APPENDIX A
Response to the Submission of Facts by Mt. Shasta Tomorrow to Dispute the Adequacy of the Final Mitigated Negative Declaration for the Application of the PacifiCorp (U901E), an Oregon Company, for a Permit To Construct (PTC) Lassen Substation Project Pursuant to General Order 131-D

The following appendix is in response to the *Submission of Facts by Mt. Shasta Tomorrow to Dispute the Adequacy of the Final Mitigated Negative Declaration. For the Application of the PacifiCorp (U901E), an Oregon Company, for a Permit To Construct (PTC) Lassen Substation Project Pursuant to General Order 131-D* (Submission).

A.1 Response to Preface

The commenter states the following:

> The Final MND [Mitigated Negative Declaration] fails to respond to any of the Mt. Shasta Tomorrow's [MST] comments submitted earlier about either the Proponent's Environmental Assessment (PEA) in December 7, 2015 or the Draft IS/MND [Initial Study/MND] in December 2016.

MST further indicates that comments on the PEA are mostly applicable to the Draft IS/MND, with the exception of the undergrounding of power lines near Lake Street.

The California Public Utilities Commission (CPUC) is not required to respond to comments filed on a PEA or to identify explicitly whether a filing has influenced or modified the project proposal. Therefore, no response is required or forthcoming.

Immediately after the submission of comments dated December 23, 2016, MST was contacted directly and informed that it was not possible to transfer comments from the PEA to the Draft IS/MND and to assume that the comments were applicable. The CPUC is not required to make assumptions regarding the commenter's intent. A request was made to MST asking that the documents be resubmitted to address the analysis in the Draft IS/MND. The follow-up email, dated December 28, 2016, as well as the initial correspondence, is included below for completeness.

> **From:** Iain Fisher
> **Sent:** Wednesday, December 28, 2016 2:35 PM
> **To:** D. La Forest; Mulligan, Jack M. (jack.mulligan@cpuc.ca.gov); Rosauer, Michael
> **Subject:** RE: Comments on IS/MND for Lassen Substation project
>
> Mr. La Forest,
>
> The issues you raise in your submittal to the Draft Mitigated Negative Declaration (Draft MND) address alleged deficiencies in the Proponents Environmental

Assessment (PEA). As I am sure you appreciate, the PEA is not the document currently under review. In the CPUC's review process, the Draft MND is the CEQA [California Environmental Quality Act] document that is subject to public review, the PEA is just one of several sources used by the CPUC to develop the Draft MND.

Since you filed the protest to the PEA, the proposed project [PacifiCorp Lassen Substation Project] has substantially changed. Further, it is evident from reviewing your comments that some are not applicable to the draft MND. It is, however, not possible for us to know which comments from your PEA protest you still believe are relevant to the Draft MND, since none of the comments directly address the contents of the Draft MND.

As the CPUC builds the administrative record for the proposed project it is vital that we understand which comments relate to the Draft MND. We understand that you wish to provide comment on the draft MND, and request that you resubmit your comments directly addressing the contents of the Draft MND by Monday January 16, 2017.

Please contact me if you have any questions
Kind Regards
Iain

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From: D. La Forest [mailto:dlaforest@gmail.com]
Sent: Friday, December 23, 2016 4:52 PM
To: Lassen Substation Project; LaForest; Vicki Gold
Subject: Comments on IS/MND for Lassen Substation project

On behalf of Mt. Shasta Tomorrow, I am resubmitting the attached comments that mostly are applicable to the current Project and its IS/MND.

I submitted these comments previously on 12-7-16 to the CPUC as a Protest to this Project's PEA but apparently these concerns were not shared with the CPUC staff, including Michael Rosauer. At a recent meeting held in Mt. Shasta, I again gave him a copy of these comments.

The undergrounding of the expanded powerlines near the Lake Street overcrossing has changed, so these comments are not entirely relevant on that point a year later.

Thank you, and please contact me if you have questions.

Dale La Forest
Director - Mt. Shasta Tomorrow (non-profit corporation)

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Mt. Shasta, CA 96067

As stated in the email dated December 28, 2016, the commenter was given additional time beyond the comment period to resubmit comments addressing the contents of the Draft IS/MND; no resubmission was received.

Moreover, despite MST's assertion that the Draft IS/MND and the PEA are very similar, there are several differences between the two documents that are critical to the comments made by MST. These include the following:

1. Undergrounding of the line crossing Interstate (I-) 5 at West Jessie Street
2. Clarification that the PacifiCorp Lassen Substation Project (proposed project or project) would not rebuild the distribution line where it crosses I-5 near Lassen Lane
3. Restriction of weekday construction activities to between 7:00 a.m. and 5:00 p.m.
4. Changes to applicant proposed measures
5. Additional mitigation measures

MST has not provided explicit direction regarding the treatment of the specific comments submitted on December 23, 2016. Therefore, the CPUC cannot respond to these comments. Any comments that were made in previous submissions, which have been repeated in the Submission, are responded to below.

