the new substation.

RESPONSE

Per the design there are actually two transmission poles that will be located just outside of the substation. These poles will between 80' and 85' feet tall. The standard design (TF255) for these poles is included in this response. Please refer to attachment PEA 3.4.1.h.

i. Describe substation gate and access control.

RESPONSE

PacifiCorp typically employs the use of double swing gates at each access point for both ingress and egress to and from the substation. The gates are constructed in a similar manner to the substation fencing and will be 7' feet tall with 1 foot of barbed (security) fence on the top. All gates are secured with standard company locks. Access is further controlled by the company's policy of reporting entry and exit to our operations centers whenever entering a substation for any reason.

3.4.2 Transmission Line Upgrade and Reconductoring

a. Describe and provide illustrations showing the typical existing wood poles to be replaced compared to the new proposed poles proposed to accommodate 115 kV along with the distribution underbuild. Provide height of existing vs proposed and material to be used for new poles. Provide diagrams and a description of how the typical pole height, diameter and span of the arms for the existing (Class 2 and Class 3) 69 kV transmission poles differ from the proposed new (Class 1) poles.

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RESPONSE

Please refer to the Company's response to question 3.4.3.a.

b. The PEA states that no ROW expansion is needed for the proposed pole replacement. Describe whether an expansion in the existing ROW would be required to operate at 115 kV.

RESPONSE

The Project, once completed, will operate at 69kV. However, no expansion of the existing transmission line ROW would be required for the transmission line to operate at 115kV. The PEA states the following (pages 33 and 34):

3.5 Right-of-Way Requirements

The site of the existing Mt. Shasta Substation is owned by PacifiCorp and is located on an approximate 130 feet by 130 feet parcel (0.4 acre). Additional property has been acquired by PacifiCorp for the proposed Lassen Substation site to accommodate the new structure. Additional transmission line ROW of 50 feet by 300 feet would be required for the transmission line and poles that would enter into the new Lassen Substation. Perpetual easements would be negotiated from private landowners for new transmission lines.

PacifiCorp design standards require a ROW that is 50 feet wide for a 115 kV transmission line. The existing ROW for the 69 kV transmission line and the transmission loop varies from 50 feet to 75 feet wide; therefore, the new 115 kV line would not require new easements for the pole upgrade portion of the Project.

3.4.3 Distribution Line Upgrade and Reconductoring

a. For overhead components, describe any pole replacements or additions. For new poles, describe and provide illustration showing wood poles to be replaced compared to the new proposed poles. Provide height and diameter of existing vs proposed poles. Provide diagrams and a description of typical height and span.

RESPONSE

At present, PacifiCorp has not done a detailed design and, therefore, cannot answer this question with specificity. However, pole change outs will be minimized wherever possible and only made if required. Modifications to existing poles could include such

things as adjustments to cross arms, insulator changes, or conductor placement. For new poles or replacement poles, the final heights and diameters of the poles cannot be determined until final design. Typically PacifiCorp's new distribution poles are 45 foot Douglas Fir at minimum class 3 and maximum class 1. Pole dimensions are given in distribution construction standard EB 101. Distribution pole framing for 3 phases and a neutral on a cross arm is shown in distribution construction standard EJ 300. Distribution framing for 2 phases on the cross arm, one phase at the pole top and the neutral in the secondary position is shown in distribution construction standard EJ 800. The areas identified for distribution conductor replacement or addition meet the GO 95 requirements for common neutral. PacifiCorp may change the framing from high neutral (EJ 300) to the neutral in the secondary position (EJ 800). Typical distribution span lengths in the area are 200 feet.

Please refer to the following attachments:

- PEA 3.4.3.a -1 – EB101
- PEA 3.4.3.a -2 – EJ300
- PEA 3.4.3.a -3 – EJ800

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments PEA_3.4.3.a-1-3

b. For underground components, provide illustration of the typical duct bank. Provide the dimensions of the pre-formed concrete splice vaults that will be installed for the underground circuit.

RESPONSE

A duct bank illustration is provided in distribution construction standard GA 212 pages 9 to 11. The splice vault is standard GV 601; exterior dimensions are 94 inches wide, 155 inches long and 110.5 inches deep.

Please refer to attachments:

- PEA 3.4.3.b -1 – BA212
- PEA 3.4.3.b -2 – GV601

Note that these files can be accessed in a single link on the webpage in the data request table under Data Request 1 Attachments: PEA_3.4.3.b-1-2

c. The project proposes the removal of distribution currently installed under I-5 to be replaced with overhead distribution. Provide rational for removal of underground distribution with overhead.

RESPONSE

The existing underground I-5 crossings are in Cal-Trans culverts and Cal-Trans requested PacifiCorp to remove the power cables from their culverts. The Cal-Trans request was taken into consideration when designing the I-5 crossing. PacifiCorp considered other

options to avoid crossing over the I-5 freeway including boring beneath the freeway or attaching the lines to the freeway overpass. A new cable route under the freeway was not chosen because it is the company's understanding that the I-5 roadbed was constructed with large heavy boulders which would make boring under the freeway impractical. Conduit attachment to the overpass would require multiple bends and likely result in cable pulling tensions in excess of cable limits.

PacifiCorp is continuing to discuss this crossing with CalTrans in order to develop the best and least impactful solution for this crossing.

d. Indicate whether the soil excavated for open cut trench operations will be hauled off site and/or used as fill within the project limits.

RESPONSE

Typically PacifiCorp requires all excavated soil be hauled offsite unless its quality can be shown to be acceptable for use a fill. Initially the work plan will be for the removal of the cut soil from the site.

e. Provide typical drawing illustrating step-down transformers proposed.

RESPONSE

Step-down transformer bank illustrations are in distribution construction standard EL 551. Please refer to attachment PEA3.4.3.e – EL551.

f. The new overhead circuit illustrated in Figure 3-5c will require new poles along W Lake Street. Please indicate how many and what type of poles will be required.

RESPONSE

The caption "Install New Overhead Circuit, Removal of Underground under I-5" should point to the purple line crossing I-5 between facility points 161406 and 162400. This is a single span and the replacement structures for 161406 and 162400 are single pole 55 foot, class H1. The brown line between facility points 160304 and 161406 is existing overhead distribution that the project converts the distribution line from 4.16 kV to 12.47 kV.

Mt. Shasta Substation Removal

a. Describe any final treatment proposed for the site once all substation equipment has been removed, including any proposed grading and restoration.

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RESPONSE

PacifiCorp intends to retain possession of this property and continue to use it as a storage yard for the local district office. Therefore, the only modifications made will be the removal of all aboveground structures. All concrete pads and yard surface rock (gravel) will remain in their current condition until such time as the local district no longer wishes to use the yard for storage of line equipment. For security purposes, the fence surrounding the site will also remain intact.

3.5 RIGHT-OF-WAY REQUIREMENTS)

a. Describe project land requirements (acres per square foot) for both temporary and permanent impacts for the proposed new Lassen substation, proposed transmission line upgrades, and proposed distribution line upgrades.

RESPONSE

Table 3-1 on page 37 of the PEA provides the temporary and permanent impact areas associated with the temporary access roads, temporary access roads through environmentally sensitive areas, the existing road to the Proposed Lassen Substation, and new roads. Please refer to attachment PEA 3.5.a for these areas that are illustrated on Figures 3-5 and 3-5 A through G.

3.6 CONSTRUCTION Provide greater detail for the sequence of construction, including the number of crews that will be working their activities and their relative timing.

RESPONSE

Construction for the project will generally be sequenced as follows:

1. Demolition and grading of new substation location, backfilling with subgrade to bring to grade as needed. One crew of 3-4 workers. This is expected to take six to eight weeks.
2. Installation of new foundations, ground grid, conduits/trenwa and security fencing. Two crews of 2-5 workers each. This is expected to take four to six weeks and will likely be overlapped with the next phase.
3. Installation of above grade structures and new equipment, pulling in of control and power cables. Two crews of 2-4 workers each. This is expected to take four to eight weeks and will likely overlap with the phases before and after it.

4. Wiring and termination of power and control cables to new equipment. One crew of 2-3 workers. This is expected to take six to eight weeks and might overlap with the phase after it.
5. Commissioning, testing, and energization of new substation. One crew of 1-5 workers. This is expected to take six to eight weeks.
6. Final cleanup and completion of punch list items as well as removal of aboveground structures at the former substation. One crew of 2-4 workers. This is expected to take one to two weeks.

a. The PEA states construction will generally take place 10 hours per day 5 days per week. Define work hours and days per week. Is construction proposed on weekends and/or nights? Is construction on Sunday anticipated?

RESPONSE

The construction of the substation and upgrades to the transmission and distribution lines would be performed concurrently and would take approximately six to 12 months, with construction personnel working during daylight hours at an estimated 10-hours per day, five days a week (but no more than 12 hour work days) between the hours of 7 a.m. and 7 p.m. Monday through Friday. Work would only be performed on Saturday if necessary to stay on schedule.

b. Provide daily truck trips associated with water trucks, material deliveries, and soil hauls.

RESPONSE

During grading and site prep, the traffic volume would be the highest with an estimated number of trucks being from 5 to 10 per day during regrading work. This would be fairly short term and periodic over a one to three week period of this construction effort. This number will vary based on location of dump site and gravel source as well as by the type of truck used (carrying capacity).

After grading, the number of truck trips would drop to 2 to 5 per day with the volume being lower the majority of the time.

c. Tables 3-3 through 3-7 provide estimated equipment to be used during construction. Provide estimates for the duration of use (i.e., 8-hour days or hours per day). (See Section 4.4, Air Quality and Greenhouse Gas Emissions, for greater detail.)

RESPONSE

Please refer to attachment PEA 3.6.d.

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d. For temporary roads in wetlands, indicate potential location of blading for temporary access to transmission lines. Where possible, provide location and conditions under which blading would be necessary.

RESPONSE

No blading is anticipated in wetland or environmentally sensitive areas.

e. Provide an estimate for water use needs during construction, including dust-control and geotechnical requirements (achieving optimum soil moisture for fill compaction). (See also Section 4.9, Hydrology and Water Quality, and Section 4.17, Utilities.)

RESPONSE

Water usage will be kept to a minimum and only during grading for dust control. Once the sub-base is laid down, some additional water usage might be needed to obtain compaction but the amount will be minimal (less than 100 gallons per day). Water will be kept available onsite in a water storage truck the size of which will be determined by the selected contractor.

f. Identify the most likely source of water (commercial source or city water) to be used for construction-related purposes, and the most likely (i.e., closest) disposal location for construction and demolition debris and/or potentially hazardous materials.

RESPONSE

Typically PacifiCorp does not designate the actual location to obtain water or dispose of construction or hazardous materials. Generally, however, contractors will find the nearest city water source and contract with the city water department to purchase the water needed for construction. Additionally, contractors are required to dispose of materials offsite at landfills properly permitted to receive the waste product whether they are hazardous or not. Contractors will generally find the closest licensed landfill to the work area to dispose of these materials.

g. The appropriate method of construction-phase dewatering for the proposed substation (i.e., subgrade and foundation work) needs to be identified based on site conditions to ensure an accurate portrayal of the construction scenario.

RESPONSE

PacifiCorp generally takes water impacts during construction into account in their design. If the expectation is that de-watering will be an effective method of keeping an excavation site free of significant standing water and allow construction to occur, then the construction contractor is allowed to pump water from the excavation through a silt bag and discharge it offsite provided they have obtained any discharge permits as appropriate.

If the expectation is that de-watering will not effectively keep up with infiltration rates then the design for foundations will include either the installation of geo-piers or the installation of drilled piers that can be constructed by pumping concrete into the pier drilled holes without actual de-watering being required.

4.0 ENVIRONMENTAL IMPACT ASSESSMENT SUMMARY

4.1 Aesthetics (Extension – 02/08)

It should be noted in the visual analysis that when a project impacts visual resources within the viewshed of an eligible state Scenic Highway, such impacts may negatively affect the eligibility status of that road section where the changed condition occurs. This is an important message to properly inform decision-makers of the potential indirect effect of decisions in favor of the potential visual resource modification.

a. Viewpoint 6 Visual Simulation and Analysis: The increased pole height and increased number of stacked conductor wires may create greater contrast in line and color than is acknowledged by the visual analysis. A linear analysis of this changed condition should be presented in the discussion because the line parallels the scenic byway for a greater distance than depicted in the visual simulation.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Viewpoint 10 Visual Simulation and Analysis: The overhead wires in the visual simulation should be presented and analyzed in the appropriate context for motorists and passengers on the Volcanic Legacy Scenic Byway. The visual simulation presents a view that represents a static condition that is inconsistent with the dynamic experience and perception of viewers.

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1. Revise the visual simulation to incorporate a broader view that represents the ability of viewers to pan across an open landscape to view and form perceptions of visual resources; the expanded view is likely to include one or more poles of the proposed poles.

   RESPONSE

   Company granted extension by Commission until February 8, 2016.

2. Include a linear analysis that includes a description of the experience of the motorist, view duration, and contrast level with the surroundings.

   RESPONSE

   Company granted extension by Commission until February 8, 2016.

4.3 Agricultural and Forestry Resources

a. Identify allowable forestry uses within the zoning and land use designations applicable to the project area. Section 4.10 states that *commercial* agricultural activities are allowable uses in the Rural Residential Agricultural zone district. This is inconsistent with the statement under this impact discussion which states that zoning allows for only non-commercial agricultural uses.

RESPONSE

The Project (substation component) is located within the Rural Residential Agricultural (R-R) zoning district, as defined by Chapter 10.6 of the Siskiyou County Municipal Code. The purpose of this zoning district is to "provide an area where rural residential uses can be compatibly mixed with commercial agricultural activities" (§ I, Ord. 86-2, eff. February 27, 1986).

b. Identify whether lands meeting the definition of forest land (as defined by California Public Resources Code, Section 12220(g)) occur within the project area. Impacts to forest land from implementation of the proposed project should be quantified. Identify whether a permit and compliance with the Z'Berg-Nejedly Forest Practices Act would be required for impacts associated with conversion of forest land.

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RESPONSE

The Project does not conflict with existing zoning for, or cause rezoning of, forest land (as defined by public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). The Project would not interfere with the growing and harvesting of timber. Furthermore, the Project would not involve any actions that would directly affect the forestry industry.

The Siskiyou County General Plan and Zoning Ordinance have not designated the project site as forest land, timberland, or timberland zoned Timberland Production, nor has it proposed a conversion of the site to any of these designations.

c. The extent of Farmland of Local Importance in the project area should be identified and impacts to Farmland of Local Importance should be disclosed and quantified.

RESPONSE

Farmland of Local Importance is land of importance to the local economy, as defined by each county's local advisory committee and adopted by its Board of Supervisors. Farmland of Local Importance is either currently producing, or has the capability of production, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the Board of Supervisors in each county.

Farmland of Local Importance in Siskiyou County includes dryland or sub-irrigated hay and grain and improved pasture forage species; these dry farmed lands commonly have inclusions of uncultivated shallow, rocky, or steep soils; farmlands presently irrigated but which do not meet the soil characteristics of Prime Farmland or Farmland of Statewide Importance; areas currently shown as Prime Agricultural Land in the Siskiyou County General Plan; areas under contract as Agricultural Preserves in Siskiyou County (currently mapped only for the Scott-Shasta-Butte Valley and Tule Lake soil survey areas); other agricultural land of significant importance to the county (currently mapped only for the Scott-Shasta-Butte Valley and Tule Lake soil survey areas); areas previously designated by soil characteristics as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance that have since become idle; lands enrolled in the U.S. Department of Agriculture's Conservation Reserve Program.

Farmland of Local Importance was identified within portions of the Project site: Transmission Line Right-of-Way (approximately 7.1 acres), New Substation (approximately 1.1 acres), and Distribution Right-of-Way (approximately 4.4) acres). The land however, is not used for agricultural purposes and the transmission line would

be constructed entirely within PacifiCorp's existing Right-of-Way. The proposed Lassen Substation is also situated on land owned by PacifiCorp.

Construction and pole locations have been designed to avoid farmland and impacts from pole placement would be temporary. The Project would involve minor, localized impacts related to vegetation removal and temporary soil disturbance.

As such, the Project would not create any changes in the environment that would result in conversion of existing farmland to nonagricultural use. Agricultural impacts would be less than significant and mitigation would not be required.

4.4 Air Quality and Greenhouse Gas Emissions (Extension – 02/08)

a. Page 36 of the PEA states: "Dependent upon final design, some temporary access roads may be constructed as part of the Project." Please indicate whether construction of temporary access roads was included in the construction emissions modeling.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Page 45 of the PEA, Section 3.6.5, Construction Workforce and Equipment, includes Tables 3-3, 3-4, and 3-5. Table 4.4-3 on page 93 of the PEA appears to omit emissions associated with the following construction phases listed in Table 3-4, Substation Construction – Estimated Personnel and Equipment:

1. Material Haul
2. Access Road Construction
3. Testing and Energization
4. Fencing
5. Marshalling Yard
6. Right-of-Way Restoration and Cleanup

Please confirm all construction phases in Section 3.6.5 are accounted for in the emissions modeling shown in Tables 4.4-3.

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Page 48 of the PEA, Table 3-7: Does this list of construction equipment differ from the equipment fleet shown in Tables 3-3, 3-4, and 3-5? Confirm all construction equipment listed in Section 3.6.5 has been accounted for in the emissions modeling shown in Tables 4.4-3 and 4.4-4.

RESPONSE

Company granted extension by Commission until February 8, 2016.

d. Confirm (a) the quantity of water required for dust control, (b) where water for dust control would be coming from, and (c) if water import is considered in construction emission estimates. Additionally, confirm if on-site water truck activity is accounted for in construction emission estimates.

RESPONSE

Company granted extension by Commission until February 8, 2016.

e. Confirm whether import or export of soil or other materials would be required that are not accounted for in the emissions estimates. If import or export of soil or other materials would be required during construction, please indicate the origin of import or disposal destination of export and travel distance for haul trucks.

RESPONSE

Company granted extension by Commission until February 8, 2016.

f. Page 49 of the PEA includes Section 3.6.6 and Table 3-8 regarding the construction schedule. Page 49 states: "The construction schedule is expected to last approximately six to 12 months…" Table 3-8 indicates a 12-month construction schedule. Table 4.4-3, Maximum Daily Construction Emissions, and Table 4.4-4, Total Construction GHG Emissions, do not indicate what timeline was used. Theoretically, a 6-month timeline would result in higher *daily* emissions if the same 12-month construction activity would occur over a shorter period of time. To identify the highest likely daily emissions, the most conservative construction scenario should be analyzed in the PEA. Confirm that the tables referenced above reflect a 6-

month construction schedule, and if not please update emissions to reflect a 6-month schedule. Further, provide all modeling output files as an appendix.

RESPONSE

Company granted extension by Commission until February 8, 2016.

g. Page 49 of the PEA, Table 3-8. Please indicate the approximate weeks for each phase of construction. For example, "Acquisition of required permits" October 2016–December 2016: Would this time duration be a full 12 weeks or 8 weeks (October 1, 2016–December 1, 2016)? The duration of each phase is not clear.

RESPONSE

Company granted extension by Commission until February 8, 2016.

h. Page 49 of the PEA, Section 3.6.6: Please indicate whether construction would occur 5 or 6 days per week, and approximately how many hours per day. What were the daily and weekly construction assumptions that are reflected in the emissions estimates shown in Table 4.4-3 and Table 4.4-4?

RESPONSE

Company granted extension by Commission until February 8, 2016.

i. Page 84 of PEA, Air Quality threshold "b": Recommend changing impact designation from "No Impact" to "Less Than Significant Impact." A "No Impact" designation indicates no emissions would be generated from construction or operation of the project; however, because moderate emissions would be generated both during construction and operation of the project, a minor impact would occur.

RESPONSE

Company granted extension by Commission until February 8, 2016.

j. Page 86, Table 4.4-1: Please ensure that analysis reflects the updated federal 8-hour O_3 standard to reflect the newly adopted standard of 0.070 (137 micrograms per cubic meter).

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RESPONSE

Company granted extension by Commission until February 8, 2016.

k. Page 91 of the PEA states that NO_2, SO_2, and CO are not measured in the Northeast Plateau Air Basin. Is this because background concentrations are low enough that monitoring is no longer warranted?

RESPONSE

Company granted extension by Commission until February 8, 2016.

l. Page 91, Table 4.4-2 is entitled "Representative Air Quality Date for the Lassen Substation Project Area (2006-2010)"; however, data for years 2009 through 2013 are shown. Additionally, 2014 data from ARB is available. Recommend including 2014 data in this table.

RESPONSE

Company granted extension by Commission until February 8, 2016.

m. Page 92 of the PEA, threshold "a" provides the stationary source thresholds adopted by the SCAPCD, including 2,500 pounds per day for CO and 250 pounds per day for all other criteria air pollutants. Provide a citation for the threshold criteria.

RESPONSE

Company granted extension by Commission until February 8, 2016.

n. Page 92 of the PEA under threshold "b" states: "Replacement of transmission poles would occur simultaneously with the substation construction. To evaluate emissions associated with construction, it was assumed that the construction phases would occur sequentially rather than simultaneously." If emissions are evaluated based on sequential construction phases rather than simultaneous or overlapping construction phases, daily criteria pollutant emissions as shown in Table 4.4-3 are underestimated. Table 4.4-3 can show emissions by individual phase; however, a line item in Table 4.4-3 should be included to disclose the maximum worst-case daily emissions, which account for overlapping construction phases.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

o. For emissions shown in Table 4.4-3, please indicate how many acres of site preparation or grading was assumed for all grading phases, access road construction, and other phases involving earth-moving activities.

RESPONSE

Company granted extension by Commission until February 8, 2016.

p. Page 92 of the PEA under threshold "b" states that the EMFAC 2007 model and OFFROAD 2007 model were used to estimate emissions from construction activity. The most recent approved version of the EMFAC model is EMFAC2011.[1] ARB released the updated EMFAC2014 model in November 2014. According to ARB, "ARB has recently submitted EMFAC2014 to USEPA for its review. USEPA approval is expected by the end of 2015. USEPA will provide a transition period during which either version may be used. Therefore, in anticipation of USEPA approval, use of EMFAC2014 before the end of the year is appropriate."[2] The OFFROAD2011 model is the most recent model to estimate emissions from in-use off-road construction equipment.[3] These updated model versions include most recent emission factors for motor vehicles and construction equipment fleets. Emission estimates should be updated to reflect emission factors included in the updated models for accuracy. CalEEMod Version 2013.2.2 may also be used to estimate motor vehicle and construction emissions, available at: http://caleemod.com/.

RESPONSE

Company granted extension by Commission until February 8, 2016.

