

**Applicant's Comments on the  
California Energy Commission  
Staff Assessment (Part 1)**

**Of the  
Application for Certification  
For the  
Pico Power Project  
Santa Clara, California  
02-AFC-03**

Submitted to the  
California Energy Commission

Submitted by  
Silicon Valley Power/  
City of Santa Clara

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## INTRODUCTION

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The following are Silicon Valley Power's (SVP's) comments on the California Energy Commission (CEC) Staff Assessment (Part 1) for the Pico Power Project (PPP) (02-AFC-3). The comments include notes on typographic errors, questions of fact, analysis, or conclusions drawn in the Staff Assessment, and discussion regarding and proposed revisions to the Staff's proposed Conditions of Certification. The comments are listed in the same order as the Staff Assessment (Introduction, Project Description, Environmental Assessment, Engineering Assessment, General Conditions). Part 1 of the Staff Assessment does not include the section on Air Quality or Alternatives. The Applicant will comment on these sections after Staff Assessment Part 2 is published.

A discussion regarding SVP's proposed revisions to the Staff's proposed Conditions of Certification is included in Appendix A of this document. The attachment shows SVP's proposed revisions to the Conditions of Certification in redline-strikeout.

## EXECUTIVE SUMMARY

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Page 1-2, Paragraph 1, line 5:

- “2.85-acre” should be “2.86-acre”

Page 1-2, Paragraph 2, line 3:

- “...approximately 3 miles of new 12-inch diameter pipeline...,” should be 2 miles

Page 1-4, Paragraph 1, line 2:

- “...impacts to serpentine habitats...” Though the term “serpentine habitats” is not incorrect, we suggest “serpentine bunchgrass ecosystem” as an alternative terminology.

## PROJECT DESCRIPTION

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Page 3-1, Paragraph 1, line 5:

- “2.85-acre” should be “2.86-acre”

Page 3-1, Paragraph 2, last line:

- “project could be on-line in the first quarter” should be “project could be on-line by the first quarter”

Page 3-1, last paragraph, second to last line:

- “low water injection” should be “water injection”

Page 3-2, fourth bullet:

- “(utilizing carbon dioxide)” should be “(some parts of which use carbon dioxide)”

Page 3-2, fifth bullet:

- “...an ammonia storage and loading area...” should be “...an aqueous ammonia storage and unloading area...”

Page 3-2, Title

- “Transmission Line Facilities” should be “Transmission Facilities” since there are no transmission lines

# ENVIRONMENTAL ANALYSIS

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## Biological Resources

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Page 4.1-3, Paragraph 3

- The statement “Land use designations around the proposed site are zoned for a variety of uses including industrial, commercial, and residential” is somewhat misleading in that land use designations immediately surrounding the project site are entirely for heavy industry, light industry, and electrical utility uses. The nearest residential and commercial zoning is 0.5 miles from the project.

Page 4.1-4, Paragraph 1, line 2

- We suggest “serpentine bunchgrass ecosystem” as an alternative for “serpentine habitats.”

Page 4.1-6, Table 2

- Title of Table 2 is misleading. The title should read “Species Observed in Project Area”, rather than “Species observed at Proposed Project Site.” Project surveys of the PPP site and along the linear rights-of-way did not observe burrowing owls and there are no records of burrowing owl sightings at the project site, though owls have been observed by others within 0.25 miles of the linears.

Page 4.1-8, Paragraph 2, line 7

- “...would be moved from the west side of the former Pico Way...” should be “...would be moved from the east side of the former Pico Way...”

Page 4.1-8, Paragraph 3

- This alternative route for undergrounding the transmission line has been eliminated from consideration. We suggest either deleting the paragraph or changing “has also been proposed” (line 1) to “was considered.”

Page 4.1-8, Paragraph 5

- The statement that the proposed Lafayette Street Route would require underground crossings of Union Pacific Railroad, Montague Expressway, and U.S Highway 101 is not correct for Montague Expressway. The Montague Expressway is elevated over Lafayette Street. Because the Expressway is owned by Santa Clara County, crossing under would require an encroachment permit, but would proceed by normal trenching in Lafayette Street (this is underground, but not because of the expressway).

Page 4.1-10, Cumulative Impacts, Paragraph 2

- “The primary biological resources concern...” should be “The primary biological resources of concern...”

Page 4.1-11, last sentence, page 4.1-12, first line.

- This sentence cites a personal communication (Davy 2002) to document SVP’s preference to mitigate potential nitrogen deposition impacts to serpentine habitats through habitat compensation. We suggest a citation to the Resource Management Plan (SVP 2002c in the reference list), since this provides written information about the SVP’s proposed mitigation and is publicly available.

Page 4.1-13, bullets at top of page

- The third bullet (“Staff proposes that applicant submit the following:”) should not be bulleted.

Page 4.1-13, Compliance With LORS, Sentence 2

- This sentence states “...no formal habitat compensation plan has been made.” SVP has prepared and filed a draft Resource Management Plan that proposes a formal habitat compensation plan that includes purchase of serpentine bunchgrass ecosystem habitat, endowment for conservation management, and an adaptive management plan. The plan, as submitted, includes a range of acreage that might be proposed in a final plan. The plan will be finalized when the final habitat compensation acreage is determined.

Page 4.1-13, Conclusions and Recommendations

- “...Staff recommends that SVP provide a complete habitat compensation plan and Resource Management Plan prior to the release of the Addendum...” We believe that our habitat compensation plan and Resource Management Plan are complete. Though we have not proposed a final habitat compensation acreage number, we have proposed a range of acreage for habitat compensation. This information should be sufficient for Staff to complete its analysis.

Conditions of Certification: See Appendix A for suggested wording changes.

## Cultural Resources

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### General Comment:

- It is helpful to try to clarify the terminology that we use in writings about cultural resources. One of the difficulties of agreeing on a standard terminology is that state and federal regulations use different terms for properties that are older than 50 years and therefore considered for their possible historic significance, and properties that have been found to have historic significance. The federal term for a significant property is “historic property.” (A property may be a buildings, site, structure, object, or district). A historic property is one meeting the criteria for listing on the National Register of Historic Places. The term in state regulations for a significant historic or archaeological property is “historical resource”.<sup>1</sup> In Paragraph 1, staff states that “Staff defines the term cultural resources to refer to anything created or affected by human beings.” Later in the section, Staff refers to various properties as “historic.” This may cause confusion, as will be pointed out in specific comments, below, since both the term “resource” and “historic” imply some aspect of significance or value, as in the dictionary definition of “resource” “*a source of supply or support : an available means...a natural source of wealth or revenue*” (Merriam Webster on-line dictionary). To avoid confusion, Applicant proposes a terminology under which the term cultural resources may refer to historic properties (federal), historical resources (state), or traditional cultural properties (cultural rather than historical) of significance. Applicant prefers the federal term “properties” for objects or artifacts of human culture, the significance of which has not been determined or that have been determined non-significant. Though the term “resource” is sometimes used in state-level regulations and guidance regarding cultural resources as a general term to mean any “property,” this is an imprecise use, since “resource” can imply significance and since this term has a more generic meaning in general parlance.

### Page 4.2-1, Paragraph 2, line 2

- “...project related...” Should be “project-related...”