A.2 Response to A: Project's climate change impacts will be significant due to greenhouse gas emissions from supplying power to Crystal Geyser Water Company and its operations

The commenter states the following three "facts" relating to greenhouse gas (GHG) emissions:

1. The proposed project would "supply Crystal Geyser Water Company (CGWC) with an increase of about 10 MW [megawatts] of additional electrical power . . ."
2. "The Final MND does not analyze the indirect greenhouse gas emissions and their off-site environmental impacts resulting from supplying and using these additional 10 MW of electric power. No estimation is provided in the Final MND of the amount of greenhouse gas emissions from off-site power generation that the Project's power lines will transmit to Crystal Geyser Water Company."
3. "This newly supplied electricity will be generated in part by combusting fossil fuels which releases additional greenhouse gases."

Regarding the first issue raised by the commenter, it is not known exactly how much additional electrical power would be supplied to the Crystal Geyser Water Company through the proposed project. This comment does not address a specific inadequacy related to the analysis provided in the Final IS/MND; therefore, no further response is warranted.

Regarding the second issue, Section 4.6, Greenhouse Gases and Climate Change, of the *Final Environmental Impact Report – Crystal Geyser Bottling Plant Project* estimated indirect GHG emissions resulting from off-site energy consumption (generated by demand for PacifiCorp electrical supplies) that would be consumed at the bottling plant (Siskiyou County 2017). The Final Environmental Impact Report was certified, and the Notice of Determination was filed on October 4, 2017 (SCH No. 2016062056). Therefore, because indirect GHG emissions generated from electricity demand at the Crystal Geyser Bottling Plant were analyzed as part of the Final Environmental Impact Report, it would be inappropriate and inaccurate for the project to evaluate indirect emissions from end-user facilities, such as the Crystal Geyser Bottling Plant. Estimating indirect GHG emissions from end-user facilities that would consume energy transmitted through conduit infrastructure, such as the proposed project, would be considered double-counting emissions.

Additionally, as a general principle, transmission projects, such as the proposed project, are viewed as *responsive* to development growth and are not *drivers* of growth. As such, the most appropriate place for the analysis of GHG impacts is at the endpoint of energy consumption, not the conduit infrastructure transmitting that energy.

Regarding the third issue, see the previous response. Because indirect GHG emissions generated from electricity demand at the Crystal Geyser Bottling Plant were analyzed as part of the Final Environmental Impact Report, which takes into account the electricity generated by the source power plant, estimating those emissions as part of the proposed project (which is the means by which the electrical power is transmitted, not consumed) would be considered double-counting emissions. Therefore, it would be inappropriate and inaccurate to include such emissions in the project's emissions inventory.

A.3 Response to B: The MND fails to disclose if there will be additional visual impacts on scenic views of Mount Shasta and surroundings due to increased sizes of this project's overhead wires

The commenter states the following three facts relating to visual impacts:

1. "This Project proposes to reconductor and enlarge the existing distribution lines above the I-5 Freeway near Lassen Lane's freeway overpass. . . ."
2. "The Final MND makes no mention or analysis of the visual impacts that may be caused by the alteration, enlargement or other changes near this Lassen Lane overpass due to this project."
3. "The Final MND provides no analysis or supporting evidence that adverse visual impacts from powerline expansion at this location will be significant."

Scenic views of Mount Shasta and surrounding areas are addressed in Section 5.1.4(a) of the Final IS/MND. On page 5.1-19 (Section 5.1.4(a), paragraph 2), the Final IS/MND scenic vista analysis discloses that reconductoring of an existing distribution line is a component of the proposed project. Further, the effects of reconductoring on existing views (including views of Mount Shasta from I-5) are evaluated on pages 5.1-20 and 5.1-21 of the Final IS/MND. More specifically, anticipated effects to existing views associated with reconductoring an existing distribution line approximately between Pine Street and Ski Village Drive (west of I-5, Pine Street is identified as Lassen Lane) are addressed on page 5.1-20 (paragraph 3). The Final IS/MND states that, between Pine Street and Ski Village Drive, the reconductored, or "new," lines associated with the distribution line would generally be screened from view of I-5 by dense and mature stands of interstate-adjacent trees. While the existing distribution support pole is located east of I-5 and approximately 170 feet south of the Lassen Lane/Pine Street overpass and is not screened from view of interstate motorists by existing vegetation, both the pole and distribution line are features that are experienced/viewed briefly in the peripheral field of vision of passing interstate motorists. Due to the limited duration of views to reconductored distribution infrastructure from I-5 near the Lassen Lane/Pine Street overpass, the Final IS/MND determined

that existing scenic views to Mount Shasta and the surrounding area from I-5 would not be substantially affected. Impacts were determined to be less than significant. Visual effects associated with proposed reconductoring are also addressed in Section 5.1.4(b) (pages 5.1-21 and 5.1-22) and Section 5.1.4(c) (Viewpoint 3-I-5 analysis on page 5.1-30) of the Final ISMND. The analysis in these sections considers and addresses proposed reconductoring that would occur east and west of I-5.

Regarding the first fact, in which the commenter contends that the applicant proposes to "reconductor and enlarge the existing distribution lines above the I-5 Freeway near Lassen Lane's freeway overpass," the applicant does not propose reconductoring of the existing distribution line over I-5 near the Lassen Lane overpass. As detailed on Figure 4-1 of the Final IS/MND, the existing distribution line segment spanning I-5 near Lassen Lane would not be reconductored. Rather, the existing distribution line span would remain and would not be altered or enlarged by the proposed project.