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1 ARB (Air Resources Board). 2015. EMFAC Web Database. EMFAC 2011 and EMFAC 2014. http://www.arb.ca.gov/emfac/

2 ARB. 2015. EMFAC Web Database. EMFAC 2011 and EMFAC 2014. http://www.arb.ca.gov/emfac/

3 ARB. 2015. Mobile Source Emissions Inventory – Categories. Off-Road Motor Vehicles, Off-Road Diesel Equipment. http://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles

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q. Page 93 of the PEA states: "Emissions for construction equipment were obtained from published emission estimates for the South Coast Air Quality Management District (SCAQMD 2011), which were considered to be representative of emissions from construction equipment within the state of California. Emissions were based on emission factors from 2012." Please explain the basis for the use of a 2012 year when the project would be constructed in 2016. Additionally, if emission factors for the SCAPCD are not available, state-wide emission factors should be used to represent state-wide factors, as opposed to using emission factors based on a Southern California air district, which may vary from Northern California emission factors.

RESPONSE

Company granted extension by Commission until February 8, 2016.

r. Page 96 of the PEA, threshold "d" states no impact would occur to sensitive receptors; however, page 189 of the PEA states scattered residences would occur between 70 feet to 580 feet from various portions of the project and associated transmission alignment. Although emissions would be below threshold, please further substantiate why "no impact" would occur to sensitive receptors if residences could be located as close as 70 feet to construction activities.

RESPONSE

Company granted extension by Commission until February 8, 2016.

s. No mention of a construction-related or operational emergency diesel generator is included in Section 3.0, Project Description, or Section 4.4, Air Quality and Greenhouse Gas Emissions. Confirm that a diesel generator would not be required during construction or for back-up power during project operations. If a generator would be required, please update the emission estimates in Table 4.4-3 (criteria pollutant emissions) and Table 4.4-4 (GHG emissions) to reflect generator use.

RESPONSE

Company granted extension by Commission until February 8, 2016.

t. SF_6 emissions were not included as part of the project's GHG analysis. The project would involve the construction of a substation, including circuit breakers and switchgear, which have the potential to emit SF_6 emissions in the event of a leak. Due to the high global

warming potential of SF_6, such emissions should be estimated and included as part of the operational GHG emission estimates. If the proposed project would not include SF_6-containing materials, please substantiate that fact in the GHG analysis.

RESPONSE

Company granted extension by Commission until February 8, 2016.

4.5 Biological Resources

4.5.1 Methodology

a. The discussion of the defined project study area does not appear to be consistent with that described in Appendix B (Section 2.1, Approach to Data Collection). Furthermore, the PEA should clearly differentiate between the "Project study area" and the "Project area" as both terms are used commonly throughout the document and it is unclear if these terms are meant to be interchangeable. In particular, "Project area" does not appear to be defined anywhere in the document. In Appendix B, "project area" is defined as "the area directly affected by the proposed construction…" Please reconcile.

RESPONSE

The text in Appendix B, Biological Resources Habitat Assessment, will be amended to more clearly differentiate between "Project study area" and "Project area". The revised Appendix B addressing these comments will be sent to the CPUC February 8, 2016.

b. Table 4.5-1, beginning on page 109. The title addresses potential to occur within the "Project Area"; however, the same table in Appendix B addresses the potential to occur within the "BSA," with columns for both the Project Area and BSA. Please reconcile these inconsistencies.

RESPONSE

The Project Area in both the document and in Appendix B have the same meaning, but the BSA (Biological Study Area) indicates the Project Area plus an additional 250 feet from centerline of the ROW that was assessed as a buffer, and to account for any potential alterations in the ROW. As indicated above, the revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016.

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4.5.2 Regulatory Framework

a. This section appears to contain only federal regulations and the Siskiyou County General Plan. Provide applicable state regulations as well.

RESPONSE

The additional regulations are included in Appendix B to the PEA, and are as follows:

Federal

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act, as amended in 1964, was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources. Consultation and coordination with USFWS and California Department of Fish and Wildlife (CDFW) are required to address ways to prevent loss of and damage to fish and wildlife resources and to further develop and improve these resources.

Water Quality Certification (Section 401)

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must apply for certification from the state. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval such as a Section 404 permit) must comply with CWA Section 401. Aquatic resources that would qualify as waters of the United States are present in the Project area. Construction and foundation removal activities have the potential to result in a discharge of pollutants into waters of the United States; therefore, a Section 401 Water Quality Certification may be required.

Executive Order 11312: Invasive Species

Executive Order 11312 (February 3, 1999) directs all federal agencies to prevent and control the introduction and spread of invasive nonnative species in a cost-effective and environmentally sound manner to minimize their effects on economic, ecological, and human health. The executive order was intended to build upon existing laws, such as NEPA, the Nonindigenous Aquatic Nuisance Prevention and Control Act, the Lacey Act, the Plant Pest Act, the Federal Noxious Weed Act, and ESA. The executive order established a national Invasive Species Council composed of federal agencies and departments, as well as a supporting Invasive Species Advisory Committee composed of state, local, and private entities. The council and advisory committee oversee and facilitate implementation of the executive order, including preparation of the National Invasive Species Management Plan. Federal activities addressing invasive aquatic species are now coordinated through this council and through the National Aquatic Nuisance

Species Task Force. The proposed Project may introduce invasive species and therefore federal agencies would be required to consider this Executive Order prior to issuing permits.

Riparian Communities in California

USFWS mitigation policy identifies California's riparian habitats as belonging to resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981). Riparian communities have a variety of functions, including providing high-quality habitat for resident and migrant wildlife, streambank stabilization, and runoff water filtration. Throughout the United States, riparian habitats have declined substantially in extent and quality compared with their historical distribution and condition. These declines have increased concerns about dependent plant and wildlife species, leading federal agencies to adopt policies to arrest further loss.

State

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires California public agencies to identify and mitigate the significant environmental impacts of projects that they are considering for approval. A project normally has a significant environmental impact on biological resources if it substantially affects a rare or endangered species or the habitat of that species, substantially interferes with the movement of resident or migratory fish or wildlife, or substantially diminishes habitat for fish, wildlife, or plants. The State CEQA Guidelines define rare, threatened, and endangered species as those listed under ESA or the California Endangered Species Act (CESA) or any other species that meet the criteria of the resource agencies or local agencies (e.g., species of special concern, as designated by CDFW). The State CEQA Guidelines state that the lead agency preparing an Environmental Impact Report must confer with CDFW concerning project impacts on species listed as endangered or threatened. The effects of a proposed project on these resources are important in determining whether the project has significant environmental impacts under CEQA. CEQA ultimately authorizes the lead agency to require mitigation measures that avoid, minimize, or mitigate potentially significant impacts.

California Endangered Species Act

CESA (California Fish and Game Code Sections 2050–2116) was implemented in 1984 to prohibit the take of species that are listed as endangered or threatened. Section 86 of the California Department of Fish and Game Code defines take as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CDFW administers CESA and authorizes incidental take through either California Fish and Game Code Section 2080.1 (consistency determination) or Section 2081 (Incidental Take Permit). State-listed species have the potential to be affected by the Project and would require consultation with CDFW under CESA.

For Swainson's hawks (Buteo swainsoni), CDFW has developed survey guidance, conservation strategies, and best practices for avoiding, minimizing, and mitigating project impacts on the species. This guidance is published in CDFW's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (California Department of Fish and Game [CDFW] 1994).

Fully Protected Species
Sections 3511, 3513, 4700, and 5050 of the California Fish and Game Code pertain to fully protected wildlife species (birds in Sections 3511 and 3513, mammals in Section 4700, and reptiles and amphibians in Section 5050) and strictly prohibit the take of these species. CDFW cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock or if a Natural Community Conservation Planning has been adopted.

Specifically, Section 3513 prohibits any take or possession of birds designated by the MBTA as migratory non-game birds except as allowed by federal rules and regulations pursuant to the MBTA. Based on observations during the habitat assessment, the Project has the potential to affect golden eagle, a fully protected species.

Protection of Birds and Raptors
Section 3503 of the Fish and Game Code prohibits the killing of birds and/or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and/or the destruction of raptor nests. Typical violations include destruction of active bird and raptor nests as a result of tree removal, and failure of nesting attempts (loss of eggs and/or young) as a result of disturbance of nesting pairs caused by nearby human activity. The Project has the potential to adversely affect birds and raptors protected under Sections 3503 and 3503.5 of the Fish and Game Code. For burrowing owls (Athene cunicularia), CDFW has developed survey guidance, conservation strategies, and best practices for avoiding, minimizing, and mitigating project impacts on the species. This guidance has been recently revised in their Staff Report on Burrowing Owl Mitigation (CDFW 2012).

Lake and Streambed Alteration
CDFW regulates activities that would interfere with the natural flow of or substantially alter the channel, bed, or bank of a lake, river, or stream including disturbance of riparian vegetation under Fish and Game Code Sections 1600–1616. CDFW requires a Lake and Streambed Alteration Agreement (LSAA) permit for these activities. Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. CDFW may establish conditions that include avoiding or minimizing vegetation removal, use of standard erosion control measures, limitations on the use of heavy equipment, limitations on work periods to avoid impacts on fisheries and wildlife resources and requirements to restore degraded sites or compensate for permanent habitat losses. Aquatic resources (e.g., streams and ponds) that would be regulated by CDFW are present in the Project area. The Project would not likely involve

modifications or improvements to stream crossings or modifications to the bed, bank, or channel of a stream, and would therefore not likely require an LSAA. If modifications are necessary, then an LSAA would be pursued.

California Native Plant Protection Act
The California Native Plant Protection Act (CNPPA) of 1977 prohibits importation of rare and endangered plants into California, take of rare and endangered plants, or sale of rare and endangered plants. CESA defers to the CNPPA, which ensures that state-listed plant species are protected when state agencies are involved in projects subject to CEQA. For the Initial and Full Repower, plants listed as rare under the CNPPA are not protected under CESA, but rather under CEQA. Several rare and endangered plants have potential to occur in the Project area and could be adversely affected by Project activities.

Title 14 California Code of Regulations (Sections 670.2 and 670.5)
Title 14, California Code of Regulations (Sections 670.2 and 670.5) lists animals designated as threatened or endangered in California. Administration of the code is through CDFW.

Porter-Cologne Water Quality Control Act
The California Water Code addresses the full range of water issues in the state, and includes Division 7, known as the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (Sections 13000–16104 of the California Water Code). Section 13260 requires "any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the State to file a report of discharge (an application for waste discharge requirements [WDRs])" with the appropriate Regional Water Quality Control Board (Regional Water Board). Under this act, each of the nine Regional Water Boards must prepare and periodically update water quality control basin plans (basin plans).

Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution. Projects that affect wetlands or waters must meet the waste discharge requirements of the Regional Water Board. Pursuant to CWA Section 401, an applicant for a Section 404 permit to conduct any activity that may result in discharge into navigable waters must provide a certification from the Regional Water Board that such discharge will comply with state water quality standards. As part of the wetlands permitting process under Section 404, a project applicant may be required to apply for a water quality certification from the applicable Regional Water Board if necessary. Section 13050 of the Porter-Cologne Act authorizes the State Water Resources Control Board (State Water Board) and the relevant Regional Water Board to regulate biological pollutants. The California Water Code generally regulates more substances contained in discharges and defines discharges to receiving waters more broadly than the CWA does. Waters of the State could be directly or indirectly affected during activities associated with the Project.

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California Wetlands Conservation Policy
The goals of the California Wetlands Conservation Policy, adopted in 1993 (Executive Order W-59-93), are "to ensure no overall net loss, and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California, in a manner that fosters creativity, stewardship, and respect for private property;" to reduce procedural complexity in the administration of state and federal wetlands conservation programs; and to make restoration, landowner incentive programs, and cooperative planning efforts the primary focus of wetlands conservation.

Existing Conditions

a. Page 103, Special-Status Plants. The first sentence states that "66 special-status plants were identified as potentially occurring within the Project area." Appendix B states that these 66 plants were determined to "potentially occur with the BSA." Please reconcile this discrepancy. See comment above regarding the definition of "Project area." Also, for all species accounts, some of the accounts note what type of suitable habitat occurs for the species to justify a potential for occurrence conclusion (e.g., "the Project area contains suitable habitat in the form of volcanic soils and meadows…") while other accounts simply state that suitable habitat occurs. Please include more detail in these latter accounts as to the suitability of habitat that occurs. Lastly, for many accounts, the description of suitable habitat, or lack thereof, is not consistent with the potential of occurrence conclusion (e.g., for Siskiyou paintbrush, the account concludes that "the area lacks the serpentine soils to which this species prefers," but then concludes that the potential for the species to occur in the Project area is "moderate"). Please reconcile these discrepancies. Also, Section 4.5.3 of the PEA notes that ground disturbance for the Project "would occur in areas already disturbed by residential activity, infrastructure, or cattle grazing." The species accounts should ultimately determine if suitable habitat occurs within proposed direct and indirect impact areas in order to determine significance of impacts. Please include in these accounts whether or not suitable habitat occurs within the proposed disturbance areas. If this level of detail was not determined during the biological surveys, this information needs to be disclosed to the reader.

RESPONSE

The Project Area in both the document and in Appendix B have the same meaning, but the BSA (Biological Study Area) encompasses the Project Area plus an additional amount of land that was assessed as a buffer, and accounts for any potential alterations in the ROW. While the BSA encompasses the Project Area, the Project Area comprises the

majority of the BSA; therefore, the potential for occurrence of special-status plants was determined to be the same. As indicated above, the revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016. Where apparent inconsistency in potential to occur determinations was noted, other factors were taken into account. For example, where a species is not restricted to, but "prefers" serpentine soil, the potential for that species to occur increases. Although some species can withstand a certain level of disturbance, the level of detail of disturbance was not noted in the habitat assessment phase of the surveys. Other specifics for habitat suitability will be included in the revised Appendix B.

b. Page 117, Special-Status Wildlife. Similar to the plant species accounts, the description of suitable habitat, or lack thereof, is not consistent with the potential for occurrence conclusion. Please reconcile these discrepancies.

RESPONSE

Please see the response to "Existing Conditions" question a, above.

c. Table 4.5-2, beginning on page 125. In the Status column, the federal and state status is listed as "none" for several species (e.g., great blue heron, bumble bee, caddisfly, slug) and no other status is given. In order to be considered as a "special-status species," some other status that is included in the definition of "special-status" given on page 102 needs to be provided. If the species has no status included in the list on page 102, the species should be removed from the table and in the species accounts discussion. Also, any occurrence conclusion changes made in the species accounts should similarly be reflected in this table.

RESPONSE

Species with the status given as "none" were those which were included in the California Natural Diversity Database (CNDDB) quadrangle search for the area. These species all have a State Rank and a Global Rank, although ranks are not commonly presented in reports. The status column for these species will be revised to show that they are CNNDB tracked species and provided with subsequent responses on February 8, 2016.

d. Please provide a discussion of Existing Conditions regarding the existence of both sensitive vegetation communities as well as wildlife movement corridors. These resources are addressed in the impacts section but not discussed in the Existing Conditions section.

RESPONSE

Sensitive vegetation communities are presented in the Habitat Assessment, Appendix B, section 3.1. No formal assessment of wildlife movement was conducted, although it is likely that wildlife does occur within and adjacent to the Project Area, but not in great numbers due to the presence of anthropogenic disturbance. Any wildlife movement that occurs within the Project Area could be deterred temporally by noise and project construction activities, but not physically. Deer migration occurs well north and south of the City of Mt. Shasta, away from urbanized areas.

Applicant Proposed Measures

APM BIO-1: Please include that surveys will be conducted during the appropriate blooming period for plants and the appropriate breeding season for wildlife. Similar to plants, APM BIO-1 also needs to discuss all the steps that would be taken if special-status wildlife species are found during the pre-construction surveys since surveys in and of themselves are not mitigation for potentially significant impacts. In particular, several state- and/or federally listed species have been identified as potentially occurring within the project site. Impacts to these species would also potentially trigger the need for a state or federal take permit. Also, this measure conflicts with APM BIO-6 to some degree in that APM BIO-6 states that if it is determined that project activities may affect special-status species, "the monitor shall coordinate with USFWS and/or CDFW regarding appropriate avoidance measures." APM BIO-1 states that if special-status plants cannot be avoided, "relocation efforts will be implemented" but does not note any coordination with resource agencies prior to relocation. Please reconcile.

RESPONSE

All required floral and wildlife surveys will be conducted during the appropriate blooming and breeding seasons. Relocation of a special-status species implies that Project activities are determined to affect those species, resulting in coordination with resource agencies. Agency coordination will be conducted for the Project prior to construction activities.

Environmental Impacts

a. Page 131, Sensitive Plants. The intent regarding the overall suitability of habitat for special-status plants is unclear and appears conflicting in the second sentence. Please revise.

   RESPONSE

   The intent of the sentence was to indicate that of the 66 species with potential to occur within the area, according to the literature searches, 26 were determined to have suitable habitat, and of those 26 species, most have a moderate to high potential to occur.

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b. Page 131, Bats. Appendix B notes that the Project area (defined in Appendix B as the disturbance footprint) contains suitable roosting habitat for western mastiff bat. Please address how impacts to occupied roosting habitat, if found during surveys, will be mitigated. Note also that the last sentence in this paragraph implies that with implementation of pre-construction surveys, "no additional mitigation would be required." Surveys in and of themselves do not legally serve as mitigation for potentially significant impacts. Please revise this paragraph.

RESPONSE

The intent of the paragraph, and the APM, was to indicate that all sensitive species, floral or wildlife, detected by any required surveys would require the initiation of avoidance modifications for the project. The revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016.

c. Page 132, Raptors. Please revise the potential to occur conclusions for the four raptors addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. Two of the species mentioned here are primarily fish eaters so it is unlikely that vegetation removal in the project area will reduce prey for these two species, as stated in this paragraph.

RESPONSE

These species may be present in the Project Area as fly-overs, but we agree that any potential vegetation removal would result in prey reduction for bald eagle and osprey, and that nesting of these species are unlikely, making their potential to occur change to absent. We agree that it is unlikely that peregrine falcon would nest or forage within the Project Area, changing its potential to occur to absent, and that there while there is suitable habitat available for northern goshawk, the potential for occurrence for nesting and foraging should be reduced to low. The revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016.

d. Page 132, Migratory and Nesting Birds. Please revise the potential to occur conclusions for the four raptors addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that any of the four bird species addressed here would nest within or adjacent to proposed disturbance areas.

RESPONSE

Please see the response to "Environmental Impacts" question c, above.

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e. Page 132, Mammals. Please revise the potential to occur conclusions for the three mammals addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that any of these three species addressed here would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE

While there is suitable habitat present within the Project Area for these species, PacifiCorp agrees with the assessment that the anthropogenic disturbance levels would preclude these species from occurring, thereby reducing their potential for occurrence to absent. The revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016.

f. Page 132, Reptiles. Please revise the potential to occur conclusions for the western pond turtle based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that this species would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE

PacifiCorp agrees with the assessment that the potential for occurrence of this species should be reduced to absent. The revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses February 8, 2016.

g. Page 133, Amphibians. Please revise the potential to occur conclusions for the three amphibian species addressed here based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that all of these species would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE

Based on breeding preferences for the Pacific tailed frog and Foothill yellow-legged frog, we agree that the potential for occurrence of these species should be reduced to absent. Big Springs Creek, which flows from the spring up in the park and down into the fish hatchery is a slow-moving stream with riffles and rocky substrate and lots of cobble for much of its course, and provides suitable habitat for Foothill yellow-legged frog, but does not come closer than 700 feet from the Project Area, which is farther than the species will move away from water. Cold Creek, which crosses the Project Area is slow moving, and combined with the presence of moist meadows and marsh, provides suitable habitat for Cascades frog. This species will retain its moderate potential for occurrence. The revised Appendix B addressing these comments will be sent to the CPUC within subsequent responses on February 8, 2016.

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h. Page 133, (b). The discussion provided does not clearly address potential adverse effects on riparian habitat or other (non-wetland) sensitive vegetation communities. Since riparian scrub is the only non-wetland sensitive vegetation community identified in Appendix B as occurring within the project site, the discussion here should focus on potential impacts on only that community and measures to mitigate these impacts.

RESPONSE

The current alignment for the Project will not cross any riparian habitat. Cold Creek will be avoided, with entrances made from opposite sides. Pole removal of the idle transmission line will be adjacent to the riparian, but not within it. The poles themselves are not within riparian vegetation. There will be no ground disturbance in the wetland north of 19/47, so no disturbance to the vegetation around the little creek. The stream on the other side of the assisted living facility will be spanned by reconductoring, meaning no pole removal and no ground disturbance.

i. Page 134, (c). While most of the APMs mentioned in this section "minimize" impacts to wetlands, some permanent and temporary impacts, as noted, will occur to wetlands under federal jurisdiction. Implementation of APM BIO-6 (monitors primarily for special-status species) and APM BIO-8 (which does not really address impacts to federally protected wetlands) would not mitigate any identified significant impacts in and of themselves. Therefore, although the total amount of wetlands to be permanently impacted is likely to be small, please provide supporting analysis that demonstrates that the quantity of disturbance would not rise to the level of being "substantial" and, therefore, "not significant." Further, the temporary and permanent loss of even a small amount of federally protected wetlands are subject to the regulatory authority of the ACOE. Even if impacts are not "significant" a Section 404 permit may need to be obtained. Please indicate whether PacifiCorp intend to consult with the ACOE on the need to obtain a permit.

RESPONSE

Although some clearing may be necessary to create a work area, vegetation will be mowed or crushed. No blading or grading will occur. By using these methods, no long-term or permanent impacts to wetland vegetation is anticipated, as vegetation will not be removed. No permanent alterations to wetland soils or hydrology are anticipated because no blading or grading will occur in these areas. Additionally, where geomats are used, the weight of construction vehicles is adsorbed and spread out over the area of the geomats and thereby reduces potential for compression and prevents rutting. If portable road beds are used, they will be installed and connected on top of the wetland vegetation, and the wetland soils and topography will be, for the most part, avoided. No long-term or

permanent alteration to wetland soils, structure, or vegetation will occur, and therefore no substantial change in the wetland environment and no significant impacts.

The permanent impact to the wetlands will occur from the placement of the larger diameter of the upgraded poles that will replace the old poles. PacifiCorp will begin consultations with respect to a NWP 12 authorization with the San Francisco District Office of the Corps of Engineers this spring.

4.7 Geology and Soils (Extension – 02/08)

a. PEA Table 4.7-1: Please include acreages within the Project's footprint for each soil unit.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. An updated geotechnical report is required to support the analysis in the CEQA document. The geographic scope of the geotechnical report (Appendix E) does not reflect the full scope of the project and is described as the first phase of a two phase investigation. Please provide a preliminary geotechnical evaluation of any soil constraints that could be encountered along the transmission and distribution corridors, and at least initial recommendations regarding pole replacement, trenching, and other activities related to installation of underground distribution components. The three borings appear to have been completed to the west of the proposed substation structures, chosen based on an outdated site plan, and did not achieve the desired depths due to boulders (compare PEA Figure 3-4 with Appendix E Figure A-2). A complete analysis of liquefaction potential of soils was deferred to "the second phase of investigation."