### Page 4.2-, Paragraph 1, last sentence

- “Although traces of human occupation provide evidence for habitation in this area for at least 11,500 years, it is likely that rising seas and deposits of sediments in the area hide sites that date back approximately 15,000 years (SVP 2002a, p. 8.3-4).” The citation to page 8.3-4 of the AFC should come before this sentence (previous text refers to the Guadalupe River and natural environment). The AFC does not make the above statement regarding the timing of first occupation in the area or the likelihood of buried sites dating back 15,000 years. While accepted models of New World colonization are changing and more archaeologists would accept the 15,000-year date than was previously the case, the fact remains that sites predating

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<sup>1</sup> Public Resources Code 5020.1 (j), “*Historical resource*’ includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic agricultural, educational, social, political, military, or cultural annals of California.”

11,500 are extremely rare and have not been found in the Bay Area (this could be due to sedimentation).

Page 4.2-4, Paragraphs 3, 5, 6

- References to decades or centuries (1830s, 1840s, 1800s...) should be made without an apostrophe.

Page 4.2-5, Paragraph 1, line 7

- “Santa Clara Heritage Resource Inventor” should be “Santa Clara Heritage Resource Inventory”

Page 4.2-7, Paragraph 3, line 8

- “Resources eligible for the California Register of Historical Resources (CRHR) may have less integrity than the resources eligible for the NRHP (National Register of Historic Places).” The integrity of a property (its condition, or state of preservation) is a very important component of significance in terms of qualifying the property for listing on either the CRHR or NRHP. Though the CRHR guidance may appear to allow listing on the California Register of properties not meeting integrity requirements for the National Register, this may not be the intention of the California Office of Historic Preservation in issuing the guidance. The State’s guidance is misleading where it states:

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data (*California Office of Historic Preservation Technical Assistance Series #1, California Environmental Quality Act (CEQA) and Historical Resources*).

This statement is misleading or incorrect in that it can apply equally to properties considered for the National Register. That is, properties not retaining sufficient integrity for listing on the National Register by virtue of their historical merit alone (criteria a, b, c) may still be significant under criterion (d) “that have yielded or may be likely to yield, information important in prehistory or history” (36 CFR 60.4). There are no statements in the regulations or OHP guidance that imply a stricter standard for National Register properties than for California Register properties. One such difference in standards, however, could stem from the scope of significance. That is, while National Register properties may have national, regional, or local significance, the California Register may allow more leeway in accepting properties of state and local importance that the National Register might overlook.

Page 4.2-9, Paragraph 7, first line

- “An historic foundation was recorded at 2975 Lafayette Street.” See general comment, above. This is a property dating to the historic era (more than 50 years old), but does not attain the designation of “historic” until found significant. The previous paragraph, second sentence correctly refers to the quonset hut at Laurelwood Road and Lafayette Street as a “potential historic resource.” It is potentially historic because it has not formally been evaluated.

Page 4.2-9, Paragraph 8, last sentence on page

- “JRP concluded that the transmission line would not be recommended eligible to the NRHP or CRHR because it would not be eligible under criterion A, B, C, or D.” As stated, this is a circular argument. It would be clearer to say “JRP concluded that the transmission line does not meet any of the criteria for listing on the NRHP or CRHR.” (Note also that the NRHP criteria are lettered—the CRHR criteria are numbered.)

Page 4.2-10, Paragraph 1, lines 2-4

- “Although this historic resource would be impacted by the project, it would not be a significant impact requiring mitigation because the resource is not recommended eligible to the CRHR, therefore no mitigation is required.” See the general comment, above. This statement is really not necessary. There is no need to discuss project effects and whether or not they are significant and adverse effects (impacts) because we have already determined the property non-significant. Only a significant property can sustain impact. Only then can we determine whether or not the impact is significant. As the National Park Service guidelines state (for compliance with Section 106 of the National Historic Preservation Act); first, identify the Area of Potential Effects; second, inventory historic (significant) properties; and third, assess project effects on any properties found historic (historic properties or historical resources).

Page 4.2-10, Paragraph 1, lines 5

- Reference to Pico 2002c should be SVP 2002c.

## Hazardous Materials

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Page 4.3-2, Paragraph 3, and Page 4.3-11

- The CUPA with jurisdiction within the City of Santa Clara is the Santa Clara City Fire Department Hazardous Materials Division, rather than Santa Clara County Health Department, Division of Environmental Health.

Page 4.3-6, Paragraph 4, last sentence

- "... no combustible or flammable material is stored, used, or transported within 100 feet of the sulfuric acid tank." As agreed by Staff at the April 8, 2003 Staff Assessment Workshop, this does not apply to natural gas pipelines or portable materials (such as welding tanks). This text should be modified to read "...no combustible or flammable material is stored within 100 feet of the sulfuric acid tank."

Page 4.3-11, Conclusion

- Since the federal RMP requirement does not apply (aqueous ammonia at concentrations less than 20 percent by weight do not require a federal RMP, per 40 CFR Part 60), submittal would be to CEC and Santa Clara City Fire Department only, not EPA.

Pages 4.3-17 through 4.3-22

- These pages are incorrectly numbered as 4.4-17 through 4.4-22.

Conditions of Certification: See Appendix A for suggested wording changes.

## Land Use

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Page 4.4-7, Electrical Transmission Line Relocation

- This entire section could be deleted, as SVP has eliminated the alternative underground transmission line from consideration (see also comments on Condition LAND-9 in Appendix A).

Conditions of Certification: See Appendix A for suggested wording changes.

## Noise

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Page 4.5-6, “Linear Facilities,” Item #2

- The 0.25-mile transmission line connecting the Kifer and Scott receiving stations is an existing line and is not part of the project. The PPP connects directly with the Kifer Receiving Station. SVP suggests deleting the item, since the connection to the Kifer Receiving Station will take place on site, and therefore does not qualify as an off-site linear.

Page 4.5-11, Paragraph 3, “Linear Facilities”

- Reference to “an electrical interconnection line to an existing substation” should be deleted for the same reason cited for Item #2 above.

Page 4.5-13, Paragraph 3, line 3

- “shudown” should be “shutdown”

Page 4.5-14, Paragraph 4

- Please delete items 2 and 3 since the present design no longer includes these.

Conditions of Certification: See Appendix A for suggested wording changes.

## Public Health

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No comments.

## Socioeconomic Resources

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Page 4.7-5, Table 3 title

- “PEP” should be “PPP”.

## Soil & Water Resources

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Page 4.8-10, Paragraph 2, line 1

- Should be a space between “least” and “150”

Page 4.8-18, Item #1

- Probably should be “Casing and depth of wells”

Page 4.8-19, Footnote 1

- The footnote contains extra spaces and the second sentence lacks a period.

Page 4.8-21, Paragraph 2 and 3.8-3, Paragraph 1

- “...given the limited on-site sampling of groundwater and the lack of information... staff cannot fully assess the potential for significant adverse impacts from groundwater contamination that would be caused by project groundwater pumping (from the backup well). SVP believes that there is sufficient information in the record for Staff to make a finding that a significant adverse impact is unlikely (per Staff discussion at the April 8, 2003 workshop). SVP has prepared an aquifer test program and testing plan and the plan has been approved by the Staff and Santa Clara Valley Water District. This program would be implemented before the SVP uses the backup well for cooling water and would be sufficient to confirm the finding of no significant impact. If the test program were to lead to a finding of a potentially significant adverse impact to the aquifer, SVP would propose to modify the use of the backup well to mitigate this impact to a level below significance.