Regarding the second fact, the commenter contends that the Final IS/MND makes no mention or analysis of the visual impacts that may be caused by the alteration, enlargement, or other changes near the Lassen Lane overpass. As discussed in the previous response, the applicant does not propose reconductoring of the existing distribution line over I-5 near the Lassen Lane overpass. As such, and because no changes are proposed, visual effects associated with reconductoring the specific segment spanning I-5 near Lassen Lane are not considered/addressed. Potential visual effects and changes to existing views due to reconductoring proposed to the east of I-5 near the Lassen Lane overpass and elsewhere are considered in the Final IS/MND. Please refer to the previous response.

Regarding the third fact, as discussed in Section A.1, Response to Preface, the applicant does not propose reconductoring of the existing distribution line over I-5 near the Lassen Lane overpass. As such, and because no changes are proposed, visual effects associated with reconductoring the specific segment spanning I-5 near Lassen Lane are not considered/addressed. Refer to the previous response regarding potential visual effects associated with reconductoring of the existing distribution line proposed by the applicant.

The commenter also states that the "Final MND accordingly is inadequate for failing to respond to Mt. Shasta Tomorrow comments about the Project's adverse aesthetic impacts. . . ." Refer to Section A.1, which outlines the reasons why it is not possible for the CPUC to make assumptions regarding which comments on the PEA should be applied to the Draft IS/MND. To illustrate the difficulty for the CPUC to make assumptions on behalf of MST, it should be noted that the distribution line crossing I-5, which was discussed previously, would not be replaced, and as such, is not part of the project and could not contribute to any visual changes. This fact is

discussed in Section 4.4.3 and illustrated on Figures 4-1 and 4-2 of the Final IS/MND but is absent in the PEA.

Finally, MST also "challenges the Final MND and asserts earlier comments about the adverse impacts for the visibly taller power poles and the increased size of power lines. . . ." The Final IS/MND addresses potential visual impacts associated with the installation of visibly taller power poles and the increased size of power lines that would be installed elsewhere west of I-5. The visual effects of visibly taller power pole installation is addressed in Section 5.1.4(a) (page 5.1-20, paragraph 2; page 5.1-21, paragraph 1) and Section 5.1.4(c) (page 5.1-24, paragraph 2; page 5.1-31, paragraph 2; page 5.1-32, paragraphs 2 and 3).

Regarding potential effects to existing views of Mount Eddy, Section 5.1.4(a) of the Final IS/MND concludes that, while the addition of taller support poles along the existing distribution alignment would create more readily noticeable line contrast from viewing locations, the poles would remain backscreened by dark coniferous forest and would not rise above the existing tree line. The poles would not dominate views such that they would substantially obstruct existing views of Mount Eddy. As such, impacts were determined to be less than significant. Regarding potential effects to existing scenic views available from I-5 related to the installation of taller poles, the poles would not be visually dominant in the landscape and would generally be backscreened by existing tall vegetation. Where new and taller poles would be installed in locations where views of Mount Shasta are also available, the Final IS/MND determined that Mount Shasta would continue to command the attention of motorists and passengers. Therefore, scenic view impacts were determined to be less than significant.

Section 5.1.4 of the Final IS/MND notes that, while replacement wood support poles would be taller than existing poles, the features would contribute similar vertical forms as existing infrastructure present in the landscape. Further, on page 5.1-30, the Final IS/MND states that support poles tend to replicate the tall form and thin line of backscreening pine trees, and these similarities help the support poles to recede into existing landscape features. The Final IS/MND (Section 5.1.4) determined that the installation of taller replacement poles would create negligible visual change and negligible form and line contrast as viewed from Viewpoint 3 (a visual simulation of project components as viewed from Viewpoint 3 is included in the Final IS/MND). Because anticipated visual contrast would be weak/low, the Final IS/MND determined that visual changes associated with implementation of the proposed project (including the installation of taller support poles) would be less than significant.

A.4 Response to C: Project's noise impacts will be significant due to inconsistency with City of Mount Shasta and Siskiyou County's General Plans' Noise Standards, as well as state and federal noise standards.

The commenter states the following three facts relating to noise:

1. "Final MND does not respond to any of Mt. Shasta Tomorrow's comments about this Project's potentially significant noise impacts."
2. "Other CEQA environmental reviews in California have analyzed noise impacts during powerline construction activities to find that noise impacts may be significant. In such cases, time-of-day limitations on operations have been imposed by mitigations."
3. "The commenter states that PacifiCorp and the Final MND did not place daytime or hourly limits like other IS/MNDs for projects in California have done."

Project-related effects related to noise and vibration are addressed in Section 5.12.5 of the Final IS/MND. The Final IS/MND determined that noise from construction activities would have a less than significant impact on nearby noise-sensitive land uses.

Regarding the first fact, the CPUC assumes that the commenter is referring to comments filed during the Draft IS/MND review period. See the response in Section A.1 for why it was not possible to respond to comments that reference the PEA and to make assumptions of how they apply to the Draft IS/MND analysis. Responses to comments filed as part of the current filing are included below.

