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



December 2, 2015

Ms Jeanne Armstrong Goodin, Macbride, Squeri & Day LLP 505 Sansome Street, Suite 900 San Francisco, California 94111

Subject: PacifiCorp (U 901 E) Lassen Substation Project (Application No. A.15-11-005)

Dear Ms. Armstrong,

The California Public Utilities Commission (CPUC), with technical assistance from Dudek, has reviewed PacfiCorp's Permit to Construct (PTC) application, including the Proponent's Environmental Assessment (PEA), dated November 2, 2015, for the subject project. The CPUC's Information and Criteria List, Rule V. and PEA Checklist were used as a basis for evaluating completeness and ensuring that sufficient information has been provided to the CPUC to complete environmental analysis for the subject project, as required by the California Environmental Quality Act (CEQA).

After reviewing the materials submitted, the CPUC Energy Division finds that the information contained in the Proponents Environmental Assessment is currently incomplete. Attachment A identifies the areas of the application that were found to be deficient.

We would appreciate your response to the requested information in Attachment A in support of the analysis for the Lassen Substation Project to be provided to Michael Rosauer (CPUC Energy Division) and Iain Fisher (Dudek) no later than January 16, 2015.

If you have any questions regarding this letter or need additional information, please contact me at 415.703.2579 or Michael.Rosauer@cpuc.ca.gov.

Sincerely,

Michael E Roman

Michael Rosauer CPUC Project Manager

cc: Ms. Cathie Allen, Mr. Dustin Till and the Data Request Response Center Attachment A: PEA Completeness Review

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.
- b. Provide the native files (word, excel, etc.) for the PEA including appendices, requested references (see below) and the Application.
- c. Provide all GIS files used to analyze resources within the project area and develop figures within the PEA.

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.

2.0 PURPOSE AND NEED

- a. Explain how future 115 kV operation will serve the needs of the wider system. When does PacifCorp 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.
- b. Will the Lassen transformers have windings capable of operation at both 69 kV and 115 kV?
- 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.
- 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.

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.

3.1 **Project Location**

- a. Provide an overview map showing location of detailed project component maps 3-5A through 3-5G.
- b. Provide city and county boundary lines on overview map as well as on proposed new Lassen substation site map.
- c. Provide a general description of the site (e.g., undeveloped) and site topography, including elevations, general vegetation type, etc.

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.
- b. Indicate whether the project will include landscaping. If it does, please include a conceptual landscape plan and irrigation requirements (source and quantity).
- c. Provide an explanation and timing as to the phased build-out of the proposed substation in relation to constructing the "ultimate arrangement."
- 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.

- 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.
- 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.
- g. Please describe lighting plan for the new substation.
- 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.
- i. Describe substation gate and access control.

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.
- 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.

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.
- 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.
- 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.
- 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.

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

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.

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.

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

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.

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

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.

- 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.
- 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.

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.
- 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.

- 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.
- 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.

- 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.
- 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.
- 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.
- 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?
- 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.
- 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).
- k. Page 91 of the PEA states that NO₂, SO₂, 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?
- 1. 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.

- 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.
- 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.
- 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.
- 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/.

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

- 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.
- 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.
- 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.
- 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.

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.

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.

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.

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.
- 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.

- 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.
- 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.

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.

Environmental Impacts

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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

4.7 Geology and Soils

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

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



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

- 1. 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.
- 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.
- 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.

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.
- 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
- 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.
- 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).
- 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).



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

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.

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.
- 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).
- 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).

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.

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?

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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.

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

5.0 CUMULATIVE IMPACTS

- a. Provide a figure illustrating where the cumulative projects are in proximity to the proposed project.
- b. Provide more detail on the status of the bottling plant with respect to permitting, as well as environmental impacts.

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.

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.

- 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.
- 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.

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).

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.

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.
- 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.
- 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.

3.3 Non-Native Plant Species

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

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 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.

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.

- 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".
- 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.
- 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.
- 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.
- 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.
- 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.

ATTACHMENT A PEA Completeness Review

- 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.
- 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."
- j. 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.
- 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."
- 1. 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?
- m. Page 46, West Coast Fisher. For the same reasons as Pacific marten, please reassess the potential of this species within the BSA.
- n. Page 46, Cascades Frog. Given the habitat requirements described, unlikely this species has a moderate potential to occur within the BSA.
- o. Page 47, Sierra Nevada Red Fox. Given the habitat requirements described, unlikely this species has a potential to occur within the BSA.

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.
- 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.

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