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. The appropriate method of construction-phase dewatering for the proposed substation needs to be determined based on site conditions. Please provide a description of the intended method to ensure an accurate portrayal of the construction scenario. Appendix E raises concerns regarding the high groundwater table and presents several options for addressing it. Please identify the method that will be used and the construction implications.

RESPONSE

Company granted extension by Commission until February 8, 2016.

4.8 Hazards and Hazardous Materials

a. The 2015 Phase I ESA covers the majority of the Project site; however, two areas shown on Figure 3-2 of the PEA are not covered by the Phase I ESA. These areas are the northern-most proposed underground distribution line and a small area of overhead distribution line near the stepdown transformer near High Street. Provide an evaluation of these areas similar to that of the 2015 Phase I ESA, including an agency database search, historical records review, site reconnaissance, and interviews.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Provide a list of proposed chemicals and quantities for both construction and operation of the Project.

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. The PEA states, on page 159, that the removed wood poles would be disposed of in a Class I hazardous waste landfill or in a lined portion of a RWQCB-certified municipal landfill. Have the wood poles been characterized to determine hazardous waste characteristics? If so, provide the data.

RESPONSE

Company granted extension by Commission until February 8, 2016.

d. The PEA states, on page 159, that demolition of the existing Mt. Shasta Substation would result in the generation of various waste materials that can be recycled and

salvaged. Has the existing substation been surveyed for the presence of hazardous materials such as asbestos, lead-based paint, polychlorinated biphenyls, or mercury? If so, provide the survey report. Additionally, the existing substation was not described in any detail in the Phase I ESA. Provide a description of the current conditions, including any potential hazardous materials, of the existing substation, include photographs where possible.

RESPONSE

Company granted extension by Commission until February 8, 2016.

e. Provide a discussion of the fire environment and the methodology used in evaluating wildfire hazard.

RESPONSE

Company granted extension by Commission until February 8, 2016.

f. Provide a discussion of applicable federal, state, and local regulations, plans, and policies related to wildfire prevention, in addition to those included in the PEA on pages 155 and 156.

RESPONSE

Company granted extension by Commission until February 8, 2016.

g. Discuss Fire Hazard Severity Zone classifications for local responsibility area (LRA) within City of Mt. Shasta in addition to those for state responsibility areas (SRA), as classified by CAL FIRE for areas outside of the City.

RESPONSE

Company granted extension by Commission until February 8, 2016.

h. The PEA (page 162) discusses construction-phase standard fire prevention protocols for addressing wildland fire risk. Provide the specific details of these protocols, how and when they will be implemented, relationship to proposed construction equipment, required plans and permits, and a discussion of responsible parties and those with enforcement responsibility.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

i. The PEA (page 162) states that PacifiCorp trained personnel would be able to respond to a fire within 15 minutes. Provide details regarding staff, training, equipment, resources, and mutual aid agreements to support this statement.

RESPONSE

Company granted extension by Commission until February 8, 2016.

j. The PEA (page 162) states that the proposed Project would comply with applicable regulations, wildland fire management plans, and policies established by state and local agencies. Please specify the applicable regulations, wildland fire management plans, and policies and clarify how the Project will comply with these regulations, plans, and policies.

RESPONSE

Company granted extension by Commission until February 8, 2016.

k. The PEA (page 162) states that the proposed Project site would be grubbed of vegetation and graded prior to the staging of equipment, thereby minimizing the potential for construction equipment to ignite a fire. However, PEA Section 3.6.1 (page 37) states that selective vegetation clearing will be performed, and APM BIO-3 (page 129) states that native vegetation will be crushed, rather than bladed. Please clarify proposed vegetation treatment actions for all Project components and how such treatment will minimize wildfire ignition potential.

RESPONSE

Company granted extension by Commission until February 8, 2016.

l. The PEA (page 162) states that the Project would be constructed in a manner consistent with General Order (GO)-65. Please clarify if this statement should relate to GO-165.

RESPONSE

Company granted extension by Commission until February 8, 2016.

m. Under a discussion of Operations Impacts, the PEA (page 162) states that PacifiCorp would maintain an area of cleared brush around the equipment, minimizing the potential for fire. Define "equipment" as used in this discussion and address clearance requirements in other vegetation types (non-brush) and clearance restrictions in sensitive habitats.

RESPONSE

Company granted extension by Commission until February 8, 2016.

n. The PEA (page 162) states that the Project will be maintained in accordance with CPUC General Orders and other applicable laws and regulations. Identify other applicable laws and regulations and how PacifiCorp will adhere to these laws/regulations and CPUC General Orders to minimize wildfire risk during project operations.

RESPONSE

Company granted extension by Commission until February 8, 2016.

4.9 Hydrology and Water Quality

a. The fourth paragraph on PEA page 35 states: "New access roads would not be necessary for construction of the proposed Lassen Substation." This appears to conflict with what is shown in Figure 3-5E and Table 3-1. Please clarify/reconcile.

RESPONSE

Refinement of the proposed Lassen Substation design resulted in the offset of the access road from its original location (the existing driveway) to the now-removed mobile home that originally occupied this parcel, and led to the creation of a new access road. This refinement was captured in the figures and in Table 3-1; however, it was overlooked in paragraph 4 of page 35 of the PEA. This paragraph should read:

> "One new and one upgraded access road would be required for construction and operation of the proposed Lassen Substation. The existing access road (currently a residential driveway) to the new substation property (refer to Figure 3-4) would require widening and upgrading to allow for safe

construction and maintenance during operation. This existing access road is approximately 500 feet in length and approximately 10 feet wide and would be upgraded to support the weight of construction vehicles. The upgrade would expand the road to a width of 16 feet, consisting of a 12- to 14-foot driving surface with a side drainage system between one and two feet wide. The new access road would branch off from this existing access road approximately 80 feet north of South Old Stage Road and would mirror the dimensions of the upgraded access road, but would be approximately 420 feet in length."

b. The last paragraph of APM WQ-1 (PEA pg. 53) must also state that the Waste Discharge ID Number (WDID) from the SWRCB (certifying that coverage has been obtained under the CGP) shall be provided to the CPUC prior to the construction NTP. Confirm that this modification to the APM is acceptable.

RESPONSE

Copies of the Project SWPPP and of the Receipt of the Letter of Intent, including the Project's WDID, will be provided to the CPUC prior to construction to certify compliance with Order 2009-2009-DWQ Construction General Permit. The SWPPP will be updated during construction as required by the State Water Resources Control Board (SWRCB).

c. The scope and purpose of APM WQ-2 (PEA pg. 53) is unclear. What level of ground disturbance is considered "substantial," and to what activities specifically would this APM apply? The second sentence alludes to drainage design for roads (e.g., cross drains, water bars, ditches), but the APM is titled "reseeding." Please clarify.

RESPONSE

For clarity this APM can be re-titled "Restoration" and would occur during the last phase of construction. Ground disturbance was considered to be substantial if it resulted in areas of exposed soils large enough that, if they remained unremediated once construction was completed, could exceed water quality objectives of receiving waters set forth in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan); specifically, the objectives for sediment, turbidity, temperature, and dissolved oxygen.

This APM would apply to areas of exposed soils where vegetation was cleared and where the soil was bladed or graded for substation construction or to create work areas for new pole construction; however, depending on weather and soil conditions during construction, this APM would also apply to temporary overland access roads where the ground may become rutted or otherwise disturbed or exposed. In such instances,

restoration would normally consist of surface preparation to loosen or roughen up the soil, followed by reseeding. Restoration may also include methods such as the installation of cross drains and water bars for erosion control, and resurfacing disturbed areas as close as possible to original contours. The former two methods would likely be used only on the substation site and laydown yard; the latter method would be used as needed throughout the proposed Project. Restoration of these sites would have an additional visual benefit of reducing visual contrast between work and natural areas following construction.

d. Please clarify the existing and proposed destination of stormwater flow on site, as well as the existing versus proposed coverage of impervious surfaces. Provide GIS data depicting both pre-project (existing) and post-project impervious surfaces (i.e., concrete) and semi-pervious surfaces (i.e., compacted dirt, unpaved access roads).

RESPONSE

See the table below for the pre-Project and post-Project conditions of the Mt. Shasta Substation site and the proposed Lassen Substation site.

	Pre-Project Conditions	**Post-Project Conditions**
Existing Mt. Shasta Substation		
Impervious	2,140 sq.ft./0.04 acre	2,140 sq.ft./0.04 acre
Semi-pervious	30,942 sq.ft./0.7 acre	30,942 sq.ft./0.7 acre
Pervious	0	0
Proposed Lassen Substation Site		
Impervious	10,018.8 sq.ft./0.23 acre	2,220 sq.ft./0.04 acre
Semi-pervious	35,283.6 sq.ft./0.81 acre	51,627 sq.ft./1.19 acre
Pervious	172,497.6 sq.ft./3.96 acres	0

The proposed Lassen Substation site is currently comprised of two residential parcels; the topography of both parcels slopes gently southwest. In the absence of observed storm drains (neither parcel is served by the storm drain system of the City of Mt. Shasta), it is assumed that stormwater follows existing topography and flows southwest into the shallow ditch observed at the edge of the site on the north/northeast side of South Old Stage Road. This ditch terminates between the existing gravel driveway that accesses 504 South Old Stage Road (now part of the proposed Project site) and the residence at 508 South Old Stage Road (not part of the proposed Project) and the existing pole 16/48. This pole is situated on the northwest corner of the residential parcel at 512 S. Old Stage Road, which is at a slightly higher elevation than the ditch. The soil type of the proposed substation site, including the ditch, is Ponto-Neer complex, 2 to 15 percent slopes (209), which is classified by the USDA Soil Survey as well drained ("Water is removed from

the soil readily but not rapidly. Internal free water occurrence is deep or very deep"; USDA 1993). During most precipitation events, stormwater leaving the two parcels likely pools in this microtopographic low area until absorbed.

e. Identify which National Pollutant Discharge Elimination System (NPDES) would be required by the Regional Water Quality Control Board (RWQCB) for non-stormwater discharge (i.e., dewatering).

RESPONSE

The proposed Project is located within limits of the North Coast Regional Water Quality Control Board (RWQCB). In 2015, the RWQCB adopted Order No. R1-2015-0003 General NPDES No. CAG0024902, Wastewater Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region. This NPDES authorizes discharges from individuals, public agencies, private businesses, etc. of clean or relatively pollutant-free waters, including groundwater from construction dewatering of groundwater, that pose little or no threat to water quality into the surface waters in the North Coast Region.

To obtain coverage under this General Order, PacifiCorp will submit a detailed Notice of Intent and a Best Management Practices and Pollution Prevention Plan (BMP/PP) as required. PacifiCorp will also pay the appropriate first annual fee which, assuming a Category 3 fee for de minimis discharges will be $2,062 for Fiscal Year 2015-2016.

f. Identify the likely discharge method and location (e.g., infiltration basin) for groundwater dewatering.

RESPONSE

See response to question section 3.6 h

g. The groundwater level conclusions of the geotechnical report (PEA Appendix E), conflict with the statement on PEA page 169 that project construction would not involve removal of groundwater. Please identify whether neighboring properties rely on groundwater wells screened in shallow zones for domestic or irrigation uses, and if so, the location and depth of those wells.

RESPONSE

Existing databases of the California Department of Water Resources (DWR) and the United States Geological Survey (USGS) for wells and groundwater were searched to

identify the presence of domestic or agricultural use wells on properties neighboring the proposed Project site. The DWR databases, Water Data Library (WDL) and the California Statewide Groundwater Elevation Monitoring System (CASGEM) did not identify any monitored wells, public or private, in the City of Mt. Shasta area. The monitored wells nearest to the proposed Project site are located in the community of Edgewood approximately 12.5 miles north of the proposed substation site, and near the junction of Highway 97 and Big Springs Road in unincorporated Siskiyou County approximately 12 miles north of the proposed substation site (DWR 2016a and 2016b). Additionally, these wells are located in different groundwater basins.

The Mount Shasta Volcanic Area groundwater basin is described by Bulletin 118 (DWR 2003) as a volcanic groundwater source area as opposed to a groundwater basin, and is thus not monitored by the DWR. DWR had not had regulatory authority over groundwater and has relied upon voluntary information sharing by municipalities and private well owners, who have not been required to provide depth-to-groundwater information to the State, which likely accounts for the lack of publicly available well information for the Project area.

In addition to DWR databases, the USGS California Active Water Level Network was searched to identify wells in or near the Project site. Results of this data search revealed fewer federally-monitored wells in the general Project area than did the DWR database. The two USGS wells nearest to the proposed substation site are located in the City of Yreka near Arroyo Drive and Old US 99, approximately 31.8 miles northwest of the proposed substation site, and on Old State Highway 3 miles north of Orr Mountain in unincorporated Siskiyou County, approximately 33 miles northeast of the proposed substation site (USGS 2016). As with the DWR wells, these two USGS wells are in groundwater basins unconnected to the Mount Shasta volcanic groundwater source area.
In the absence of publicly available data on DWR- monitored wells, it is not possible to determine whether properties neighboring the proposed Lassen Substation rely on groundwater wells for domestic or irrigation uses. Likewise, in the absence of DWR- as well as USGS-monitored wells in the immediate Project area, as well as the volcanic nature of the underlying groundwater source area, current depth-to-groundwater on the proposed substation site cannot be ascertained at this time. During the project permitting process, existing groundwater depth will be obtained, via geotechnical sampling, for substation engineering purposes.

California Department of Water Resources (DWR). 2016a. Water Data Library. Available at: http://www.water.ca.gov/waterdatalibrary/. Accessed on January 13, 2016.

California Department of Water Resources (DWR). 2016b. California Statewide Groundwater Elevation Monitoring. Available at: http://www.water.ca.gov/groundwater/casgem/. Accessed on January 13, 2016.

United States Department of Agriculture, Natural Resources Conservation Service (USDA). 1993. Soil Survey Manual. U.S. Department of Agriculture Handbook 18.

h. United States Department of the Interior, U.S. Geological Survey (USGS). 2016. USGS Groundwater Watch, California Active Water Level Network. Available at http://groundwaterwatch.usgs.gov/statemap.asp?sc=06&sa=CA. Accessed on January 13 and 14, 2016.Please provide both short-term (construction) and long-term (maintenance) water demand estimates for the project. From what source(s) would such water demands be served?

RESPONSE

See response to question section 3.6 g

4.10 Land Use and Planning

a. Siskiyou County Zoning (Page 180) states: "The substation component of the proposed project would be considered a compatible use in this district with the approval and issuance of a conditional use permit." Since the County has no discretionary permitting authority for a substation proposed by a California Investor Owned Utility (IOU), please clarify the intent of this sentence and the similar analysis on page 183.

RESPONSE

The California Public Utilities Commission (CPUC) has exclusive jurisdiction to regulate the design, siting, installation, operation, maintenance, and repair of electric transmission facilities. The Project is therefore exempt from local land use and zoning requirements. However, as a part of the environmental review process for the Project, local land use ordinances, plans, goals, and policies were considered in evaluating potential impacts.

The Project would not require a Conditional Use Permit (Kristen Maze, City Planner, City of Mt. Shasta, California – December 10 and 16, 2015) and (Richard Tinsman, Deputy Director of Planning, Siskiyou County Community Development Department, December 22, 2015).

4.12 Noise

a. Provide quantitative noise level estimates (in terms of LeqA) of worst-case construction noise levels at the nearest noise-sensitive land uses for both the substation site and along the transmission and distribution lines. Identify the nearest noise-sensitive uses affected

by these levels. Please verify that these noise levels would not exceed applicable noise standards or result in a temporary substantial noise increase.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Provide quantitative vibration level estimates (in VdB or inches/second) of worst-case construction vibration levels at the nearest noise/vibration-sensitive land uses for both the substation site and along the transmission and distribution lines. Identify the nearest noise/vibration-sensitive uses affected by these levels. Please verify that these vibration levels would not exceed applicable vibration standards or, in the absence of local standards, result in vibration levels that exceed annoyance criteria or damage criteria established by other agencies (i.e., Federal Transit Administration, California Department of Transportation).

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Provide a discussion and analysis of potential noise and vibration impacts and mitigation measures should blasting be necessary (see Section 3.6.4, Underground Distribution Line Construction, of the PEA).

RESPONSE

Company granted extension by Commission until February 8, 2016.

d. Please note that the City of Mt. Shasta Noise Element states that noise from construction activities within its boundaries is exempt from the noise in Table 7-5 of the Noise Element (Noise Standards for New Uses Affected by Non-Transportation Noise) provided that construction takes place between the hours of 7 a.m. and 5 p.m., or by request for an exemption because of special circumstances. This conflicts with the last sentence under the "Construction Impacts" heading on PEA page 191 that states "…between the hours of 7 a.m. and 7 p.m…". Please reconcile.

RESPONSE

Company granted extension by Commission until February 8, 2016.

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4.13 Population and Housing

a. Provide quantification of the new service capacity of the upgraded facilities proposed in terms of potential development or facilities that could be served. For example, how many homes could be served by the existing facility versus how many homes would be served by the new facility and how does that compare to General Plan projections?

RESPONSE

The Siskiyou County General Plan 2014 Housing Element (p. 25) contains a projection of 258 newly constructed/ rehabilitated units for the period of 2014-2019. The electricity needs generated by this level of development can be accommodated by the proposed upgraded electric facilities.

4.16 Transportation and Traffic (Extension – 02/08)

a. Identify Caltrans BMPs that would be used to minimize traffic impacts. This can be a general description or summary of measures.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Under "Regulatory Framework" under the "City of Mt. Shasta" heading, the PEA states that the project is in unincorporated Siskiyou County (not within City limits). Project components are in the City and the County. Please describe the relevant City of Mt. Shasta standards.

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Provide an estimate of frequency of inspection and maintenance visits to quantify anticipated trip generation. While it is acknowledged that a higher frequency of visits could be required to respond to certain conditions or circumstances, some estimate of frequency for normal maintenance should be provided. Visits per month or per year could be estimated based on other facilities or visits to the current facility.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

d. Please clearly state whether there is an applicable congestion management program applicable to roadways that would be affected by the proposed project or if Level of Service standards are the only applicable standards in the County and the City.

RESPONSE

Company granted extension by Commission until February 8, 2016.

e. The PEA states that it is not anticipated that construction and operation of the project would include the use of helicopters. If helicopters would not be used, this should be definitively stated. If helicopters could be used, then this should be stated and appropriate information should be provided regarding use and applicable regulations in relation to air traffic patterns.

RESPONSE

Company granted extension by Commission until February 8, 2016.

f. Please state what measures would be implemented during construction to ensure safety at construction access driveways. A general description of site access safety measures from the traffic management plan should be provided.

RESPONSE

Company granted extension by Commission until February 8, 2016.

g. Provide a preliminary description of the traffic management plan that would be implemented during construction of the proposed project. In particular, describe in greater detail what is required to obtain an encroachment permit for work or obstruction of the public right-of-way and what measures, if any, would be taken to notify emergency services (fire, police, ambulances, etc.) of planned detours or roadway closures.

RESPONSE

Company granted extension by Commission until February 8, 2016.

h. Provide a discussion of measures in the traffic management plan that would be applicable to maintaining safety and performance of pedestrian and bicycle facilities.

RESPONSE

Company granted extension by Commission until February 8, 2016.

4.17 Utilities

See also Hydrology and Water Quality Section 4.9 (h).

a. Please quantify water requirements for construction and operational activities, including irrigation activities associated with restoration.

RESPONSE

It is expected that the construction will not use more than 100 gallons per day at the maximum for dust suppression or compaction efforts. There is no plan for irrigation of the site so the water usage after construction should be zero.

b. Identify the likely sources of water from existing entitlements for construction and subsequent operational activities including irrigation activities associated with restoration.

RESPONSE

See response to question section 3.6 g

5.0 CUMULATIVE IMPACTS

a. Provide a figure illustrating where the cumulative projects are in proximity to the proposed project.

RESPONSE

Please refer to attachment PEA 5.0.

b. Provide more detail on the status of the bottling plant with respect to permitting, as well as environmental impacts.

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RESPONSE

The bottling plant is not part of the Proposed Project. The construction of the Proposed Project is clearly independent of Crystal Geyser's planned upgrade to the bottling plant. The projects have different proponents, serve different purposes, and the Proposed Project can be implemented irrespective of whether the upgrade to the bottling plant occurs. With respect to any cumulative impact analysis performed with respect to the Proposed Project, to the best of PacifiCorp's knowledge, there have been no permit applications filed with Shasta County or the City of Mt. Shasta with respect to the bottling plant.

APPENDIX B: BIOLOGICAL RESOURCES TECHNICAL REPORT

1.2.2 Regulatory Framework

a. Page 8, California Endangered Species Act. Since Swainson's hawk is not listed in the PEA or Appendix B as a special-status species that potentially occurs on or near the project, please indicate why this species was not discussed in the regulatory framework.

RESPONSE

Company granted extension by Commission until February 8, 2016.

2.1 Approach to Data Collection

a. Page 11. In the first paragraph, it is unclear what the "biological survey area" (BSA) actually encompasses. For example, the author describes the BSA as including "the overall site," but then describes the BSA as being that area "approximately 250 feet from the ROW centerline..." It is unclear as to what "centerline" the author is referring and how far out from all areas of proposed development the BSA actually includes. Provide a more detailed description of the BSA for all proposed development/ground disturbance areas.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Page 11. The first paragraph also defines "Project area" as "the area directly affected by the proposed construction…" However, the term "Project area" seems to apply to a more regional context in many of the species discussions later on. Please define "Project area" and consistently use this term throughout the document.

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Page 11. In the last paragraph, it is stated that "biologists reviewed records of known occurrences to identify special-status species that may occur within the BSA…" Identify which records were reviewed or refer to records/databases discussed further in Section 2.2 if these are the sources that were reviewed.

RESPONSE

Company granted extension by Commission until February 8, 2016.

2.3 Field Survey

a. Provide more detail as to what was included, and meant by, a "reconnaissance-level" survey (e.g., in addition to vegetation mapping, it is assumed that the surveys also characterized the potential of on-site habitats to support various special-status species known to occur in the region/vicinity).

RESPONSE

Company granted extension by Commission until February 8, 2016.