In response to the second fact, it is correct that "other power line construction projects have in some cases determined that construction noise impacts were potentially significant." However, for the project, the findings were that noise impacts resulting from the proposed project would be less than significant. This determination is based on the following elements of analysis:

- The nearest existing noise-sensitive receptors potentially impacted by the proposed project are occupied residences, most of which are located in the City of Mount Shasta (City). Residential dwellings potentially affected by installation of new poles and replacement of existing poles along the transmission line are located at various distances from the pole locations (estimated at approximately 70 feet[1] and 580 feet).

[1] Based on information from the commenter, several residences located along Mill Street and Forest Street would be within approximately 40 feet of project-related construction work. However, at these locations, the actual work proposed would be limited to reconductoring and re-stringing, which would not involve heavy construction equipment and would be of a short duration.

- The primary contributors to noise on the project site are traffic along I-5 and other local roadways and fixed noise sources relating to residential and commercial uses. According to the City's General Plan Noise Element, the 24-hour day–night sound level ranges from 65 A-weighted decibels (dBA) at a distance of 464 feet from I-5 to 60 dBA at a distance of 999 feet from I-5 in 2006 (City of Mount Shasta 2007).
- Noise levels from construction equipment and activities were provided in Table 5.12-2, Construction Noise Sources, of the Final IS/MND (provided below). The Final IS/MND states that "the maximum intermittent construction noise levels would range from 90 to 100 dBA at 50 feet for backhoes, bulldozers, and cranes for the substation and line construction operations." Table 5.12-2 indicates that, more typically, the range of noise levels for the heavier equipment and activities would be in the range of 66 to 93 dBA. For lighter-duty tasks and equipment (i.e., tensioners and cable-pullers), the noise levels would range from approximately 74 to 86 dBA.

Table 5.12-2
Construction Noise Sources

Equipment	Range of Noise Levels (dBA) 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 (moveable)	70–92
Cranes (derrick)	80–83
Forklifts	76–82
Tensioners	76–86
Cable pullers	74–82
Pneumatic tools	
Pneumatic wrenches	84–88
Jack hammers and rock drills	72–93
Compactors	80–83

dBA = A-weighted decibel

- The proposed substation and the majority of the transmission line component of the project would be located to the west of the City (in unincorporated Siskiyou County (County)), with approximately 1,200 feet of the transmission line upgrades located within

the City. Neither the County nor the City has set forth numerical standards for construction noise. Therefore, there is no local standard set to regulate construction noise standards. To the contrary, the City's General Plan Noise Element exempts construction noise. Specifically, Policy NZ-1.8(c) states the following (City of Mount Shasta 2007):

> NZ-1.8(c): Noise associated with construction activity between the hours of 7 a.m. and 5 p.m. shall be exempt from the standards cited in Table 7-5 [of the Noise Element]. Construction activity outside of this period may exceed the cited standards if an exemption is granted by the City to cover special circumstances.

To reiterate, construction activity noise is exempted from numerical land use compatibility standards if construction takes place within defined daytime hours (7:00 a.m. to 5:00 p.m.).

- As stated on page 4-28 of the Final IS/MND, construction work would occur 5 days per week for 10 hours per day. This is further clarified on page 5.12-9 of the Final IS/MND to be limited to between 7:00 a.m. and 5:00 p.m. (PacifiCorp 2016)[2]

In conclusion, the project would comply with existing applicable local noise policies. Therefore, no additional mitigation constraining time of work or limiting construction noise is required for the proposed project, and consequently, no additional mitigation is required.

Although neither applicant proposed measures nor mitigation measures were required, page 5.12-14 of the Final IS/MND listed a set of noise-reducing practices that would be in place, including maintaining the integrity of mufflers, the minimization of idling equipment, the shielding of small stationary equipment, the use of quieter construction equipment where available, and the routing of truck traffic away from noise-sensitive areas when possible. As a principal within CEQA, the project description, best management practices (including those listed), and mitigation measures would be monitored to ensure that the project is built as described.

Finally, regarding the third fact, as discussed previously, the applicant proposes a 10-hour workday, between the hours of 7:00 a.m. to 5:00 p.m., Mondays through Fridays, as stated in the Final IS/MND, Section 5.12.5(a); therefore, no limitation is required since this is consistent with local noise policies.

[2] It is acknowledged that on page 5.12-13 it states "construction activities in proximity to residential areas would occur between 7:00 a.m. and 7:00 p.m." this is an error, and an errata sheet has been issued.

A.4.1 Response to C1: The Final MND presents no predicted noise level data representing residential noise level exposure.

The commenter states the following three "facts" relating to C1 of the Submission:

1. "Nowhere does the Final MND (or PEA) describe what the maximum cumulative noise levels will be from the operation of multiple pieces of heavy construction equipment at the same time."
2. "Nowhere does the Final MND state that construction noise will **not** occur at nighttime or prior to 7:00 a.m. in the morning. . . ."
3. "The Final MND never provides measurements of ambient noise levels in the vicinity of those homes that this Project will impact with its loud construction noise . . ."

