

Comment Set 1

Letter from City of Mission Viejo Assistant City Attorney David Snow dated March 19, 2004



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Michael Rosauer
California Public Utilities Commission
c/o Aspen Environmental Group
30423 Canwood Street, Suite 215
Agoura Hills, California 91301

Re: Viejo Systems Project Proposed Mitigated Negative Declaration and Initial Study (Application No. A.03-03-43)

Dear Mr. Rosauer:

This office serves as the City Attorney for the City of Mission Viejo, and has reviewed the proposed Mitigated Negative Declaration and Initial Study for the Southern California Edison Viejo System Project. Based on our review we believe that an Environmental Impact Report (EIR) is required for this project because of substantial evidence that the project individually and cumulatively may cause a significant effect on the environment.

1-1

We offer the following comments on the Initial Study documentation which support the conclusion that an EIR is required and which point out other inaccuracies and defects in the analysis.

Project Description

“Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal’s benefit against its environmental cost, consider mitigation measures, assess the advantages of terminating the proposal... and weigh other alternatives in the balance. An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” *County of Inyo v City of Los Angeles* (1977) 71 Cal.App.3d 185, 192. The same accuracy is should be provided in the project description for a mitigated negative declaration for the same policy reasons.

1-2

Page B-3, Section B.1.9, describes the project as replacing 19 existing double circuit poles with 13 H-frame structures with the capacity for a total of four circuits in the future. This capacity enhancement requires consideration of the project through the PUC Certificate of Public Convenience and Necessity (CPCN) process rather than the

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permit to construct. *See* Public Utilities Commission of the State of California, General Order No. 131-D, Section III. Edison claims that the project is necessary to improve reliability and meet projected electrical load requirements in the rapidly urbanization South Orange County Area, however insufficient documentation is provided to support these claims. For example, Figure 3 at Page B-8 includes data through the year 2002, and provides no data for system demand in 2003.

Further, the project description regarding transmission line construction at Page B-19 to B-20 fails to adequately explain the process of installing the necessary footings for the towers. The Initial Study references the potential need for rock drilling (p. B-113, 114), but defers completion of geologic studies and engineering for the footings. The project description is deficient for failure to explain the scope of drilling that will be entailed in the construction.

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The project description also states that “SCE proposes to initiate construction in Spring 2004 . . .” This statement conflicts with the biological analysis which states that “construction would occur prior to [the California Horned Lark] breeding season . . .” (P. B-82.) Based on SCE’s construction schedule, delaying construction until after the breeding season, which extends through May, seems unlikely. Nonetheless, the inconsistency must be clarified.

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Finally, the project description does not mention the potential use of helicopters during tower construction and line stringing activities. However, the noise analysis references the potential use of helicopters. (P. B-114.) By leaving helicopter use out of the project description, it was not analyzed in air quality analysis or other sections in which its use could alter the analysis, including construction impacts on biological resources.

1-6

Cultural Resources

The applicants’ proposed mitigation C-1 on Page B-25 limits archeological monitoring to activities north of El Toro Road and ignores all areas in the approximately three mile powerline corridor within the City of Mission Viejo. Archeological monitoring must also be undertaken within the construction areas in the City of Mission Viejo because fossils and other resources have been found during construction in various locations within the City of Mission Viejo including, but not limited to, the Painted Trails area. The initial study provides no basis for limiting the mitigation to only one portion of the Project.

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Further, if resources are found on City-owned property, it is the City's standard requirement that it first be provided the opportunity to take possession of the resources, and only if the City refuses can the resources then be donated to another entity. Therefore, the City requests that the PUC impose the City's standard conditions of approval as further mitigation for potential impacts to cultural resources. The recommended conditions applicable to all construction activity in Mission Viejo are as follows:

1. That prior to issuance of a grading permit, the developer shall provide written evidence to the City Engineer that a County certified archaeologist has been retained to conduct salvage excavation of archaeological resources, establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the developer, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the developer and to the Director of Community Development. If the archeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the developer, for exploration and/or salvage. Excavated finds shall be offered to the City of Mission Viejo or designee on a first refusal basis. Developer may retain said finds if written assurance is provided that they will be properly preserved in Orange County, unless said finds are of special significance, or a museum in Orange County indicates desire to study and/or display them at this time, in which case items shall be donated to the City or designee. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Director of Community Development.

2. That prior to issuance of a grading permit, the developer shall provide written evidence to the City Engineer that a County certified paleontologist has been retained to observe grading activities and salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish, in cooperation with the developer, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the fossils. If major paleontological resources are discovered which require long term halting or redirecting of grading, the paleontologist shall report such findings to the developer and to the Director of Community

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Development. The paleontologist shall determine appropriate actions, in cooperation with the developer, which ensure proper exploration and/or salvage. Excavated finds shall be offered to the City of Mission Viejo, or designee, on a first refusal basis. Developer may retain said finds if written assurance is provided that they will be properly preserved in Orange County, unless said finds are of special significance, or a museum in Orange County indicates desire to study and/or display them at this time, in which case items shall be donated to the City, or designee. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Director of Community Development. If significant fossils are found, the paleontologist shall submit a follow up report for approval by the Director of Community Development, which shall include the period of inspection, an analysis of the fossils found, and present repository of the fossils.

3. That prior to the start of grading of the temporary access roads, the City shall retain a qualified archaeologist and/or paleontologist consultant(s) to be present during the grading and soil borings. The consultant, in conjunction with the City Public Works Department, shall establish procedures for archaeological and paleontological resource surveillance and establish procedures for temporarily halting grading and/or soil borings should any resources be discovered. If resources discovered are determined to be significant, the consultant shall determine appropriate actions, in conjunction with the Director of Public Works and the Director of Community Development which shall include the period of inspection, analysis of artifacts or resources discovered and the repository of the artifacts or resources. Any resources/artifacts discovered shall be offered to the City of Mission Viejo, or designee, on a first refusal basis.

Electric And Magnetic Fields

The Initial Study claims that magnetic field levels will be reduced through replacement of the existing power lines with the higher, expanded capacity lines. In support of this assertion, Figure 9 at Page B-28 shows a comparison of the fields from existing circuits to those from the proposed circuits. For the existing circuits, at a distance of between 115 feet and 160 feet, a increase in the magnetic field levels is shown for the existing circuits, whereas no increase is shown for the proposed project circuits. Please explain the discrepancy between these two graphs, and provide the basis for the difference at an increased distance from the lines, which runs counter to

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the stated field reduction measures incorporated into the project. These measures state that “field exposure is reduced by increasing tower height and placing tower structures further from the edge of the right-of-way” (P. B-27.)

Aesthetics

The aesthetic impact analysis, and particularly the visual analysis methodology, suffers from fatal flaws and therefore underestimates the impact of the expanded capacity power line and H-frame tower installation proposed by the project. The Initial Study acknowledges that “the proposed H-frames would generally be larger in size than the existing [tubular steel poles].” (P. B-33.) However, the analysis states that there would be six fewer H-frame poles than the existing number of tubular steel poles (“TSP”). The fundamental flaw in the comparison is the fact that each H-frame tower consists of two vertical elements, each of which is larger than a single existing TSP. (See fig. 6, p. B-15.) Therefore, although the Initial Study analyzes the installation of thirteen H-frames, and the removal of nineteen TSPs, the analysis should consider each H-frame as constituting two TSPs. Therefore, rather than the asserted reduction by six poles, which is an erroneous assumption underlying the visual analysis, the replacement H-frame towers should be viewed as adding seven vertical tower elements to the existing condition. Further exacerbating the impact of the additional H-frame towers, is the fact that most of these H-frame towers will exceed the existing heights of the TSPs, in some cases by as much as 75 feet. (See p. B-14, Table B.1-1, proposed tower HF09.)

The visual analysis misrepresents the height of the proposed H-frame towers by stating that “on average, the new H-frame structures would be 25 feet taller than the existing TSPs.” However, averaging the heights of the proposed towers as shown in Table B.1-1 shows that the average height is 28 feet, not 25 feet; an analytical error of over ten percent.¹

The analysis of the various key viewpoints reaches a conclusion as to many of these viewpoints that “any increase in industrial character visible from the [viewpoint area] would be seen as an adverse visual change.” Nonetheless, the analysis generally concludes that the impacts are not significant because of the presence of other utility

¹ The document also states that “five key viewpoints” were established to evaluate the visual impact of the proposed project, however, the study includes nine key viewpoints. The typographical errors appearing on B-33, should be corrected to remedy this typographical error.

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lines in the area. These conclusions fail to consider the incremental impact of the higher, and more visually obtrusive tower structures proposed by the project, and completely ignore the fact that additional power lines will be added to the already impacted views in these areas. Further, these conclusions improperly elevate the “visual context” element above both the “Vision Sensitivity” and “Overall Visual Change” factors. The analysis also includes “viewer concern” and “viewer exposure” as elements in determining visual sensitivity. (P. B-32.) However, no evidence supports the conclusions as to sensitivity. In fact, viewer concern has been repeatedly presented to the City with respect to this proposal. As will be shown at the Prehearing Conference, vast numbers of citizens are very concerned and incremental changes will be highly noticed, thus supporting the conclusion that the impact will be significant. As such, other alternatives must be considered and analyzed in an EIR.

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The aesthetic impact analysis of the Key Viewpoints also establishes a baseline premised on the built environment, which ignores natural characteristics seen from the various viewing areas. For example, Key Viewpoint 3 states that “the existing electric transmission facilities and residential structures are the most prominent built features in the residential landscape along this portion of the proposed route.” However, this analysis ignores the presence of Saddleback Mountain and the Santa Ana Mountain range, which is a significant component of the view in this area. (See Page B-34, B-50, and B-51.) Similarly, in Key Viewpoint 5, the view of Lake Mission Viejo is relegated to a secondary or insignificant status, whereas the baseline for analysis states the “most prominent built features in the landscape are the existing electric transmission lines that pass near the residences.” (See Page B-35.) The photo in support of the conclusion that Key Viewpoint 6 is not impacted significantly by the proposed double tower H-frame configuration, shows the power line from a perpendicular perspective rather than showing the full or partial profile that will be observed by most residences in the area. This photo simulation therefore underestimates and under represents the potential impacts to this area.

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The Initial Study identifies the applicable regulations, plans, and standards relevant to the aesthetic and view analysis, however the list is inadequate and incomplete. Table B.3-1 (P. B-23) identifies only two City of Mission Viejo General Plan policies as relevant to the aesthetic analysis. First, Policy 3.3, which should be noted as “Land Use Policy 3.3,” relates to infill development that should be compatible with community open space areas and existing community character. The Initial Study concludes that replacement of existing power poles with higher, more visually obtrusive poles is consistent with this policy. First, installation of replacement power

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poles is not “infill development,” and reliance on this policy is wholly misplaced. Second, the proposed project is not consistent with the visual character of the community, and is inconsistent with Public Facilities Element Policy 8.2, which calls for encouraging utility companies to underground overhead transmission facilities. (General Plan Public Facilities Element, at p.9.) Further, the Public Facilities Element states that “the City strongly encourages local providers of energy and gas to underground existing and future distribution and supply lines, including overhead transmission lines.” (Public Facilities Element at p. 23.) As such, the proposed project is not consistent with the goals and policies of the City of Mission Viejo General Plan.

The Initial Study also states that the project is consistent with Conservation and Open Space Policy No. 3.7, which calls for preservation of views from streets and highways adjacent to recreational and open space areas of significant scenic value. The stated basis for consistency admits that the proposed power lines would adversely impact visual features from recreational areas and adjoining streets, however, contrary to this admission, it concludes that the project would not “substantially” change the character from those areas. Doubling the size of the tower structures, and increasing the heights in most circumstances, substantially changes the existing character of the affected areas and therefore, contrary to assertions in the Initial Study, the proposed project is not consistent with the Conservation and Open Space Policy 3.7.

Further, the analysis ignores Land Use Element Policy 3.2, which states: “Define community aesthetic values and develop programs which promote and protect these values.” As amply demonstrated, the aesthetic values of the City do not include continuation or expansion of overhead facilities, as evidenced by the above cited goals and policies that encourage undergrounding of such facilities.

The Initial Study overlooks Land Use Policy 3.5, which states: “Emphasize quality of design for new development and rehabilitation of existing development.” Clearly, the increased obtrusiveness of the H-frame towers, when compared to the smaller and less obtrusive single pole tower configuration is not an improved quality design. The project is inconsistent with this Land Use Policy.

The Land Use Element also includes policies regarding preservation of open space, including Police 4.1, which states: “Provide for the preservation of significant scenic areas, and natural open space areas and corridors within the City.” Clearly, installation of 26 vertical support poles where previously there were only 19

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(including installation of two tower poles in some locations where there previously was one), increasing the height,² and increasing the massing of the structures are each inconsistent with preserving the significant scenic area and natural open spaces and corridors within the City. Therefore, the project is inconsistent with this policy. Further, Policy 4.4 calls for protection of “areas of scenic beauty which may otherwise be effected by development.” For the same reasons cited above, the proposed H-frame line configuration is inconsistent with this policy.

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In light of the numerous relevant policies that were not considered within the Initial Study, the analysis and conclusions are not supported by substantial evidence and the Initial Study fails to consider all relevant factors.

In the analysis contained on Page B-38 through B-42, the Initial Study repeatedly concludes that “the visual character of the proposed structures, while different in design, would exhibit fundamentally similar industrial characteristics compared to the existing transmission structures.” The City disagrees with this conclusion because of the increased visual impact related to the significantly larger and more obtrusive H-frame structures, along with the additional power lines currently proposed and those that could be installed in the future, which have been neither identified nor analyzed. Further, the analysis continually concludes that “the incremental visual change would be moderate and the resulting aesthetic impact would be adverse but less than significant.” Again, the City disagrees with the conclusions regarding significance, and believes that these conclusions are not based on substantial evidence. The View Analyses and the various simulations of impact amply demonstrate the significance of the impacts. For example, Figure 20, when compared to Figure 19 show at least a doubling of the visual impact. Further, the doubly intrusive structure impacts the view of the defining characteristic of this portion of the City, specifically Lake Mission Viejo. Not only is it doubly intrusive to the Lake, but also it intrudes on the recreational open space areas within this corridor.