Page 4.8-25, Paragraph 2

- In refining the design of the storm water runoff system, project engineering consultant Black & Veatch has recalculated the estimated stormwater runoff. Revised numbers are partly due to a revised allocation of paved and graveled surfaces and partly due to the use of more conservative drainage assumptions. The revised figures for the 10-year storm are:

Pre-development: 3.21 cfs

Post-development: 4.52 cfs

For the 100-year storm:

Pre-development: 4.78 cfs

Post-development: 6.74 cfs

The net increase in runoff would be 1.31 cfs (10 year) or 1.96 cfs (100 year), or approximately 41 percent. Given the small quantities involved, however, this will not cause

a significant impact. As described in the AFC and subsequent filings, the existing storm drain system has sufficient reserve capacity to handle the existing plus project storm drainage. Since the project area is mostly built out, cumulative impacts to the drainage system are unlikely as well.

Pages 4.8-30 and 31, “Soils”

- The paragraphs in this section following the first paragraph “The Applicant will:” should be bulleted.

Pages 4.8-31 and 32, “Surface and Storm Water”

- The paragraphs in this section following the first paragraph “The Applicant proposes to:” should be bulleted.

Page 4.8-33, Paragraph 1

- “To address the unresolved issue of potential impacts of groundwater contamination, staff recommends the implementation of the Applicant’s proposed aquifer test program...” As previously stated under the comment related to Page 4.8-21, Paragraph 2, SVP believes that there is sufficient information in the record for Staff to make a finding that significant adverse impact is unlikely (per Staff discussion at the April 8, 2003 workshop). SVP has prepared an aquifer test program and testing plan and the plan has been approved by the Staff and Santa Clara Valley Water District. This program would be implemented before the SVP uses the backup well for cooling water and would be sufficient to confirm the finding of no significant impact. If the test program were to lead to a finding of a potentially significant adverse impact to the aquifer, SVP would propose to modify the use of the backup well to mitigate this impact to a level below significance.

Page 4.8-33, Paragraph 4, significance criteria

- Please clarify in the Staff Assessment that there must both be detection of contamination concentrations of Title 22 constituents above the MCLs or detection of petroleum hydrocarbons and the finding of a calculated vertical downward gradient between the Upper and Lower Aquifer zones that would allow for migration of these contaminants for there to be a finding of significant adverse impact resulting from the backup well (per Staff Assessment Workshop). Please also clarify that certain kinds of petroleum hydrocarbon contamination (minor spill of crank-case oil for example) would not pose a significant threat to the Lower Aquifer.

Page 4.8-33, Paragraph 7

- “...the project owner would be required to amend the project license to identify...” Since any project changes necessary to avoid adverse impacts to water supply resulting from

operation of the backup water supply well would not involve a change of project equipment, but merely a change in operational modes, SVP proposes that a finding of significant adverse impact lead to a change in the way in which the backup well would be used (for example, a limit on annual pumping), as documented in an operational plan for the well, rather than a license amendment.

Conditions of Certification: See Appendix A for suggested wording changes.

## Traffic & Transportation

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Page 4.9-3, “Local Setting”

- SVP has identified a new plan to access the project site through the Kifer Receiving Station/Lafayette Substation yard from the southern perimeter, through a new gate on Comstock Avenue. This would be a new site access point.

Page 4.9-7, “Construction Phase”

- The peak period of construction in terms of workforce on site would be months 10-12, according to Socioeconomics Table 3, and the AFC, rather than months 12-15 as identified in the Staff Assessment.

Page 4.9-9, “Railways”

- The Applicant plans to use rail transport for eight heavy hauls. Sidings for unloading are not available near the project site, however. Sidings that may be used are located in North San Jose and at Marberry Road near 101 in San Jose. Negotiations are underway with Union Pacific to determine the appropriate siding or sidings. Equipment would be trucked from the siding to the site. Each rail car would constitute one heavy truck haul.

Page 4.9-9, Paragraph 4, first sentence

- “...easterly underneath the Union Pacific Railroad tracks, and then south along Lafayette Street.” Suggested rewording “...westerly under the Union Pacific Railroad tracks and follows Bassett Street south to Laurelwood Road near U.S. 101.”

Page 4.9-9, Paragraph 5, line 2

- The gas metering station is just south of the Hetch Hetchy Aqueduct right-of-way, but is not within the right-of-way.

Page 4.9-11, “Truck Traffic”

- The anticipated travel route for truck traffic should be modified to refer to the newly identified entrance on Comstock Street.

Page 4.9-12, Paragraph 3, 3<sup>rd</sup> sentence

- “Emergency vehicles such as fire trucks and ambulances should approach the site from the west via Space Park Drive or from the north using Lafayette Street.” Emergency vehicles could also approach the site through the newly identified entrance through the Kifer Receiving Station/Lafayette Substation yard from Comstock Street (see first comment, above).

Page 4.9-12, Paragraph 4, last sentence

- “The applicant stated at a workshop that workers could take a shuttle to the PPP site.” There is no longer a plan for a shuttle, since parking at the Brokaw Substation will not be

necessary. All construction parking will be at the Kifer Receiving Station yard or the project site.

Conditions of Certification: See Appendix A for suggested wording changes.

## Transmission Safety & Nuisance

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Page 4.10-8, last line

- "...area's magnetic would..." should be "...area's magnetic field levels would..."

Page 4.10-10, "Electric and magnetic field exposure", first line

- "...to be utilized lines was..." should be "...to be utilized was..."

Page 4.10-11, first line

- "The only area of significant change during PPP operation would mainly be..." Should be "only" or "mainly."

Page 4.10-14, Bibliography, Feychting and Ahlbom

- There is an inadvertent line break in the citation.

## Visual Resources

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General comment on the analysis of potential impacts:

- Applicant believes that Staff's analysis methodology is overly conservative and disagrees with Staff's finding of a significant impact for KOP 2. Applicant agrees with the mitigation measures Staff proposes, however, to reduce the impact to below the level of significance. Applicant offers the following comment on the Staff's methodology.

The basic steps of environmental impact analysis are to: 1) define a project's area of potential effects, 2) define potentially significant environmental resources (resources of demonstrable public interest) and document their significance. 3) If a resource is significant, identify potential effects of a given project on the resource and determine whether or not the effects might be adverse. 4) If adverse, determine whether the effects are significant; that is, do they change the characteristics of the resource that rendered the resource significant such that the resource would no longer be significant? 5) If there would be an significant adverse impact to a significant resource, are there mitigation measures that would reduce the impact to a level such that the resource would not lose its significance or value?

In the case of Staff's visual resources analysis of the Pico Power Project, Staff has found that the project would cause adverse impacts from every Key Observation Point assessed (Table, Appendix VR-1). For KOPs 1, 2, and 6, Staff has found that mitigation measures would reduce the impacts below the level of significance. For KOPs 3, 4, and 5, the impacts are not sufficient to require mitigation. The impacts as judged at these three KOPs are adverse, but not significant.