In response to C1, Fact 1, refer to Table 5.12-2 in the Final IS/MND, in which noise level exposures are presented in terms of a range of noise levels at a distance of 50 feet, which is nearer than the typical distance from construction work areas to most of the noise-sensitive residential land uses. This approach is appropriate because, unlike the majority of construction projects in which the work occurs on the same construction site for weeks or months at a time, work for the linear portion of the project would generally move from one site to the next on a daily basis, and the amount and type of equipment that would be capable of operating simultaneously at any one location would typically be limited to no more than three units. Thus, the values shown in Table 5.12-2 present a conservative estimate of short-term construction noise exposure.

In response to C1, Fact 2, of the Submission, as stated on page 4-28 of the Final IS/MND, construction work would occur 5 days per week for 10 hours per day. This is further clarified on page 5.12-9 of the Final IS/MND to be limited to between 7:00 a.m. and 5:00 p.m. No information in the project description or other record indicates that construction would occur outside of this period. Consequently, there is no evidence to suggest that the proposed project would occur before 7:00 a.m. or at night.

In response to C1, Fact 3, of the Submission, although ambient noise measurements are often conducted for a range of projects, it is also an accepted practice to use measurement data collected at a prior date from other projects or from other sources, such as the City's General Plan Noise Element. This is especially the case when project impacts are anticipated to be limited to a short construction noise duration, such as for the project. In particular, the extent of work anticipated adjacent to the nearest noise-sensitive receivers for the distribution lines would be brief and similar in loudness to common maintenance and short-term community noise events, such as landscaping maintenance (e.g., leaf-blowing, lawn-mowers).

A.4.2 Response to C2: The Final MND underestimates how severe project noise impacts will be.

The commenter states the following:

> The Final MND never considers that construction noise will be generated by more than a single piece of heavy construction equipment at one time. As such, its conclusions of construction noise being less-than-significant are unsupported by substantial evidence.

In addition, MST offers the following four facts relating to C2 of the Submission:

1. "The Final MND, p. 5.12-9, states that approximately 43 workers would be required for construction. Not only is more than one worker likely to be working at a time, workers are likely to be operating more than one piece of heavy construction equipment at a time. The Final MND ignores that cumulative noise from construction is additive when more than one source of noise is operating at the same time."
2. "The Final MND never discusses the significance of noise impacts to nearby residents from this Project's use of backup beepers during heavy equipment construction activities. The Final MND does not describe how loud backup beeper alarms are. Backup alarms are the loudest and often most-complained about noise sources by nearby property owners during construction."
3. "Backup alarms must generate a noise level at least 5 to 10 dBA above the background noise in the vicinity of the rear of the machine where a person would be warned by the alarm. Thus, they are significantly louder than the Project's heavy equipment noise. Yet the Final MND fails to describe their decibel rating or place limits on their loudness. Backup alarms typically produce from 97 to 112 decibels at four feet, which attenuates to about 75 to 89 dBA at 50 feet, and can even be heard at far greater distances than just where the nearest neighbors live. Because of its frequency, such backup alarm noise is designed to alert people even if not louder on the A-weighted decibel scale than other noise sources. These backup alarms beep about once per second at a penetrating frequency of about 1,100 Hertz designed to be easily heard by most people."
4. "The Final MND does not analyze this Project's irritating backup warning alarm noise impacts that may occur during construction activities."

In response to C2, Fact 1, it is estimated that up to 43 workers at any time would be required for project construction. Because of the linear nature of the project, and because work would take place at multiple locations concurrently, there would be substantially fewer workers at any one location. As described in Table 4-2, a wire installation crew would consist of up to eight

workers. Therefore, the impacts at the locations identified by the commenter would more likely be up to eight crew members plus equipment.

In response to the statement that the Final IS/MND never considered construction noise from more than a single piece of equipment, refer to the analysis explained in Section A.4, Response to C. Further, as stated in Section 5.12.5(a) of the Final IS/MND, "the maximum intermittent construction noise levels would range from 90 to 100 dBA at 50 feet for backhoes, bulldozers, and cranes for the substation and line construction operations." Such equipment would be used when replacing poles and constructing the substation. Since residences are considerably farther than 50 feet away from the substation and pole replacement sites, the noise would be substantially attenuated.

The remaining construction activities, including replacement of distribution lines, that would occur within the City would use considerably lighter equipment with estimated maximum noise impacts of 88 dBA (see C7 for discussion), which is comparable to regular landscaping maintenance equipment such as lawn mowers and leaf blowers.

In response to C2, Facts 2 through 4, outdoor warning devices such as backup alarms (on construction equipment outfitted with them) are mandated by the Code of Federal Regulations, specifically Title 29, Part 1926.601(b)(4), which requires "a reverse signal alarm audible above surrounding noise level," but only when the motor vehicle has "an obstructed view to the rear." However, the nature of the project is such that the backing up of vehicles in or near noise-sensitive land uses on a regular basis is not anticipated. Because backup alarms sound only when vehicles fitted with them are backing up, backup alarm noise is not anticipated to be a major component of construction noise.

A.4.3 Response to C3: The Final MND does not evaluate or mitigate sleep disturbance impacts of construction noise occurring before 7:00 a.m.