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In conclusion, the project will result in significant visual and aesthetic impacts for which no mitigation has been identified.

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² At Page B-39, the Initial Study states “only four of the proposed H-frame structures would be more than 25 feet taller than the TSPs they would replace...” This characterization is disingenuous because “only four” of the thirteen proposed H-frame towers constitutes 30.7%, or nearly one-third, of the proposed towers.

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Air Quality

The Initial Study acknowledges that the Orange County area is in “extreme non-attainment” as to federal and state ozone standards, “serious non-attainment” as to federal standards for PM-10 and carbon monoxide, and “non-attainment” for the state designation for PM-10. Nonetheless, the Initial Study concludes that the impacts associated with this project are not significant. In reaching this determination, several reductions in impacts are included, but are not explained.

1-16

The study states that phasing will eliminate 27 lb/day of NOx emissions, but provides no basis for the amount of this adjustment. (P. B-73.) This reduction of NOx, an emission total that exceeds the South Coast Air Quality Management District’s Significant Threshold (*see* Table B.3-4) without the reduction, is not supported in either the Initial Study nor the appendix for Air Quality Emission Impact Analysis.

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Further, mitigation measure AQ-1 is not a sufficient mitigation measure to ensure the reduction in emissions would actually occur. Mitigation Measure AQ-1 states “to reduce simultaneous project-related NOx emissions from on-highway haul trucks and off-road heavy construction equipment... SCE shall phase project construction, *to the extent feasible*, so that off-site disposal of excavated material from Viejo Substation grading and excavation does not occur simultaneously with transmission line construction or modification activity....” (P. B-73; emphasis added.) The measure continues to state that “during transmission line construction or modification, SCE shall phase the project construction schedule *to the extent feasible*, so that grading and excavation for site access, tower bases, or crane pads do not occur simultaneously with tower delivery or erection.” (*Id.*; emphasis added.) This mitigation measure allows SCE, in its sole discretion, to determine what is and is not feasible with respect to project phasing and could easily result in no phasing whatsoever. Therefore, this mitigation measure is not fully enforceable as required by Pub. Res. Code §21081.6(b), and is not sufficient to ensure emission reductions to any degree, much less to the 27 pound-per-day degree for which the Initial Study takes credit. Thus, the NOx emissions exceed SCAQMD’s significance threshold, and the impact is significant and unmitigated.

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Mitigation Measure AQ-2 is also an insufficient mitigation measure, because it defers determination of the nearest feasible destination for exported material which can, and must be identified now. Appropriate analysis of emissions based on that destination

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should not be deferred, and if deferred, the Initial Study fails to adequately disclose the full impact associated with material export.

On Page B-74, the Initial Study states that the South Coast Air Quality Management District’s Air Quality Management Plan (“AQMP”) mandates reducing impacts to a level that is not cumulatively considerable. However, the Initial Study states without support, that “only large, unmitigated projects are considered cumulatively considerable.” This conclusion is inconsistent with the requirement that cumulative impact analysis be undertaken to avoid a situation where “piecemeal approval of several projects with related impacts could lead to severe environmental harm.” (*San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal.4th 713, 720.) Further, California CEQA Guidelines, Section 15355(b) acknowledges that cumulative impacts may result from individually minor but collectively significant projects taking place over a period of time. Even though a project-specific impact may be deemed insignificant, a related cumulative impact may be significant in circumstances such as when, “a new project will emit a relatively small quantity of air pollutants, but there is an existing air quality problem in the area.” (Practice Under the California Environmental Act, Section 13.37, Page 534, Kostka and Zischke, Continuing Education of the Bar, Oakland, California, December 2003.)

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The cumulative air quality impacts analysis fails to provide any quantification of the impacts from the cumulative projects set forth in Appendix 6 of the Initial Study.

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In the absence of evidence supporting the conclusion that an adopted regulatory standard is sufficient to protect against adverse environmental impacts, reliance on that standard is insufficient under CEQA. *See, for example, Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 128, wherein, previous CEQA Guidelines Section 15064(h) was set aside as violative of the Fair Argument Standard applicable to negative declarations. The Air Quality Analysis and the Cumulative Air Quality Analyses are insufficient in the Initial Study, and the project has the potential to result in unmitigable cumulative air quality impacts.

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Biological Impacts

This Initial Study acknowledges the potential for significant impacts on biological resources, but dismisses these potential impacts as mitigated through Southern California Edison’s participation in a Natural Community Conservation Plan

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(“NCCP”) for the Orange, Central, and Coastal sub-regions. What neither the analysis in the Initial Study, nor the analysis in the proponent’s own environmental assessment (“PEA”) explains, is that the impacts associated with the Viejo Systems Project are being mitigated through NCCP dedicated lands, but the amount of dedicated land is not disclosed within the environmental documentation for this project. To the extent that the NCCP created a mitigation banking system that SCE now takes advantage of, the amount of mitigation credit SCE is entitled to, or has already used on other projects, is undisclosed. Mitigation credits that have already been fully expended by SCE or other participants in the NCCP, must be disclosed so as to demonstrate that true mitigation of impacts will occur.

The Biological Resource Analysis Section should discuss the mechanics of the NCCP mitigation program such that the public is fully aware of the impacts and the exact manner in which those impacts will be mitigated. Failure to do so in the context of an environmental impact report would violate the public participation and full disclosure purposes underlying CEQA.

Further, as noted above, the biological resources section states that “the California Horned Lark breeding season occurs between March and July, with peak activity in May.” In order to mitigate potential impacts from construction activity during these times, the Initial Study says that “construction would occur prior to the breeding season for this species.” (See Page B-82.) This provision is inconsistent with the statement at page B-20, which states that “SCE proposes to initiate construction in Spring 2004.” Therefore, the impacts to nesting habitat during spring construction is inadequately analyzed and potential impacts are not properly disclosed.

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Finally, Biological Mitigation Measure BIO-9 requires SCE to prepare a stormwater pollution prevention plan for construction activities associated with the project prior to ground disturbance. This mitigation allows for deferred analysis, and fails to establish appropriate standards that the stormwater pollution prevention plan must meet in order to fully mitigate impacts to federally protected wetlands. The mitigation as proposed is insufficient to ensure mitigation of the impact to a less than significant level.

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Cultural Resources

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The Initial Study proposes a mitigation measure related to impacts to archeological resources, which calls for avoidance of archeological sites of significance, but allows

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SCE to submit a Recovery Plan to the Public Utilities Commission for review and approval is avoidance is determined to be unfeasible. First, if such sites are located in the City of Mission Viejo, the City should also be consulted with respect to the Recovery Plan. Second, this project should be conditioned consistent with all other development proposals in the City of Mission Viejo, and should incorporate the three conditions of approval set forth above. Finally, the mitigation is not fully enforceable because impacts will result if avoidance is deemed infeasible, and an after-the-fact determination that avoidance is infeasible renders this mitigation measure ineffective.

Geology and Soils

Initial Study analysis of grading and soil stability incorporates a number of future requirements thereby improperly deferring mitigation and analysis. For example, the Initial Study says that “the towers and tower footings proposed for the project would be designed to withstand expected wind forces, which far exceed stresses encountered during typical seismic events.” (P. B-95.) However, the footing design is nowhere analyzed or disclosed. To the contrary, the Initial Study proposes a mitigation measure to require future analysis, rather than completing the analysis now, and disclosing the impacts at the earliest feasible time, as is required under CEQA.

Mitigation Measure GEO-1 states that:

“SCE shall perform geotechnical studies to make design and construction recommendations for slope stability, liquefaction potential, subsidence, collapse, or seismic ground failure. **Prior to construction**, SCE shall provide the CPUC with written verification that the applicable geotechnical studies have been conducted, and that suitable structural features have been incorporated into the substation design to minimize damage from seismic related ground failure.” (P. B-95.)

Not only does this mitigation measure defer analysis, but also it ignores the requirement for analysis of transmission tower footings. In order to address this, the Initial Study relies on the applicant’s proposed mitigation G-1, which requires SCE to conduct site specific geotechnical investigations for general and seismic slope stability to provide input for the design of tower footings and to plan the construction methods. All of this analysis can, and should be, completed prior to approval of the project such that footings can be designed, grading quantities and depths, and related noise and air quality impacts can be fully disclosed, and the public is informed of the

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true scope of the impact associated with the project. The locations of the towers are known, and there is no basis for deferring analysis of these potential impacts.

Further, reliance on the deferral of analysis permitted by Mitigation Measure GEO-1 to reach the conclusion that impacts from landslides would be reduced to a less than significant level lack analytical support.

On Page B-96, the Initial Study states that “the location of the Viejo Substation places it on a ridge underlain by the Capistrano Formation: this formation is known to contain bentonite beds (expansive clay) and can also contain loose friable beds that could collapse if an unfavorable orientation of the bed occurs within the Substation Building Pad.” Bentonite beds can serve as slip planes for landslide activity. (*See* attached Exhibit 1, Slope Stability, Triggering Events, Mass Wasting Events, Prof. Stephen A. Nelson, at pp. 9-10 (bentonite related to Portuguese Bend Landslide activity).) Further, introduction of water can “cause a loss in shear strength of the soil and result in slippage down slope” (*Id.* at p. 5.)

In order to adequately analyze the potential for landslide activity or land instability, geological analysis should be undertaken now to disclose the nature of the bentonite bedding, and to disclose the potential for landslide activities associated with the geologic conditions. The initial study defers this analysis until a future date, while at the same time acknowledging that the analysis is necessary in order to “develop appropriate foundation design, construction practices, and structures that would not generate landslides or collapse.” (P. B-96.)

Each of these potential impacts from the project, and from the geological conditions that have yet to be analyzed, must be fully disclosed and acknowledged in the Initial Study in order to implement the public participation and full disclosure requirements underlying CEQA. Further, CEQA does not allow for deferral of analysis to future stages of a project, because such deferral allows for minimization of project impacts. CEQA requires full environmental analysis at the earliest feasible time.

Land Use and Planning

The Land Use and Planning Analysis section includes a reference to the above-discussed NCCP, in which SCE is a participant. As noted above, full explanation of the NCCP dedication and mitigation provisions should be provided, and the blanket and unsupported statement that “the proposed project would be an allowable action

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under the terms of SCE's participation in the plan" is insufficient and lacks evidence to support the conclusion.

On Page B-107, Section B.3.9.2, Subsection (b), the Initial Study concludes that there would be no impact with regard to conflicts with any applicable Land Use Plan policy or regulation, including, but not limited to, general plans, specific plans, and zoning ordinances adopted for the purpose of avoiding or mitigating environmental effects. The City disagrees with this conclusion in part because the analysis fails to consider specific goals and policies set forth in the City of Mission Viejo General Plan. The City believes that the proposed project is inconsistent with the following goals and policies of its General Plan:

Land Use Policy 3.2: Define community aesthetic values and develop programs which promote and protect those values;

Land Use Policy 3.3: Ensure that in-fill development is compatible with the community open space areas and existing community character;

Land Use Goal 4.0: Maintain open space resources for the purpose of providing recreational opportunities, protecting the public from safety hazards, and conserving natural resources;

Land Use Policy 4.1: Provide for the preservation of significant scenic areas, and natural open space areas and corridors within the city;

Land Use Policy 4.4: Protect areas of scenic beauty which may otherwise be affected by development;

Conservation/Open Space Goal 1: Conserve the city's natural resources;

Conservation/Open Space Element Policy 1.12: Work with energy provides to encourage community-wide reduction in energy consumption through conservation practices;

Conservation/Open Space Policy 3.7: Views from streets and highways that adjoin recreational and open space areas of significant

1-28
continued

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scenic value (such as a golf course or lake) should be preserved. Any landscaping, structure, or screen shall be designed to preserve and enhance the scenic character of the area;

Conservation/Open Space Policy 4.3: Utilize utility easements as open space linkage corridors;

Public Safety Policy 1.1: Require soil and geotechnical reports for new developments, both residential and commercial. Development in areas that contain potentially hazardous geologic/soils conditions shall require detailed geotechnical studies and mitigation measures that reduce the identified risks prior to approval of development;

Public Facilities Policy 8.2: Encourage utility companies to underground overhead transmission facilities;

Public Facilities Element, Page 23, Energy, “The City strongly encourages local provides of energy and gas to underground existing and future distribution and supply lines, including overhead transmission facilities.”

Further, the Land Use and Planning Analysis fails to consider the City’s zoning requirements, including, specifically, Section 9.20.015(v) of the Mission Viejo Municipal Code which states:

“Undergrounding of Utilities. Utilities shall be placed underground to the extent feasible. In the event an aboveground electrical transformer is located outdoors on any site, it shall be screened from view with a solid wall and/or landscaping and not located in any setback area. If it cannot be screened to the satisfaction of the director, it shall be located in an underground vault.”

As such, the conclusion reached in Table B.3-9, which states that the project is consistent with both the City of Mission Viejo General Plan and the City of Mission Viejo zoning code, is not supported by substantial evidence, and all relevant policies have not been considered.

1-28
continued

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Noise

The Noise Analysis set forth in the Initial Study fails to adequately account for a number of noise sources. These noise sources include the potential use of helicopters for installation of the poles and/or running of the wires. Further, the noise section acknowledges that rock drilling may be necessary.³ Both of these activities would have impacts to neighboring property owners as acknowledged in the Initial Study, however, neither of these activities is fully explained in either the Project Description or the Noise Analysis. If appropriate geologic studies were completed for each location where towers are proposed, the applicant could adequately disclose those areas in which rock drilling may be necessary, and the impacts to adjacent property owners and residents could be analyzed and disclosed.

1-29

Further, additional mitigation measures could be identified to minimize impacts to neighbors and other sensitive receptors that may be present in the area. The potential impact is clearly significant because, as acknowledged in the Initial Study, the rock drilling could result in noise up to 98 dBA, whereas helicopter activity could meet or exceed that level. In addition, the document implies that construction activities during nighttime hours, which would violate both Mission Viejo and Lake Forest construction hour requirements, could be used to offset the noise impacts. (P. B-114.) However, noises occurring during night hours are considered more impactful than similar noises during daytime hours. The fact that both helicopter operations and rock drilling activities are disclosed, but not explained or quantified in a meaningful way, and are reviewed in a cursory manner at best supports the conclusion that both of these activities are reasonably foreseeable and therefore must be fully analyzed in the Initial Study.