3.1 Vegetation Community Descriptions

a. In Figures 3a and 3b, "creek" is depicted (and listed in the legend) as occurring within the BSA. However, creek habitat is not discussed as a habitat type within this section nor is it listed in Table 1. Describe and characterize any creeks passing through the BSA, or any other open water aquatic habitat occurring within the BSA.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

3.2 Special-Status Plant Species

a. Page 18. The first paragraph states that special-status plant species were determined by the literature review to occur within the BSA. Provide references and sources that were reviewed to make this conclusion.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Page 18. The third paragraph discusses the levels of potential (high, moderate, low) for special-status plant occurrence. Provide a general description of the criteria used to make these determinations.

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Page 18. The third paragraph discusses the number of plants with potential to occur within the BSA versus those with potential of occurring within the "Project area." Per an earlier comment above regarding the BSA, the reader is unclear as to the boundaries of the BSA and why the author is differentiating between occurrence within the Project area and BSA if ultimately these areas are fairly small in area. Of note, the author states here (and also in Section 3.2 regarding special-status wildlife) that the "BSA provides habitat that could support special-status species; however, the Project Area provides much of the same suitable habitat to a lesser degree that could support special-status species." If the BSA ultimately includes that area in which both direct and indirect impacts could occur, and particularly since no focused presence/absence surveys were conducted for special-status plants at this time. Please provide a revised discussion that addresses potential occurrence within the BSA, of which the much smaller "Project

area" is a component. This comment also applies to the special-status wildlife discussion (Section 3.4) as well.

RESPONSE

Company granted extension by Commission until February 8, 2016.

3.3 Non-Native Plant Species

a. Please include an explanation as to the reason non-native plant species were inventoried.

RESPONSE

Company granted extension by Commission until February 8, 2016.

Table 2 Special-Status Plant Species

b. Per previous comments regarding the BSA, not knowing exactly the boundaries of the BSA, and questions concerning differentiating between occurrence predictions in the BSA versus the "Project area," this table is confusing. The title addresses potential to occur within the BSA; however, the table includes a column for both the Project Area and BSA. Also, for all species in the table, there is at least some potential for occurrence in both the Project Area and BSA, or the species is assumed to be absent in both the Project Area and the BSA. Again, if the boundary difference between the Project Area and the BSA is relatively small, we are not sure it makes sense to differentiate and suggest limiting the discussion to the BSA area only, which is inclusive of the Project Area.

RESPONSE

Company granted extension by Commission until February 8, 2016.

3.4 Special-Status Wildlife Species

a. Same comments as above in Section 3.2 regarding literature review, criteria used to determine occurrence level, and potential for occurrence in the BSA versus the Project Area. In particular, all the "potential to occur" conclusions for each species is with

respect to the Project Area, which has been previously defined (Section 2.2) as the "disturbance footprint." For this project, the disturbance footprint is very small, especially in areas such as new poles, lines, etc. However, the discussion for many of the wildlife species includes phrases such as "the XXX has not been recorded in the Project area since 19XX"; "project area" here implies a much larger area (project "vicinity"?; "region"?) than the disturbance footprint. To provide more clarity with respect to occurrence conclusions, please clarify whether or not suitable habitat actually occurs within the project footprint or BSA; and if a species truly has a potential to occur, define the type of occurrence (foraging, nesting, wintering, migration, etc.) as the type of occurrence directly affects the significance of any direct/indirect impacts. The focus of the occurrence discussion should be whether or not the species has potential to occur within the areas to be directly or indirectly impacted; it is assumed that if these species are addressed in this document, they are known to occur in the project "vicinity" or "region." Lastly, for many species, the text states that specific habitat requirements for the species does not occur, yet the conclusion for potential occurrence is still "low" or even "moderate." Please reevaluate these conclusions in light of the above standard described above or provide more specific evidence as to why potential occurrences are described as low or moderate.

RESPONSE

Company granted extension by Commission until February 8, 2016.

b. Page 40, Sierra Nevada Mountain Beaver. Since the only record for this species in the region is over 115 years old, and because it requires "ample surface water" (as stated by the author), please reevaluate the potential to occur or provide more detailed evidence supporting the current designation of "moderate".

RESPONSE

Company granted extension by Commission until February 8, 2016.

c. Page 41, Pacific Tailed Frog. The text describes the habitat for this species as "clear, cold, fast-flowing, rocky streams in areas dominated by old-growth Douglas-fir, pine, spruce, hemlock, redwood…" This habitat type is not noted in Section 3.1 as occurring within the BSA.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

d. Page 42, Western Yellow-billed Cuckoo. The text states that there is a "general lack of the complex structured riparian canopies that it requires for nesting and foraging," but concludes that there is some potential (low) for the species to occur in the Project Area. Please clarify whether the microhabitat for this species occur on site.

RESPONSE

Company granted extension by Commission until February 8, 2016.

e. Page 42, Confusion Caddisfly. The discussion states that this species requires "small, cold, first- and second-order streams"; do such streams occur within the BSA? If so, this should be noted in the discussion for this species.

RESPONSE

Company granted extension by Commission until February 8, 2016.

f. Page 42, Willow Flycatcher. Same issue as for cuckoo; if the project does not support the specific nesting/foraging habitat type needed for the species, the potential for occurrence should be absent, not "low" as indicated in this discussion.

RESPONSE

Company granted extension by Commission until February 8, 2016.

g. Page 43, Western Pond Turtle. Does open water, aquatic habitat needed for this species occur within the BSA? It is unclear in this description and in Figures 3a and 3b if such habitat occurs.

RESPONSE

Company granted extension by Commission until February 8, 2016.

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h. Page 43, American Peregrine Falcon. This species is highly unlikely to nest within the BSA or immediate vicinity. Please confirm whether there is evidence the contrary or confirm that this species is likely to occur as a migrant or irregular visitor to the area.

RESPONSE

Company granted extension by Commission until February 8, 2016.

i. Page 44, California Gull. Given the description of nesting habitat provided for this species, the potential for nesting with the Project area is essentially non-existent, not "low."

RESPONSE

j. Company granted extension by Commission until February 8, 2016.Page 45, Pacific Marten. Given the habitat requirements of this species described in the text ("structurally complex," "different-aged stands, particularly old-growth conifers," "sensitive to human disturbance, especially habitat fragmentation"), please provide supporting evidence as to why the occurrence conclusion is "moderate," or revise the occurrence likelihood and we suggest that it would not be expected to occur at all.

RESPONSE

Company granted extension by Commission until February 8, 2016.

k. Page 45, Natural Bridge Megomphix. Since the last record for this species in the region was 1941, we suggest that the potential for this species is "not expected to occur."

RESPONSE

Company granted extension by Commission until February 8, 2016.

l. Page 45, Osprey. Please clarify the type of occurrence (foraging, nesting, flyover, etc.) for which this species has a moderate potential to occur. It is highly unlikely to nest within the BSA given the distance of the site to large water bodies, and therefore would not forage on site due to the lack of large water bodies. Could osprey possibly fly over the site?

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RESPONSE

Company granted extension by Commission until February 8, 2016.

m. Page 46, West Coast Fisher. For the same reasons as Pacific marten, please reassess the potential of this species within the BSA.

RESPONSE

Company granted extension by Commission until February 8, 2016.

n. Page 46, Cascades Frog. Given the habitat requirements described, unlikely this species has a moderate potential to occur within the BSA.

RESPONSE

Company granted extension by Commission until February 8, 2016.

o. Page 47, Sierra Nevada Red Fox. Given the habitat requirements described, unlikely this species has a potential to occur within the BSA.

RESPONSE

Company granted extension by Commission until February 8, 2016.

Table 3 Special-Status Wildlife Potential to Occur

a. Same comments as for Table 2. Also, any conclusion revisions made per above comments for each species need to be reflected in this table as well.

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RESPONSE

Company granted extension by Commission until February 8, 2016.

b. In the Status column, the federal and state status is listed as "none" for several species (e.g., great blue heron, bumble bee, caddisfly, slug) and no other status is given. In order to be considered as a "special-status species," some other status that is included in the definition of "special-status" given on page 11 needs to be provided. If the species has no status included in the list on page 11, the species should be removed from the table and in the discussion under Section 3.4.

RESPONSE

Company granted extension by Commission until February 8, 2016.

ATTACHMENT A
PEA Completeness Review

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PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
Portland, Oregon 97232

February 8, 2016

Michael Rosauer
CPUC Project Manager
CPUC Energy Division
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102
michael.rosauer@cpuc.ca.gov

Iain Fisher
Dudek
605 Third Street
Encinitas, CA 92024
ifisher@dudek.com

Re: CA A.15-11-005
CPUC Data Request 1.0 – Lassen Sub PEA Completeness Review

Please find enclosed PacifiCorp's Responses to CPUC Data Request 1.0. The Company was granted an extension on several subparts as noted within the response document sent on January 19, 2016. Those Responses to those sections are being provided today February 8, 2016.

The following attachments are provided on the enclosed disc: PEA 4.4, 4.5, 4.7, and 4.12 Revised.

If you have any questions, please call me at (503) 813-5934.

Sincerely,

Cathie Allen /pd

Cathie Allen
Manager, Regulation

ATTACHMENT A
Permit to Construct
PacifiCorp Lassen Substation Project
Proponent's Environmental Assessment (PEA) Completeness Review
Data Request 1.0

Data Request 1.0 reviews the PEA and accompanying appendices. This data request mirrors the layout of information in the PEA and the appendices. Consequently, requests may be duplicated or cross-referenced between sections, and resource specialist may be required to address data requests that originate from both the PEA and the associated appendices.

ADMINISTRATIVE

a. Provide all agency and public involvement contacts and correspondence to date, including names, addresses, phone numbers, and email addresses.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Provide the native files (word, excel, etc.) for the PEA including appendices, requested references (see below) and the Application.

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. Provide all GIS files used to analyze resources within the project area and develop figures within the PEA.

RESPONSE
Company provided response to the Commission on January 19, 2016.

1.0 PEA SUMMARY

1.7 Public Outreach Efforts

a. Provide a summary of any community's feedback that has been received to date through public outreach.

RESPONSE
Company provided response to the Commission on January 19, 2016.

ATTACHMENT A
PEA Completeness Review

2.0 PURPOSE AND NEED

a. Explain how future 115 kV operation will serve the needs of the wider system. When does PacifiCorp expect to convert the existing 69 kV system to 115 kV? Provide information on how this project fits in with WECC path criteria mentioned in the PEA.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Will the Lassen transformers have windings capable of operation at both 69 kV and 115 kV?

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. Confirm the date of service for the bottling plant. Provide a contingency table with forecasted loads in presence and absence of the bottling plant. Describe the ability of the existing system to accommodate growth other than the bottling plant.

RESPONSE
Company provided response to the Commission on January 19, 2016.

d. State whether upgrading the 4,160-volt service to 12.47 kV for improved service with less voltage fluctuations and lower power losses is a purpose of the project.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.0 PROJECT DESCRIPTION

a. Per the PEA checklist, provide GIS (or equivalent) data layers for the proposed project preliminary engineering, including estimated locations of all physical components of the proposed project as well as those related to construction. For physical components, this could include but is not limited to the existing components (e.g., ROW, substation locations, poles) as well as the proposed pole locations, transmission lines, substations, etc. For elements related to construction, include the following: proposed or likely lay-down areas, work areas at the pole sites, pull and tension sites, access roads (e.g., temporary, permanent, existing), areas where special construction methods may need to be employed (e.g., where temporary access routes are required), and areas where vegetation removal may occur, areas to be heavily graded, etc.

RESPONSE
Company provided response to the Commission on January 19, 2016.

ATTACHMENT A
PEA Completeness Review

3.1 Project Location

a. Provide an overview map showing location of detailed project component maps 3-5A through 3-5G.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Provide city and county boundary lines on overview map as well as on proposed new Lassen substation site map.

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. Provide a general description of the site (e.g., undeveloped) and site topography, including elevations, general vegetation type, etc.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.4 Proposed Project

3.4.1 Proposed New Lassen Substation)

a. The PEA states that the perimeter will be enclosed using chain-link fencing. Please describe height and treatment.

RESPONSE
Company provided response to the Commission on January 19. 2016.

b. Indicate whether the project will include landscaping. If it does, please include a conceptual landscape plan and irrigation requirements (source and quantity).

RESPONSE
Company provided response the Commission on January 19, 2016.

c. Provide an explanation and timing as to the phased build-out of the proposed substation in relation to constructing the “ultimate arrangement.”

RESPONSE
Company provided response to the Commission on January 19, 2016.

ATTACHMENT A
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d. The PEA describes that one transformer, switch gear, and a capacity bank are proposed to be installed. Please describe any other equipment or facilities, such as communications tower or control house, that would be installed.

RESPONSE
Company provided response to the Commission on January 19, 2016.

e. Provide a substation typical site plan and profile views illustrating equipment (primarily line terminals, circuit breakers and transformers, communications, control house). Provide height of major equipment.

RESPONSE
Company provided response the Commission on January 19, 2016.

f. Clarify as to whether the substation layout and site plan exhibits and profile include the initial arrangement or ultimate arrangement. In the event the site plan exhibits and profile drawing include the initial arrangement, provide exhibits with the ultimate configuration.

RESPONSE
Company provided response to the Commission on January 19, 2016.

g. Please describe lighting plan for the new substation.

RESPONSE
Company provided response to the Commission on January 19, 2016.

h. Provide a description of typical height and illustration for the three new wood poles to be used to transfer power to the new substation.

RESPONSE
Company provided response to the Commission on January 19, 2016.

i. Describe substation gate and access control.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.4.2 Transmission Line Upgrade and Reconductoring

a. Describe and provide illustrations showing the typical existing wood poles to be replaced compared to the new proposed poles proposed to accommodate 115 kV along with the distribution underbuild. Provide height of existing vs proposed and material to be used for new poles. Provide diagrams and a description of how the typical pole height,

diameter and span of the arms for the existing (Class 2 and Class 3) 69 kV transmission poles differ from the proposed new (Class 1) poles.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. The PEA states that no ROW expansion is needed for the proposed pole replacement. Describe whether an expansion in the existing ROW would be required to operate at 115 kV.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.4.3 Distribution Line Upgrade and Reconductoring

a. For overhead components, describe any pole replacements or additions. For new poles, describe and provide illustration showing wood poles to be replaced compared to the new proposed poles. Provide height and diameter of existing vs proposed poles. Provide diagrams and a description of typical height and span.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. For underground components, provide illustration of the typical duct bank. Provide the dimensions of the pre-formed concrete splice vaults that will be installed for the underground circuit.

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. The project proposes the removal of distribution currently installed under I-5 to be replaced with overhead distribution. Provide rational for removal of underground distribution with overhead.

RESPONSE
Company provided response to the Commission on January 19, 2016.

d. Indicate whether the soil excavated for open cut trench operations will be hauled off site and/or used as fill within the project limits.

RESPONSE
Company provided response to the Commission on January 19, 2016.

e. Provide typical drawing illustrating step-down transformers proposed.

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RESPONSE
Company provided response to the Commission on January 19, 2016.

f. The new overhead circuit illustrated in Figure 3-5c will require new poles along W Lake Street. Please indicate how many and what type of poles will be required.

RESPONSE
Company provided response to the Commission on January 19, 2016.

Mt. Shasta Substation Removal

a. Describe any final treatment proposed for the site once all substation equipment has been removed, including any proposed grading and restoration.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.5 RIGHT-OF-WAY REQUIREMENTS

a. Describe project land requirements (acres per square foot) for both temporary and permanent impacts for the proposed new Lassen substation, proposed transmission line upgrades, and proposed distribution line upgrades.

RESPONSE
Company provided response to the Commission on January 19, 2016.

3.6 CONSTRUCTION

a. Provide greater detail for the sequence of construction, including the number of crews that will be working their activities and their relative timing.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. The PEA states construction will generally take place 10 hours per day 5 days per week. Define work hours and days per week. Is construction proposed on weekends and/or nights? Is construction on Sunday anticipated?

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. Provide daily truck trips associated with water trucks, material deliveries, and soil hauls.

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RESPONSE
Company provided response to the Commission on January 19, 2016.

d. Tables 3-3 through 3-7 provide estimated equipment to be used during construction. Provide estimates for the duration of use (i.e., 8-hour days or hours per day). (See Section 4.4, Air Quality and Greenhouse Gas Emissions, for greater detail.)

RESPONSE
Company provided response to the Commission on January 19, 2016.

e. For temporary roads in wetlands, indicate potential location of blading for temporary access to transmission lines. Where possible, provide location and conditions under which blading would be necessary.

RESPONSE
Company provided response to the Commission on January 19, 2016.

f. Provide an estimate for water use needs during construction, including dust-control and geotechnical requirements (achieving optimum soil moisture for fill compaction). (See also Section 4.9, Hydrology and Water Quality, and Section 4.17, Utilities.)

RESPONSE
Company provided response to the Commission on January 19, 2016.

g. Identify the most likely source of water (commercial source or city water) to be used for construction-related purposes, and the most likely (i.e., closest) disposal location for construction and demolition debris and/or potentially hazardous materials.

RESPONSE
Company provided response to the Commission on January 19, 2016.

h. The appropriate method of construction-phase dewatering for the proposed substation (i.e., subgrade and foundation work) needs to be identified based on site conditions to ensure an accurate portrayal of the construction scenario.

RESPONSE
Company provided response to the Commission on January 19, 2016.

ATTACHMENT A
PEA Completeness Review

4.0 ENVIRONMENTAL IMPACT ASSESSMENT SUMMARY

4.1 Aesthetics

It should be noted in the visual analysis that when a project impacts visual resources within the viewshed of an eligible state Scenic Highway, such impacts may negatively affect the eligibility status of that road section where the changed condition occurs. This is an important message to properly inform decision-makers of the potential indirect effect of decisions in favor of the potential visual resource modification.

a. Viewpoint 6 Visual Simulation and Analysis: The increased pole height and increased number of stacked conductor wires may create greater contrast in line and color than is acknowledged by the visual analysis. A linear analysis of this changed condition should be presented in the discussion because the line parallels the scenic byway for a greater distance than depicted in the visual simulation.

RESPONSE

Scenic highway nominations are evaluated, as defined in Section II (page 2) of the Scenic Highway Guidelines (Caltrans 2008), by the presence of a "memorable landscape that showcases the natural beauty or agriculture of California", and the extent to which "existing visual intrusions do not significantly impact the scenic corridor". Visual resources located adjacent to the State eligible Volcanic Legacy Scenic Byway (I-5), including the Lassen Lane overpass and the W. Lake Street overpass, the existing radio tower associated with the California State Highway Patrol Building located on W. Jessie St., and existing distribution and transmission structures already within the viewshed in the Project area do not meet the criteria defined in the Scenic Highway Guidelines (Caltrans 2008) and detract from the scenic resources of the corridor. Therefore, the presence of additional and new conductors and replacement distribution or transmission structures that are largely screened or very briefly visible, would not adversely affect the current scenic byway eligibility status of the highway.

The transmission line component of the Project parallels the I-5 at a distance of approximately 1,250 feet (0.25 miles) on the north end, to 550 feet (0.1 miles) on the south end of the 115 kV transmission line Project component. Approaching from the south in the north-bound lane of the highway as depicted in Viewpoint 6, the transmission line does not become visible from the eligible state scenic byway, during any season, until past the W. Lake Street overpass due to roadside intervening evergreen/coniferous vegetation located between the Project and the I-5 right-of-way, and topography created primarily by the elevated roadway. North of the W. Lake Street overpass, the view of the transmission line is broken up by vegetation, and continuous views of the Project occur only very briefly. Intermittent views of the transmission line component occur for about 34 seconds at 65 mph from where the line would begin to be visible (north of the W. Lake Street overpass). Similarly, south-bound travelers would

potentially view the Project only between the W. Lake Street overpass from just south of the Lassen Lane Bridge intermittently primarily due to intervening vegetation.

As shown in the photo simulation from Viewpoint 6, additional conductor wires and taller transmission line structures would be visible from I-5, but this simulation shows the visual condition during a brief moment of unimpeded viewing. Also as shown in the photo simulations, the existing structures and conductors are subordinate within the landscape, and are backdropped and somewhat visually absorbed by vegetation and coniferous forest. The viewshed from the eligible scenic byway includes the presence of existing transmission (and distribution) poles and conductor wires that are being rebuilt that are similar in form, line color and texture as the existing infrastructure that are currently visual intrusion along the scenic corridor. Therefore, the Project would incrementally change the developed elements of the I-5 viewshed by creating moderate contrasts.

Views of Mt. Shasta occur for an extended duration for highway travelers, and these views are in an elevated orientation and direction within the viewshed compared with the orientation and direction to views of the transmission line component of the Project. Due to the position of the Project relative to views of Mt. Shasta, the 115 kV component of the Project would not be seen in the same viewshed for south-bound travelers. Simultaneous views of the 115 kV Project component and Mt. Shasta would only potentially occur for north-bound travelers. The change created by the 115 kV transmission line would be moderate and impacts low due to Project distance. For north-bound viewers, Mt. Shasta and Black Butte provides focal points where attention is drawn from the general field of view toward the transmission line.

b. Viewpoint 10 Visual Simulation and Analysis: The overhead wires in the visual simulation should be presented and analyzed in the appropriate context for motorists and passengers on the Volcanic Legacy Scenic Byway. The visual simulation presents a view that represents a static condition that is inconsistent with the dynamic experience and perception of viewers.
    1. Revise the visual simulation to incorporate a broader view that represents the ability of viewers to pan across an open landscape to view and form perceptions of visual resources; the expanded view is likely to include one or more poles of the proposed poles.

       RESPONSE
       Viewpoint 10 photo simulation will be revised to include a wider viewing angle, the new conductors, and rebuilt distribution structure #162400 (located on the northeast side of the highway) and #161406 (located on the southwest side of the highway).

       Company granted extension by Commission until February 22, 2016.

ATTACHMENT A
PEA Completeness Review

2. Include a linear analysis that includes a description of the experience of the motorist, view duration, and contrast level with the surroundings.

RESPONSE

Where the existing and new distribution components are or would be visible in the viewshed from I-5, they are generally oriented perpendicularly to the highway. Approaching the Project study area from the south along the north-bound Volcanic Legacy Scenic Byway (I-5), views of the rebuilt transmission line portion and the distribution portion of the Project would be screened during all seasons by intervening vegetation located between the Project and the I-5 right-of-way in the southern section of the study area. Black Butte and Mount Shasta are dominant scenic features within the viewshed from the southern portion of the study area along most of this section of the corridor, with Black Butte being enframed by vegetation as a focal point for travelers from just north of the Exit 737 overpass (S. Mt. Shasta Boulevard) located about one mile south of the Project. Mount Shasta is intermittently viewed to the northeast (right) for these travelers throughout this corridor beginning many miles south of the study area along the scenic highway. As north-bound travelers approach Viewpoint 10, the W. Lake Street overpass is crossed, interrupting the view of Black Butte briefly. Immediately after crossing the overpass, the new distribution line crossing depicted in the Viewpoint 10 photo simulation is approached and perpendicularly crossed. The new distribution conductors intersect with the view of Black Butte just prior to and as they are crossed. The rebuilt distribution structure located on the southwest side of the highway (to the left) would be visible where moderate structure contrasts would be viewed in the immediate foreground.