The commenter states the following:

> The PEA previously (and similarly now the Final MND) state[d]: 'No construction activities would occur in proximity to existing residential uses except between the hours of 7 a.m. and 7 p.m., Monday through Friday, or 8 a.m. to 5 p.m. on Saturdays.' But that claim rings hollow because it provides no definition or limitation on the term 'proximity.' Since the Project's construction noise could be significant and in excess of applicable standards for hundreds of feet, if not a thousand feet or more, the PEA's and Final MND's reassurances, if that, are essentially meaningless. The Final MND provides no mitigations that would reduce loud construction noise impacts to a less-than-significant level for some residences.

The commenter presents several additional facts relating to C3, which are as follows:

1. "Nothing in the Final MND prohibits noisy construction activity before 7:00 a.m."
2. "Project construction noise levels may be excessively loud at occupied residences and reach levels of over 100 dBA. . . ."
3. "For example, if construction noise levels are 100 dBA at 50 feet from heavy equipment operations, then that same noise source at a distance of 1,000 feet could be as much as 74 dBA (if intervening ground was 'hard') or 67 dBA (if intervening terrain is 'soft')."
4. "The ambient sound level for some affected homes before 7:00 a.m. is at times lower than 40 dBA L_{eq} [equivalent sound level over a given period]. The Proposed Project's maximum construction noise would therefore be heard at that 1,000 foot distance at between 27 to 34 dB [decibels] louder than ambient noise levels."
5. "A home that is 1,000 feet from construction noise (i.e., about 1/5 mile) would generally not be considered to be in 'the proximity' of the construction activity. The Final MND accordingly does not prohibit excessive construction noise before 7:00 a.m. at that 1,000 foot distance even though the noise impacts could be significantly sleep-disturbing for those residents who sleep in the summer with open windows."
6. "That a typical home with open windows at night for summer cooling attenuates exterior noise by about 10 dBA."
7. "That construction noise, when reduced by that 10 dBA as it passes through an open window, might still create about 17 to 24 dBA louder noise levels indoors."
8. "A temporary noise level increase of only 5 dB is audible and capable of awakening a sleeping resident. Construction noise that is 17 to 24 dB louder than ambient conditions in a bedroom would constitute a substantial noise level increase and would be considered a significant noise impact."

In summary, MST contends that construction activities may occur at night or prior to 7 a.m. The Final IS/MND states that construction work would occur 5 days per week for 10 hours per day and is further clarified on page 5.12-9 of the Final IS/MND to be limited to between 7:00 a.m. and 5:00 p.m. (PacifiCorp 2016). There is no evidence in the Final IS/MND to suggest that construction activities for the proposed project would occur before this time. Further, the applicant's response to Data Request 1, February 8, 2016, question 4.12(d), revised PEA to limit work hours from 7:00 a.m. to 5:00 p.m., which categorically restricts construction activities to times within those hours, as discussed in C3 (PacifiCorp 2016).

The project would be monitored by the CPUC to ensure that it is constructed as described in the Final IS/MND. This includes adherence to timing of construction actives where applicable. Since it is already stated in the noise analysis that no construction activities would occur prior to 7:00

a.m., monitors would ensure that no construction would occur before this time. Therefore, there is no requirement for additional mitigation.

A.4.4 Response to C4: Locations of the most severely noise-impacted homes are not adequately identified in the Final MND nor on its maps. No ambient noise levels are described at those homes by other means.

The commenter presents the following three facts relating to C4:

1. "The Final MND's section on noise impacts contains no maps of Project-noise affected homes. Such maps are not found elsewhere in the Final MND either. The distances to specific homes most likely to be affected by Project noise are also not listed in any tables in the Final MND."
2. "CEQA environmental studies throughout California routinely display maps of noise-affected homes to better enable the public to understand which residents might be harmed by projects' noise generation."
3. "In the absence of any scaled mapping of Project noise-affected residences being presented in the Final MND, there is no substantial evidence to support the Final MND's conclusion that the nearest homes are 70 feet away and their Project noise impact exposure will be less-than-significant."

Lack of maps displaying noise-affected residences is not a deficiency. CEQA, Section 15063(d)(3), requires an IS to briefly show a factual basis for any decision. This basis could be a narrative, map, or reference to source information. In this case, the distances identified in the discussion for noise impacts are sufficient factual evidence from which to make a determination. A challenge to those facts, usually during the comment period, could be an appropriate public comment. As evidenced in A.4.7, sufficient information was presented in the IS for the commenter to provide comments on potential noise issues. Therefore, the commenter's own action demonstrated the there is sufficient evidence in the public record to support an informed discussion and from which the whole record can be developed to enable the CPUC to make an informed decision.

A.4.5 Response to C5: Project-related time of day construction activities are not adequately regulated or mitigated to avoid significant sleep-disturbance impacts.

The commenter presents the following additional facts relating to the regulation of construction activities to mitigate sleep disturbance:

1. "The Final MND's Project Description does not contain any time limits for construction activities. The text, while vaguely suggesting that construction generally

will occur from 7:00 a.m. to 5:00 p.m. or 7:00 p.m., places no definitive time limitations on such activities."

2. "During hot summer weather, construction companies often begin outdoor work before 7:00 a.m. to avoid the heat. These early morning hours are times when significant sleep-disturbance impacts may occur. The Final MND however never discusses sleep disturbance impacts."
3. "Nor does PacifiCorp or the Final MND propose any noise-related time limits that can be ensured by enforceable mitigations."