1-30

At Page B-114, the Initial Study asserts that because pole locations “are more than 25 feet from the edge of the right-of-way,” there would be no excess vibration impacting neighboring residences. This statement is unsupported by evidence. To the extent that the Initial Study purports to rely on notification to mitigate potential impacts, it is insufficient. Mitigation, pursuant to California State CEQA Guidelines Section 15370 is defined to include:

³ As noted above, neither of these activities were analyzed for air quality impacts, and the rock drilling activity was not even mentioned, much less analyzed, in the geologic study portion of the Initial Study.

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- “(a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing and providing substitute resources or environments.”

As such, simply notifying businesses or residences within 300 feet of a project does not serve as adequate mitigation of potential noise and vibration impacts associated with the project. Without sufficient mitigation, the impact must be deemed significant.

Population and Housing

Section B.3.12.2.a. discusses growth inducement and the potential for increased population as a result of construction of the Viejo System Project. However, the analysis does not consider the extension and expansion of utility capacity, although it acknowledges that the system is needed to serve potential future growth in the South Orange County area. The question from CEQA Guidelines, Appendix G, asks whether the increase in capacity through the utility extension could induce growth by creating additional electrical capacity. Whereas a lack of capacity could slow growth, an expansion of capacity could induce growth. The Initial Study fails to quantify the potential impact of the facility expansion and line capacity expansion, and provides no indication of the residential, commercial and population growth that could result from the expanded electrical service capacity.

The Initial Study acknowledges that “the project is intended to meet existing and *future* electrical demand generated by residential and business uses.” Nonetheless, the Initial Study concludes without any support whatsoever that “the proposed project itself would not induce population growth either directly or indirectly.” Without

1-30
continued

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evidence to support this conclusion, and because of the admission that the project is intended to meet future electrical demand, the potential growth inducing impacts of the project have been neither adequately analyzed nor disclosed.

When adequately analyzed and disclosed, these growth-inducing impacts must also be considered in discussing impacts to schools (Page B-120), parks (Page B-120), population and housing (Page B-117 through 118), air quality impacts (Page B-71), and recreational facilities (Page B-127).

Recreation

1-32

This analysis concludes that impacts to Florence Joyner Olympiad Park (Flo. Jo. Park) and other recreational facilities would be insignificant. However in Flo. Jo. Park, installation of two H-frame towers results in installation of four vertical poles, whereas only three existing tubular steel pole structures would be removed. The installation of an additional vertical element, plus the overall increased massing of the H-frame tower configuration when compared to the TSP structures, constitutes a significant unmitigated impact in this recreational facility.

Further in this section, at Page B-127, the Initial Study summarizes applicable regulations, plans and standards and includes the City of Mission Viejo General Plan. However, this General Plan Analysis leaves out relevant General Plan policies including Conservation and Open Space Policy 3.7 and 4.3, as discussed in the Land Use and Planning Section above. Further, the City disagrees with the conclusion of Section B.3.14.2.c. (p. B-127), which states that the project would not result in significant permanent or temporary impacts to recreational activities provided mitigation is incorporated. This section acknowledged that “permanent diminished value of a recreational resource due to construction of new transmission towers, will result.” (Id.)

1-33

This section also acknowledges that “noise, dust, and views of construction equipment and activities could reduce the recreational value of the off-road bikeway.” However, no means to mitigate this decreased recreational value are presented. The section proposes Mitigation Measure R-1, which requires that

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“SCE shall provide on-site notification of recreational access closures at least two weeks in advance, through the posting of signs and/or notices at all public

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entrances. Documentation of such notification should be submitted to CPUC.”

1-34
continued

As discussed above, notice is not sufficient mitigation, and does not meet the purpose of reducing or eliminating impacts to recreational facilities. As such, this mitigation is ineffective to offset the actual impact to the recreational facilities, and therefore does not mitigate the potential impacts to less than significant.

At Page B-130 (p. B-131), the Initial Study discusses County of Orange General Plan Recreational Element policies. However, the relevance of this analysis is unclear. All portions of this project occur within either the City of Lake Forest or the City of Mission Viejo, therefore, County regulations plans and standards are irrelevant to the analysis.

1-35

At Table B.3-15, the Initial Study considers certain General Plan regulations, policies, and standards. First, the table concludes that the project is consistent with Land Use Element Goal 4.0, even though “the project would reduce the open space used for transmission structures.” However, the area dedicated to such structures is nowhere disclosed or analyzed. Removing one pole and replacing it with an H-style pole consisting of two vertical elements significantly increases the footprint of the facility, and results in double the decrease in recreational area or open space area, or more depending on footing and foundation design. The Initial Study similarly relies on the erroneous assumption that removing single poles offsets any impact in determining consistency with Conservation and Open Space Goal 1.0 and Goal 2.0.

1-36

The Initial Study acknowledges that “most of the facilities along the transmission corridor would be affected for a short period during the re-stringing of the transmission lines.” (P. B-131.) Thereafter the Initial Study concludes that this impact is less than significant. However, a “short period” is never defined. It could be from one to two weeks, one day, or perhaps even as long as one month. Therefore, the actual temporary impact has not been disclosed, and determination of significance is impossible without further clarification of the duration of impact. Significant temporary impacts would likely occur because those impacts cannot feasibly be mitigated.

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Traffic

1-38

In analyzing the potential traffic impacts, the Initial Study relies on a statement that “SCE anticipates that the majority of truck traffic would use major streets and would be scheduled to occur during non-peak hours.” (P. B-136.) Because this underlying assumption colors the analysis, and avoids impacts during peak hours, the requirement should be made a mitigation measure rather than appearing as advisory language. Otherwise, the potential impact is not adequately mitigated. Similarly, the local road closures required to construct the project should also occur only in non-peak traffic periods, and a mitigation measure requiring this should be incorporated into the project. Without such mitigation, the project will likely result in significant traffic impacts during peak hours. Further, even with mitigation, impacts are likely to result from the construction traffic interrupting normal traffic flow.

Mandatory Findings of Significance

1-39

As discussed above, the project does have the potential to have impacts that are individually limited but cumulatively considerable, meaning that incremental effects of the project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and effects of probable future projects. The potentially significant cumulative impacts include visual impacts, for the reasons discussed above, as well as cumulative impacts for air quality. As such, under Mandatory Finding of Significance, an EIR must be prepared for this project.

Mitigation Monitoring Plan

1-40

The mitigation measures identified in the Mitigation Monitoring Plan should be revised and augmented based on the foregoing comments. Further, a cultural resources data recovery plan, as required under Table C-1, should be required prior to initiation of construction, and not deferred. With respect to mitigation measures AQ-3, AQ-4, and AQ-5, the monitoring requirements state that SCE shall provide certain records and documentation to CPUC, but only if the CPUC so requests. In the event that the CPUC fails to request these documents, SCE could fail to comply with the mitigation measures, therefore resulting in significant impacts. The monitoring requirement should be made mandatory and not discretionary on the part of the CPUC, as currently it is not fully enforceable as required by Pub. Res. Code §21081.6(b).

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At Page C-8, under Geology and Soils, the monitoring requirement allows for deferral of geologic and seismic studies. This is insufficient mitigation and insufficient monitoring for the reasons explained previously. Similarly, as discussed above, Mitigation Measure R-1, at Page C-9, is not an adequate mitigation measure under CEQA.

1-41

With respect to the applicant's Proposed Mitigation C-1, at Page C-12, archeological resource monitoring only would occur for ground disturbances north of El Toro Road. For the reasons discussed above, this mitigation measure must be modified to include those areas south of El Toro Road as well.

With respect to applicant's Proposed Mitigation G-1, at Page C-13, the applicant will submit Geological Studies and Geotechnical Engineering studies only prior to construction. This constitutes improper deferral of analysis in conflict with the requirements of CEQA.

References

1-42

The appendices state that the Initial Study relied upon the City of Mission Viejo General Plan amended in 1992. However, the current City of Mission Viejo has been amended a number of times since 1992, including Land Use Element amendments in 1998, Housing Element amendments in 2000, Conservation and Open Space Element amendments in 1999, Public Safety Element amendment in 2003, Public Facilities Element amendment in 2003, Economic Development Element updated in 2002, and Growth Management Element updated in 2004. Therefore, analysis of the Initial Study relied on improper and out of date General Plan elements. Reliance on old, inapplicable documents calls into question the validity of the entirety of the Land Use and Planning consistency findings as well as the other analyses related to General Plan policies.

Appendix 4 – Air Quality Calculations

1-43

The daily emissions estimates for construction equipment found on Page 4-1 indicate that the total pieces of construction equipment will be eight, whereas the daily emission estimates for construction equipment on Page 4-2 analyzes a total of nine pieces of construction equipment. This inconsistency calls into question the validity of the air quality calculations. Further, without explanation, the analysis takes a 70 percent reduction of emissions while providing no basis for this reduction

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whatsoever. The daily emission estimates for construction equipment calculations on Page 4-2 include a “typical load factor” and, without explanation or evidence supporting the reduction, reduces emission estimates by anywhere from 30 percent to 75 percent on various pieces of equipment. Through these reductions, the analysis reaches the conclusion that only NOx exceeds relevant emission standards. After acknowledging the exceedance of the standard, the Initial Study, again, without explanation, reduces the impact to less than significant by an unexplained 27 pounds per day reduction through advisory and not mandatory mitigation measures. (See Page B-73.) With unexplained, unsupported reductions through these miscellaneous factors, the Initial Study fails to provide substantial evidence supporting the conclusion that maximum daily construction emissions will be less than significant. Further, the reduction assumptions avoid the necessity to mitigate potential impacts both from the project and on a cumulative basis.

Appendix 6 – Cumulative Projects

At Page 6-1, the Initial Study identifies certain projects within and outside of the City of Mission Viejo to be considered in cumulative project analysis. However, this listing does not contain any reference to the existing power line facilities on the lattice tower structures, or any other pending SCE projects therefore ignoring the potential cumulative impacts of the existing facility and proposed facilities when considered together. Further, the list of projects does not include major residential developments including the Rancho Mission Viejo Ranch Plan and all projects near the project site that are located in the unincorporated portion of the County, including Saddleback Meadows and Saddleback/Saddle Crest projects in Trabuco Canyon. For these reasons, the list of cumulative projects is insufficient, as is the resulting cumulative analysis.

1-44

Conclusion

Based on the foregoing, a fair argument exists that the project will have significant impact on the environment in the areas of Cultural Resources, Aesthetics, Air Quality, Biology, Geology and Soils, Land Use and Planning. The City has provided substantial evidence that in fact the proposed project will have potentially significant impacts individually and cumulatively. The City has also identified numerous areas where the mitigations set forth in the Initial Study and in the applicant’s PEA are insufficient to insure that all impacts will be mitigated to less than significant levels. Finally, the City has identified areas where adequate analysis has not been completed,

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and must be completed in order to comply with CEQA's policies regarding full disclosure of potential impacts, completion of analysis at the earliest feasible time, and implementation of all feasible mitigation measures.

When the EIR that is required for this project is prepared, various alternatives must be considered. In concluding that a mitigated negative declaration is proper for this project, the Initial Study evades critical analytical tool CEQA implements through alternatives analysis. Further, the Initial Study does not consider alternatives, although the PUC CEQA rules require such analysis. CPUC CEQA Rule 17.1(v)(3) states the objectives for implementation of the California Environmental Quality, and states that it is the objective "to assess in detail, as early as possible, the potential environmental impact of a project, in order that adverse effects are avoided, *alternatives are investigated*, and environmental quality is restored or enhanced to the fullest extent possible" (emphasis added).

The Initial Study includes no explanation of alternatives, when feasible alternatives are available that could address certain adverse environmental impacts associated with the project as presently proposed. Failure to consider these alternatives violates the PUC's CEQA rules and circumvents the purposes of CEQA that decision makers be fully informed of the potential impacts of the project and other available alternatives to minimize such impacts. The City looks forward to providing input on the various alternatives to be analyzed at such time as the notice of preparation of an EIR for this project is circulated.

The City appreciates the opportunity to provide these comments on the Initial Study, and we look forward to receiving the full EIR analysis of this project in furtherance of the public participation and public disclosure purposes underlying the California Environmental Quality Act. In the alternative, the City requests specific responses to each of the points raised in this letter. Further, the City reserves its right to submit additional comments as deemed appropriate. Should you have any questions


1-45
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regarding the content of this letter, or should you wish to discuss any of the comments, please do not hesitate to contact me. █

Very truly yours,



David M. Snow
Assistant City Attorney

cc: Mayor and City Council
Dennis Wilburg, City Manager
Chuck Wilson, Community Development Director
Peter Thorson, City Attorney
B. Tilden Kim, Esq.
Eric Alderete, Esq.

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EXHIBIT 1

1-46
*Exhibit 1
in its
entirety*

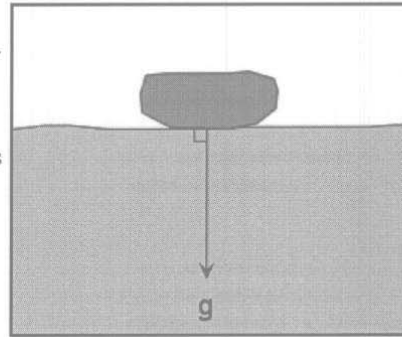
EENS 204	Natural Disasters
Tulane University	Prof. Stephen A. Nelson
Slope Stability, Triggering Events, Mass Wasting Events	

This page last updated on 09-Mar-2004

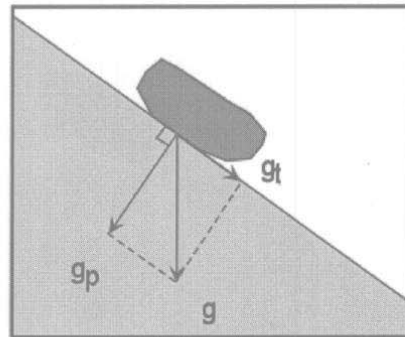
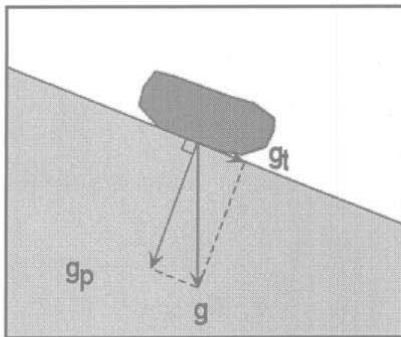
Factors that Influence Slope Stability

Gravity

The main force responsible for mass wasting is gravity. Gravity is the force that acts everywhere on the Earth's surface, pulling everything in a direction toward the center of the Earth. On a flat surface the force of gravity acts downward. So long as the material remains on the flat surface it will not move under the force of gravity.