The structure located on the northeast side of I-5 would be screened from view by trees and vegetation until the viewer is just south of the crossing location, where the view opens up providing generally unimpeded visibility of the structure. From the first view just south of the W. Lake Street overpass and at a highway speed of 65 mile per hour (mph), the total time the conductor wires and/or distribution structures would be visible would be about 11 seconds. The conductors would have the highest visibility, provide the strongest contrasts from the existing condition, and would be visible for the longest duration compared to the replacement distribution structures. Given the presence of existing distribution structures that already impose a moderate level of visual intrusion, the partial screening provided primarily by vegetation, the duration of Project views, and the overall moderate level of visual contrast created by the installation of the overhead conductor wire and rebuilt structures, the visual impacts would be less than significant for north-bound viewers as depicted in Viewpoint 10.

Impacts from the south-bound direction would be lower than those from the north-bound direction. Black Butte is behind and Mount Shasta is more than 90 degrees to the left off the travel direction viewing angle. In the vicinity of Viewpoint 10, visibility of the rebuilt structures on the southwest side of the highway (to the right) would also be higher than those on the northeast side of the highway (to the left). Structures on the northeast side of the highway would be completely screened from view during all seasons by intervening evergreen trees until the viewer is nearly perpendicular with the crossing. Again, the highest visibility would occur for the conductors crossing the highway. From the Lassen Road overpass, where the new distribution line crossing first becomes noticeable in the viewshed, the conductor wires would be visible for approximately 30 seconds at 65 mph. The viewing duration of the conductors would be longer than those from the north-bound direction, but the wires would be seen in the context of the W. Lake Street overpass, which also provides a strong elevated, horizontal feature crossing within the viewshed of the I-5 traveler. In addition, there is no strong landscape focal point feature as there is from the north-bound direction (Black Butte).

Reference:
California Department of Transportation (Caltrans). 2008 (October). Landscape Architecture Program Division of Design. Scenic Highway Guidelines.

4.3 Agricultural and Forestry Resources

a. Identify allowable forestry uses within the zoning and land use designations applicable to the project area. Section 4.10 states that *commercial* agricultural activities are allowable uses in the Rural Residential Agricultural zone district. This is inconsistent with the statement under this impact discussion which states that zoning allows for only non-commercial agricultural uses.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Identify whether lands meeting the definition of forest land (as defined by California Public Resources Code, Section 12220(g)) occur within the project area. Impacts to forest land from implementation of the proposed project should be quantified. Identify whether a permit and compliance with the Z'Berg-Nejedly Forest Practices Act would be required for impacts associated with conversion of forest land.

RESPONSE
Company provided response to the Commission on January 19, 2016.

ATTACHMENT A
PEA Completeness Review

c. The extent of Farmland of Local Importance in the project area should be identified and impacts to Farmland of Local Importance should be disclosed and quantified.

RESPONSE
Company provided response to the Commission on January 19, 2016.

4.4 Air Quality and Greenhouse Gas Emissions

For responses in this section refer to the following attachments:

- PEA 4.4 -1 – Lassen Substation Annual Construction
- PEA 4.4 -2 – Section 4.4 Air Quality and Greenhouse Gas Emissions

a. Page 36 of the PEA states: "Dependent upon final design, some temporary access roads may be constructed as part of the Project." Please indicate whether construction of temporary access roads was included in the construction emissions modeling.

RESPONSE
Construction of temporary access roads has been included in the construction emissions modeling.

b. Page 45 of the PEA, Section 3.6.5, Construction Workforce and Equipment, includes Tables 3-3, 3-4, and 3-5. Table 4.4-3 on page 93 of the PEA appears to omit emissions associated with the following construction phases listed in Table 3-4, Substation Construction – Estimated Personnel and Equipment:

1. Material Haul
2. Access Road Construction
3. Testing and Energization
4. Fencing
5. Marshalling Yard
6. Right-of-Way Restoration and Cleanup

Please confirm all construction phases in Section 3.6.5 are accounted for in the emissions modeling shown in Tables 4.4-3.

RESPONSE
Due to the delay in the Project schedule and changes in start and end dates for construction, the entire construction scenario has been re-run using the CalEEMod Model. All of the construction phases identified in Section 3.6.5 have been accounted for within the CalEEMod model runs.

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c. Page 48 of the PEA, Table 3-7: Does this list of construction equipment differ from the equipment fleet shown in Tables 3-3, 3-4, and 3-5? Confirm all construction equipment listed in Section 3.6.5 has been accounted for in the emissions modeling shown in Tables 4.4-3 and 4.4-4.

RESPONSE
Due to the delay in the project schedule and changes in start and end dates for construction, the entire construction scenario has been re-run using the CalEEMod Model. All of the construction equipment identified in Section 3.6.5 have been accounted for within the CalEEMod model runs.

d. Confirm (a) the quantity of water required for dust control, (b) where water for dust control would be coming from, and (c) if water import is considered in construction emission estimates. Additionally, confirm if on-site water truck activity is accounted for in construction emission estimates.

RESPONSE
Typically PacifiCorp does not designate the actual location to obtain water. Generally, however, contractors will find the nearest city water source and contract with the city water department to purchase the water needed for construction.

On-site water truck activity has been included in the construction emission estimates, with the water trucks conservatively represented as off-highway trucks with a horsepower rating of 250 horsepower.

e. Confirm whether import or export of soil or other materials would be required that are not accounted for in the emissions estimates. If import or export of soil or other materials would be required during construction, please indicate the origin of import or disposal destination of export and travel distance for haul trucks.

RESPONSE
It is estimated that no additional equipment or vehicle usage would be required specifically for import or export of soil or other materials required for the construction of the substation and transmission/distribution lines beyond the equipment estimates listed in Tables 3-3 through 3-7.

f. Page 49 of the PEA includes Section 3.6.6 and Table 3-8 regarding the construction schedule. Page 49 states: "The construction schedule is expected to last approximately six to 12 months…" Table 3-8 indicates a 12-month construction schedule. Table 4.4-3, Maximum Daily Construction Emissions, and Table 4.4-4, Total Construction GHG Emissions, do not indicate what timeline was used. Theoretically, a 6-month timeline would result in higher *daily* emissions if the same 12-month construction activity would occur over a shorter period of time. To identify the highest likely daily emissions, the most conservative construction

scenario should be analyzed in the PEA. Confirm that the tables referenced above reflect a 6-month construction schedule, and if not please update emissions to reflect a 6-month schedule. Further, provide all modeling output files as an appendix.

RESPONSE
A 12-month construction schedule has been assumed given the requirements of construction for both the substation and the transmission/distribution lines. The maximum daily construction scenario is assumed to occur when both the transmission/distribution lines and the substation are under construction. The equipment that would be used would be the same as shown in Table 3.6-5. Because the equipment would be the same and the simultaneous use would be the same, the analysis provides an estimate of the maximum daily construction emissions for the schedule as it is currently understood.

g. Page 49 of the PEA, Table 3-8. Please indicate the approximate weeks for each phase of construction. For example, "Acquisition of required permits" October 2016–December 2016: Would this time duration be a full 12 weeks or 8 weeks (October 1, 2016–December 1, 2016)? The duration of each phase is not clear.

RESPONSE
Information regarding the specific weeks for each phase of construction are not known at this time. Therefore, estimates were made in the air quality emissions analysis, and conservative assumptions regarding construction overlap were made.

h. Page 49 of the PEA, Section 3.6.6: Please indicate whether construction would occur 5 or 6 days per week, and approximately how many hours per day. What were the daily and weekly construction assumptions that are reflected in the emissions estimates shown in Table 4.4-3 and Table 4.4-4?

RESPONSE
Construction would occur 5 days per week, 10 hours per day. These parameters were used in the updated CalEEMod Modeling analysis.

i. Page 84 of PEA, Air Quality threshold "b": Recommend changing impact designation from "No Impact" to "Less Than Significant Impact." A "No Impact" designation indicates no emissions would be generated from construction or operation of the project; however, because moderate emissions would be generated both during construction and operation of the project, a minor impact would occur.

RESPONSE
The impact designation has been changed.

j. Page 86, Table 4.4-1: Please ensure that analysis reflects the updated federal 8-hour O_3 standard to reflect the newly adopted standard of 0.070 (137 micrograms per cubic meter).

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RESPONSE
The newly adopted federal standard of 0.070 has been included in the standards table and analysis.

k. Page 91 of the PEA states that NO_2, SO_2, and CO are not measured in the Northeast Plateau Air Basin. Is this because background concentrations are low enough that monitoring is no longer warranted?

RESPONSE
These pollutants are not considered an air quality problem in the Northeast Plateau. A statement to this effect has been added.

l. Page 91, Table 4.4-2 is entitled "Representative Air Quality Date for the Lassen Substation Project Area (2006-2010)"; however, data for years 2009 through 2013 are shown. Additionally, 2014 data from ARB is available. Recommend including 2014 data in this table.

RESPONSE
This table has been corrected.

m. Page 92 of the PEA, threshold "a" provides the stationary source thresholds adopted by the SCAPCD, including 2,500 pounds per day for CO and 250 pounds per day for all other criteria air pollutants. Provide a citation for the threshold criteria.

RESPONSE
Text has been added to indicate that the thresholds are based on Siskiyou County Construction Permit Standards for Criteria Pollutants, Rule 6.1 B.1.

n. Page 92 of the PEA under threshold "b" states: "Replacement of transmission poles would occur simultaneously with the substation construction. To evaluate emissions associated with construction, it was assumed that the construction phases would occur sequentially rather than simultaneously." If emissions are evaluated based on sequential construction phases rather than simultaneous or overlapping construction phases, daily criteria pollutant emissions as shown in Table 4.4-3 are underestimated. Table 4.4-3 can show emissions by individual phase; however, a line item in Table 4.4-3 should be included to disclose the maximum worst-case daily emissions, which account for overlapping construction phases.

RESPONSE
The analysis has been rerun using the CalEEMod Model, and the maximum daily emissions for both 2016 and 2017 have been provided in the table.

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o. For emissions shown in Table 4.4-3, please indicate how many acres of site preparation or grading was assumed for all grading phases, access road construction, and other phases involving earth-moving activities.

RESPONSE
A note has been added to the table to indicate the total amount of acreage of site preparation and grading for grading phases and access road construction.

p. Page 92 of the PEA under threshold "b" states that the EMFAC 2007 model and OFFROAD 2007 model were used to estimate emissions from construction activity. The most recent approved version of the EMFAC model is EMFAC2011.[1] ARB released the updated EMFAC2014 model in November 2014. According to ARB, "ARB has recently submitted EMFAC2014 to USEPA for its review. USEPA approval is expected by the end of 2015. USEPA will provide a transition period during which either version may be used. Therefore, in anticipation of USEPA approval, use of EMFAC2014 before the end of the year is appropriate."[2] The OFFROAD2011 model is the most recent model to estimate emissions from in-use off-road construction equipment.[3] These updated model versions include most recent emission factors for motor vehicles and construction equipment fleets. Emission estimates should be updated to reflect emission factors included in the updated models for accuracy. CalEEMod Version 2013.2.2 may also be used to estimate motor vehicle and construction emissions, available at: http://caleemod.com/.

RESPONSE
As discussed above, the analysis was rerun using the CalEEMod Model.

q. Page 93 of the PEA states: "Emissions for construction equipment were obtained from published emission estimates for the South Coast Air Quality Management District (SCAQMD 2011), which were considered to be representative of emissions from construction equipment within the state of California. Emissions were based on emission factors from 2012." Please explain the basis for the use of a 2012 year when the project would be constructed in 2016. Additionally, if emission factors for the SCAPCD are not available, state-wide emission factors should be used to represent state-wide factors, as opposed to using emission factors based on a Southern California air district, which may vary from Northern California emission factors.

RESPONSE

1 ARB (Air Resources Board). 2015. EMFAC Web Database. EMFAC 2011 and EMFAC 2014. http://www.arb.ca.gov/emfac/
2 ARB. 2015. EMFAC Web Database. EMFAC 2011 and EMFAC 2014. http://www.arb.ca.gov/emfac/
3 ARB. 2015. Mobile Source Emissions Inventory – Categories. Off-Road Motor Vehicles, Off-Road Diesel Equipment. http://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles

As discussed above, the analysis was rerun using the CalEEMod Model.

r. Page 96 of the PEA, threshold "d" states no impact would occur to sensitive receptors; however, page 189 of the PEA states scattered residences would occur between 70 feet to 580 feet from various portions of the project and associated transmission alignment. Although emissions would be below threshold, please further substantiate why "no impact" would occur to sensitive receptors if residences could be located as close as 70 feet to construction activities.

RESPONSE
The discussion has been modified to indicate that because construction is short term and temporary no impact would occur.

s. No mention of a construction-related or operational emergency diesel generator is included in Section 3.0, Project Description, or Section 4.4, Air Quality and Greenhouse Gas Emissions. Confirm that a diesel generator would not be required during construction or for back-up power during project operations. If a generator would be required, please update the emission estimates in Table 4.4-3 (criteria pollutant emissions) and Table 4.4-4 (GHG emissions) to reflect generator use.

RESPONSE
An emergency generator would not be required.

t. SF_6 emissions were not included as part of the project's GHG analysis. The project would involve the construction of a substation, including circuit breakers and switchgear, which have the potential to emit SF_6 emissions in the event of a leak. Due to the high global warming potential of SF_6, such emissions should be estimated and included as part of the operational GHG emission estimates. If the proposed project would not include SF_6-containing materials, please substantiate that fact in the GHG analysis.

RESPONSE
The only piece of equipment which will have SF6 gas is a small transrupter. This device has three separate sections containing no more than 4 lbs of SF6 gas each. Transrupters are very unlikely to release or leak SF6 gas and highly unlikely to ever release gas from all three containers at one time. Therefore PacifiCorp does not believe that consideration of SF6 emissions in the project's GHG analysis is warranted.

4.5 Biological Resources

For responses in this section refer to the following attachments:

- PEA 4.5-1 – Section 4.5 Biological Resources
- PEA 4.5 -2 –Revised Lassen Biological Resource Habitat Assessment

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4.5.1 Methodology

a. The discussion of the defined project study area does not appear to be consistent with that described in Appendix B (Section 2.1, Approach to Data Collection). Furthermore, the PEA should clearly differentiate between the "Project study area" and the "Project area" as both terms are used commonly throughout the document and it is unclear if these terms are meant to be interchangeable. In particular, "Project area" does not appear to be defined anywhere in the document. In Appendix B, "project area" is defined as "the area directly affected by the proposed construction…" Please reconcile.

RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B addressing these comments would be provided by February 8, 2016. The text has been amended to be consistent with Appendix B.

b. Table 4.5-1, beginning on page 109. The title addresses potential to occur within the "Project Area"; however, the same table in Appendix B addresses the potential to occur within the "BSA," with columns for both the Project Area and BSA. Please reconcile these inconsistencies.

RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B addressing these comments would be provided by February 8, 2016. There is no inconsistency between Tabl.4.5-1 of the PEA and the same table in Appendix B. The PEA is focused specifically on the Project Area, while the Habitat Assessment contained in Appendix B considers both the BSA (Biological Study Area) and the Project Area, which exists within the greater BSA. If the alignment should be adjusted for any reason in the future, the assessment of the larger area precludes the need for additional visits to the site, as potential biological resources have already been determined.

4.5.2 Regulatory Framework

a. This section appears to contain only federal regulations and the Siskiyou County General Plan. Provide applicable state regulations as well.

RESPONSE
Company provided response to the Commission on January 19, 2016.

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Existing Conditions

a. Page 103, Special-Status Plants. The first sentence states that "66 special-status plants were identified as potentially occurring within the Project area." Appendix B states that these 66 plants were determined to "potentially occur with the BSA." Please reconcile this discrepancy. See comment above regarding the definition of "Project area." Also, for all species accounts, some of the accounts note what type of suitable habitat occurs for the species to justify a potential for occurrence conclusion (e.g., "the Project area contains suitable habitat in the form of volcanic soils and meadows…") while other accounts simply state that suitable habitat occurs. Please include more detail in these latter accounts as to the suitability of habitat that occurs. Lastly, for many accounts, the description of suitable habitat, or lack thereof, is not consistent with the potential of occurrence conclusion (e.g., for Siskiyou paintbrush, the account concludes that "the area lacks the serpentine soils to which this species prefers," but then concludes that the potential for the species to occur in the Project area is "moderate"). Please reconcile these discrepancies. Also, Section 4.5.3 of the PEA notes that ground disturbance for the Project "would occur in areas already disturbed by residential activity, infrastructure, or cattle grazing." The species accounts should ultimately determine if suitable habitat occurs within proposed direct and indirect impact areas in order to determine significance of impacts. Please include in these accounts whether or not suitable habitat occurs within the proposed disturbance areas. If this level of detail was not determined during the biological surveys, this information needs to be disclosed to the reader.

RESPONSE
Company supplements its initial response to the Commission on January 19, 2016, as follows:

The PEA refers specifically to the Project Area and the Habitat Assessment refers to both the Project Area and the BSA. The text has been amended in the Habitat Assessment to add clarity.

In response to the comment that presents the example of a species that prefers serpentine soils, other factors have been taken into account when making the determination of "moderate" potential to occur. In this example, the species is not restricted to, but "prefers" serpentine soil, so the potential for that species to occur increases in the presence of these soils, and decreases, but not to the point of absence, without these soils. Although some species can withstand a certain level of disturbance, the level of detail of disturbance was not noted in the habitat assessment phase of the surveys, as noted in the comment. Where apparent inconsistency in potential to occur determinations was noted, other factors were taken into account. Other specifics for habitat suitability have been included in the revised Appendix B of the PEA

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b. Page 117, Special-Status Wildlife. Similar to the plant species accounts, the description of suitable habitat, or lack thereof, is not consistent with the potential for occurrence conclusion. Please reconcile these discrepancies.

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. Table 4.5-2, beginning on page 125. In the Status column, the federal and state status is listed as "none" for several species (e.g., great blue heron, bumble bee, caddisfly, slug) and no other status is given. In order to be considered as a "special-status species," some other status that is included in the definition of "special-status" given on page 102 needs to be provided. If the species has no status included in the list on page 102, the species should be removed from the table and in the species accounts discussion. Also, any occurrence conclusion changes made in the species accounts should similarly be reflected in this table.

RESPONSE
Company supplements its initial response to the Commission on January 19, 2016, as follows:
The status column for these species has been revised to show that they are CNNDB tracked species.

d. Please provide a discussion of Existing Conditions regarding the existence of both sensitive vegetation communities as well as wildlife movement corridors. These resources are addressed in the impacts section but not discussed in the Existing Conditions section.

RESPONSE
Company provided response to the Commission on January 19, 2016.

Applicant Proposed Measures

APM BIO-1: Please include that surveys will be conducted during the appropriate blooming period for plants and the appropriate breeding season for wildlife. Similar to plants, APM BIO-1 also needs to discuss all the steps that would be taken if special-status wildlife species are found during the pre-construction surveys since surveys in and of themselves are not mitigation for potentially significant impacts. In particular, several state- and/or federally listed species have been identified as potentially occurring within the project site. Impacts to these species would also potentially trigger the need for a state or federal take permit. Also, this measure conflicts with APM BIO-6 to some degree in that APM BIO-6 states that if it is determined that project activities may affect special-status species, "the monitor shall coordinate with USFWS and/or CDFW regarding appropriate avoidance measures." APM BIO-1 states that if special-status

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plants cannot be avoided, "relocation efforts will be implemented" but does not note any coordination with resource agencies prior to relocation. Please reconcile.

RESPONSE
Company provided response to the Commission on January 19, 2016.

Environmental Impacts Updated Responses

a. Page 131, Sensitive Plants. The intent regarding the overall suitability of habitat for special-status plants is unclear and appears conflicting in the second sentence. Please revise.

   RESPONSE
   Company provided an initial response to the Commission on January 19, 2016. The sentence on page 131 has been revised.

b. Page 131, Bats. Appendix B notes that the Project area (defined in Appendix B as the disturbance footprint) contains suitable roosting habitat for western mastiff bat. Please address how impacts to occupied roosting habitat, if found during surveys, will be mitigated. Note also that the last sentence in this paragraph implies that with implementation of pre-construction surveys, "no additional mitigation would be required." Surveys in and of themselves do not legally serve as mitigation for potentially significant impacts. Please revise this paragraph.

   RESPONSE
   Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B would be provided by February 8, 2016. APM BIO-1 has been revised.

c. Page 132, Raptors. Please revise the potential to occur conclusions for the four raptors addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. Two of the species mentioned here are primarily fish eaters so it is unlikely that vegetation removal in the project area will reduce prey for these two species, as stated in this paragraph.

   RESPONSE
   Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B would be provided by February 8, 2016. The discussion of raptors on page 132 has been revised.

d. Page 132, Migratory and Nesting Birds. Please revise the potential to occur conclusions for the four raptors addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that any of the four bird species addressed here would nest within or adjacent to proposed disturbance areas.

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RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B would be provided on February 8, 2016. The discussion of migratory and nesting birds on page 132 has been revised.

e. Page 132, Mammals. Please revise the potential to occur conclusions for the three mammals addressed in this section based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that any of these three species addressed here would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting revised Appendix B would be provided on February 8, 2016. The discussion of migratory and nesting birds on page 132 has been revised.

f. Page 132, Reptiles. Please revise the potential to occur conclusions for the western pond turtle based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that this species would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting the revised Appendix B would be provided on February 8, 2016. The discussion of reptiles on page 132 has been revised.

g. Page 133, Amphibians. Please revise the potential to occur conclusions for the three amphibian species addressed here based on earlier comments to species accounts regarding occurrence conclusions. It is highly unlikely that all of these species would occur within or immediately adjacent to proposed disturbance areas.

RESPONSE
Company provided an initial response to the Commission on January 19, 2016, noting revised Appendix B would be provided on February 8, 2016. The discussion of reptiles on page 132 has been revised.

h. Page 133, (b). The discussion provided does not clearly address potential adverse effects on riparian habitat or other (non-wetland) sensitive vegetation communities. Since riparian scrub is the only non-wetland sensitive vegetation community identified in Appendix B as occurring within the project site, the discussion here should focus on potential impacts on only that community and measures to mitigate these impacts.