In summary, MST incorrectly asserts that times of construction activities require mitigation and would not be adequately regulated. To reiterate the response to C3, the Final IS/MND states that construction work would occur 5 days per week for 10 hours per day and is further clarified on page 5.12-9 of the Final IS/MND to be limited to between 7:00 a.m. and 5:00 p.m. (PacifiCorp 2016). There is no evidence in the Final IS/MND to suggest that construction activities for the proposed project would occur before this time.

As with all CPUC projects, the proposed project would be monitored by the CPUC to ensure that it is constructed as described in the Final IS/MND. This includes adherence to timing of construction actives where applicable. Since it is already stated in the noise analysis that no construction activities would occur prior to 7:00 a.m., monitors would ensure that no construction would occur before this time. Therefore, there is no requirement for additional mitigation.

To further clarify the response to C5, Fact 1, it is acknowledged that on page 5.12-13 of the Final IS/MND, it states that "construction activities in proximity to residential areas would occur between 7:00 a.m. and 7:00 p.m." This should be 7.00 a.m. to 5:00 p.m., as clarified by PacifiCorp in their response to Question 4.12(d) Data Request 1. An errata sheet for the Final IS/MND that corrects this error has been issued.

A.4.6 Response to C6: The Project's daytime construction noise exposure at existing homes will also exceed acceptable noise standards response to comment.

The commenter presents the following several additional facts relating to the regulation of construction activities to mitigate sleep disturbance:

1. "The Final MND fails to evaluate which homes will be exposed to noise levels that exceed City, County or other reasonable noise standards even during the daytime hours. Some homes could be exposed to significant and excessive construction noise levels of over 100 dBA L_{eq} even during daylight hours."

2. "The Final MND essentially takes the position that as long as construction noise occurs after 7:00 a.m. in the morning, that everyone has left his or her home or is deaf, and any amount of noise impact at those homes is acceptable or is at least less-than-significant."
3. "The 'noise-reducing practices' the Final MND lists on page 5.12-14, just like the previous PEA did on its page 194, are not sufficiently enforceable or meaningful to cure the Final MND's serious deficiencies in its Project's noise impact analysis. These practices are excessively vague as worded. They are not enforceable as would be CEQA mitigations. They contain no specific performance standards by which the public can be assured any meaningful noise attenuation will occur even if utilized. They provide no substantial evidence or support for the determination that construction noise will be reduced to a less-than-significant noise level. The Final MND never identifies any threshold of significance for construction noise impacts either. In the absence of any threshold of significance, and with no evidence of any enforceable Project noise level reduction, the Final MND's determination that these noise impacts will be less-than-significant is unsupported and inadequate."
4. "Standards for maximum acceptable construction noise exist in some California communities. For example, the City of Redding's General Plan Noise Element, p. 12, limits maximum daytime noise to 55 dBA $L_{eq.}$"

In response to C6, Facts 1 and 2, the appropriate standards against which to assess noise impacts of construction activities are those set out by the County and City. Neither the County nor the City has set forth numerical standards for construction noise. Therefore, there is no local standard set to regulate construction noise. However, the City recognizes that construction noise is temporary in nature, and Policy NZ-1.8(c) of the City's General Plan Noise Element specifically exempts construction noise between 7:00 a.m. and 5:00 p.m., which would be the construction hours adhered to by the proposed project (as discussed above).

In response to C6, Fact 2, as discussed in response to C7, construction activity would consist of stringing and tensioning new wire and no pole replacement. The maximum likely noise impacts would be 88 dBA for the closest residences, as described in C7. Such a noise level is comparable to regular short-term community noise events, such as landscaping maintenance (e.g., leaf-blowing, lawn-mowers). Because the City exempts construction noise from regulation, the impact would remain less than significant and require no mitigation.

In response to C6, Fact 3, as discussed above, neither the City nor the County regulates noise impacts from construction beyond prohibiting nighttime construction. Therefore, no mitigation is required.

In response to C6, Fact 4, the reference to the City of Redding's General Plan Noise Element is erroneous because the standard referred to in Table 5-5 (City of Redding 2000) is for noise level performance standards for new projects affected by or including non-transportation noise sources. Thus, these are operational standards, not construction noise standards. Construction noise is addressed in Section 18.40.100 of the City of Redding's Municipal Code (City of Redding 2009). Construction noise for the City of Redding is regulated in much the same way as the City of Mount Shasta by prohibiting noise during nighttime hours.

Furthermore, the City of Redding's General Plan Noise Element is not applicable to the proposed project. The project is not within the jurisdiction or boundary of the City of Redding. As previously stated, the County does not regulate construction noise, and the City specifically exempts construction noise under General Plan Policy NZ-1.8(c). Therefore, this fact is not relevant to the proposed project or its CEQA analysis.

A.4.7 Response to C7: Distances to the nearest affected residences are overstated, resulting in underestimated noise level prediction.