On a slope, the force of gravity can be resolved into two components: a component acting perpendicular to the slope and a component acting tangential to the slope.



- The perpendicular component of gravity, g_p , helps to hold the object in place on the slope. The tangential component of gravity, g_t , causes a shear stress parallel to the slope that pulls the object in the down-slope direction.
- On a steeper slope, the shear stress or tangential component of gravity, g_t , increases, and the perpendicular component of gravity, g_p , decreases.
- The forces resisting movement down the slope are grouped under the term *shear strength* which includes frictional resistance and cohesion among the particles that make up the object.
- When the shear stress becomes greater than the combination of forces holding the object on the slope, the object will move down-slope.

<http://www.tulane.edu/~sanelson/geol204/slopestability.htm>

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Slope Stability

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Thus, down-slope movement is favored by steeper slope angles which increase the shear stress, and anything that reduces the shear strength, such as lowering the cohesion among the particles or lowering the frictional resistance. This is often expressed as the safety factor, F_s , the ratio of shear strength to shear stress.

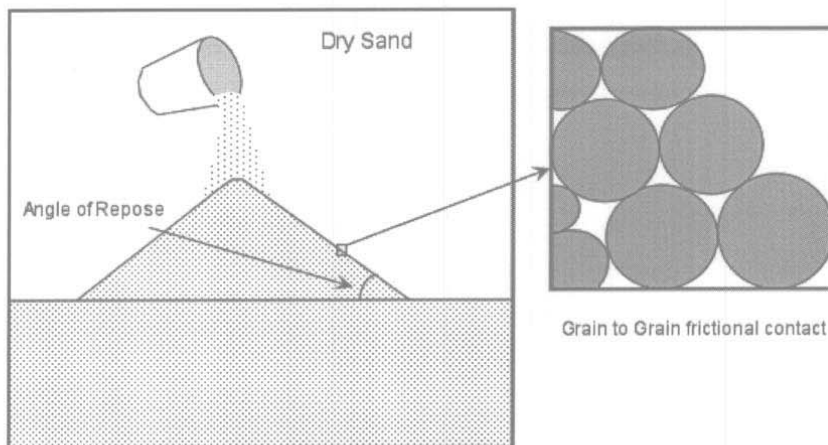
$$F_s = \text{Shear Strength/Shear Stress}$$

If the safety factor becomes less than 1.0, slope failure is expected.

The Role of Water

Although water is not always directly involved as the transporting medium in mass-wasting processes, it does play an important role. Think about building a sand castle on the beach. If the sand is totally dry, it is impossible to build a pile of sand with a steep face like a castle wall. If the sand is somewhat wet, however, one can build a vertical wall. If the sand is too wet, then it flows like a fluid and cannot remain in position as a wall.

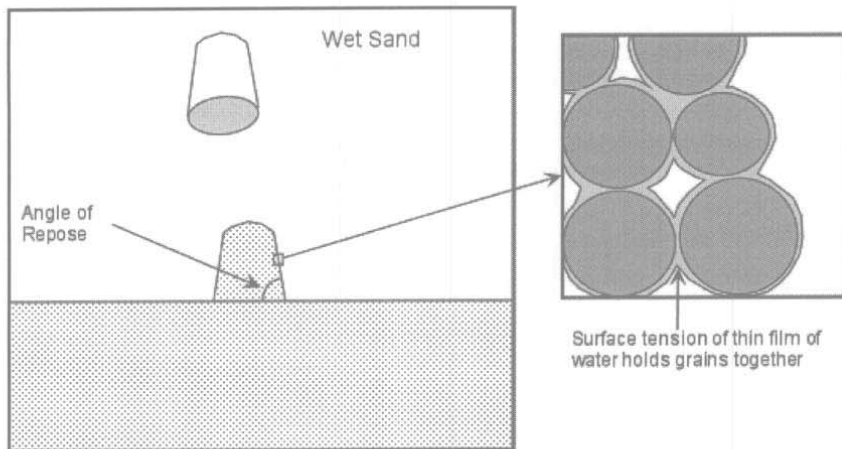
- Dry unconsolidated grains will form a pile with a slope angle determined by the *angle of repose*. The angle of repose is the steepest angle at which a pile of unconsolidated grains remains stable, and is controlled by the frictional contact between the grains. In general, for dry materials the angle of repose increases with increasing grain size, but usually lies between about 30 and 37°.



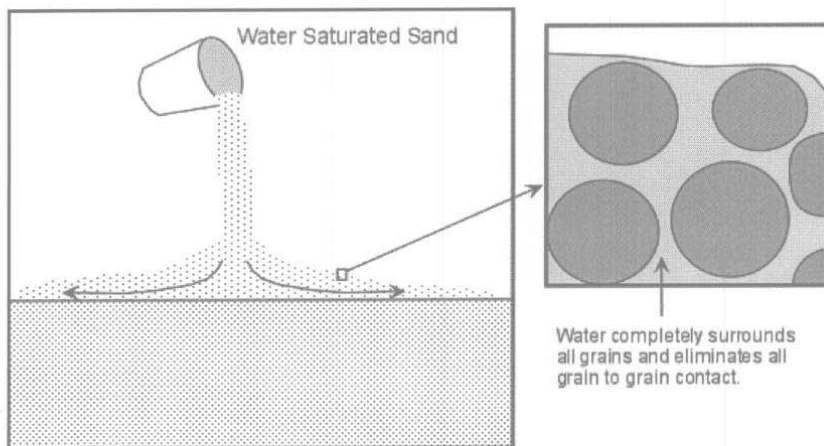
- Slightly wet unconsolidated materials exhibit a very high angle of repose because surface tension between the water and the solid grains tends to hold the grains in place.

Slope Stability

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- When the material becomes saturated with water, the angle of repose is reduced to very small values and the material tends to flow like a fluid. This is because the water gets between the grains and eliminates grain to grain frictional contact.



Another aspect of water that affects slope stability is fluid pressure. In some cases fluid pressure can build in such a way that water can support the weight of the overlying rock mass. When this occurs, friction is reduced, and thus the shear strength holding the material on the slope is also reduced, resulting in slope failure.

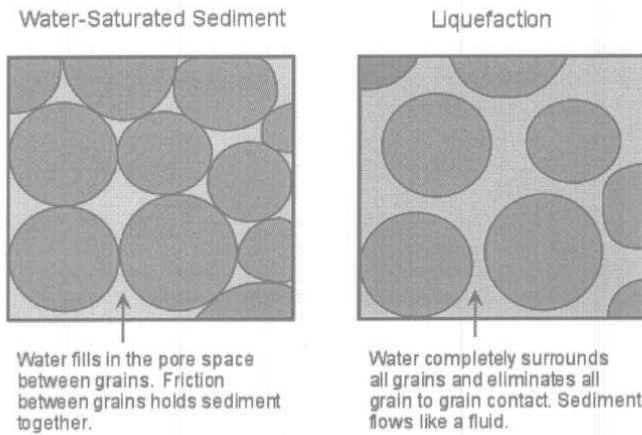
Troublesome Earth Materials

- Liquefaction - As we have already discussed, liquefaction occurs when loose sediment
- <http://www.tulane.edu/~sanelson/geol204/slopestability.htm>

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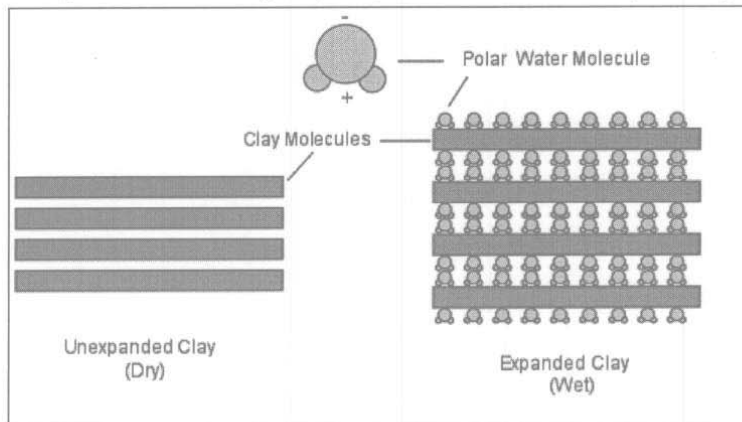
becomes oversaturated with water and individual grains loose grain to grain contact with one another as water gets between them.

This can occur as a result of ground shaking, as we discussed during our exploration of earthquakes, or can occur as water is added as a result of heavy rainfall or melting of ice or snow. It can also occur gradually by slow infiltration of water into loose sediments and soils.



The amount of water necessary to transform the sediment or soil from a solid mass into a liquid mass varies with the type of material. Clay bearing sediments in general require more water because water is first absorbed onto the clay minerals, making them even more solid-like, then further water is needed to lift the individual grains away from each other.

- Expansive and Hydrocompacting Soils - These are soils that contain a high proportion of a type of clay mineral called smectites or montmorillinites. Such clay minerals expand when they become wet as water enters the crystal structure and increases the volume of the mineral. When such clays dry out, the loss of water causes the volume to decrease and the clays to shrink or compact (This process is referred to as hydrocompaction).

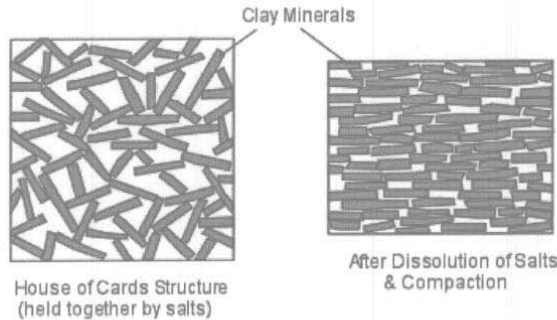


Another material that shows similar swelling and compaction as a result of addition or removal of water is peat. Peat is organic-rich material accumulated in the bottoms of swamps as decaying vegetable matter.

Slope Stability

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- Sensitive Soils - In some soils the clay minerals are arranged in random fashion, with much pore space between the individual grains. This is often referred to as a "house of cards" structure. Often the grains are held in this position by salts precipitated in the pore space that "glue" the particles together.
- As water infiltrates into the pore spaces, it can both be absorbed onto the clay minerals, as discussed above, and can dissolve away the salts holding the "house of cards" together. Compaction of the soil or shaking of the soil can thus cause a rapid change in the structure of the material. The clay minerals will then line up with one another and the open space will be reduced.



But this may cause a loss in shear strength of the soil and result in slippage down slope or liquefaction. This is referred to as **remolding**. Clays that are subject to remolding are called **quick clays**.

Some clays, called **thixotropic clays**, when left undisturbed can strengthen, but when disturbed they lose their shear strength.

Triggering Events

A mass-wasting event can occur any time a slope becomes unstable. Sometimes, as in the case of creep or solifluction, the slope is unstable all of the time and the process is continuous. But other times, triggering events can occur that cause a sudden instability to occur.

- Shocks - A sudden shock, such as an earthquake may trigger slope instability. Minor shocks like heavy trucks rambling down the road, trees blowing in the wind, or human made explosions can also trigger mass-wasting events.

Examples:

- Turnagain Heights Alaska, 1964
During the Good Friday earthquake on March 27, 1964, a suburb of Anchorage, Alaska, known as Turnagain Heights broke into a series of slump blocks that slid toward the ocean. This area was built on sands and gravels overlying marine clay.

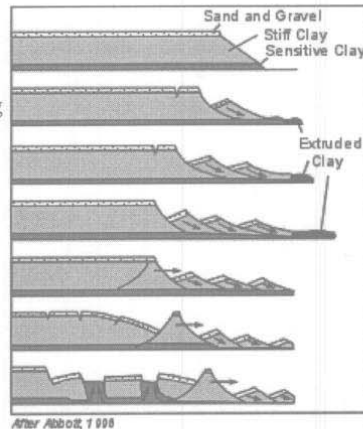
The upper clay layers were relatively stiff, but the lower layers consisted of a sensitive clay, as discussed above. The slide moved about 610 m toward the ocean, breaking up into a series of blocks. It began at the sea cliffs on the ocean after about 1.5 minutes of shaking caused by the earthquake, when the lower clay layer became liquefied. As the slide moved into the ocean, clays were extruded from the toe of the slide. The blocks rotating near the

<http://www.tulane.edu/~sanelson/geol204/slopestability.htm>

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front of the slide, eventually sealed off the sensitive clay layer preventing further extrusion. This led to pull-apart basins being formed near the rear of the slide and the oozing upward of the sensitive clays into the space created by the extension.

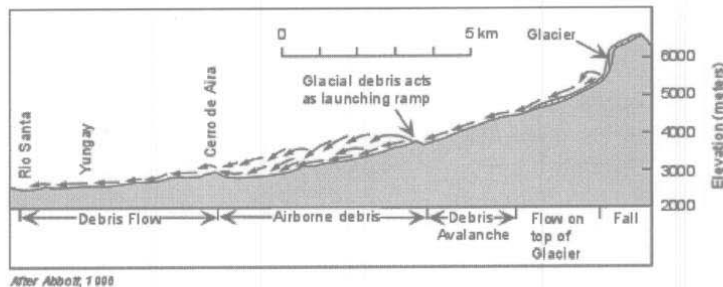


75 homes on the top of the slide were destroyed by the movement of the mass of material toward the ocean.