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RESPONSE
Company provided response to the Commission on January 19, 2016.

i. Page 134, (c). While most of the APMs mentioned in this section "minimize" impacts to wetlands, some permanent and temporary impacts, as noted, will occur to wetlands under federal jurisdiction. Implementation of APM BIO-6 (monitors primarily for special-status species) and APM BIO-8 (which does not really address impacts to federally protected wetlands) would not mitigate any identified significant impacts in and of themselves. Therefore, although the total amount of wetlands to be permanently impacted is likely to be small, please provide supporting analysis that demonstrates that the quantity of disturbance would not rise to the level of being "substantial" and, therefore, "not significant." Further, the temporary and permanent loss of even a small amount of federally protected wetlands are subject to the regulatory authority of the ACOE. Even if impacts are not "significant" a Section 404 permit may need to be obtained. Please indicate whether PacifiCorp intend to consult with the ACOE on the need to obtain a permit.

RESPONSE
Company provided response to the Commission on January 19, 2016.

4.7 Geology and Soils

a. PEA Table 4.7-1: Please include acreages within the Project's footprint for each soil unit.

RESPONSE
Table 4.7-1 has been updated to include acreages within the Project's footprint. See PEA 4.7 Attachments.

b. An updated geotechnical report is required to support the analysis in the CEQA document. The geographic scope of the geotechnical report (Appendix E) does not reflect the full scope of the project and is described as the first phase of a two phase investigation. Please provide a preliminary geotechnical evaluation of any soil constraints that could be encountered along the transmission and distribution corridors, and at least initial recommendations regarding pole replacement, trenching, and other activities related to installation of underground distribution components. The three borings appear to have been completed to the west of the proposed substation structures, chosen based on an outdated site plan, and did not achieve the desired depths due to boulders (compare PEA Figure 3-4 with Appendix E Figure A-2). A complete analysis of liquefaction potential of soils was deferred to "the second phase of investigation."

RESPONSE

PacifiCorp takes geotechnical considerations into account during the final engineering stage. As stated in the PEA, additional design-level geotechnical investigation will be performed within the Project boundary prior to final design plans and construction. Design-level geotechnical studies would be performed to evaluate the potential for, and effects of, strong ground shaking, liquefaction, and expansion potential. Project facilities would be designed and constructed in accordance with current codes.

The following APM will be included in the Project to ensure that the recommendations of the design-level geotechnical report are incorporated into the final design plans.

> 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.

With implementation of this APM, the impact from seismic-related ground failure, including liquefaction, would be considered less than significant.

c. The appropriate method of construction-phase dewatering for the proposed substation needs to be determined based on site conditions. Please provide a description of the intended method to ensure an accurate portrayal of the construction scenario. Appendix E raises concerns regarding the high groundwater table and presents several options for addressing it. Please identify the method that will be used and the construction implications.

RESPONSE

PacifiCorp generally takes water impacts during construction into account in their design. If the expectation is that de-watering will be an effective method of keeping an excavation site free of significant standing water and allow construction to occur, then the construction contractor is allowed to pump water from the excavation through a silt bag and discharge it offsite provided they have obtained any discharge permits as appropriate.

If the expectation is that de-watering will not effectively keep up with infiltration rates then the design for foundations will include either the installation of geo-piers or the installation of drilled piers that can be constructed by pumping concrete into the pier drilled holes without actual de-watering being required.

4.8 Hazards and Hazardous Materials

a. The 2015 Phase I ESA covers the majority of the Project site; however, two areas shown on Figure 3-2 of the PEA are not covered by the Phase I ESA. These areas are the northern-most proposed underground distribution line and a small area of overhead

distribution line near the stepdown transformer near High Street. Provide an evaluation of these areas similar to that of the 2015 Phase I ESA, including an agency database search, historical records review, site reconnaissance, and interviews.

RESPONSE
ENPLAN did perform a review of the two areas in question as part of the July 20, 2015 Phase I ESA site assessment and therefore those areas were evaluated as part of the Phase I ESA. Because of the large size of the project area, two EDR packages were ordered. The second EDR package was inadvertently omitted from the Phase I ESA report and subsequently omitted from Appendix F of the PEA. Attached is the EDR report from the second EDR package that includes the two areas in question and will be included in Appendix F of the PEA.

b. Provide a list of proposed chemicals and quantities for both construction and operation of the Project.

RESPONSE
Project construction would require the use of motorized heavy equipment, including trucks, cranes, backhoes, and air compressors. This equipment requires the use of hazardous materials, such as gasoline, diesel, oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids. Diesel and gasoline are needed for motor vehicle operation during routine inspections and maintenance, as well as to temporarily operate generators that might be needed to perform maintenance activities.

The quantities of hazardous materials to be used for standard vehicle and equipment operation during project construction would be small and the area affected by an accidental release would be limited in size within most of the Proposed Project component work areas.

During operation of the Proposed Project, routine inspections and emergency repair would require the use of fuel and lubricants inside vehicles and equipment.
The proposed substation would be equipped with transformer banks that contain mineral oil.

c. The PEA states, on page 159, that the removed wood poles would be disposed of in a Class I hazardous waste landfill or in a lined portion of a RWQCB-certified municipal landfill. Have the wood poles been characterized to determine hazardous waste characteristics? If so, provide the data.

RESPONSE
The wood poles associated with the proposed Project have not been tested to determine hazardous waste characteristics. However, wood poles used for transmission/distribution lines are sometimes chemically treated with creosote, pentachlorophenol (penta), or other

wood preservatives. These treatment chemicals are used in pressure treated wood to protect against rotting due to insects or microbial agents. These chemicals are applied to wood transmission/distribution line poles by the manufacturer at their facility and are left to dry prior to installation and use of the poles. In certain uses and quantities, these chemicals can require specific handling procedures for the poles when disposed as prescribed by State and federal regulations.

It has been assumed that the existing wood poles have been chemically treated with creosote, pentachlorophenol (penta), or other wood preservatives. Therefore, prior to removal of the top portion of the pole, the wood poles will be checked for coatings, and if found to be coated, an appropriate waste determination will be made and then the poles will be transported to an appropriately permitted disposal facility as necessary.

d. The PEA states, on page 159, that demolition of the existing Mt. Shasta Substation would result in the generation of various waste materials that can be recycled and salvaged. Has the existing substation been surveyed for the presence of hazardous materials such as asbestos, lead-based paint, polychlorinated biphenyls, or mercury? If so, provide the survey report. Additionally, the existing substation was not described in any detail in the Phase I ESA. Provide a description of the current conditions, including any potential hazardous materials, of the existing substation, include photographs where possible.

RESPONSE
Components of the existing substation currently have not been surveyed for the presence of hazardous materials such as asbestos, lead-based paint, polychlorinated biphenyls, or mercury. A determination of whether these materials exist will be conducted prior to demolition activities. If encountered, they will be handled by specialty contractors authorized to perform necessary abatement activities in accordance with applicable laws, ordinances, regulations, and standards (LORS). Where possible, waste materials will be recycled and salvaged.

Additionally, hazardous soil waste may be generated during site remediation and site preparation excavation activities. Any soil excavated in conjunction with the removal of underground utilities and structure foundations associated with the existing substation during demolition will be characterized to determine appropriate soil management protocol and disposition. Any soil removed from the site will be disposed of at an appropriate landfill facility based on characterization results.

Demolition of the existing substation would result in the generation of various waste materials that can be recycled and salvaged. Waste items and materials would be collected by construction crews and separated into roll-off boxes at the staging areas. All waste materials that are not recycled would be characterized by PacifiCorp in order to

ensure appropriate final disposal. Non-hazardous waste would be transported to local waste management facilities. When possible, waste materials from the construction of the proposed Project would be delivered to the closest waste management facility, which is located within one mile of the proposed substation site.

In addition, the two residences on the Project site will be demolished. PacifiCorp would be required to comply with federal and State regulations pertaining to the demolition of structures with lead-based paint and/or asbestos-containing materials. Federal and state lead regulations (29 CFR Part 1926.62 and CCR Title 8, section 1532.1) regulate disturbance of lead-containing materials during construction, demolition, and maintenance-related activities. In the event asbestos-containing materials or lead-containing materials are found, these materials would be abated in accordance with applicable federal, State, and local regulations prior to the removal process.

As previously discussed, the proposed substation would be equipped with transformer banks that contain mineral oil that could leak or spill if the transformers were damaged from a seismic event, fire, or other accident scenario. To minimize potential impacts in the event a transformer is damaged, the design of the proposed substation would provide secondary containment and/or diversionary structures or equipment to prevent discharge of an oil spill, as described in a SPCC Plan that would be prepared for the Proposed Project during final design. A SPCC Plan would be prepared and implemented by PacifiCorp before oil-containing equipment is brought to the proposed substation site.

During operation of the proposed Project, routine inspections and emergency repair would require the use of fuel and lubricants inside vehicles and equipment. 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.

e. Provide a discussion of the fire environment and the methodology used in evaluating wildfire hazardd.

RESPONSE

The behavior and characteristics of wildfires depend on a number of factors. These include fuels (which vary in composition, cover, and moisture content), weather conditions (particularly wind speed and humidity), topography (slope and aspect), and ignition sources (such as lightning, arson, smoking, campfires, and power lines) as well as management practices (wildfire prevention and suppression efforts).

Vegetation with low moisture content is more susceptible to ignitions and burns more readily than vegetation with higher moisture content. Grasses tend to ignite more easily

and burn faster and for a shorter duration than woody vegetation such as shrubs and trees. Dense vegetation tends to carry a fire farther than patchy vegetation. The presence of invasive annual grasses, however, can provide fuel connectivity in patchy desert shrublands that would otherwise provide inconsistent fuel for a wildland fire. High winds can blow glowing embers off burning vegetation to areas far ahead of the front of a fire, allowing fires to jump fuelbreaks. Low relative humidity conditions will dry out fuels, increasing the likelihood of ignition. Finally, steep slopes and slopes exposed to wind will carry fires rapidly uphill.

Fire Hazard Severity Zones (FHSZ) are areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors were mapped by the California Department of Forestry and Fire Protection (CAL FIRE) in accordance with Public Resources Code (PRC) 4201-4204 and Government Code 51175-89. FHSZs are ranked from moderate to very high and are categorized for fire protection as within a Federal Responsibility Area (FRA) under the jurisdiction of a federal agency, within a State Responsibility Area (SRA) under the jurisdiction of CAL FIRE, or within a Local Responsibility Area (LRA) under the jurisdiction of a local agency.

Fire hazard severity zone maps indicate the level of hazard. In the case of the FHSZ maps, the maps identify the likelihood that an area will burn over a 30- to 50-year period without considering modifications that may occur, such as through fuel reduction efforts or other changes in the fuel regime (CAL FIRE, 2007).
Responsibility areas fall into one of the following designations:

- Very High Fire Hazard Severity Zone (Very High FHSZ)
- High Fire Hazard Severity Zone (High FHSZ)
- Moderate Fire Hazard Severity Zone (Moderate FHSZ)
- Non–Very High Fire Hazard Severity Zone (Non-Very High FHSZ)
- Undesignated, or non-wildlands, which may include urban and agricultural uses

In areas of State responsibility, CAL FIRE uses three levels of FHSZ designation: Very High, High, and Moderate. The fire hazard severity zone classification is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings.

For areas of local responsibility, CAL FIRE uses two FHSZ designations: Very High or Non-Very High (the High and Moderate FHSZ designations are not used). The local responsibility area FHSZ rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation found in the urban area (CAL FIRE, 2007). CAL FIRE has designated FHSZs on federal or tribal lands as either Very High FHSZ or Non-Very High FHSZ, similar to the system used for local jurisdiction areas.

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Risk is not indicated by these maps, but in ongoing work is being addressed. This development quantifies risk as the product of probability versus consequent. Risk is the potential damage that can be done by a fire, based on existing conditions. Risk can be reduced by various strategies, such as creation of defensible space, fuel load reduction, and, in the case of structures, the use of sprinklers and ignition-resistant building materials and construction. Standards have been developed regarding the management of vegetation under and around conductors and structures to reduce risk, and further mitigating standards are currently under development as a parallel activity within R.15-05-006, after which pertinent General Orders will be amended to reflect these new requirements.

While in previous fire threat assessments FRAP maps were developed to identify fire threats, recent developments have been underway to further quantify these risks, using the probability times consequence method described previously. The probability has been quantified using fire ignition probability, while fuel, terrain, historic weather and other parameters were evaluated to calculate consequence. In CPUC Rulemaking R.15-05-006 these threats will be further refined to estimate the risk associated with utility infrastructure. The first stage of this mapping effort has been led by an Independent Expert Team (IET) headed by the California Department of Forestry and Fire Protection. These maps are in draft form with expected production on February 16, 2016. However, based upon data provided by this team, the fire threat has been overlaid onto land-base with company facilities and the proposed Lassen substation site superimposed. The fire threat environment is depicted below, with the shaded area represented as the high fire threat area. Please note this assessment applies the current version of the Independent Expert Team (IET map) where shaded areas represent an 80^{th} percentile fire threat area. The proposed substation is located approximately 1,000 feet from the closest point of the shaded area. Features that separate the site include local arterials and certain green space which do not contain flammable fuels. The IET methodology has been documented in R.15-05-006, which will also be served on the R.15-05-006 service list on February 16, 2016.

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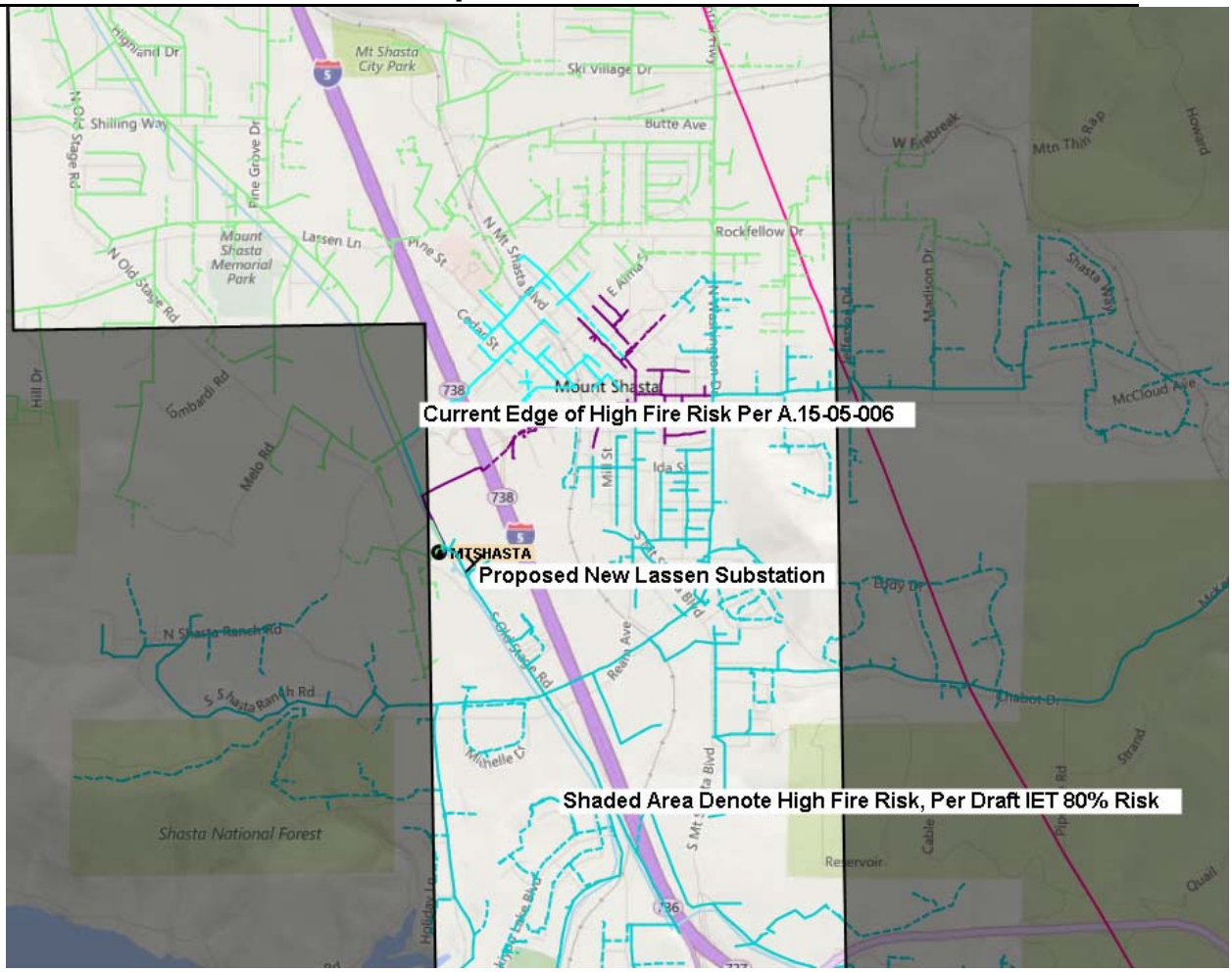

Please also refer to Response to Comment 4.8 g. below.

f. Provide a discussion of applicable federal, state, and local regulations, plans, and policies related to wildfire prevention, in addition to those included in the PEA on pages 155 and 156.

RESPONSE
CPUC G.O. 95 and CPUC G.O. 165
These General Orders by the CPUC specify construction, operation, and maintenance requirements for electrical facilities.

California Code of Regulations
The CCR is a catalog of state laws and regulations adopted by state agencies, including:

- CCR Title 8, Section 2700 et seq., High Voltage Electrical Safety Orders, establishes essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger.
- CCR Title 14, Section 1250-1258, Fire Prevention Standards for Electric Utilities, provides specific exemptions from electric pole and tower firebreak and electric conductor clearance standards, and specifies when and where standards apply.

California Public Resources Code California PRC Sections 4292 and 4293 specify requirements related to fire protection associated with transmission and distribution lines, relevant to vegetation clearances for the lines during identified times and in particular areas (which complements General Order 95 Rule 35), in addition to fuel management in the vicinity of certain types of electrical equipment.

g. Discuss Fire Hazard Severity Zone classifications for local responsibility area (LRA) within City of Mt. Shasta in addition to those for state responsibility areas (SRA), as classified by CAL FIRE for areas outside of the City.

RESPONSE
As mentioned previously, significant development has been undertaken to quantify risks associated with wildland fires and utility equipment. This study is coming to a chief milestone in the near future which may further inform the identification of fire hazards relative to the proposed Project site. Since the impacts of these new map products have not yet been evaluated with respect to SRA and LRAs, the existing threat maps were evaluated to assess risks. The Project site is located in the southern portion of Strawberry Valley, which is surrounded by the Shasta National Forest. Pine trees and other highly flammable vegetation cover many of the surrounding properties, including the proposed Project site. The California Department of Forestry and Fire Protection (Cal Fire) maps Fire Hazard Severity Zones (FHSZs) based on fuels, terrain, weather, and other relevant factors; these FHSZs define the application of various mitigation strategies to reduce risk associated with wildland fires. The Project would be situated in an area designated as a Very High Fire Hazard Severity Zone by Cal Fire (Cal Fire 2007). Fire protection services for the Project site are provided by the Mt. Shasta Fire Protection District.

The City of Mount Shasta is rated as being in a “Very High Fire Hazard Severity Zone” pursuant to California Government Code Section 51179. Jurisdictions and property owners within such zones are required to comply with the requirements of Section 51182 of the Government Code. One such requirement is the maintenance of at least 100 feet of defensible space around structures, or the clearing of all flammable vegetation (with a few exceptions) to the property line should that distance be shorter. Other requirements of the Code are designed to reduce hazards to residences in the event of a wildfire, but are likewise designed to minimize the likelihood of fires spreading outward from a structural fire.

Fire protection services and emergency response in the Project area are provided within the city limits by the Mt. Shasta Fire Department and outside the City by the Mt. Shasta Fire Protection District. The City Fire Department and the Fire Protection District have a mutual aid agreement, and the department is a partner with all other fire protection agencies in Siskiyou County in a countywide mutual aid agreement. Both the Fire Department and the District work cooperatively with the U.S. Forest Service and the California Department of Forestry and Fire Protection to reduce fire threats to the community from adjacent forest and wildland areas.

h. The PEA (page 162) discusses construction-phase standard fire prevention protocols for addressing wildland fire risk. Provide the specific details of these protocols, how and when they will be implemented, relationship to proposed construction equipment, required plans and permits, and a discussion of responsible parties and those with enforcement responsibility.

RESPONSE
The proposed substation and transmission and distribution lines are located in an area mapped as Very High Fire Hazard using the FRAP maps, however they are not within the area designated as High Fire Risk using the methodology currently being advanced in R R.15-05-006. PacifiCorp has standard protocols that include measures to address smoking and fire rules, storage and parking areas, use of gasoline powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

In addition to these protective measures, the proposed Project site would be grubbed of vegetation and graded prior to the staging of equipment, minimizing the potential for a construction vehicle to start a fire. During grubbing and grading, PacifiCorp's standard fire-prevention protocols, including the use of spark arresters on construction equipment, would minimize the potential for these activities to ignite fires. The construction of the Proposed Project would not result in increased risk of wildfires in the Project area. Regardless, the proposed Project would comply with applicable wildland fire management plans and policies established by state and local agencies. Based on compliance with applicable regulations, the proposed Project is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

i. The PEA (page 162) states that PacifiCorp trained personnel would be able to respond to a fire within 15 minutes. Provide details regarding staff, training, equipment, resources, and mutual aid agreements to support this statement.

RESPONSE
Trained fire suppression personnel and fire suppression equipment would be established at key locations, and the personnel and equipment would be capable of responding to a

fire within 15 minutes of notification. Portable communication devices (e.g., radio or mobile telephones) would be available to construction personnel. Consistent with current PacifiCorp standard practices, PacifiCorp would implement fire protection and best management practices (BMP), which typically include requirements for carrying emergency fire suppression equipment, conducting "tailgate meetings", that cover fire safety discussions, restricting smoking, idling vehicles and power equipment when not in use, and imposing construction restrictions during red flag warnings. As part of the proposed Project, PacifiCorp would also implement a specific Lassen Substation Project Fire Plan to assist in safe practices to prevent fires within the Project area. The Lassen Substation Project Fire Plan includes procedures and tools that are designed to minimize the risk of starting wildland fires during construction and increase the ability to suppress a wildland fire in the unlikely event that one is ignited. The Lassen Substation Project Fire Plan includes the following procedures:

- minimum requirements for firefighting equipment (including size and response time requirements),
- work limitations for "high" to "extreme" fire danger days, and
- designation of specific "Fire Patrol" personnel to perform monitoring and first response on-site.

Prior to construction, PacifiCorp would also coordinate with the Mt. Shasta City Fire Department and Mt. Shasta Fire Protection District to ensure that construction activities and associated land closures would not hinder firefighting response pathways or delay response time.

j. The PEA (page 162) states that the proposed Project would comply with applicable regulations, wildland fire management plans, and policies established by state and local agencies. Please specify the applicable regulations, wildland fire management plans, and policies and clarify how the Project will comply with these regulations, plans, and policies.