Staff's assessment of the factors contributing the adverse impacts considers a wide variety of factors, including visual quality, viewer concern and exposure (number of viewers), and the amount of change in the viewshed that the project would cause. The impacts analysis is moot, however, because Staff has not initially defined any particular viewshed as a significant viewshed that is worthy of protection. Instead, existing visual quality at the KOPs is rated as Low (KOPs 1, 3, 6) or Low to Moderate (KOPs 2, 4, 5). By comparison, the Applicant's assessment of these same viewsheds indicated either Low, or Moderately Low visual quality (1 or 2 on a 6-point scale). Staff indicates that the rating scale used runs from Outstanding to Low, but does not indicate how many steps in the scale. The Staff Assessment defines Low visual quality (p. 4.11-3) as "landscapes that are often dominated by visually discordant human alterations, and do not provide views that people would find inviting or interesting." Other categories are not defined in the Staff Assessment except for "Outstanding," ("picture postcard" landscapes") which does not apply to any of the viewsheds in the project area.

While Staff's stated significance criteria (page 4.11-2) focus mostly on the scenic quality of the project area, Staff's analysis focuses almost entirely on the number of viewers (KOPs 1, 2, 4, 5) and the scale of the project structures (KOPs 2 and 6). Staff makes no case that views in the project area are sensitive or deserving of special protection. Staff also makes no case that there is a high viewer sensitivity, as ratings of viewer concern range from Low to Moderate and for overall visual sensitivity range from Low to Moderate (Appendix VR-1 summary table). Therefore, Staff has assessed potential impacts based on analysis of potential effects, but not based on the need significance of the resource. Applicant believes that Low to Moderate visual quality and Low to Moderate viewer sensitivity cannot lead to a finding of adverse impacts. The project is located within an industrial district, within which industrial structures are expected and accepted. The project would not block views of landmarks or scenic resources, either natural or man-made. Large structures such as the PPP are not inherently damaging to the viewshed. They may also, in fact, be interesting to see and provide visual relief or interest, etc. Visual impact analysis should be based on first defining the significant resources in need of protection and only then on analysis of project effects on the significant resources. The number of viewers and scale of the structures are not important if the viewers are not sensitive and the viewshed is not a scenic resource.

Page 4.11-6, Paragraph 2, last sentence

- "The landscape areas would be approximately 25 feet wide along Duane Avenue and 20 feet wide along Lafayette Street." The landscape areas may not be this wide, due to requirements for sidewalks and project equipment. They will, however, be wide enough for tree planting.

Page 4.11-6, Paragraph 4, line 14

- The bicycle and pedestrian pathway is a surfaced walkway about 10 feet wide that runs in a 40-foot-wide open space between residences on Gianera Street and the sound wall to the Union Pacific Railroad. It is thus not accurate to say that the metering station would be within the walkway. It would be in this open space or pathway area.

Page 4.11-10, "Visual Quality," line 2

- "...building on the south..." should be "...buildings on the south..."

Page 4.11-17, "Visual Impact Significance," KOP 2

- See general comments, above. The project's impact is seen as significant and adverse because of the "moderate visual sensitivity" and "moderate to high visual change." Also, "...the project structures sufficiently enough..." is redundant. Should be "sufficiently" or "enough."

Page 4.11-22, Paragraph 1, line 2

- "...large electrical substation..." This substation is SVP's Northern Receiving Station.

Page 4.11-24, Paragraph 1, line 4

- "...less then 10 percent..." should be "...less than 10 percent..."

Page 4.11-26, Significance criterion #3

- The significance criterion states "Would the project substantially degrade the existing visual character or quality of the site and its surroundings?" Staff's response is that this criterion is met for KOP 2 because of moderate to high visual change and moderate visual sensitivity. Change does not necessarily cause an impact in and of itself, however, even if the change is due to a structure that is human-made. This assessment must take into consideration the value of the viewshed being changed. If the value is not high, then the change must represent a very significant level of degradation to support a finding of significant impact. This standard is not met at KOP 2, with or without the mitigation proposed.

Page 4.11-27, Paragraph 3, cumulative impacts

- "The proposed project would contribute to the significant cumulative visual impact that has occurred in this area of the City..." A finding of significant cumulative impact must take into consideration effects that do not individually meet the criterion of significance but, which taken together, make a significant impact. Staff makes a finding of significant impact but does not list the projects that cumulatively cause the impact or substantiate significance of the visual resource impacted or define what this might be beyond referring to "this area of the City." The area of the City in question, however, is zoned for industrial uses and is an area in which large structures are expected and accepted. By this token, any addition of a large human-made structure would cause a significant adverse impact, such as adding a new high rise to major urban downtown, whether or not it would block scenic views.

Page 4.11-37, Paragraph 4, lines 2 and 3

- "...the project structures sufficiently enough..." is redundant. Should be "sufficiently" or "enough."

Page 4.11-38, Conclusions and Recommendation

- Applicant suggests adding the following sentence. "To ensure compliance with all applicable LORS of the City of Santa Clara, Condition of Certification VIS-5 requires a design review of the project's landscaping and other external treatment by the City so that the City can determine consistency with City guidelines and policies."

Conditions of Certification: See Appendix A for suggested wording changes.

## Waste Management

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Page 4.12-4, “Nonhazardous Solid Wastes”

- Applicant has determined that it will be necessary to dispose of approximately 2,000 tons of soil excavated from the project site, to be replaced by foundation base fill. This material will be disposed of at a qualified landfill.

Page 4.12-6, “Impact on Existing Waste Disposal Facilities”

- Discussions with BFI’s Newby Island Landfill have indicated that this class III landfill has capacity to accept 2,000 tons of soil. Based on results of the Phase II site investigation and knowledge of the proposed excavation areas, the applicant expects the soil to meet acceptance criteria for this landfill. If the excavated soil contaminant levels exceed Newby Island acceptance criteria, the excavated soil will be disposed of at another facility (Class II or I if necessary) in accordance with the soil management workplan

SVP has proposed a new Condition of Certification that requires a soil management workplan to describe the methods that SVP will use to characterize the soil removed and to qualify the soil for Class III landfill, or other landfill, if necessary.

## **Worker Safety**

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Page 4.13-9, “Fire Protection”, line 13-14.

- There will be no backup well on site for fire protection. Backup fire protection water will come from the cooling tower.

Page 4.13-9, “Fire Protection”, Paragraph 3

- “A deluge spray system...” Please delete this sentence. There will be no deluge spray system, as this would be hazardous around electrical equipment.

# ENGINEERING ASSESSMENT

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## Facility Design

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See attached redline/strikeout changes to “Facility Design Table 1: Major Structures and Equipment List.”