- o Nevados de Huascarán, Peru, 1962 and 1970.

Nevados de Huascarán is a high peak in the Peruvian Andes Mountains. The peak consists of granite with nearly vertical joints (fractures) covered by glacial ice. On January 10, 1962 a huge slab of rock and glacial ice suddenly fell, with no apparent triggering mechanism. This initiated a debris flow that moved rapidly into the valley below and killed 4,000 people in the town of Ranrahirca, but stopped when it reached the hill called Cerro de Aira, and did not reach the larger population center of Yungay.

On May 31, 1970 a magnitude 7.7 earthquake occurred on the subduction zone 135 km away from the Nevados de Huascarán.



Shaking in the area lasted for 45 seconds, and during this shaking another large block of the Nevados de Huascarán between 5,500 and 6,400 meters elevation fell from the peak.

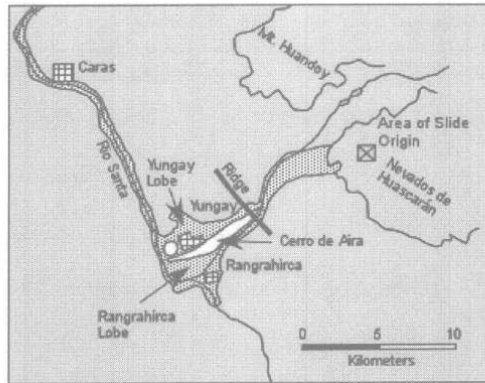
This time it became a debris avalanche sliding across the snow covered glacier and moving down slope at velocities up

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Slope Stability

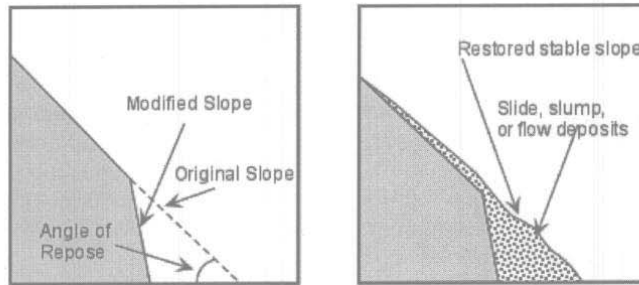
to 335 km/hr. The avalanche then hit a small hill composed of glacially deposited sediment and was launched into the air as an airborne debris avalanche. From this airborne debris, blocks the size of large houses fell on real houses for another 4 km. The mass then recombined in the vicinity of Cerro de Aira and continued flowing as a debris flow, burying the town of Yungay and its 18,000 residents.



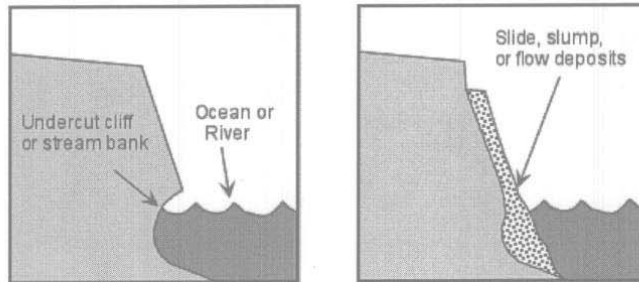
After Browning, 1973

The debris flow reached the valley of the Rio Santa and climbed up the valley walls killing another 600 people on the opposite side of the river. Since then, the valley has been repopulated, and currently large cracks are seen on the remains of the glacier that still covers the upper slopes of Nevados de Huascarán.

- Slope Modification - Modification of a slope either by humans or by natural causes can result in changing the slope angle so that it is no longer at the angle of repose. A mass-wasting event can then restore the slope to its angle of repose.



- Undercutting - streams eroding their banks or surf action along a coast can undercut a slope making it unstable.



- Example: Elm Switzerland, 1881

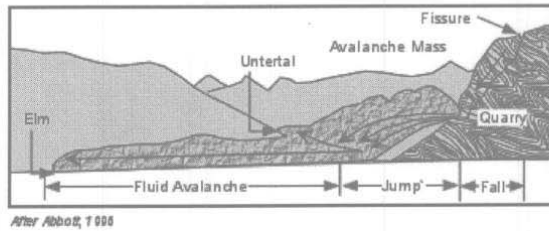
In 1870s there was a large demand for slate to make blackboards throughout Europe. To meet this demand, miners near Elm, Switzerland began digging a slate quarry at the base of a steep cliff. Slate is a metamorphic rock with an excellent planar foliation that breaks smoothly along the foliation planes. By 1876 a "v" shaped fissure formed above the cliff, about 360 meters above the quarry. By September 1881, the quarry had been excavated to where it was 180 m long and 60 m into the hill below the cliff, and the "v" shaped fissure had opened to 30 m wide.

Falling rocks were frequent in the quarry and their were almost continuous

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loud noises heard coming from the overhang above the quarry. Realizing that the slope had become unstable, the miners stopped working, thinking that the rock mass above the quarry would probably fall down.

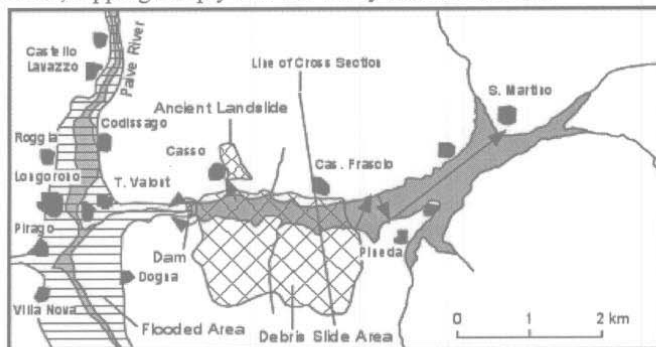


On September 11, 1881 the 10 million m³ mass of rock above the quarry suddenly fell. But, it did not stop when it hit the quarry floor. Instead, it broke into pieces and rebounded into the air. Residents in Untertal, on the opposite side of the valley from the slide, saw the mass of rebounded rock coming at the them and ran uphill. But the mass of rock continued up the walls of the valley and buried them. The avalanche then turned and ran an additional 2,230 m as a dry avalanche traveling at 180 km/hr burying the village of Elm. The avalanche killed 115 people.

- Changes in Hydrologic Characteristics - heavy rains can saturate regolith reducing grain to grain contact and reducing the angle of repose, thus triggering a mass-wasting event. Heavy rains can also saturate rock and increase its weight. Changes in the groundwater system can increase or decrease fluid pressure in rock and also trigger mass-wasting events.
 - Example: Vaiont Reservoir, Italy, 1963

In 1960 a dam was built across the Vaiont Valley in northeastern Italy near the border with Austria and Slovenia. The valley runs along the bottom of a geologic structure called a syncline, wherein rocks have been folded downward and dip into the valley from both sides (see cross section below).

The rocks are mostly limestones, but some are intricately interbedded with sands and clays. These sand and clay layers form bedding planes that parallel the syncline structure, dipping steeply into the valley from both sides.



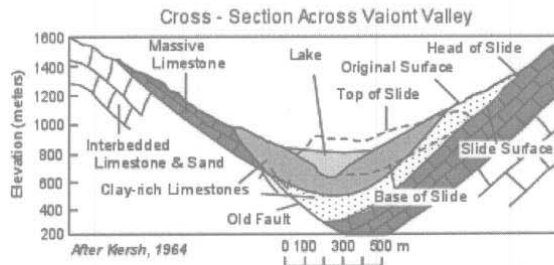
Fracture systems in the rocks run parallel to the bedding planes and

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Slope Stability

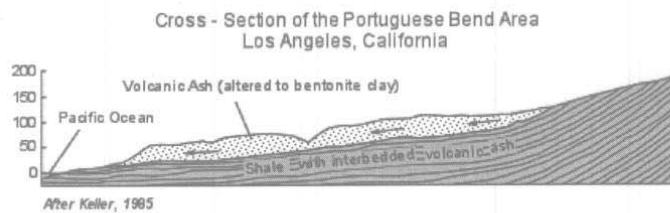
perpendicular to bedding planes. The latter fractures had formed as a result of glacial erosion which had relieved pressure on the rocks that had formed deeper in the Earth.



Some of the limestone units have caverns that have been dissolved in the rock due to chemical weathering by groundwater. Furthermore, the dam site was built near an old fault system. During August and September, 1963, heavy rains drenched the area adding weight to the rocks above the dam. On October 9, 1963 at 10:41 P.M. the south wall of the valley failed and slid into the reservoir behind the dam. The slide mass was 1.8 km long and 1.6 km wide with a volume of 240 million m³. As the slide moved into the reservoir it displaced the water, forcing it 240 meters above the dam and into the village of Casso on the northern side of the valley. Subsequent waves swept up to 100 meters above the dam. Although the dam did not fail, the water rushing over the dam swept into the villages of Longorone and T. Vaiont, killing 2,000 people. Waves also swept up the reservoir where they first bounced off the northern shore, then back toward the Pineda Peninsula, and then back up the valley slamming into San Martino and killing another 1000 people. The debris slide had moved along the clay layers that parallel the bedding planes in the northern wall of the valley. A combination of factors was responsible for the slide. First filling of the reservoir had increased fluid pressure in the pore spaces and fractures of the rock. Second, the heavy rains had also increased fluid pressure and also increased the weight of the rock above the slide surface. After the slide event, parts of the reservoir were filled up to 250 m above the former water level, and even though the dam did not fail, it became totally useless. This event is often referred to as the world's worst dam disaster.

- o Example: Portuguese Bend, California, 1956
Portuguese Bend lies on the Palos Verdes Peninsula just to the south of Los Angeles, California, but still within Los Angeles County.

In this area the rocks have been folded into a synclinal structure with rock layers dipping gently toward the Pacific Ocean.



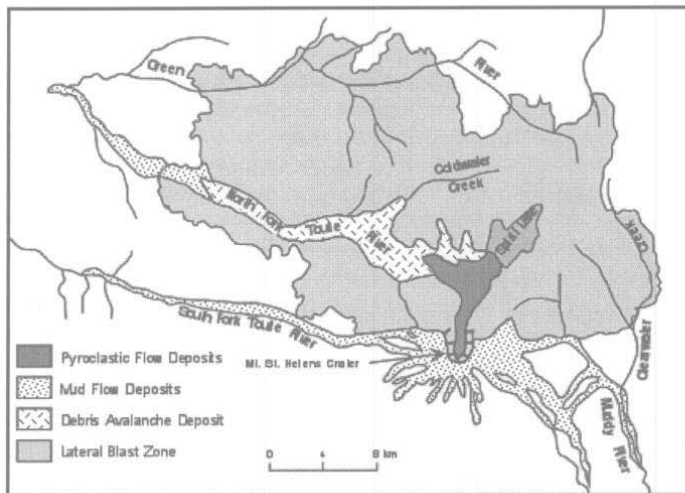
Rocks near the surface consist of volcanic ash that has been altered by chemical weathering to an expanding type clay called bentonite. Below these altered ash layers are shales that are interbedded with other thin volcanic ash layers that have been similarly altered to bentonite clay. The area had the appearance of an earth flow, with a very hummocky topography with many enclosed basins filled with lakes. Prior to the 1950s the area had been used for farming. In the 1950s demand for ocean views led to the development of the area as an upscale suburb. But, no sewer system was available, so wastes were put into the ground via septic tanks. In 1956 the area began moving down slope toward the ocean. Rates of movement were fastest several months after the end of the winter rainy season and slowest



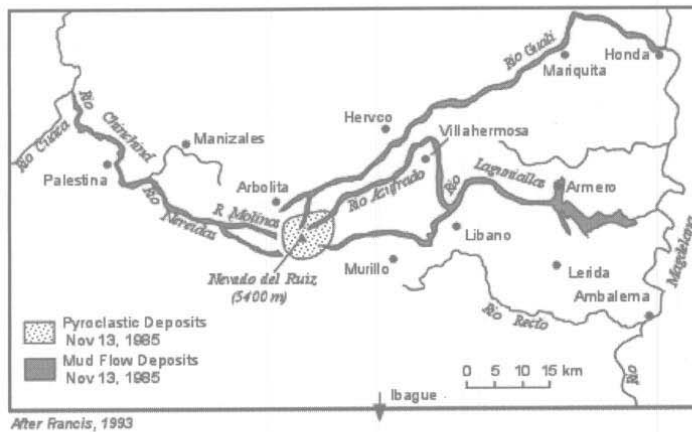
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during the summer dry season. In the next three years the earthflow moved as much as 20 meters, but in the processes the expensive homes built on the flow became uninhabitable. Movement was caused by a combination of wave erosion along the coast removing some the mass resisting flow, added water due to the disposal of wastes, watering of lawns, and rainfall causing the bentonite clays to expand and weaken, and by the added weight of development on top of the flow. Property owners looked desperately for someone to sue, and eventually won a suit against the county of Los Angeles who had added fill dirt to build a road into the development (note that since the property owners could not sue themselves, nor could they sue the clay layers responsible for the movement they found the only agency with deep pockets that was available).

- Volcanic Eruptions - produce shocks like explosions and earthquakes. They can also cause snow to melt or empty crater lakes, rapidly releasing large amounts of water that can be mixed with regolith to reduce grain to grain contact and result in debris flows, mudflows, and landslides.
 - Examples - We have previously discussed the mudflows and debris avalanche produced by the 1980 eruption of Mount St. Helens, and the devastating mudflows that killed 23,000 people in Armero that resulted from an eruption of Nevado del Ruiz volcano in Columbia.



After Tilling, 1984



Assessing and Mitigating Mass-Wasting Hazards

As we have seen mass-wasting events can be extremely hazardous and result in extensive loss of life and property. But, in most cases, areas that are prone to such hazards can be recognized with some geologic knowledge, slopes can be stabilized or avoided, and warning systems can be put in place that can minimize such hazards.

- Prediction and Hazard Assessment

If we look at the case histories of mass-wasting disasters discussed above, in all cases looking at the event in hindsight shows us that conditions were present that should have told us that a hazardous condition existed prior to the event.