RESPONSE
Federal

Clearance Requirements for Transmission Lines. A variety of line and tower clearance standards are used throughout the electric transmission industry. In California, the CPUC has adopted its General Order 95 (GO 95), rather than the National Electric Safety Code (NESC) as the key electric safety standard for the state. Nationally, most transmission line owners follow the NESC rules or American National Standards Institute (ANSI) guidelines, or both, when managing vegetation around transmission system equipment. The NESC deals with electric safety rules, including transmission wire clearance standards, whereas the applicable ANSI code deals with the practice of pruning and removal of vegetation. The following standards, guidelines, rules and regulations

identify requirements and suggested practices for vegetation management in transmission line corridors.

- **National Electric Safety Code.** The NESC is a national code covering a variety of basic provisions regarding electric supply stations, overhead electric supply and communication lines, and underground electric supply and communication lines. It contains work rules for construction, maintenance, and operation of electric supply and communication lines and equipment. The NESC is be adopted by individual states. The State of California has adopted its own standard (GO 95) governing overhead transmission lines in the State.
- **North American Electric Reliability Council Standards.** NERC is a nonprofit corporation whose members are ten regional reliability councils. NERC's function is to maintain and improve the reliability of the North American integrated electric transmission system, including preventing outages from vegetation located on transmission ROWs, minimizing outages from vegetation located adjacent to ROWs, and maintaining clearances between transmission lines and vegetation on and along transmission ROWs. Standard FAC-003-1, Transmission Vegetation Management Program, applies to all transmission lines operated at 200 kV and above and to any lower voltage lines considered critical to the reliability of the electric system in the region. (In March 2013, the Federal Energy Regulatory Commission (FERC) issued its Final Rule, Order No. 777, approving an updated NERC Reliability Standard, FAC-003-2, expanding the applicability of FAC-003-1 to include overhead transmissions operated below 200 kV.) The transmission owner must prepare, and keep current, a formal transmission vegetation management program (TVMP). The TVMP must identify and document clearances between vegetation and overhead, ungrounded supply conductors, taking into consideration transmission line voltage, the effects of ambient temperatures on conductor sag under maximum design loading, and the effects of wind velocities on conductor sway. Minimum clearance distances must be no less than those set forth in IEEE Standard 516-2003 (now superseded by Standard 516-2009).
- **Institute of Electrical and Electronics Engineers (IEEE) Standard 516-2009.** The Institute of Electrical and Electronics Engineers (IEEE) is a leading authority in setting standards for the electric power industry. Standard 516-2009, Guide for Maintenance Methods on Energized Power Lines, provides minimum vegetation-to-conductor clearances to maintain electrical transmission safety.
- **Title 14 CFR 91.137, Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas.** This regulation allows the Federal Aviation Agency (FAA) to temporarily restrict flights in disaster or hazard areas, which includes areas where a wildfire is burning. The restriction is intended to protect persons and property on the surface or in the air for an existing or imminent hazard, to provide a safe environment for the operation of disaster relief aircraft, and to prevent unsafe congestion from sightseeing and other aircraft above an incident that may generate a high degree of public interest.

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14 CFR 91.137 allows an administrator to issue a Notice to Airmen (NOTAM) designating an area within which temporary flight restrictions (TFR) apply. When a NOTAM is issued, no person may operate an aircraft within the designated area unless that aircraft is participating in the hazard relief activities and is being operated under the direction of the official in charge of on-scene emergency response activities.

State

CPUC General Order 95: Rules for Overhead Electric Line Construction. CPUC's GO 95 is the key standard governing the design, construction, operation, and maintenance of overhead electric lines in the State. GO 95 safety standards for overhead electric lines include minimum distances for conductor spacing, minimum conductor ground clearance, standards for calculating maximum sag, electric line inspection requirements, and vegetation clearance requirements.
GO 95 Rule 35 governs tree trimming requirements, including minimum vegetation clearances around power lines in extreme and very high fire threat zones in Southern California. The rule requires that these clearances be:

- 4 feet radial distance for any conductor of a line operating between 7.5 kV and 22.5 kV
- 6 feet radial clearances for any conductor of a line operating between 22.5 kV and 300 kV

GO 95 Rule 31.2 requires that lines be inspected frequently and thoroughly for the purpose of insuring that they are in good condition, and that lines temporarily out of service be inspected and maintained in such condition as not to create a hazard.

Public Resources Code (PRC) 4292 (Powerline Hazard Reduction). PRC 4292 requires a 10-foot area in each direction around the outer circumference of any power pole or tower carrying more than 750 volts to be clear of tree branches or ground vegetation. The director or the agency that has primary fire protection responsibility for the protection of such areas may permit exceptions from the requirements of this section, which are based upon the specific circumstances involved.

PRC 4293 (Powerline Clearance Required). Similar to CPUC GO 95, PRC 4293 presents requirements for line clearance including a minimum of:

- 4 feet of vegetation clearance from any conductor (line) operating at 2.4 or more kV but less than 72 kV
- 6 feet of vegetation clearance from any conductor (line) operating at 72 or more kV but less than 110 kV

- 10 feet of vegetation clearance from any conductor (line) operating at 110 kV or higher.

Dead trees, old decadent or rotten trees, trees weakened by decay or disease, and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard.

California Code of Regulations (CCR) Title 14, Article 4, Section 1254 (Minimum Clearances – PRC 4292). CCR 14 Section 1254 identifies minimum clearance requirements on non-exempt utility poles. The minimum clearance provision of PRC 4292 are not required around poles and towers where all conductors are continuous over or through a pole or tower, or where conductors are of a specified design and properly manufactured and installed, or in certain 12 inches in height and is fire resistant and planted and maintained to prevent soil erosion and fire ignition. The proposed Project structures would be primarily exempted from the clearance requirements of the CCR section.

The firebreak clearances required by PRC 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer or lightning arrester is attached and surrounding each dead-end or corner pole, unless such pole or tower is exempt from minimum clearance requirements by provisions of 14, CCR, 1255 or PRC 4296. The radius of the cylindroid is 3.1 m (10 feet) measured horizontally from the outer circumference of the specified pole or tower with height equal to the distance from the intersection of the imaginary vertical exterior surface of the cylindroid with the ground to an intersection with a horizontal plane passing through the highest point at which a conductor is attached to such pole or tower. Flammable vegetation and materials located wholly or partially within the firebreak space shall be treated as follows:

- At ground level – remove flammable materials, including but not limited to, ground litter, duff and dead or desiccated vegetation that will propagate fire
- From 0 to 2.4 m (0 to 8 feet) above ground level – remove flammable trash, debris or other materials, grass, herbaceous and brush vegetation. All limbs and foliage of living trees shall be removed up to a height of 2.4 m (8 feet).
- From 2.4 m (8 feet) to horizontal plane of highest point of conductor attachment – remove dead, diseased or dying limbs and foliage from living sound trees and any dead, diseased or dying trees in their entirety.

California Code of Regulations (CCR) Title 14, Article 4, Section 1256 (Minimum Clearances – PRC 4293). CCR 14 Section 1256 identifies minimum clearance requirements to be maintained between conductors and their surroundings. Minimum clearances required by PRC 4293 are to be maintained within the specified radius around the conductor. Minimum clearance includes any position through which the conductor

may move and any position through which the vegetation may sway. This accounts for the dynamic movement of both conductors and vegetation.

Power Line Fire Prevention Field Guide 2008 Edition. CAL FIRE, the state's three investor owned utilities (Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric), and other California electric utilities have mutually developed a comprehensive field guide for their personnel. Its purpose is "to provide information and guidance to the personnel of the fire service agencies and electrical operators for minimum uniform application within the areas of their respective jurisdiction and franchise responsibilities." In addition to safety of the public, the guide details fire hazard reduction maintenance procedures for the safety of conductors and certain hardware.

Local

The CPUC has jurisdiction over the siting and design of the Proposed Project. Although exempt from local land use and zoning regulations, GO 131-D, Section III.C requires "the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any nondiscretionary local permits."

Local plans, regulations, and standards vary somewhat by specific jurisdictions. Below are plans, policies, and programs that jurisdictions have developed with regard to hazards, and specifically with regard to fire.

County of Siskiyou General Plan. Map 10. Wildfire Hazard. High constraint tone (60% screen) for high and extremely high wildfire hazard include areas with heavy vegetation on slope of 40% or greater. Heavy vegetation provides fuel for burning and slope provides a wind-like influence on the rate of fire spread. Slope also inhibits accessibility by men and equipment and determines the type of equipment useful in combat with wildfire.

High wildfire hazard is prevalent throughout most of Siskiyou County. Although there are no specific development policy limitations to development in wildfire hazard areas, the 60 percent screen tone is applied to insure careful treatment and project design in order that future populations will not be subjected to undue risks associated with wild land fires.

> **Policy 30.** All development proposed within a wildfire hazard area shall be designed to provide safe ingress, egress, and have an adequate water supply for fire suppression purposes in accordance with the degree of wildfire hazard.

City of Mt. Shasta. 6. Safety Element. D. Fire Hazards.

2. General Plan Objectives and Programs: Fire Hazards

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Goal SF-4: Protect property and life from fire hazards.

Policy SF-4.1: Update City codes to provide for fire protection.

Implementation Measures:
SF-4.1(a): Amend the City's building and land development codes to incorporate fire prevention and wildfire protection measures.

SF-4.1(b): Utilize the expertise and experience of the area firefighting personnel to recommend a workable program that can be used to gain public cooperation in protecting property and lives against fire hazards.

SF-4.1(c): Require street and address signs to be clearly and legibly displayed for all streets and structures in the City.

SF-4.1(d): Amend the land development code to require adequate fire suppression water supplies for all new development, other than the construction of a single-family home on an existing single family parcel.

SF-4.1(e): Require residents to maintain defensible space around their homes and businesses consistent with state standards.

SF-4.1(f): The City shall review the recommendations of the Mt. Shasta Area Community Wildfire Protection Plan and, when found to be appropriate and otherwise consistent with City policy, support and/or implement its recommendations.

SF-4.1(g): In evaluating proposed measures for public safety concerning fire hazards, the City will consider, and Safety Element 6-14 City of Mt. Shasta General Plan will encourage the County to consider, the recommendations and standards set forth in the Fire Hazard Zoning Field Guide.

Policy SF-4.2: Adopt and enforce development standards that provide adequate fire protection.

Implementation Measures:
SF-4.2(a): Avoid individual driveways of more than seventy five feet in length by requiring as a condition of building permits extra width or mandating a paved, all-weather surface for longer driveways.

SF-4.2(b): Amend the land development code to require that cul-de-sacs serving individual parcels with a length of more than three hundred feet be wide enough to allow

for incoming-and outgoing vehicles during a fire emergency. The minimum paved width shall be twenty feet with two four-foot shoulder areas.

SF-4.2(c): Amend the land development code to require special fire agency approvals for any new cul-de-sac proposed to have a length greater than one quarter of a mile. The City may deny a road design on the basis of single access point and length of cul-de-sac.

SF-4.2(d): Require all new subdivisions when viewed as complete projects to have at least two points of public ingress and egress unless there are overriding considerations agreed to by the fire chief or California Department of Forestry and Fire Protection for allowing only one public access point.

k. The PEA (page 162) states that the proposed Project site would be grubbed of vegetation and graded prior to the staging of equipment, thereby minimizing the potential for construction equipment to ignite a fire. However, PEA Section 3.6.1 (page 37) states that selective vegetation clearing will be performed, and APM BIO-3 (page 129) states that native vegetation will be crushed, rather than bladed. Please clarify proposed vegetation treatment actions for all Project components and how such treatment will minimize wildfire ignition potential.

RESPONSE
The discussion of vegetation clearance on page 37 of the PEA will be revised as follows:

> Clearing of some natural vegetation may be required to upgrade the transmission pole structures. However, selective clearing would be performed only when necessary to provide for surveying, electrical safety clearances, line reliability, and maintenance. Tree removal and trimming would be conducted in accordance with CPUC GO-95, Rule 35. Along some access roads, trees may need to be trimmed to provide clearance for vehicles. PacifiCorp would coordinate with landowners should tree trimming or removal on private property be required. Tree trimming and removal would be avoided where feasible.

Page 38 of the PEA addresses the substation construction and identifies that construction of the proposed substation would entail of preconstruction surveys, clearing and grading of the existing access road, site grading and drainage development, installation of concrete foundations and steel support structures, installation of below- and above-ground electrical conduits for equipment power and control, installation of below- and above-grade grounding conductors, and installation of control and relay houses.

l. The PEA (page 162) states that the Project would be constructed in a manner consistent with General Order (GO)-65. Please clarify if this statement should relate to GO-165.

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RESPONSE
Page 162 of the PEA will be revised to read:

> **Less than Significant Impact.** The proposed Project may pose a fire hazard if vegetation or other obstructions come into contact with energized electrical equipment. The proposed Project would be constructed, inspected, and maintained in a manner consistent with CPUC GO-95 and CPUC GO-165. Consistent with these and other applicable State and federal laws, PacifiCorp would maintain an area of cleared brush around the equipment, minimizing the potential for fire. As a result, operation of the proposed Project would have a less than significant impact to risk of loss, injury or death involving wildland fires.

m. Under a discussion of Operations Impacts, the PEA (page 162) states that PacifiCorp would maintain an area of cleared brush around the equipment, minimizing the potential for fire. Define "equipment" as used in this discussion and address clearance requirements in other vegetation types (non-brush) and clearance restrictions in sensitive habitats.

RESPONSE
Inspection would occur at least once per year by ground patrols. Maintenance would be performed as needed. When access is required for non-emergency maintenance and repairs, PacifiCorp would adhere to the same precautions that were taken during the original construction. Inspection typically consists of a visual inspection. The equipment expected in the inspection typically consists of one crew member, accessing the site by pick-up truck.

During visual inspections, no vegetation clearing would be necessary. Should any repairs to the line be necessary, PacifiCorp would employ the appropriate personnel and mix of equipment determined necessary at the time based on field conditions. However, based on field experience, PacifiCorp does not generally need to clear vegetation during regular maintenance activities. If vegetation clearing does become necessary PacifiCorp generally disturbs a minimal work area. Based on site conditions, should any area require clearing of brush to minimize the potential for fire, PacifiCorp would restore the disturbed habitat.

n. The PEA (page 162) states that the Project will be maintained in accordance with CPUC General Orders and other applicable laws and regulations. Identify other applicable laws and regulations and how PacifiCorp will adhere to these laws/regulations and CPUC General Orders to minimize wildfire risk during project operations.

RESPONSE

Please refer to the federal, State, and local regulations described above in 4.8 j.

4.9 Hydrology and Water Quality

a. The fourth paragraph on PEA page 35 states: "New access roads would not be necessary for construction of the proposed Lassen Substation." This appears to conflict with what is shown in Figure 3-5E and Table 3-1. Please clarify/reconcile.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. The last paragraph of APM WQ-1 (PEA pg. 53) must also state that the Waste Discharge ID Number (WDID) from the SWRCB (certifying that coverage has been obtained under the CGP) shall be provided to the CPUC prior to the construction NTP. Confirm that this modification to the APM is acceptable.

RESPONSE
Company provided response to the Commission on January 19, 2016.

c. The scope and purpose of APM WQ-2 (PEA pg. 53) is unclear. What level of ground disturbance is considered "substantial," and to what activities specifically would this APM apply? The second sentence alludes to drainage design for roads (e.g., cross drains, water bars, ditches), but the APM is titled "reseeding." Please clarify.

RESPONSE
Company provided response to the Commission on January 19, 2016.

d. Please clarify the existing and proposed destination of stormwater flow on site, as well as the existing versus proposed coverage of impervious surfaces. Provide GIS data depicting both pre-project (existing) and post-project impervious surfaces (i.e., concrete) and semi-pervious surfaces (i.e., compacted dirt, unpaved access roads).

RESPONSE
Company provided response to the Commission on January 19, 2016.

e. Identify which National Pollutant Discharge Elimination System (NPDES) would be required by the Regional Water Quality Control Board (RWQCB) for non-stormwater discharge (i.e., dewatering).

RESPONSE
Company provided response to the Commission on January 19, 2016.

f. Identify the likely discharge method and location (e.g., infiltration basin) for groundwater dewatering.

RESPONSE
Company provided response to the Commission on January 19, 2016.

g. The groundwater level conclusions of the geotechnical report (PEA Appendix E), conflict with the statement on PEA page 169 that project construction would not involve removal of groundwater. Please identify whether neighboring properties rely on groundwater wells screened in shallow zones for domestic or irrigation uses, and if so, the location and depth of those wells.

RESPONSE
Company provided response to the Commission on January 19, 2016.

h. Please provide both short-term (construction) and long-term (maintenance) water demand estimates for the project. From what source(s) would such water demands be served?

RESPONSE
Company provided response to the Commission on January 19, 2016.

4.10 Land Use and Planning

a. Siskiyou County Zoning (Page 180) states: "The substation component of the proposed project would be considered a compatible use in this district with the approval and issuance of a conditional use permit." Since the County has no discretionary permitting authority for a substation proposed by a California Investor Owned Utility (IOU), please clarify the intent of this sentence and the similar analysis on page 183.

RESPONSE
Company provided response to the Commission on January 19, 2016.

4.12 Noise

a. Provide quantitative noise level estimates (in terms of LeqA) of worst-case construction noise levels at the nearest noise-sensitive land uses for both the substation site and along the transmission and distribution lines. Identify the nearest noise-sensitive uses affected by these levels. Please verify that these noise levels would not exceed applicable noise standards or result in a temporary substantial noise increase.

RESPONSE

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The construction noise level estimates are ranges for equipment involved in line and substation construction. The table shows L_{eq} noise levels at a distance of 50 feet from the location where the equipment is operating which is in close proximity to some sensitive receptors.

There are three residences and an agricultural property in close proximity to the Lassen Substation. There are seven residences in close proximity the 115 kV transmission line. The distribution lines are close to some residences, a senior community facility, and a hotel. Approximately 1,200 feet of underground cable would be installed to increase capacity of an existing underground line. This work would occur adjacent to the existing senior community facility. Work in the areas of the distribution lines would occur within the City's noise standards and would only occur for a short duration.

According to the Siskiyou County General Plan Noise Element, an acceptable noise limit for residences is 60 dBA. Direct noise impacts would result from construction activities occurring adjacent to the sensitive receptors. However, this noise would be short-term, occurring during daylight hours when the ambient noise levels are higher within the Proposed Project. The California Department of Transportation (Caltrans) utilizing the Federal Highway Administration Traffic Noise Model indicates that interstate highway I-5 has noise levels of 65 dBA at a distance of 464 feet and 60 dBA at a distance of 999 feet. The closest portion of the substation is approximately 750 feet from I-5 and the closest part of the transmission line is approximately 600 feet from I-5. (Please refer PEA 4.12 Attachment Revised.

CONSTRUCTION NOISE SOURCES

Equipment	Range of Noise Levels, L_{eq} (dB(A)) at 50 Feet
Earth Moving	
Front Loaders	66-93
Backhoes	72-92
Tractors, Dozers	68-93
Scrapers, Graders	72-92
Pavers	76-85
Trucks	65-92
Rollers	66-83
Material Handling	
Concrete Mixers	67-86
Concrete Pumps	68-81
Cranes (movable)	70-92
Cranes (derrick)	80-83
Forklifts	76-82
Tensioners	76-86
Cable Pullers	74-81

Pneumatic Tools	
Pneumatic Wrenches	84-88
Compactors	80-83

b. Provide quantitative vibration level estimates (in VdB or inches/second) of worst-case construction vibration levels at the nearest noise/vibration-sensitive land uses for both the substation site and along the transmission and distribution lines. Identify the nearest noise/vibration-sensitive uses affected by these levels. Please verify that these vibration levels would not exceed applicable vibration standards or, in the absence of local standards, result in vibration levels that exceed annoyance criteria or damage criteria established by other agencies (i.e., Federal Transit Administration, California Department of Transportation).

RESPONSE
The type of construction equipment that is planned for use on the Project is listed in Table 3-3 to 3-7 of the PEA. Data from the Federal Transit Administration (FTA)'s *Transit Noise and Vibration Impact Assessment (2006)* as shown in the table below, lists typical construction equipment and the vibration source level of each at a distance of 25 ft. The construction vibration levels anticipated for all components of the Lassen project at 25 ft. from the source would likely fall between .003 PPV and .089 PPV and between 58 and 87 VdB (FTA 2006).

Equipment	**PPV at 25 ft. (in/sec)**	**Approx. L_v* at 25 ft.**
Large Bulldozer	.089	87
Caisson drilling	.089	87
Loaded trucks	.076	86
Jackhammer	.035	79
Small bulldozer	.003	58
*RMS velocity in decibels (VdB) re 1 micro-inch/sec		

According to the FTA report, the vibration velocity level in a residential area is approximately 50 VdB or lower. The threshold of perception for humans is approximately 65 VdB. The FTA also developed what are considered acceptable levels of ground-borne vibration for building use. Within a residential area (those building types were people sleep), a level of 80 VdB is associated with a level of vibration that could lead to human annoyance from infrequent events (defined as fewer than 70 events per day).

Because the type of Project equipment to be used and the relative infrequent use/day of each piece of large equipment, the vibration annoyance levels are expected to be transient, short term and limited in duration. The nearest residents to the Project construction work that will include the largest type of equipment creating the highest levels of vibration would be associated with both substation sites and the proposed distribution underground installation. Several residences in these areas are within 50 -100 feet of proposed construction. Given the expected vibration levels, distances to source, and sources of vibration being intermittent and confined to the immediate area surrounding the activity, the impacts are expected to be less than significant. (Please refer to updated section 4.12 of the PEA attached).

c. Provide a discussion and analysis of potential noise and vibration impacts and mitigation measures should blasting be necessary (see Section 3.6.4, Underground Distribution Line Construction, of the PEA).

RESPONSE
Based upon further review, typical construction methods would be used for trenching (e.g. backhoe). Blasting will not be required to construct the Project.

d. Please note that the City of Mt. Shasta Noise Element states that noise from construction activities within its boundaries is exempt from the noise in Table 7-5 of the Noise Element (Noise Standards for New Uses Affected by Non-Transportation Noise) provided that construction takes place between the hours of 7 a.m. and 5 p.m., or by request for an exemption because of special circumstances. This conflicts with the last sentence under the "Construction Impacts" heading on PEA page 191 that states "…between the hours of 7 a.m. and 7 p.m…". Please reconcile.

RESPONSE
The construction of the substation and upgrades to the transmission and distribution lines would be performed concurrently and would take approximately six to 12 months, with construction personnel working during daylight hours at an estimated 10-hours per day, five days a week between the hours of 7 a.m. and 5 p.m. Monday through Friday. Work would only be performed on Saturday if necessary to stay on schedule.