**Facility Design Table 1: Major Structures and Equipment List**

<b>Equipment/System</b>	<b>Quantity (Plant)</b>
Combustion Turbine (CT) Foundation and Connections	2
<i>Combustion Turbine Generator Foundation and Connections</i>	2
Steam Turbine (ST) Foundation and Connections	1
Steam Turbine Generator Foundation and Connections	1
Steam Condenser and Auxiliaries Foundation and Connections	1
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	2
HRSG Feed Pumps Foundation and Connections	4
HRSG Stack Structure, Foundation and Connections	2
CT/ <i>ST</i> Main Transformer Foundation and Connections	2
<del>ST Main Transformer Foundation and Connections</del>	4
Auxiliary or Station Service Transformer Foundation and Connections	<del>4</del> 6
CT Inlet Air Plenum Structure, Foundation and Connections	2
<b><i>CT Inlet Air Chillers</i></b>	<b>2</b>
HRSG Transition Duct from CTG — Structure	2
Condensate Pumps Foundation and Connections	3
Circulating Water Pumps Foundation and Connections	3
Power Cycle Makeup and Storage Pumps Foundation and Connections	2
Cooling Tower Makeup Pumps Foundation and Connections	2
Demineralized Water Storage Tank and Pump Foundations and Connections	1
<del>Condensate Storage and Transfer System Foundation and Connections</del>	4
<del>Condensate Water Tank Foundation and Connections</del>	4
Closed Cycle Cooling Water Heat Exchanger Foundation and Connections	2
Auxiliary Cooling Water Pumps Foundation and Connections	2
Waste Water Collection System Foundation and Connections	1
<del>Fuel Gas Heater Foundation and Connections</del>	4
Fire Protection System	1
Cooling Tower Structure, Foundation and Connections	1
Generator Breakers Foundation and Connections	3
Transformer Breakers Foundation and Connections	3
Natural Gas Metering Station Structure, Foundation and Connections	1
Natural Gas Compressor Skid Foundation and Connections	3
Ammonia Storage Facility Foundation and Connections	1
Closed Cycle Cooling Pumps Foundation and Connections	2
<b><i>Closed Cycle Cooling Heat Exchangers</i></b>	<b>2</b>
Demineralizer – Reverse Osmosis (RO) System Foundation and	<b>21</b>

<b>Equipment/System</b>	<b>Quantity (Plant)</b>
Connections	
Warehouse/Shop Structure, Foundation and Connections	1
Gas Compressor Building Structure, Foundation and Connections	1
Ammonia Vaporizer System Foundation and Connections	42
Continuous Emissions Monitoring Systems Structure, Foundation and Connections	42
Sound Wall at Property Line	1
Potable Water Systems	1 Lot
Drainage Systems (including sanitary drain and waste)	1 Lot
High Pressure and Large Diameter Piping and Pipe Racks	1 Lot
HVAC and Refrigeration Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot
Building Energy Conservation Systems	1 Lot
Switchyard, Buses and Towers	1 Lot
Electrical Duct Banks	1 Lot

## **Geology, Mineral Resources, and Paleontology**

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Conditions of Certification: See Appendix A for suggested wording changes.

## Power Plant Efficiency

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No comments.

## Power Plant Reliability

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No comments.

## Transmission System Engineering

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No comments.

## GENERAL CONDITIONS

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No comments.

## **APPENDIX A**

### **APPLICANT'S SUGGESTED MODIFICATIONS TO STAFF'S PROPOSED CONDITIONS OF CERTIFICATION**

## BIOLOGICAL RESOURCES

### *MITIGATION*

**BIO-8** The project owner shall implement the mitigation measures listed below.

1. Provide wildlife escape ramps for construction areas that contain steep walled holes or trenches if outside of an approved, permanent exclusionary fence;
2. Inspect trenches each morning for entrapped animals prior to the beginning of construction. Construction will be allowed to begin only after trapped animals are able to escape voluntarily;
3. Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater for sensitive species (such as burrowing owls) prior to pipe burial. Pipes to be left in trenches overnight will be capped;
4. Provide a post-construction compliance report, within 45 calendar days of completion of the project, to the Energy Commission CPM;
5. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals shall be reported to CDFG and the project owner shall follow instructions that are provided by CDFG.
6. Conduct pre-construction bird nest surveys. Upon discovery of any bird nests, the CPM will be notified as to appropriate action necessary.

***All inspections may be performed by either the Designated Biologist or his appropriately trained delegate.***

**Verification:** All mitigation measures and their implementation methods shall be included in the BRMIMP.

**Rationale:** SVP is requesting the modifications to clarify that someone other than the Designated Biologist can perform field inspections as long as that individual is appropriately trained and working at the direction of the Designated Biologist.

### *HABITAT COMPENSATION*

**BIO-9** To compensate for *potential* impacts to serpentine habitats and associated endemic species, the project owner shall provide a **maximum** ~~minimum~~ of 40 acres of land within critical habitat occupied by sensitive serpentine endemic species. The project owner shall calculate an appropriate endowment for management of the compensation habitat in perpetuity using the Center for Natural Lands Management Property Analysis Record (PAR). Also to be provided is the name of the entity that would manage and protect the land in perpetuity.

**Verification:** At least 60 days prior to initial commissioning activities, the project owner shall provide to the CPM for approval, in consultation with the USFWS, the name of the management entity and written verification that the compensation lands have been purchased and protected in perpetuity. The project owner shall also provide the PAR analysis and written verification that the appropriate endowment

fund (determined by the PAR analysis) has been received by the approved management entity.

**Rationale:** SVP requests the modifications highlighted above to accurately reflect language in the impact analysis of the Staff Assessment.

## HAZARDOUS MATERIALS

**HAZ-2** The project owner shall provide a Risk Management Plan RMP (if required by regulation) to the Certified Unified Program Authority (CUPA) and the CPM for review ~~at the time the RMP is first submitted to the U.S. Environmental Protection Agency (EPA).~~ A Hazardous Materials Business Plan (HMBP, which shall include the proposed building chemical inventory as per the UFC) shall also be submitted to the CUPA for review and to the CPM for review and approval prior to construction of hazardous materials storage and containment structures. The project owner shall include all recommendations of the CUPA and the CPM in the final HMBP. A copy of the final RMP, including all comments, shall be provided to the CUPA and the CPM ~~once it gets EPA approval.~~

**Verification:** At least 30 days prior to the commencement of construction of hazardous materials storage and containment structures, the project owner shall provide the final plans (RMP and HMBP) listed above to the CPM for approval.

**Rationale:** SVP requests modification to clarify that the project would not be subject to the Federal RMP program rules and EPA review under 40 CFR Part 60 because the PPP would use aqueous ammonia in a concentration of less than 20 percent ammonia (19 percent).

**HAZ-4** The aqueous ammonia storage facility shall be designed to either the ASME Pressure Vessel Code and ANSI K61.6, or to API 620. In either case, the storage tank shall be protected by a secondary containment basin capable of holding 150 percent of the storage volume plus the 24-hour rainfall from the 25-year storm event.

**Verification:** At least 60 days prior to the first delivery of aqueous ammonia to the storage tanks, the project owner shall submit final design drawings and specifications for the ammonia storage tank, **and** the secondary containment basin, ~~and the secondary containment building~~ to the CPM for review and approval.

**Rationale:** SVP requests the modification to clarify that a secondary containment building is not part of the project description.

**HAZ-6** The project owner shall ensure that no combustible or flammable material is stored ~~or used~~ within 100 feet of the sulfuric acid tank.

**Verification:** At least 30 days prior to the first delivery of sulfuric acid onsite, the Project Owner shall provide to the CPM for review and approval copies of the facility design drawings showing the location of the sulfuric acid storage tank and the location of any tanks, drums, or piping containing any combustible or flammable material and the route by which such materials will be transported through the facility.