- Exploration could have revealed the sensitive clays beneath Turnagain Heights, located in known earthquake prone area.
- The area beneath the slopes of Nevados de Huascarán was littered with debris from prior landslide events, and even though the first event in 1962 was not caused by an earthquake, it should have been known that the area was susceptible to such a hazard. The 1962 event should have provided fair warning to inhabitants of the area and the death and destruction caused by the 1970 event should have been avoided.
- Miners in Elm, Switzerland, certainly realized that undercutting of the mountain could cause the mountain to fail, but did not consider the more widespread effect of the avalanche.
- In the Portuguese Bend area, planners should have realized that the slope was an earthflow, fine for farming, but not a very desirable place to construct houses of any sort.
- In both of the volcanic mudflow cases, the hazards were known before the event. In the Mount St. Helens case, hazards assessments were available and plans were in effect to minimize further damage once the event occurred. In the case of Armero, warnings were given, but ignored. The town was built on mudflow deposits from prior mudflow events.

Because there is usually evidence in the form of distinctive deposits and geologic

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structures left by recent mass wasting events, it is possible, if resources are available, to construct maps of all areas prone to possible mass-wasting hazards. Planners can use such hazards maps to make decisions about land use policies in such areas or, as will be discussed below, steps can be taken to stabilize slopes to attempt to prevent a disaster.

Short-term prediction of mass-wasting events is somewhat more problematical. For earthquake triggered events, the same problems that are inherent in earthquake prediction are present. Slope destabilization and undercutting triggered events require the constant attention of those undertaking or observing the slopes, many of whom are not educated in the problems inherent in such processes. Mass-wasting hazards from volcanic eruptions can be predicted with the same degree of certainty that volcanic eruptions can be predicted, but again, the threat has to be realized and warnings need to be heeded. Hydrologic conditions such as heavy precipitation can be forecast with some certainty, and warnings can be issued to areas that might be susceptible to mass-wasting processes caused by such conditions. Still, it is difficult to know exactly which hill slope of the millions that exist will be vulnerable to an event triggered by heavy rainfall.

- Prevention and Mitigation

All slopes are susceptible to mass-wasting hazards if a triggering event occurs. Thus, all slopes should be assessed for potential mass-wasting hazards. Mass-wasting events can sometimes be avoided by employing engineering techniques to make the slope more stable. Among them are:

- Steep slopes can be covered or sprayed with concrete to prevent rock falls.
- Retaining walls could be built to stabilize a slope.
- Drainage pipes could be inserted into the slope to more easily allow water to get out and avoid increases in fluid pressure, the possibility of liquefaction, or increased weight due to the addition of water.
- Oversteepened slopes could be graded to reduce the slope to the natural angle of repose.
- In mountain valleys subject to mudflows, plans could be made to rapidly lower levels of water in human-made reservoirs to catch and trap the mudflows.

Some slopes, however, cannot be stabilized. In these cases, humans should avoid these areas or use them for purposes that will not increase susceptibility of lives or property to mass-wasting hazards.

References

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Response to Comment Set 1

Letter from City of Mission Viejo Assistant City Attorney David Snow dated March 19, 2004

- 1-1 Adoption of a Mitigated Negative Declaration is appropriate when the lead agency determines that any potentially significant impacts can be avoided or reduced to a less-than-significant level with mitigation measures incorporated into the project. Preparation of an EIR is only required when there is substantial evidence in the record indicating that a project may have a significant adverse impact. Based on the Initial Study, it was concluded that all potentially significant impacts can be mitigated to less-than-significant levels by measures presented in the MND/IS. Please refer to General Response GR-6 for more information.
- 1-2 The project description presented in the MND/IS, and supported by the PEA, is complete and accurate for the purposes of the environmental analysis. The information provided in the comment refers to the project description for an EIR. Section 15063(d) of the CEQA Guidelines only indicates that an Initial Study shall contain a description of the project, including the location of the project. If it is assumed that a MND/IS project description should be similar in content to that of an EIR, then the required contents listed in Section 15124 can be used. Section 15124 states that the description of the project should not supply extensive detail beyond that needed for evaluation of impacts, but should include the following: (1) the precise location of the project (presented in Section B.1.5 of the MND/IS and in Figures 1, 2, 4, 7, and 8); (2) a statement of project objectives (provided in Section B.1.9.1); (3) a general description of the project's technical, economic, and environmental characteristics (provided in Section B.1.9); and (4) a statement of the intended uses of the document (provided in Section B.1.11, which lists the agencies that may need to use the MND/IS in granting subsequent permits and approvals). Therefore, the project description in the MND/IS provides all required information.
- 1-3 A Certificate of Public Convenience and Necessity (CPCN) is not required for the proposed project. As stated in Section III of General Order No. 131-D, a Permit to Construct is required for "electric power line facilities or substations which are designed for immediate or eventual operation at any voltage between 50 kV or 200 kV or *new or upgraded substations with high side voltage exceeding 50 kV* [emphasis added]." A Permit to Construct is the appropriate approval for the proposed project. A CPCN would only be required for the project if the electric transmission line facilities were designed for immediate or eventual operation at 200 kV or more. The new transmission line facilities associated with the proposed project are 66 kV.
- 1-4 Please see the response to your more detailed Comment 1-27 (below) regarding this issue.
- 1-5 Schedule information presented in the MND/IS is intended to provide the reader with general construction time frames and, as such, is not specific in nature because various events must occur prior to start of construction, including adoption of the Viejo System Project MND/IS, project approval by the CPUC, finalization of project design, delivery of project materials, etc. In addition, the text referenced states that "...breeding [for the California horned lark] occurs between March and July, with peak activity in May; however, nesting would likely occur offsite at more suitable habitat locations." This text also provides the general time frames for breeding, but concludes that the project is not likely to disturb lark habitat. Therefore, there is no inconsistency in information. In addition, while lark were observed foraging in the project area, nesting habitat preferred by this species is limited in the project footprint. As this species is not likely to nest in the project area, impacts to this species are not expected to occur as a result of project construction. Mitigation Measure B-2 also requires SCE to halt construction and coordinate with the appropriate resource agencies if sensitive species not fully addressed by the NCCP, including horned lark, are encountered in the project area. As both CPUC and SCE

biological monitors would be present during construction in areas where lark may occur, impacts to this species, if present, would be reduced to less than significant levels. Further, APM B-3 requires SCE to complete the delineation of all coastal sage scrub habitat and conduct pre-construction capture and relocation efforts for Identified species prior to construction in this area. APM B-3 also requires that a qualified biologist, approved by the USFWS and CDFG, shall be present during construction and SCE is required to coordinate with USFWS/CDFG to allow the relocation of sensitive species nesting in this area.

- 1-6 Use of helicopters for transmission line stringing is common practice during transmission line construction activities. This method of stringing is often used in rough terrain or areas where typical construction equipment access is difficult. The project description information provided in the MND/IS is based on information provided by the applicant. At the time the MND/IS was prepared, SCE did not have plans for use of a helicopter during construction of the proposed project. However, the MND/IS preparers, recognizing the commonality of helicopter usage for line stringing, did analyze its impacts in the noise section of the document in the event that SCE needed to use this method. The analysis was limited to the noise section, because the preparers recognized that the possible use of helicopters for line stringing would be only for a short duration in a developed area, some distance away from residences. As such, impacts to other resources were deemed unlikely. SCE's comment letter on the MND/IS (Comment Set 27) states,

Since the submittal of its application in March 2003, SCE determined that it will be necessary to use a helicopter for stringing conductor between HF-10 and HF-11. The use of a helicopter is required at this location due to the topography of the site and the need to string across the Foothill Transportation Corridor... In this case the Foothill Transportation Corridor, as it crosses Aliso Creek and El Toro Road, is elevated well above ground level... The stringing would require the use of a helicopter for approximately eight hours and would be used during daylight hours only...

Please also refer to Comment 27-28 and its associated response.

- 1-7 Applicant-Proposed Measure (APM) C-1 presented in the MND/IS is only one of four cultural resources measures that would be applied to the proposed project. Detailed analysis of potential cultural resource impacts is provided in Section B.3.5 (Cultural Resources) of the MND/IS. This section provides information on the existing conditions of the area based on record searches, and also requires Mitigation Measures CR-1 and CR-2 in addition to APMs C-1 and C-2. In particular, Mitigation Measure CR-2 regarding Discovery of Unanticipated Cultural Resources and Human Remains applies to the entire project and ensures that construction activities are not conducted within 100 feet of any unanticipated cultural or historic resource.

In addition, it should be noted that in the event an archaeological or historic resource is encountered during project construction, SCE would be required (in compliance with federal and State requirements) to notify the appropriate regulatory agencies such as the State Historic Preservation Officer and Native American Heritage Commission. Both of these entities are State agencies that implement standards pursuant to the requirements of federal and State laws. These laws supersede and are more stringent than local jurisdiction standard conditions of approval. However, if any resources are found on City-owned property, the CPUC would provide the City with the first opportunity to take possession of the resources, to the extent permitted by existing laws, as referenced in Mitigation Measure CR-2, amended.

- 1-8 According to SCE's Field Management Plan, implementation of the proposed Viejo System Project would result in an overall reduction of the magnetic field compared to existing conditions as shown in Figure 9 of the MND/IS. Figure 9 shows that the highest peak magnetic field levels for the existing lines are close to 45 mG (at about 45 feet from the transmission lines) and these peak levels also rise to over 40 mG at approximately 140 feet from the transmission lines. In comparison, the highest peak levels for the proposed project are only about 40 mG (at about 65

feet from the transmission line) and magnetic field levels decline steadily from this point as distance increases. While there is a slight increase in peak magnetic field levels with the proposed project (occurring at a distance of about 65 to 100 feet from the transmission line), these increases are quite small (about 1 to 4 mG). Despite this, the graph in Figure 9 clearly shows an overall decrease in magnetic field levels with the proposed project when compared to existing conditions.

Placing two transmission lines adjacent to each other can result in an interaction of their magnetic fields. This interaction has been demonstrated on actual transmission lines for real world installations. The type and amount of interaction depends on a number of factors. There are three main parameters that affect the magnetic field interaction of transmission lines: (1) the distance between the phases of the two lines; (2) the amount of electrical current and direction of power flow on each line; and (3) how the phases of each line are arranged relative to each other. It is not possible to state specific distances for field cancellation. In general, placing power lines in close proximity to each other (i.e., on the same structure or in the same duct bank) would be expected to result in noticeable interaction of the magnetic field from each line. Please see General Response GR-1 for more information.

The CPUC retained an independent engineering company, R.W. Beck, Inc., to review SCE's Field Management Plan (FMP) for the proposed Viejo System Project. R.W. Beck reviewed the field modeling and analysis included in the FMP and concurred with SCE's general conclusion that there would be an overall reduction in magnetic fields in the area of the proposed Viejo System Project.

- 1-9 As evidenced by MND/IS Figures 11 through 31, which contain 21 11"x17" color photos and photo simulations of the existing environment and proposed project components (i.e., existing and proposed transmission structures and the proposed Viejo Substation), the environmental analysis in Section B.3.1 (Aesthetics) recognizes that the proposed H-frames are two-leg structures. These figures and photo simulations are provided for the purpose of showing the difference between existing structures and proposed structures, and to illustrate what the proposed H-frame structure would look like at the proposed locations. The analysis methodology used to analyze the visual impacts of the proposed project takes the two-leg nature of the proposed H-frame structures into consideration by evaluating the overall height and bulk of the proposed structures, as well as their overall design and placement. These physical attributes are considered in conjunction with an assessment of the overall existing visual quality of the area, the level of viewer interest, and the degree to which viewers are exposed to a particular view of the landscape. In reaching conclusions regarding significance, several factors are taken into consideration, including: the degree of noticeable visual change based on existing visual quality, viewer concern, and viewer exposure; the project's consistency with the visual elements of form, line, color, and texture in the existing landscape; and the extent of incremental visual change in the landscape. Section B.3.1.1 of the MND/IS provides descriptions of the visual assessment methodology utilized in the analysis and descriptions of current visual conditions in the overall project area and at ten selected key viewpoints. Section B.3.1.2 describes the proposed project's effects on scenic vistas and resources, and its potential to substantially degrade existing visual character. Unfortunately, despite attempts to employ refined methods of visual analysis, the evaluation of significance of visual impacts remains somewhat subjective and open to interpretation. For this reason, a number of visual simulations were included in the MND/IS to help readers gauge the degree of visual change associated with the proposed project for themselves, including the proposed change from a TSP to a two-leg H-frame structure.
- 1-10 There is no error. The project proposes the installation of 13 new H-frame towers with an average height of 110 feet. The heights of all 13 H-frame towers are displayed on Figure 7 of the MND/IS. Table B.1-1 shows that the average height of the 18 existing TSPs is 85 feet. This

represents an average increase in structure height of 25 feet. Also, please see the response to Comment 27-6.

- 1-11 The MND/IS does consider the incremental impact of the proposed tower structures. In fact, the incremental change in visual conditions represented by the proposed project is the focus of the analysis since CEQA requires determination of impacts based on a comparison of existing conditions to future conditions with the proposed project. Therefore, the existence of the transmission lines and structures in the existing right-of-way must be considered part of baseline conditions and the evaluation of impacts necessarily focuses on the incremental change that would occur with the proposed project. The MND/IS acknowledges that the proposed project would have an adverse impact on visual conditions, but it would not be appropriate to determine that the project's visual impacts are considered significant due to the fact that existing views in the area are already impacted by the existing transmission towers. We recognize the high degree of public concern regarding the proposed project and have no doubt that the proposed project would be noticed if implemented, but the analysis attempts to make an objective evaluation of the proposed project rather than to reflect general public sentiment.

In addition, preparation of an EIR is required when there is substantial evidence in the record indicating that a project may have a significant adverse impact. At this time, the CPUC's conclusion is that all potentially significant impacts can be mitigated to less-than-significant levels by measures presented in the MND/IS. The public's concerns will be given serious consideration by the Commission in deciding whether to approve or deny the proposed project, but the existence of public controversy over the environmental effects of a project is not an adequate basis for a decision to prepare an EIR [CEQA Guidelines § 15064(f)(4)]. Please see General Response GR-6.