The commenter presents the following additional facts relating to the regulation of construction activities to mitigate sleep disturbance:

1. "The Final MND, p. 5.12-6, states that '[t]hese residences occur approximately 70 feet and 580 feet from pole locations.' Those are the same distances stated in the PEA. And that closest distance is wrong. The fact is that some homes are even closer than that to some Project pole locations and other Project activities. Two homes at the corner of Mill Street and Forest Street are only about 40 feet and 44 feet from a proposed power pole (#167241) that will be modified with increased voltage wires."
2. "There is a home at the northeast corner of the intersection of Forest Street and Mill Street located at 512 Mill Street which is 44 feet as measured from that power pole."
3. "There is a home at the south east corner of the intersection of Forest Street and Mill Street located at 109 Forest Street which is only 40 feet as measured from that power pole."
4. "If construction noise levels reach 100 dBA L_{eq} at a distance of 50 feet from the construction source at the closest distance estimated in the Final MND, then that noise level would likely be reduced by distance down to about 96 dB L_{eq} at a distance of 70 feet (assuming typically soft ground surfaces in between and using the rule that noise diminishes in loudness by about 7.5 dB for each doubling of distance over soft ground.)."
5. "By comparison to some worst-case examples, then at a house at 109 Forest Street in the City of Mt. Shasta, (which is located 40 feet from the pole location), that same construction noise would be over 102 dBA L_{eq}. That noise level would be audibly louder by 2 dB than if

assumed at a 50-foot distance. When compared to the claimed 70-foot minimum distance, the Final MND underestimates construction noise impacts at the closest homes about 6 dB by misstating the distances they are from power poles slated for replacement."

6. "The heavy equipment operations may be even louder at these homes because the equipment may even be closer to these houses because that measured distance is along a diagonal from the street intersection of Mill Street and Forest Street. When parked directly in front or to the side of these corner lot homes, those distances would be reduced more."
7. "Along South Old Stage Road are homes closer to proposed pole positions than the Final MND estimates too. Along West Jessie Street are five homes within 40 to 50 feet or Project undergrounding activities. But the Final MND totally ignores that those homes so close to Project activities will be exposed to excessive construction noise levels."

In response to C7, Facts 1–7, additional noise calculations were performed and are summarized below. The residences identified on pages 17–18 of the Submission are adjacent to a portion of the project in which construction activities would be limited to line replacement and tensioning (i.e., no poles would be replaced). No other construction activities would take place. Using a construction scenario in which three pieces of equipment are operational at any one time at any one pole (a bucket truck, a wire-pulling machine, and a line tensioner), the Federal Highway Administration's Roadway Construction Noise Model[3] was used to estimate the construction noise. The results indicated that, at the nearest residences 40 and 44 feet away, respectively, noise levels are predicted to be approximately 87 dBA and 86 dBA, respectively. Because of the transient nature of the work, activities would be a short duration (no more than 3–4 days at any one pole location). Although clearly audible (even indoors), the noise level would be comparable to many maintenance and short-term community noise events, such as landscaping maintenance (e.g., leaf-blowing, lawn-mowers). Such noise levels do not represent unusual noise levels in duration or volume. Therefore, noise impacts would be less than significant.

Regarding the residences along Old Stage Road and West Jessie Street identified on page 19 of the submission, each of these locations is addressed in turn in the Final IS/MND. At proposed transmission line pole locations along West Jessie Street, a recheck of distances to the nearest residential dwellings confirmed that the original estimate of approximately 70 feet is accurate.

[3] The Federal Highway Administration's Roadway Construction Noise Model (FHWA 2008) was used to estimate construction noise levels at these noise-sensitive land uses. Although the model was funded and promulgated by the Federal Highway Administration, the Roadway Construction Noise Model is often used for non-roadway projects because the same types of construction equipment used for roadway projects are also used for other project types. Input variables for the Roadway Construction Noise Model consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver.

Therefore, the noise assessment contained in the Final IS/MND is correct. Regarding the residences along West Jessie Street in proximity to undergrounding activities, review of Figure 1, Revised Project, in the Lassen Substation PEA Amendment indicates that there would be one residence located within 40 to 50 feet of the directional drilling equipment work area, though the actual proposed underground vault (and hence, the focus of the actual work) would be approximately 90 feet away. Based on the description of the work provided in the PEA Amendment, in which approximately four workers and four pieces of equipment (a drill rig, a back reamer, a mud truck excavator vacuum trailer, and a pipe reel trailer) are anticipated, the Roadway Construction Noise Model was used to estimate the resultant construction noise. The results indicated that, at the nearest residence, the noise level from this component of the project is predicted to be approximately 86 dBA. Construction of the underground distribution line is expected to take approximately 1 to 2 weeks. Construction of the underground distribution line would require minor excavation, earthwork activities, and use of construction equipment that could result in infrequent periods of high noise levels. However, this noise would not be sustained and would occur only during the temporary construction period of approximately 1 to 2 weeks. Furthermore, as stated previously, no construction activities would occur except between 7:00 a.m. and 5:00 p.m. Monday through Friday or 8:00 a.m. to 5:00 p.m. on Saturdays, resulting in a less than significant noise impact.

The commenter concludes with the claim that these facts about noise impacts support a fair argument that the project may have significant noise impacts on neighbors to the construction activities that the Final IS/MND entirely fails to disclose and mitigate. As provided above, a detailed response to the stated "facts" shows that potential project impacts have been adequately disclosed and addressed under CEQA.

REFERENCES CITED

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