**Rationale:** SVP requests the modification to clarify that the condition is aimed at preventing incompatible storage locations and was not intended to prohibit the occasional use of flammable material within 100 feet of the sulfuric acid tank. SVP believes Worker Health and Safety Plans that will be prepared in accordance with applicable law and the conditions in the Worker Health and Safety section of the Staff Assessment will adequately ensure that any use of flammable materials near the sulfuric acid tank will be conducted in a safe manner.

**HAZ-11** The natural gas pipeline shall be designed to meet CPUC General Order 112-D&E and 58 A standards, or any successor standards, and will be designed to meet Class III service. The pipeline shall be designed to withstand seismic stresses and will be surveyed annually for leakage. The project owner shall incorporate the following safety features into the design and operation of the natural gas pipeline ***in accordance with the applicable code***: (1) butt welds will be x-rayed and the pipeline will be pressure tested prior to the introduction of natural gas into the line; (2) the pipeline will be surveyed for leakage annually; (3) the pipeline route will be marked to prevent rupture by heavy equipment excavating in the area; and (4) valves will be installed to isolate the line if a leak occurs.

**Verification:** Prior to the introduction of natural gas into the pipeline, the project owner shall submit design and operation specifications of the pipelines to the CPM for review and approval.

**Rationale:** SVP requests the modification above to clarify that Staff is not requiring additional safety features above and beyond those codes that are applicable at the time of design and construction of the natural gas pipeline.

## LAND USE

**LAND-8** ~~Prior to the start of construction, t~~ The project owner shall **ensure that** ~~partially realign~~ the pedestrian/bicycle pathway within the 60-foot dedicated right-of-way located at Gianera Street and Wilcox Avenue **is partially realigned** to accommodate the **gas** metering station **prior to construction of the gas metering station.**

**Verification:** At least 30 days prior to the start of construction **of the gas metering station**, the project owner shall provide the CPM with proof of **a contract indicating that** completion of the above realignment of the pedestrian/bicycle pathway **will be accomplished prior to construction of the gas metering station.**

**Rationale:** SVP requests the modification above to clarify the timing of the partial realignment of the pedestrian/bicycle pathway.

## NOISE

### STEAM BLOW MANAGEMENT

**NOISE-4** If a traditional, high-pressure steam blow process is employed, the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 80 dBA measured at a distance of 100 feet. The project owner shall conduct steam blows only during the hours specified in Condition of Certification **NOISE-8**, unless the CPM agrees to longer hours based on a demonstration by the project owner that offsite noise impacts will not cause annoyance.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise levels **due to the steam blows alone** will not exceed 49 dBA  $L_{eq}$  measured at the apartments at 1425 Laurelwood Road. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

**Verification:** At least 15 days prior to the first high-pressure steam blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam blow silencer and the noise levels expected, and a description of the steam blow schedule.

At least 15 days prior to any low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

**Rationale:** SVP requests the modification to clarify that the noise limitation applies to the steam blow alone and not to the steam blow in combination with ambient noise at the apartments at 1425 Laurelwood Road.

### NOISE RESTRICTIONS

**NOISE-6** The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation **alone** to exceed 45 dBA  $L_{eq}$  measured at the apartments at 1425 Laurelwood Road, and that the noise due to plant operation will comply with the noise standards of the City of Santa Clara General Plan, or 63.3 dBA  $L_{eq}$  at the site boundaries.

No new pure-tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

- A. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at the monitoring site near the apartments at 1425 Laurelwood Road. This survey during power plant operation shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced.
- B. If the results from the noise survey indicate that the power plant noise level ( $L_{eq}$ ) at the affected receptor exceeds the above value for any given hour during the 25-hour period, or that the noise standards of the LORS have been exceeded, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.
- C. If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

**Verification:** The survey shall take place within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity. Within 15 days after completing the survey, the project owner shall submit a summary report of the survey to the City of Santa Clara Planning Department, and to the CPM. Included in the survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey.

Within 15 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

**Rationale:** SVP requests the modification to clarify that the noise limitation does not include ambient noise levels at the apartments at 1425 Laurelwood Road.

**CONSTRUCTION TIME RESTRICTIONS**

**NOISE-8** ~~Heavy equipment operation and noisy construction work relating to any project features that lie within 300 feet of residentially zoned property shall be restricted to the times of day delineated below:~~

Monday through Friday	7 a.m. to 6 p.m.
Saturday	9 a.m. to 6 p.m.
Sunday and Holidays	Not permissible

Noise due to high pressure steam blows shall be restricted to the times of day delineated below:

Monday through Friday	7 a.m. to 6 p.m.
Saturday	9 a.m. to 6 p.m.

Sunday and Holidays

Not permissible

Holidays are defined as January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, Thanksgiving Day and the day after, and December 25<sup>th</sup>.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

**Verification** Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

**Rationale:** SVP requests the modifications to clarify that it is exempt from the City of Santa Clara noise restrictions itemized in the condition and therefore the construction hours restrictions are inapplicable to the Pico Power Project.

## SOIL AND WATER RESOURCES

**SOIL & WATER 1:** Prior to beginning any site mobilization activities, the project owner shall obtain staff approval of a Sedimentation and Erosion Control Plan. The plan shall be submitted to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment and to the CPM for approval.

**Verification:** At least 60 days prior to the start of any site mobilization activities the Sedimentation and Erosion Control Plan shall be submitted to the CPM for approval and to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment. Comments from other agencies shall be submitted to the CPM. The CPM must approve the sedimentation and Erosion Control Plan prior to the initiation of any site mobilization activities.

**Rationale:** SVP requests modifications to SOIL & Water 1 through 3 to eliminate submittal of plans to Santa Clara County and SCVWD as the referenced plans are outside these agencies' jurisdiction.

**SOIL & WATER 2:** Prior to beginning site mobilization, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Construction Activity from the Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Construction Activity. The SWPPP will include final construction drainage design consistent with the ~~Santa Clara County Ordinances regarding grading, and discharge of storm water, as well as~~ the City of Santa Clara requirements for grading, drainage and erosion control and specify BMPs for all on and off-site PPP project facilities. This includes providing calculations for determining the design capacity of the perimeter drainage, as well as final site drainage plans and locations of BMPs. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment at least 60 days prior to start of any site mobilization activities.

**Verification:** At least 60 days prior to the start of any site mobilization activities, the SWPPP for Construction Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity shall be submitted to the CPM for approval and to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment. Approval of the SWPPP by the CPM must be received prior to initiation of any site mobilization activities.

**Rationale:** SVP requests modifications to SOIL & Water 1 through 3 to eliminate submittal of plans to Santa Clara County and SCVWD as the referenced plans are outside these agencies' jurisdiction.

**SOIL & WATER 3:** Prior to initiating project operation, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity from Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Industrial Activity. The SWPPP will include final operating drainage design consistent with the Santa Clara County Ordinances regarding discharge of storm water as well as the City of Santa Clara requirements for drainage and erosion control and

specify BMPs and monitoring requirements for the PPP project facilities. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment at least sixty days prior to initiation of project operation.