- 1-12 The description of the Key Viewpoint 3 cited in the comment states that the transmission facilities and residential structures are the most prominent features in the *built* environment, and the description of Key Viewpoint 5 makes a similar statement. Both of these statements are true. The descriptions focus on these built features because they are most visually dominant features at these viewpoints. The mountains and other natural features that contribute to the quality of various views are often background features that are sometimes dominated by larger foreground features, such as buildings and other structures. For the most part, the visual simulations speak for themselves, showing views from various vantage points, including viewpoints showing natural features such as mountains, the lake, parks, and vegetated hillsides. Overemphasis of mountains and other distant features in the existing visual landscape would improperly downplay the visual prominence of the existing built environment (including the transmission facilities) when viewed from nearby residential areas.

Key Viewpoint 6 is just one of ten viewpoints illustrated in the MND/IS, which attempts to show a variety of views from different angles, distances, and locations in order to provide a relatively full representation of the visual changes that could be expected along the transmission corridor if the proposed project is implemented. Obviously, it is not possible to provide simulations of all possible viewing locations.

- 1-13 As a general practice and as is the case with the Viejo System Project MND/IS, the CPUC does attempt to address affected local jurisdictions' plans and policies in its environmental review documents. As part of project approval, when granted, the Commission instructs utilities to consult with local agencies regarding land use matters and obtain all necessary local and state permits and approvals. Nevertheless, pursuant to General Order 131-D, the Commission retains exclusive jurisdiction over the regulation of electric power line projects, distribution lines, substations, or electric facilities constructed by regulated public utilities. Pursuant to General Order 131-D, the Commission shall resolve any differences that arise between the utilities and

local agencies regarding these issues. The MND/IS attempts to identify the most relevant City policies related to aesthetics as part of the description of the environmental setting, but does not undertake a comprehensive evaluation of the project's consistency with local regulations, plans, and standards as a basis for determining impacts. None of these regulations, plans, or standards is binding on the proposed project since the CPUC has exclusive jurisdiction to approve or deny the construction of utility transmission facilities by regulated utility companies. Also, please see response to Comment 1-10 regarding tower heights.

1-14 Please see responses to Comments 1-9 and 1-11 and General Response GR-4.

1-15 Please see responses to Comments 1-9 and 1-11 and General Response GR-4.

1-16 With incorporation of Applicant-Proposed Measures and Mitigation Measures in the MND/IS, air quality impacts would be reduced to less-than-significant levels.

The existing status of nonattainment is taken into consideration by the South Coast Air Quality Management District (SCAQMD) and reflected in their *CEQA Air Quality Handbook*, which includes their recommended significance thresholds for construction activities (shown in Table B.3-4). Because construction activities would be short-term, construction emissions below these thresholds would not contribute substantially to the existing nonattainment conditions.

1-17 The comment correctly points out that Table B.3-4 shows that maximum daily NO_x emissions could slightly exceed the SCAQMD Significance Threshold by less than two pounds per day. However, the benefits of implementing Mitigation Measures AQ-1 and AQ-2 were not included in that assessment (see footnote to Table B.3-4). The preparers of the MND/IS did not quantify the reductions that would be achieved by the mitigation measures, but the CPUC believes that the combined effects of all measures would be sufficient to reduce NO_x emissions by at least two pounds per day. The following response provides more explanation.

1-18 In compliance with the CEQA Guidelines [§15070(b)(1)], the CPUC developed the mitigation measures in the MND/IS in consultation with SCE. SCE agreed to the language of Mitigation Measure AQ-1 after the CPUC and MND/IS preparers included phrase "to the extent feasible." The phasing recommended in Mitigation Measure AQ-1 aims to eliminate the overlapping emissions from on-road haul and dump trucks, which would occur with off-site disposal of excavated material or tower delivery. From the 26.8 lb/day of NO_x shown in Table B.3-4 for on-road haul and dump trucks, successfully implementing this phasing could eliminate "up to 27 lb/day of NO_x emissions" (p. B-73). To ensure full mitigation of the NO_x emissions, it would not be necessary for the project to fully eliminate all of the overlapping 27 lb/day of NO_x from on-road haul and dump trucks. In fact, eliminating only ten percent of these overlapping emissions (2.7 lb/day) would be sufficient to bring project emissions to levels below the SCAQMD Significance Threshold. SCE's current construction schedule (Comment 27-18) phases project construction so that off-site disposal of excavated material would not occur simultaneously with transmission line construction.

1-19 Similar to Mitigation Measure AQ-1, the CPUC recommended and SCE agreed to Mitigation Measure AQ-2, which would reduce emissions from on-road haul and dump trucks by minimizing the distances they would need to travel. Until construction contracts are in place, the exact distances will not be known. The assumption that haul trucks would need to travel approximately 150 miles per day (p. B-73) is a planning assumption used by SCE, and absent evidence to the contrary, the CPUC believes it is a reasonable assumption, appropriate for disclosure of impacts under the CEQA Guidelines [§15064(f)(5)].

1-20 The comment correctly points out that the MND/IS includes an inappropriate explanation of the scope of the SCAQMD's Air Quality Management Plan and the scope of cumulative impact analyses. The CPUC agrees that actions other than large unmitigated projects can indeed affect

cumulative air quality. The inaccurate sentence is now removed. The CPUC followed the SCAQMD *CEQA Air Quality Handbook* (Chapter 9.5) in the analysis of air quality cumulative impacts. The SCAQMD does not provide a mandatory approach, but rather suggests that each lead agency select an approach that demonstrates consistency with the AQMP. The fourth paragraph under item c, p. B-74 of the MND/IS is revised to clarify this approach.

Implementation of recommended mitigation measures for construction equipment exhaust (**AQ-1 through AQ-6**, above), dust control measures associated with SCAQMD Rule 403, and the proposed BMPs, coupled with compliance with other programs (see above, under Rules and Regulations: South Coast Air Quality Management District) to reduce emissions from off-road mobile sources and portable equipment, would minimize project emissions and would be consistent with the assumptions of the Air Quality Management Plan (AQMP). ~~The AQMP mandates reducing impacts to a level that is not cumulatively considerable. Only large unmitigated projects are considered cumulatively considerable.~~ The AQMP allows activity in the region (such as population growth and related infrastructure) to continue in a way that does not disrupt progress towards attainment, so long as the activity is compliant with the AQMP. **Because the project's construction activity would be short-term, and it would be mitigated in a manner consistent with the AQMP to cause emissions less than the SCAQMD significance thresholds, the construction emissions would not be cumulatively considerable.**

- 1-21 It is not necessary to quantify the impacts from every cumulative project [CEQA Guidelines §15130(b)(5)]. The MND/IS appropriately identifies the cumulative projects and provides a qualitative description of their potential impacts to air quality (third paragraph under item c, p. B-74). Although cumulative projects may degrade regional air quality, the contribution caused by the proposed project would not be cumulatively considerable because it would be short-term and mitigated in a manner consistent with the AQMP (see response to Comment 1-20). The mitigation measures identified in the MND/IS, in conjunction with the adopted rules and regulations, would avoid the project's contribution to any significant cumulative effects.
- 1-22 The MND/IS does not rely on regulatory standards alone to demonstrate that less than significant air quality impacts would occur. The conclusions of the air quality analyses are based on implementation of mitigation measures, along with the project's required compliance with District rules, to ensure the project activity is consistent with the regional AQMP and that the corresponding emissions would be below established significance thresholds.
- 1-23 SCE is a participating member of the Central and Coastal Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) and is fully authorized to take 2.4 acres of coastal sage scrub within the Reserve System. SCE has indicated that to date none of the habitat authorized by the NCCP has been utilized. SCE also plans to deed 101 acres of land to the County of Orange and, in turn, SCE would have the opportunity to establish a Conservation Bank and sell credits and/or mitigate for future SCE projects located elsewhere in designated Reserve Areas in the NCCP/HCP area. The approach of the NCCP/HCP is to focus on conserving regional areas that are occupied by a variety of sensitive species rather than protecting individual organisms, while accommodating compatible land uses. Participating members of the NCCP/HCP contribute funds or land to the NCCP system and then are allocated an area that each participating member can disturb. The take of species identified in the NCCP area is fully authorized provided the member complies with the requirements of the NCCP. Any member of the NCCP may also transfer acreage to another participating member with the approval of the USFWS and CDFG. These actions have been adopted by the USFWS and the CDFG, who are the responsible agencies for addressing take of State and federally listed species. As identified by the 1996 NCCP, "the shift in the focus toward protection of multiple species within the mosaic of natural communities is

intended to enhance the ability of local, state, and federal agencies to provide long-term protection for a broad range of species that are dependent on the natural communities.”

- 1-24 Please see response to Comment 1-5.
- 1-25 Preparation of a Storm Water Pollution Prevention Plan (SWPPP) is already a requirement of the Regional Water Quality Control Board (RWQCB) as part of the NPDES Construction Activity General Permit. Mitigation Measure BIO-9 includes the additional requirement for SCE to submit a copy of the SWPPP to the CPUC (this is not required under the NPDES permit). Mitigation Measure BIO-9 provides a means for the CPUC to verify that SCE has obtained this required permit prior to construction and has prepared a SWPPP in conformance with the requirements of the RWQCB. This allows the CPUC monitor to verify compliance with the SWPPP in the field. If the CPUC did not require this additional submittal, the CPUC field monitor would not have the authority to enforce provisions of the NPDES permit and accompanying SWPPP. With this requirement, the CPUC may properly assume SCE would follow these provisions. There is no deferral of mitigation. In addition, the SWPPP identifies mitigation measures that are typically incorporated as part of the RWQCB permit. Mitigation measures typically included within the SWPPP require the implementation of Best Management Practices (BMP) to minimize or prevent sediment-laden water from entering waters of the state. Other measures include limits on the locations of fueling; the timing of grading activities to avoid the rainy season if working in areas adjacent to riparian habitat; restoration and reseeding specifications required at the conclusion of ground disturbance; and photographic documentation of pre and post project conditions.
- 1-26 At this time, there is no evidence to suggest that a significant impact to cultural resources would occur. The mitigation measures presented in the MND/IS are precautionary and would be implemented only if evidence emerges at a later time indicating that impacts to cultural resources might occur. These mitigation measures are fairly standard and are generally considered sufficient to address unanticipated discovery of cultural resources during construction. The CPUC will notify the appropriate City if any cultural resources are found, as noted in amended Mitigation Measure CR-2. Impacts to cultural resources can often be mitigated to less-than-significant levels through means other than avoidance. Please see the response to Comment 1-7.
- 1-27 CEQA requires that mitigation measures be fully formulated in the environmental review document for a project. Future studies may be required as part of these mitigation measures. Requiring specific studies that analyze technical and engineering aspects of a project as part of a CEQA mitigation measure is not considered deferral if appropriate or potential action measures are also contemplated. In the particular case of GEO-1, SCE (in their Comment Letter [Comment 27-24] on the MND/IS) indicates that they:

...have performed the necessary soils investigations within the transmission corridor prior to construction of the existing 220 kV towers in the 1960s...Several geotechnical studies were also conducted for the substation site...

Therefore, there is no deferral of analysis. Also, please see Comment 27-24 and its associated response which requires SCE to submit all applicable studies to the CPUC for review and approval prior to the start of construction to ensure that they comply with GEO-1. The purpose of the MND/IS is to characterize the geologic conditions that occur within the proposed project area. The project engineers would assess specific geologic conditions that may occur at each individual footing location and incorporate design modifications to the proposed tower footings consistent with the recommendations of the Institute of Electrical and Electronic Engineers (IEEE) to ensure the stability of the structure. SCE has indicated that borings in the proposed project area did not indicate the presence of bentonite deposits at the proposed substation site. However, in the event that bentonite bedding, or other soil stability issues, are encountered during the drilling of footings for tower locations, SCE has indicated they would construct the footings consistent with

the recommendations of the IEEE as previously stated above. In addition, the proposed towers would be located along the existing power line corridor, which safely supports two sets of structures (220 kV and 66 kV lines).

- 1-28 Please see response to Comment 1-23 regarding SCE's participation in the Central and Coastal NCCP. Please also note that CEQA does not require all evidence in support of a conclusion to be presented in the MND/IS. The instructions for completing the Environmental Checklist form in Appendix G of the CEQA Guidelines indicate that reference or earlier analyses or other information sources that provide information to support significance conclusions is adequate documentation of evidence, especially for "No Impact" conclusions.

As a general practice and as is the case with the Viejo System Project MND/IS, the CPUC does attempt to address affected local jurisdictions' plans and policies in its environmental review documents. However, see response 1-13 regarding CPUC authority over and role in proposed transmission line projects. The Initial Study checklist questions for Land Use and Planning only address consistency with applicable land use plans, policies, or regulations of agencies with jurisdiction over the project that were adopted for the purpose of avoiding or mitigating an environmental effect. The MND/IS attempts to identify the most relevant City land use policies, but does not undertake a comprehensive evaluation of the project's consistency with every local regulation, plan, and standard as a basis for determining impacts. CEQA Guidelines specify only land use policy inconsistencies as potentially significant impacts, and then only when the policy is developed by an agency with jurisdiction over the proposed project and when that policy is intended to mitigate or avoid an environmental impact. Several of the goals and policies cited by the commenter are not land use goals and policies by definition as they exist in the City's Conservation/Open Space and Public Facilities Elements. The land use goals and policies cited are general statements and subject to interpretation, but they generally address scenic resources and open space. Since the proposed project would be located in an existing transmission corridor, there would be no changes in land designated for open space or changes in the general characteristics of open space areas. There would also be no changes in designated scenic resources, although the proposed project's visual impacts are admittedly adverse as discussed in the Aesthetics section of the MND/IS (see responses to Comments 1-9, 1-11, and 1-12). It is unclear how some of the goals and policies cited are intended to avoid or mitigate environmental effects.