Section 3.6.5 Construction Workforce and Equipment and Section 4.12.3, Noise, on page 191, Section 6.2.2 Alternatives, Noise on page 249 will be revised to reflect that construction will occur between the hours of 7 a.m. and 5 p.m.

4.13 Population and Housing

a. Provide quantification of the new service capacity of the upgraded facilities proposed in terms of potential development or facilities that could be served. For example, how

many homes could be served by the existing facility versus how many homes would be served by the new facility and how does that compare to General Plan projections?

RESPONSE
Company provided response to the Commission on January 19, 2016.

4.16 Transportation and Traffic

a. Identify Caltrans BMPs that would be used to minimize traffic impacts. This can be a general description or summary of measures.

RESPONSE
Caltrans does not provide specific traffic related BMPs; rather, Caltran's provides guidance for Avoidance, Minimization, and/or Mitigation Measures in the Caltrans' *Initial Study/Environmental Assessment Annotated Outline*. Per Caltran's guidance, measures have been identified in the PEA that would lessen construction-related traffic impacts.

The following Applicant Proposed Measures (APMs) are incorporated into the Project to minimize traffic impacts during construction activities.

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 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.

The following APM has been added to the proposed Project:
APM TT-2

PacifiCorp shall obtain and comply with local road encroachment permits for public roads that are utilized during construction activities. PacifiCorp shall also coordinate short-term construction activities at private road crossings with the applicable private property owners. Copies of encroachment permits and permits for oversized loads shall be provided to the CPUC prior to the commencement of construction activities.

b. Under "Regulatory Framework" under the "City of Mt. Shasta" heading, the PEA states that the project is in unincorporated Siskiyou County (not within City limits). Project components are in the City and the County. Please describe the relevant City of Mt. Shasta standards.

RESPONSE
As shown below, 4.16.2, Environmental Setting of the PEA lists both Siskiyou County and City of Mt. Shasta under Local Regulatory Framework. The PEA stated that the Project is located within the City's sphere of influence. The PEA has been revised to state that the Project is located within the City of Mt. Shasta.

It should be noted that because the CPUC has exclusive jurisdiction over the siting, design, and construction of the proposed Project, the Project is not subject to local discretionary land use regulations. If transportation involving oversize or excessive loads is required, PacifiCorp will obtain the necessary permits and follow the terms of that permit.

Regulatory Framework

Local

Siskiyou County
Local roads within the Project area are under the jurisdiction of Siskiyou County. Local roads utilized during construction and maintenance of the Project may include North Old Stage Road, South Old Stage Road, Fish Hatchery Lane, Lake Street, and West Ream Avenue.

County policies and regulations regarding the design or use of roadways are detailed in the Circulation Element of the Siskiyou County General Plan. Siskiyou County requires an encroachment permit for any impediment to travel on highways over which the County has jurisdiction, and requires a transportation permit to carry extralegal loads on County roadways.

City of Mt. Shasta
The City of Mt. Shasta outlines local policies and regulations regarding the design or use of roadways within city limits in the Circulation Element of the City of Mt. Shasta General Plan. In addition, the City has introduced a Bicycle, Pedestrian, and Trails

Master Plan that provides for a city-wide network of bicycle paths, lanes, and routes, along with bicycle- and pedestrian-related programs and support facilities. The proposed Project is located in unincorporated Siskiyou County, and within the City of Mt. Shasta.

c. Provide an estimate of frequency of inspection and maintenance visits to quantify anticipated trip generation. While it is acknowledged that a higher frequency of visits could be required to respond to certain conditions or circumstances, some estimate of frequency for normal maintenance should be provided. Visits per month or per year could be estimated based on other facilities or visits to the current facility.

RESPONSE
It is anticipated that inspection and maintenance of the transmission/distribution lines will occur at least once per year by ground patrols. Inspection typically consists of a visual inspection, typically consisting of one crew member, accessing the site by a pick-up truck.

It is anticipated that routine, temporary, and periodic visits to the proposed substation site will be required for operation and maintenance. The substation will be unmanned, with automated features and remote control capabilities. Based on PacifiCorp's past experience, it is anticipated that PacifiCorp's maintenance personnel will visit up to six times per year to perform routine maintenance activities.

d. Please clearly state whether there is an applicable congestion management program applicable to roadways that would be affected by the proposed project or if Level of Service standards are the only applicable standards in the County and the City.

RESPONSE
Construction of the proposed Project would not result in a substantial increase in traffic in relation to existing traffic load and capacity of the street system. Additionally, Project construction would not affect pedestrian or bicycle paths or mass transit. As a result, the proposed project would not conflict with County or City applicable plans, ordinances, or policies. Additionally, PacifiCorp will obtain encroachment permits to conduct work in public rights-of-way as required by the State and local entities for the transmission/distribution line upgrades and substation construction. Neither the County nor the City have a congestion management plan.

e. The PEA states that it is not anticipated that construction and operation of the project would include the use of helicopters. If helicopters would not be used, this should be definitively stated. If helicopters could be used, then this should be stated and appropriate information should be provided regarding use and applicable regulations in relation to air traffic patterns.

RESPONSE

PacifiCorp will not use helicopters during construction or operation/maintenance activities.

f. Please state what measures would be implemented during construction to ensure safety at construction access driveways. A general description of site access safety measures from the traffic management plan should be provided.

RESPONSE
PacifiCorp will adhere to all County and/or City safety measures as part of the local road encroachment and oversized load permits for all public and private road crossings. Prior to the commencement of construction activities, construction workers will be provided with the Project's Applicant Proposed Measures (APMs) which include APM TT-1 and will be instructed on the hours in which construction may occur (between 7 a.m. and 5 p.m.), haul routes, work area delineation, and traffic control and flagging procedures.

g. Provide a preliminary description of the traffic management plan that would be implemented during construction of the proposed project. In particular, describe in greater detail what is required to obtain an encroachment permit for work or obstruction of the public right-of-way and what measures, if any, would be taken to notify emergency services (fire, police, ambulances, etc.) of planned detours or roadway closures.

RESPONSE
Construction and demolition activities associated with the proposed Project may require short-term alterations to local roadways. PacifiCorp would obtain appropriate local permits. This process would involve the preparation of appropriate management plans and provisions to ensure adequate compliance with local ordinances. Also, if any work were to potentially limit access, permits would be obtained and plans would be implemented to ensure safety and avoid the closure of any emergency access route (refer to APM's TT-1 and TT-2).

h. Provide a discussion of measures in the traffic management plan that would be applicable to maintaining safety and performance of pedestrian and bicycle facilities.

RESPONSE
No designated bicycle lanes are currently located in the vicinity of the Project or on roadways likely to be used by construction traffic.

No trails or associated signage exist within the immediate vicinity of the proposed substation site, as evidenced in the City of Mt. Shasta Bicycle Pedestrian and Trails Master Plan 2009.

The proposed Project would not preclude pedestrians and cyclists from traveling on local streets and sidewalks in the Project vicinity. If any work requires modifications on local

roads, PacifiCorp would obtain appropriate local permits. This process would involve the preparation of appropriate management plans and provisions to ensure adequate compliance with local ordinances. Also, if any work were to potentially limit access, permits would be obtained and plans would be implemented to ensure safety and avoid the closure of any emergency access route. These permits and plans would be submitted to CPUC for review.

4.17 Utilities

See also Hydrology and Water Quality Section 4.9 (h).

a. Please quantify water requirements for construction and operational activities, including irrigation activities associated with restoration.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Identify the likely sources of water from existing entitlements for construction and subsequent operational activities including irrigation activities associated with restoration.

RESPONSE
Company provided response to the Commission on January 19, 2016.

5.0 CUMULATIVE IMPACTS

a. Provide a figure illustrating where the cumulative projects are in proximity to the proposed project.

RESPONSE
Company provided response to the Commission on January 19, 2016.

b. Provide more detail on the status of the bottling plant with respect to permitting, as well as environmental impacts.

RESPONSE
Company provided response to the Commission on January 19, 2016.

APPENDIX B: BIOLOGICAL RESOURCES TECHNICAL REPORT

For responses in this section refer to the following attachment:

- PEA 4.5 -2 –Revised Lassen Biological Resource Habitat Assessment

ATTACHMENT A
PEA Completeness Review

1.2.2 Regulatory Framework

a. Page 8, California Endangered Species Act. Since Swainson's hawk is not listed in the PEA or Appendix B as a special-status species that potentially occurs on or near the project, please indicate why this species was not discussed in the regulatory framework.

RESPONSE
Text discussing Swainson's hawk already exists in under the Regulatory Setting 1.2, Section, 1.2.2 which discusses applicable State regulations, on page 8. No reported occurrences of Swainson's hawk in the project area were discovered in the literature searches. However, given the verbal communication with Keith Babcock of Dudek, Appendix B has been updated to include this species in Section 3.4 and Table 3.

2.1 Approach to Data Collection

a. Page 11. In the first paragraph, it is unclear what the "biological survey area" (BSA) actually encompasses. For example, the author describes the BSA as including "the overall site," but then describes the BSA as being that area "approximately 250 feet from the ROW centerline…" It is unclear as to what "centerline" the author is referring and how far out from all areas of proposed development the BSA actually includes. Provide a more detailed description of the BSA for all proposed development/ground disturbance areas.

RESPONSE
The BSA (Biological Study Area) indicates the Project Area plus an additional 250 feet from centerline of the ROW that was assessed as a buffer, as shown on Figure 3A and 3B, and to account for any potential alterations in the ROW. The text has been amended in Section 2.1 Approach to Data Collection and in Section 3.1 Vegetation Community Descriptions to add clarity.

b. Page 11. The first paragraph also defines "Project area" as "the area directly affected by the proposed construction…" However, the term "Project area" seems to apply to a more regional context in many of the species discussions later on. Please define "Project area" and consistently use this term throughout the document.

RESPONSE
The Project Area includes the footprint of disturbance, the ROW, and access roads that will be used for the project. The text has been updated to add clarity in section 3.2 and 3.4.

c. Page 11. In the last paragraph, it is stated that "biologists reviewed records of known occurrences to identify special-status species that may occur within the BSA…" Identify

which records were reviewed or refer to records/databases discussed further in Section 2.2 if these are the sources that were reviewed.

RESPONSE
The California Natural Diversity Database (CNDDB) and the California Native Plant Society Electronic Inventory (CNPSEI) were queried as to what special-status species have been recorded in the USGS topographic quadrants that the Project occupies. If requested, the full 159 page CNDDB Multiple Occurrence Per Page list will be provided as an addendum for more specific reference.

2.3 Field Survey

a. Provide more detail as to what was included, and meant by, a "reconnaissance-level" survey (e.g., in addition to vegetation mapping, it is assumed that the surveys also characterized the potential of on-site habitats to support various special-status species known to occur in the region/vicinity).

RESPONSE
This detail is outlined in Section 2.1 Approach to Data Collection. More detail has been added to Section 2.3 Field Survey to add clarity.

3.1 Vegetation Community Descriptions

a. In Figures 3a and 3b, "creek" is depicted (and listed in the legend) as occurring within the BSA. However, creek habitat is not discussed as a habitat type within this section nor is it listed in Table 1. Describe and characterize any creeks passing through the BSA, or any other open water aquatic habitat occurring within the BSA.

RESPONSE
This information has been added to Section 3.1, and will follow the description of Disturbed/Developed.

3.2 Special-Status Plant Species

a. Page 18. The first paragraph states that special-status plant species were determined by the literature review to occur within the BSA. Provide references and sources that were reviewed to make this conclusion.

RESPONSE
The references have been added to this paragraph.

b. Page 18. The third paragraph discusses the levels of potential (high, moderate, low) for special-status plant occurrence. Provide a general description of the criteria used to make these determinations.

RESPONSE
The criteria for high, moderate, low, etc. potentials are provided immediately following Table 2 and 3, Special Status Species and their Potential to Occur within the BSA.
A potential of High was given to a species if it has a reasonable certainty to occur based on site conditions, the species range, and recent recorded observations. A potential of Moderate was given to a species if site conditions are suitable for the species, and there are historical observations recorded in the vicinity. A potential of Low was given if site conditions are considered to be marginal for the species to occur, but there are historical observations recorded in the vicinity. A species was considered to be Absent if conditions were not suitable for occurrence, including outside of known range, out of preferred elevation range, and lack of micro-habitat or soil requirements.

c. Page 18. The third paragraph discusses the number of plants with potential to occur within the BSA versus those with potential of occurring within the "Project area." Per an earlier comment above regarding the BSA, the reader is unclear as to the boundaries of the BSA and why the author is differentiating between occurrence within the Project area and BSA if ultimately these areas are fairly small in area. Of note, the author states here (and also in Section 3.2 regarding special-status wildlife) that the "BSA provides habitat that could support special-status species; however, the Project Area provides much of the same suitable habitat to a lesser degree that could support special-status species." If the BSA ultimately includes that area in which both direct and indirect impacts could occur, and particularly since no focused presence/absence surveys were conducted for special-status plants at this time. Please provide a revised discussion that addresses potential occurrence within the BSA, of which the much smaller "Project area" is a component. This comment also applies to the special-status wildlife discussion (Section 3.4) as well.

RESPONSE
The differentiation of the two areas is presented in Section 2.1 Approach to Data Collection. A brief discussion of potential occurrence within the BSA and within the Project Area is provided in Section 3.2 for special-status plant species and in Section 3.4 for special-status wildlife species.

3.3 Non-Native Plant Species

a. Please include an explanation as to the reason non-native plant species were inventoried.

RESPONSE

Non-native plant species were inventoried as a general standard as part of the habitat assessment data collection, and under the federal regulatory framework of Executive Order 11312: Invasive Species, Section 1.2.1. Foreknowledge of the presence of non-native plant species can be important towards planning for potential mitigation measures and best management practices for the construction of the project and for project operations.

Table 2 Special-Status Plant Species

b. Per previous comments regarding the BSA, not knowing exactly the boundaries of the BSA, and questions concerning differentiating between occurrence predictions in the BSA versus the "Project area," this table is confusing. The title addresses potential to occur within the BSA; however, the table includes a column for both the Project Area and BSA. Also, for all species in the table, there is at least some potential for occurrence in both the Project Area and BSA, or the species is assumed to be absent in both the Project Area and the BSA. Again, if the boundary difference between the Project Area and the BSA is relatively small, we are not sure it makes sense to differentiate and suggest limiting the discussion to the BSA area only, which is inclusive of the Project Area.

RESPONSE
The description of the BSA versus the Project Area has been clarified further in Section 3.2 to avoid confusion. The reason to keep the table with columns for both BSA and Project Area is to remain consistent with the PEA. While the Habitat Assessment is focused on the BSA, the PEA is focused on the smaller Project Area that occurs within the BSA.

3.4 Special-Status Wildlife Species

a. Same comments as above in Section 3.2 regarding literature review, criteria used to determine occurrence level, and potential for occurrence in the BSA versus the Project Area. In particular, all the "potential to occur" conclusions for each species is with respect to the Project Area, which has been previously defined (Section 2.2) as the "disturbance footprint." For this project, the disturbance footprint is very small, especially in areas such as new poles, lines, etc. However, the discussion for many of the wildlife species includes phrases such as "the XXX has not been recorded in the Project area since 19XX"; "project area" here implies a much larger area (project "vicinity"?; "region"?) than the disturbance footprint. To provide more clarity with respect to occurrence conclusions, please clarify whether or not suitable habitat actually occurs within the project footprint or BSA; and if a species truly has a potential to occur, define the type of occurrence (foraging, nesting, wintering, migration, etc.) as the type of occurrence directly affects the significance of any direct/indirect impacts. The focus of the occurrence discussion should be whether or not the species has potential to occur within the areas to be directly or indirectly impacted; it is assumed that if these species

are addressed in this document, they are known to occur in the project "vicinity" or "region." Lastly, for many species, the text states that specific habitat requirements for the species does not occur, yet the conclusion for potential occurrence is still "low" or even "moderate." Please reevaluate these conclusions in light of the above standard described above or provide more specific evidence as to why potential occurrences are described as low or moderate.

RESPONSE
The literature review references have been added to this paragraph. Additional clarification and any updates have been added to the potential for occurrence conclusions of the various species, as well as potential for occurrence determinations.

b. Page 40, Sierra Nevada Mountain Beaver. Since the only record for this species in the region is over 115 years old, and because it requires "ample surface water" (as stated by the author), please reevaluate the potential to occur or provide more detailed evidence supporting the current designation of "moderate".

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

c. Page 41, Pacific Tailed Frog. The text describes the habitat for this species as "clear, cold, fast-flowing, rocky streams in areas dominated by old-growth Douglas-fir, pine, spruce, hemlock, redwood…" This habitat type is not noted in Section 3.1 as occurring within the BSA.

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

d. Page 42, Western Yellow-billed Cuckoo. The text states that there is a "general lack of the complex structured riparian canopies that it requires for nesting and foraging," but concludes that there is some potential (low) for the species to occur in the Project Area. Please clarify whether the microhabitat for this species occur on site.

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

e. Page 42, Confusion Caddisfly. The discussion states that this species requires "small, cold, first- and second-order streams"; do such streams occur within the BSA? If so, this should be noted in the discussion for this species.

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PEA Completeness Review

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

f. Page 42, Willow Flycatcher. Same issue as for cuckoo; if the project does not support the specific nesting/foraging habitat type needed for the species, the potential for occurrence should be absent, not "low" as indicated in this discussion.

RESPONSE
This determination was reassessed and determined to remain low, but additional data was added to the preferred habitat, which does occur within the project area.

g. Page 43, Western Pond Turtle. Does open water, aquatic habitat needed for this species occur within the BSA? It is unclear in this description and in Figures 3a and 3b if such habitat occurs.

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

h. Page 43, American Peregrine Falcon. This species is highly unlikely to nest within the BSA or immediate vicinity. Please confirm whether there is evidence the contrary or confirm that this species is likely to occur as a migrant or irregular visitor to the area.

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

i. Page 44, California Gull. Given the description of nesting habitat provided for this species, the potential for nesting with the Project area is essentially non-existent, not "low."

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

j. Company granted extension by Commission until February 8, 2016.Page 45, Pacific Marten. Given the habitat requirements of this species described in the text ("structurally complex," "different-aged stands, particularly old-growth conifers," "sensitive to human disturbance, especially habitat fragmentation"), please provide supporting evidence as to why the occurrence conclusion is "moderate," or revise the occurrence likelihood and we suggest that it would not be expected to occur at all.

RESPONSE

This determination was reassessed and updated to absent, with no suitable habitat occurring in the Project area, but low potential in the greater BSA, with marginal suitable habitat present.

k. Page 45, Natural Bridge Megomphix. Since the last record for this species in the region was 1941, we suggest that the potential for this species is "not expected to occur."

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

l. Page 45, Osprey. Please clarify the type of occurrence (foraging, nesting, flyover, etc.) for which this species has a moderate potential to occur. It is highly unlikely to nest within the BSA given the distance of the site to large water bodies, and therefore would not forage on site due to the lack of large water bodies. Could osprey possibly fly over the site?

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring in the Project area, but low potential in the greater BSA, with marginal suitable habitat present.

m. Page 46, West Coast Fisher. For the same reasons as Pacific marten, please reassess the potential of this species within the BSA.

RESPONSE
This determination was reassessed and updated to low, with marginal suitable habitat occurring.

n. Page 46, Cascades Frog. Given the habitat requirements described, unlikely this species has a moderate potential to occur within the BSA.

RESPONSE
This determination was reassessed and remains as moderate, with suitable habitat occurring.

o. Page 47, Sierra Nevada Red Fox. Given the habitat requirements described, unlikely this species has a potential to occur within the BSA.

RESPONSE
This determination was reassessed and updated to absent, with no suitable habitat occurring.

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Table 3 Special-Status Wildlife Potential to Occur

a. Same comments as for Table 2. Also, any conclusion revisions made per above comments for each species need to be reflected in this table as well.

RESPONSE
All updates made are reflected in Table 3.

b. In the Status column, the federal and state status is listed as "none" for several species (e.g., great blue heron, bumble bee, caddisfly, slug) and no other status is given. In order to be considered as a "special-status species," some other status that is included in the definition of "special-status" given on page 11 needs to be provided. If the species has no status included in the list on page 11, the species should be removed from the table and in the discussion under Section 3.4.

RESPONSE
Species with the status given as "none" were those which were included in the California Natural Diversity Database (CNDDB) quadrangle search for the area. These species all have a State Rank and a Global Rank, although ranks are not commonly presented in reports. The status column for these species has been revised to show that they are CNNDB tracked species.

ATTACHMENT A
PEA Completeness Review

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PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
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February 22, 2016

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Re: CA A.15-11-005
CPUC Data Request 1.0 – Lassen Sub PEA Completeness Review

Please find enclosed PacifiCorp's Responses to CPUC Data Request 1.0. The Company was granted an extension on several subparts as noted within the response document sent on January 19, 2016.

The following attachment is provided on the enclosed disc: PEA 4.1b.

If you have any questions, please call me at (503) 813-5934.

Sincerely,

cathie allen/sm

Cathie Allen
Manager, Regulation

ATTACHMENT A
PEA Completeness Review

4.0 ENVIRONMENTAL IMPACT ASSESSMENT SUMMARY

4.1 Aesthetics

It should be noted in the visual analysis that when a project impacts visual resources within the viewshed of an eligible state Scenic Highway, such impacts may negatively affect the eligibility status of that road section where the changed condition occurs. This is an important message to properly inform decision-makers of the potential indirect effect of decisions in favor of the potential visual resource modification.

a. Viewpoint 6 Visual Simulation and Analysis: The increased pole height and increased number of stacked conductor wires may create greater contrast in line and color than is acknowledged by the visual analysis. A linear analysis of this changed condition should be presented in the discussion because the line parallels the scenic byway for a greater distance than depicted in the visual simulation.

RESPONSE
Company provided response to the Commission on February 8, 2016.

b. Viewpoint 10 Visual Simulation and Analysis: The overhead wires in the visual simulation should be presented and analyzed in the appropriate context for motorists and passengers on the Volcanic Legacy Scenic Byway. The visual simulation presents a view that represents a static condition that is inconsistent with the dynamic experience and perception of viewers.
    1. Revise the visual simulation to incorporate a broader view that represents the ability of viewers to pan across an open landscape to view and form perceptions of visual resources; the expanded view is likely to include one or more poles of the proposed poles.

    RESPONSE
    Please refer to PEA 4.1 b Attachment for the revised Viewpoint 10 photo simulation.

    2. Include a linear analysis that includes a description of the experience of the motorist, view duration, and contrast level with the surroundings.

    RESPONSE
    Company provided response to the Commission on February 8, 2016.