**Verification:** At least 60 days prior to the start of project operation, the SWPPP for Industrial Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity shall be submitted to the CPM. The SWPPP shall be submitted to ~~Santa Clara County, SCVWD~~ and the City of Santa Clara Public Works Department for review and comment at least 60 days prior to initiation of project operation. Approval of the final SWPPP plan by the CPM must be received prior to initiation of project operation.

**Rationale:** SVP requests modifications to SOIL & Water 1 through 3 to eliminate submittal of plans to Santa Clara County and SCVWD as the referenced plans are outside these agencies' jurisdiction.

**SOIL & WATER 6:** Groundwater shall be used as a backup water supply for the PPP. Groundwater shall only be used during time when the primary water supply is unavailable. The maximum annual groundwater use for the project shall not exceed 57 million gallons nor shall it exceed a period of more than 45 days each year. ***However, groundwater may be used for cooling and process purposes in excess of 45 days per calendar year if an unavoidable interruption of the primary water supply is due to an Act of God, a natural disaster, an unforeseen emergency or other unforeseen circumstances outside the control of the project owner. If one of the aforementioned unavoidable interruptions should occur, the CPM, project Owner, and shall confer and determine how to restore the primary water supply as soon as practicable.***

**Verification:** The project owner shall meter, record and report project groundwater pumping annually to the CPM.

**SOIL & WATER 8:** The project owner shall conduct the aquifer test program as proposed by the applicant in the *Statement of Work, Proposed Aquifer Test Program, Backup Water Supply Well, Pico Power Project* (SVP 2003c). The project owner shall calculate the projected vertical gradient between the Upper and Lower Aquifer Zones over the life of the project based on an annual groundwater pumping rate of 57 million gallons for a period of 45 days each year for 40 years. The aquifer test procedures, the interpretation of the test results, the raw data (in machine readable format), the calculation of aquifer properties, and the impacts analyses shall be presented and discussed in the aquifer test technical report ***and submitted to SCVWD, the CPM and RWQCB. If the SCVWD shall review the technical report and determine in consultation with the CPM and RWQCB, if applicable, whether the results of the aquifer test indicate that the proposed use of the backup well will cause vertical migration of contaminants from the upper aquifer to the lower aquifer in a manner that would increase such contaminant levels in the lower aquifer***

~~above drinking water standards. a potential pumping impact, If the SCVWD makes such determination the project owner shall submit an alternative backup water supply and pumping plan to the SCVWD, the CPM and the RWQCB for review and approval. amend the project license The primary purpose of the plan will be to identify actions that will be implemented to avoid or reduce the potential vertical migration of contaminants from the upper aquifer to the lower aquifer such that the projected concentrations of the contaminants will not exceed drinking water standards. impact to a level less than significant. The aquifer test technical report shall be provided to the RWQCB and the Santa Clara Valley Water District for review, as well as the CPM for approval, at least 90 days prior to the commercial operation of the project backup well.~~

**Verification:** The project owner shall provide a copy of the aquifer test technical report to **the SCVWD, CPM, and the RWQCB** for review and approval at least 90 days prior to commercial operation of the project backup well. **The CEC CPM shall have final approval of the technical report but shall give great weight to the opinion of the SCVWD. If an alternative backup water supply and pumping plan is required, such plan shall be submitted to the SCVWD, CPM and RWQCB for review and approval prior to use of the backup well or alternative backup water supply. The CEC CPM shall have final approval of the alternative backup water supply and pumping plan but shall give great weight to the opinion of the SCVWD.** ~~The project owner shall also provide a copy of the aquifer test technical report to the RWQCB and the Santa Clara Valley Water District for review and comment 90 days prior to commercial operation of the project backup well.~~

**Rationale:** SVP requests the modification to set clear performance standards for the aquifer test, to eliminate the requirement for amendment of the license and replace it with the preparation and implementation of a mitigation plan, and to acknowledge the expertise of the SCVWD and RWQCB. SVP believes that the modifications above improve the enforceability and legality of the condition.

## TRAFFIC AND TRANSPORTATION

**TRANS-7** During construction and operation of the PPP, the project owner and contractors shall enforce a policy that all project-related traffic traveling north on Lafayette Street avoid turning left across traffic onto Duane Street, and from turning left onto Lafayette Street from Duane Street. Staff has identified ~~two~~ **three** alternate routes for reaching the site that avoid the left turn off at Lafayette Street. The first involves using Central Expressway or San Tomas to Scott Boulevard followed by a turn onto Space Park Drive, a left turn onto Kenneth Street, and a right turn onto Duane Street and proceed east to the site. The second route involves going south on De La Cruz to Central Expressway and turning right and proceeding west to Scott Boulevard, followed by a right turn on Space Park Drive and proceeding in the same manner identified in the first route. ***The third route involves going north of Lafayette Street from either the westbound or eastbound lanes on Central Avenue, followed by a left turn onto Comstock Avenue and then an immediate right into the southern perimeter gate for the Pico Power Project site area.***

**Verification:** At least 60 days prior to start of site preparation or earth moving activities, the project owner shall provide a traffic routing plan for all phases of project construction and operation to Santa Clara County and Caltrans for review and comment, and to the CPM for review and approval.

**Rationale:** SVP requests the modification to identify and alternative route utilizing a new southern perimeter gate. SVP believes that the addition of the new gate will allow it additional options to reduce truck traffic through residential neighborhoods.

## VISUAL RESOURCES

**VIS-1** The project owner shall ensure that visual impacts of construction of the gas pipeline, metering station, and underground transmission line (if relocated offsite) are adequately mitigated. To accomplish this, the project owner shall require the following as a condition of contract with its contractors involved in constructing the gas pipeline, metering station, and underground transmission line:

- A.** The construction site and staging and material and equipment storage areas for gas metering station construction shall be visually screened from view from adjacent residences with temporary opaque or semi-opaque fencing. Fencing will be of an appropriate design and color, as determined by the Compliance Project Manager (CPM).
- B.** All evidence of pipeline and offsite underground transmission line construction activities, including ground disturbance in staging and storage areas, shall be removed, and all disturbed areas shall be remediated to an original or improved condition upon completion of construction, including the replacement of any vegetation or paving removed during construction. Any replacement plantings shall be monitored for a period of three years to ensure survival. During this period, all dead plant material shall be replaced.
- C.** The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a specific screening and restoration plan whose proper implementation will satisfy these requirements.
- D.** The project owner shall not implement the screening and restoration plan until receiving written approval from the CPM.

**Verification:** At least 60 days prior to construction of the gas pipeline and metering station, the project owner shall submit the screening and restoration plan to the CPM for review and approval and to the City of Santa Clara for review and comment.

If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days after installing the temporary screening that it is ready for inspection.

The project owner shall notify the CPM within seven days after completing surface restoration that the restored areas are ready for inspection.

**Rationale:** SVP requests the modification to clarify that the screening requirements apply to the gas metering station and not construction of the natural gas pipeline and other features.

**VIS-2** Prior to ~~first turbine roll~~ **commercial operation**, the project owner shall treat the surfaces of all project structures, buildings, and walls visible to the public such that: their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create excessive glare; and they are designed consistent with the City of Santa Clara Community Design Guidelines. The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment, a specific treatment and design plan, the proper implementation of which will satisfy these requirements. The submittal to the CPM shall include the City's comments. The treatment and design plan shall include:

- a) Specification, and 11" x 17" color photo simulations at life size scale when viewed at 18 inches, of the treatment/design proposed for use on project structures, including structures treated during manufacture;
- b) A list of each major project structure, building, tank, transmission line tower and/or pole, and wall and/or fence specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation). The transmission line structures shall have a neutral gray finish. The conductors shall be non-specular conductors and non-reflective, and the insulators shall be non-refractive;
- c) Two sets of brochures and/or color chips for each proposed color;
- d) A detailed schedule for completion of the treatment; and
- e) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until the project owner receives notification of approval of the treatment plan by the CPM.

**Verification:** The project owner shall submit its proposed treatment and design plan to the CPM and the City of Santa Clara at least 60 days prior to ordering the first structures that are color treated during manufacture.

If the CPM notifies the project owner that any revisions of the plan are needed, the project owner shall submit to the CPM a revised plan within 30 days after that notification.

Prior to ~~first turbine roll~~ **commercial operation**, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

**Rationale:** SVP requests modifications to the above Visual Conditions to clarify compliance timing. The well-defined term “commercial operation” replaces the outdated term “first turbine roll”.

**VIS-3** The project owner shall prepare and implement a landscape plan to substantially screen views of the power plant and gas metering station and to soften views of the perimeter sound walls. Landscaping shall consist of a mix of trees, shrubs, vines, and groundcovers. Fast growing evergreen species shall be used to ensure that maximum screening of the project is achieved as quickly as possible and is effective year-around. Landscaping shall be provided along Lafayette Street and Duane Avenue of sufficient density and height, to substantially screen project structures from southbound views from Lafayette Street within five years after completion of construction. Landscaping shall be ~~planted~~ **installed** around the gas metering station to substantially screen it from view from residences at Gianera Street and Wilcox Avenue. Suitable irrigation shall be installed to ensure survival of all plantings. Landscaping shall be provided, including plantings to soften the appearance of the sound walls from public rights-of-way and adjacent properties, and installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines.

The project owner shall submit a landscaping plan to the CPM for review and approval and to the City of Santa Clara for review and comment. The submittal to the CPM shall include the City’s comments. The plan shall include:

- a) 11”x17” color photo simulations of the proposed landscaping for the power plant, as viewed from KOPs 2 and 6, and for the gas metering station, as viewed from the residences to the west, at 5 years after planting and at maturity;
- b) A detailed list of plants to be used, specifying their rates of growth and times to maturity and their proposed size and age at planting;
- c) Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project; and
- d) A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM.

**Verification:** Masonry wall may be the best option for screening the gas metering station, and this change of wording preserves that option. The project owner shall submit the landscaping plan prior to ~~first turbine roll~~ **commercial operation** and at least 90 days prior to installing the landscaping.

If the CPM notifies the project owner that revisions of the submittal are needed, within 30 days of receiving that notification the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within seven days after completing installation of the landscaping that the plantings and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in each Annual Compliance Report.

**Rationale:** SVP requests modifications to the above Visual Conditions to clarify compliance timing. The well-defined term “commercial operation” replaces the outdated term “first turbine roll”.

**VIS-4** The project owner shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. Lighting shall be installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines. To meet these requirements the project owner shall ensure that:

- a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to reduce light trespass outside the project boundary while taking into consideration security concerns.
- b) All lighting shall be of minimum necessary brightness consistent with worker safety and security concerns;
- c) High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied; and
- d) Plant operations staff shall record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

**Verification:** At least 90 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to arrange a meeting to discuss the documentation required in the lighting mitigation plan.

At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a plan that describes the measures to be used and demonstrates that the requirements of the condition will be satisfied. The submittal to the CPM shall

include the City's comments. The project owner shall not order any exterior lighting until it receives CPM approval of the lighting mitigation plan.

Prior to ~~first turbine roll~~ **commercial operation**, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report for that year.

**Rationale:** SVP requests modifications to the above Visual Conditions to clarify compliance timing. The well-defined term "commercial operation" replaces the outdated term "first turbine roll".

**VIS-6** The project owner shall reduce cooling tower visible vapor plumes through the use of a dry-cooling section that has a stipulated plume abatement design point of 35 degrees Fahrenheit and 85 percent relative humidity. An automated control system will be used to ensure that plumes are abated to the maximum extent possible for the stipulated design point.

**Verification:** At least 30 days prior to ~~first turbine roll~~ **commercial operation**, the project owner shall provide to the CPM for review and approval the specifications for the automated control systems and related systems and sensors that will be used to ensure maximum plume abatement from the dry-cooling section of the cooling tower.

**Rationale:** SVP requests modifications to the above Visual Conditions to clarify compliance timing. The well-defined term "commercial operation" replaces the outdated term "first turbine roll".

## WASTE MANAGEMENT

### Proposed new condition

**WASTE-6** *The project owner shall provide a soil management workplan providing the methods which will be used to properly handle or dispose of soil which may contain contaminants. The workplan will discuss: 1) landfill facility disposal options, 2) acceptance criteria, and 3) soil contaminant characterization requirements.*

**Verification:** *The project owner shall submit the soil management workplan to the CPM for approval 60 days prior to any earth moving activities, including those associated with site mobilization, ground disturbance, or grading as defined in the general conditions of certification.*

## GEOLOGY, MINERAL RESOURCES, AND PALEONTOLOGY

**PAL-1** The project owner shall provide the CPM with the resume and qualifications of the Paleontological Resource Specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the Paleontological Resources Report, the project owner shall obtain CPM approval of the replacement PRS. The project owner shall submit to the CPM to keep on file, resumes of the qualified Paleontological Resource Monitors PRMs. If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM.

The PRS resume shall include the names and phone numbers of references. The resume shall also demonstrate to the satisfaction of the CPM, the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontology guidelines of 1995. The experience of the PRS shall include the following:

1. Institutional affiliations or appropriate credentials and college degree;
2. ability to recognize and collect fossils in the field;
3. local geological and biostratigraphic expertise;
4. proficiency in identifying vertebrate and invertebrate fossils and;
5. at least ~~three~~ **one** years of paleontological resource mitigation and field experience in California, and at least one year of experience leading paleontological resource mitigation and field activities.

The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems necessary on the project. Paleontologic resource monitors (PRMs) shall have the equivalent of the following qualifications:

1. BS or BA degree in geology or paleontology and one year experience monitoring in California; or
2. AS or AA in geology, paleontology or biology and four years experience monitoring in California; or
3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California.

**Verification:** At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.

At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project and stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM. The letter shall be provided to the CPM no later than one week prior to the monitor beginning on-site duties.

Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

**Rationale:** This condition requires that the designated Paleontological Resources Specialist have three years of paleontology experience in California. Appropriate training and experience may be more important, however, than experience in California. For example, as written, a candidate with three years of overall experience and only one year leading paleontological resource mitigation and field activities would qualify, whereas a senior paleontologist with 15 years of experience leading projects, only two of which were located in California, would not. A requirement for three years of California experience could therefore eliminate many worthy candidates from consideration. We recommend modifying the condition or the verification to allow for more flexibility in qualifying a PRS.