The CPUC is aware of the zoning requirements for the undergrounding of utilities. However, the requirement is vague and it is unclear how it relates to electrical transmission lines (voltages of 50 kV and higher), which are under the exclusive jurisdiction of the CPUC, versus lower voltage electrical distribution lines. The CPUC understands the City's desire for underground utility lines, but it is not bound by the City's Municipal Code.

- 1-29 Helicopter activity would only occur near the Foothill Transportation Corridor (see Response to Comment 1-6, and Comment 27-28). Helicopters would not be used for installation of poles or installing the wires at any portion of the project with the exception of the freeway crossing. Maximum intermittent noise levels anticipated to occur with helicopter activity and rock drilling are identified in the MND/IS. Noise from other activities that could be more continuous, such as installing the poles and mounting the circuits, would not exceed the maximum intermittent levels for rock drilling portrayed in the MND/IS. These intermittent levels shown would be peaks, occurring with periods of relative quiet between the moments of activity. The activity would be minimized and coordinated with surrounding land uses, as explained in the MND/IS. The information in the MND/IS fully discloses the possibility of these impacts. Also, please see response to Comment 1-6 regarding use of helicopters during construction, and response to Comment 1-27 regarding geologic issues.

- 1-30 The comment claims that the noise from construction would be significant. SCE plans to implement a number of measures to minimize the effects of noise. Because of the short-term and intermittent nature of construction noise and the transient impact to any one location, the CPUC believes that the mitigation is appropriate for reducing the impact to a less-than-significant level. The comment also shows concern over whether night-time construction could occur. Currently, night-time construction appears unlikely, unless the City of Mission Viejo requests it as a means to avoid traffic impacts (see Comment 27-28).

Impacts that are short-term nuisances, such as the groundborne vibration experienced by people immediately adjacent to construction activity, can be mitigated through proper coordination of project activities with the people who would experience the nuisance. The conclusion that construction-related groundborne vibration would not be excessive for distances beyond 25 feet is a rule-of-thumb (further information on this subject can be found in Section 12.2 of the report on *Transit Noise and Vibration Impact Assessment*, from the Federal Transit Administration, April 1995). Because of the sufficient distance of project work from existing adjacent buildings, the CPUC does not anticipate any likelihood of structural damage. Therefore, there would be no need for “repairing, rehabilitating, or restoring the impacted environment,” and the concern becomes whether vibration could be perceived as a nuisance by persons in the vicinity. The Applicant-Proposed Measures include steps to limit “the degree or magnitude” of this impact, through minimizing the activity, providing notification, and providing a public liaison. The CPUC believes the impact of the short-term nuisance, when limited by these measures, would not be excessive. Also, please see response to Comment 1-6 regarding use of helicopters during construction, and response to Comment 1-27 regarding geologic issues.

- 1-31 The intent of the proposed project is to meet the projected electrical demands for the south Orange County area, including new development such as those pointed out in your Comment 1-44. Electrical transmission capacity needs to be in place prior to demand to avoid disruptions of service. This requires forecasting of anticipated future demand and formulation of plans to meet this demand in advance. This is a reasonable and responsible approach that is intended to avoid any future shortfalls in system capacity or reliability. Growth in electrical demand, due primarily to increases in population and employment, necessitates the development of services and utilities such as the proposed project. While a lack of transmission capacity could certainly hinder growth, the expansion of transmission capacity alone does not necessarily induce growth as there are various demographic, economic, and policy factors that drive growth and development, including land use policies adopted in local general plans. The projected electrical demand that necessitates the proposed project and the anticipated capacity deficiencies that would be addressed by the proposed project are described in Section B.1.9.1 of the MND/IS.
- 1-32 Impacts to recreational resources would be considered significant if the project would result in temporary and/or permanent impacts due to disruption of recreational activities affecting the recreational value of existing facilities, or if the proposed project caused an increase in recreation use such that increased physical deterioration occurred or caused a need for construction of new recreation facilities, which could themselves significantly impact the environment. The comments provided regarding potential impacts to Florence Joyner Olympiad Park seem to be based on aesthetic concerns, which are addressed in the Aesthetics section of the MND/IS rather than the Recreation section. The MND/IS concludes that aesthetic impacts are not significant. Specifically, the analysis of Key Viewpoint 1, which is located in Florence Joyner Olympiad Park, concludes that although the proposed H-frame structures would be larger and more visually prominent than the existing TSPs, the visual change associated with the proposed project would be moderate at this location. Given that the existing SCE ROW and existing transmission lines can be seen from the park, installation of H-frame towers is consistent with the general character of the ROW. Therefore, this is not considered a significant impact on recreationists. Mitigation Measure R-1

- would ensure that recreationists are aware of potential access disruptions during construction. Also, please see responses to Comments 1-9 through 1-11.
- 1-33 It is not clear how the proposed project would be inconsistent with Conservation and Open Space Policies 3.7 and 4.3, especially considering the transmission corridor is an existing facility. These policies indicate a desire to preserve views from streets and to utilize utility easements as open space linkage corridors. While the proposed project would not help the City achieve these policies, it also would not substantially change existing conditions with regard to these policies. Regardless, consistency with these types of goals and policies is not a basis for determining the significance of recreation impacts. None of the Initial Study checklist questions pertaining to recreation address consistency with open space and conservation policies. The CPUC agrees that there could be temporary disruptions to recreational facilities along the transmission route, but these impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measure R-1. The MND/IS states that permanent diminished value of recreational facilities is a possible significant impact, but concludes that no such impact would occur.
- 1-34 Please see response to Comment 1-32. Mitigation Measure R-1 would reduce temporary impacts to the use of recreation facilities by providing users with advance notice of the disruptions such that they can avoid the park or make alternative arrangements if necessary during construction. Actual disruptions to park use would be limited due to the short amount of time needed to install structures and string conductor at any given location. In addition, the work needed to replace the towers would not need to occur in any of the active recreation areas of the parks, such as playfields or playgrounds, but rather would occur in peripheral areas. Given that construction impacts are of a temporary nature, notification to recreational resource users should be sufficient mitigation of those impacts. The commenter has not stated why these types of temporary limitations on park use are significant and why the proposed mitigation is insufficient. This circumstance is similar to the City or other public agency initiating improvements at or adjacent to the park or conducting periodic maintenance that temporarily limits park use.
- 1-35 Although the proposed project would not be within any unincorporated County of Orange lands, information on the County's General Plan is provided because such lands are in close proximity to the Viejo Substation.
- 1-36 As pointed out by the commenter, the total number of 66 kV structures would be reduced with the proposed project but each individual structure would have a larger footprint. Regardless, the overall change in area devoted to structure footprints is small, especially compared to the total land area contained within the transmission corridor. Therefore, there is no appreciable decrease in open space within the transmission corridor. Currently, there are seven 66 kV TSPs located within parks along the transmission corridor. With the proposed project, there would be four H-frames located within parks. The structural footprint (minus footing) would be approximately 20 ft² for the proposed H-frame, compared to approximately 13 ft² for the existing TSP. Therefore, the change in area available for recreation uses is not substantial. Please see the response to Comment 1-34.
- 1-37 Stringing of conductor at any given location would take less than one day. This temporary impact to recreational facilities can be satisfactorily mitigated by implementation of Mitigation Measure R-1. Please see the response to Comment 1-34.
- 1-38 The total number of truck trips required during any individual day of project construction is small enough that there would be no significant effect on roadway capacity regardless of whether these trips occur in the peak periods or non-peak periods. Based on maximum employment, about 30 vehicle trips (a conservative assumption) would occur for commuters and less than 20 truck trips would occur during any individual day of construction (see Appendix 4). Most of these trips

would be related to construction activities at the proposed substation site in Lake Forest. This represents no more than one half of one percent of average daily traffic on roadways in the vicinity (see Table B.3-16 in the MND/IS). SCE's proposed scheduling of trips during non-peak periods is a good idea, but it did not factor into the determination that traffic impacts would be less than significant, and scheduling during non-peak hours is not necessary to avoid significant adverse impacts to roadway capacity. In addition, SCE would need to apply for and obtain transportation and encroachment permits from the City of Mission Viejo for work within the public right-of-way or lane closures (as on p. B-135). SCE's commitment to participate in the City's permitting process provides the City with the opportunity to identify specific locations where it believes specific scheduling restrictions should be established.

1-39 The MND/IS considered potential cumulative impacts related to both visual resources and air quality. Please see the responses to Comments 1-9 through 1-14 and Comments 1-16 through 1-22. At this time, the CPUC's conclusion is that all potentially significant impacts can be mitigated by measures presented in the MND/IS and that there is no substantial evidence indicating that cumulative impacts are potentially significant.

1-40 A cultural resources data recovery plan would only need to be prepared if unanticipated circumstances occur that require data recovery. This plan would be prepared based on the specific circumstances of a particular cultural resources site once unearthed and evaluated by a qualified cultural resources specialist. It is not appropriate to prepare such a plan until those circumstances occur. At this time, there is no evidence that a significant impact to cultural resources would occur.

The wording in the MMP has been changed to indicate that documentation shall be provided to the CPUC upon request. It is the responsibility of the CPUC as Lead Agency to monitor the implementation of the mitigation measures that are adopted by the Commission as conditions of project approval. The CPUC will request records and documentation as appropriate to verify compliance with the mitigation measures. The CPUC has the authority to require compliance with the mitigation measures and to use means beyond those stated in the Mitigation Monitoring Plan to verify compliance. Therefore, the mitigation measures are fully enforceable.

1-41 See responses to Comments 1-7 and 1-27 regarding cultural resources and geologic resources, respectively.

1-42 All of the current versions of applicable plans and policies were reviewed as part of the MND/IS analysis. The 1990 General Plan was referenced because it is the date the General Plan was originally adopted by the City, and is still the official date of the Plan. A complete copy of the General Plan was purchased from the City in October 2003. This includes all of the element amendments cited by the commenter. The reference section of the MND/IS has been revised to reflect the dates of General Plan amendments to individual elements.

1-43 The comment raises several questions about the emission calculations and reiterates the concerns of earlier comments. Emission calculations for fugitive dust (p. 4-1) are a function of the number pieces of equipment operating in unpaved areas. The paver (shown on p. 4-2) would generally operate on paved areas, thus it is not included in the inventory of eight pieces of equipment on unpaved areas. Estimating uncontrolled fugitive dust emissions, absent any local requirements for site watering, etc., is the first step in the calculation. A control factor of 70 percent is then applied to account for SCE's commitment to implement Best Management Practices and also comply with extensive dust control requirements in SCAQMD Rule 403. Actual control efficiencies may be higher, but 70 percent was selected because the efficiencies normally vary over a range. The SCAQMD *CEQA Air Quality Handbook* specifies that the control efficiencies for work on graded surfaces can range from 45 to 85 percent (*Air Quality Handbook*, Table 11-

4), and control efficiencies for material handling can range up to 90 percent (U.S. EPA, *AP-42 Compilation of Air Pollutant Emission Factors*, Section 13.2.4). The typical load factors (p. 4-2) are also from the *SCAQMD CEQA Air Quality Handbook* (Table A9-8-D). As described in Response to Comment 1-18, the recommendation for phasing aims to eliminate overlapping emissions from on-road haul and dump trucks, or up to 26.8 lb/day of NO_x shown in Table B.3-4. The mitigation measure does not require full elimination of these emissions. In fact, eliminating only ten percent of these overlapping emissions (2.7 lb/day) would be sufficient to bring project emissions to levels below the SCAQMD Significance Threshold. In response to further comments on the effectiveness of mitigation measures described in Section B.3.3 of the MND/IS and project impacts on a cumulative basis, please see responses to Comments 1-16 through 1-21, above.

- 1-44 Section 15130(b) of the CEQA Guidelines describes methods for identifying projects to be considered in cumulative impact discussion. The MND/IS uses the list method commonly employed in EIRs. It is necessary to list pending or probable future projects in the cumulative projects list because their impacts do not currently exist and need to be anticipated in the cumulative impact discussion. Pursuant to CEQA Guidelines section 15130(b), a cumulative impact “discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.”

As discussed in MND/IS Sections B.3.1 through B.3.16, many of the potential impacts of the proposed project would occur during construction, with few lasting operational effects. The construction impacts of the proposed project (primarily related to biological resources, noise, air pollutant emissions, and minor traffic) have little potential to combine with similar effects of other projects in the general vicinity, particularly considering that the implementation of appropriate mitigation measures (see Sections B.3.1 through B.3.16, and the Mitigation Monitoring Plan in Section C) would reduce the construction-related effects of the proposed project to less-than-significant levels. Because the construction-related impacts of the proposed project are temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity. Therefore, the potential for construction impacts are not cumulatively considerable.

After the project has been constructed, the only continuing effect of the proposed project evaluated is the incremental visual change it would represent compared to current conditions. From a cumulative perspective, the incremental visual effects of the proposed project are considered in combination with past visual changes in the area and anticipated changes from future projects. Over time, visual conditions in the project vicinity have changed substantially as a result of land development and construction of supporting infrastructure. The incremental change in visual conditions associated with the proposed project contributes to this cumulative change in visual conditions, but represents only a relatively minor incremental change in cumulative conditions. Therefore, the project’s visual effects are adverse, but not considerable enough to represent a significant cumulative impact. Similarly, with regard to the remaining areas of analysis (Sections B.3.2 through B.3.16), individually and cumulatively, the proposed project would not result in any significant long-term impacts that would substantially combine with impacts of other past, current and probable future impacts. Consequently, the proposed project would not create impacts that are cumulatively considerable.

The information on cumulative projects provided in the MND/IS is based on information provided by the potentially affected jurisdictions contacted. This list was formulated at the outset of the environmental analysis by requesting information on cumulative projects from the City of Mission Viejo, City of Lake Forest, County of Orange, Caltrans, and several surrounding cities.

Thank you for providing the information regarding additional residential developments in the area. However, this additional informational does not alter the conclusions of the MND/IS regarding cumulative effects. While the residential projects referenced in the comment may contribute to various types of cumulative impacts that does not necessarily make the incremental changes associated with the proposed project cumulatively considerable. Please note that Section 15064(h)(4) of the CEQA Guidelines states “The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.”

- 1-45 See responses to Comments 1-1 through 1-44. Thank you for your comments.
- 1-46 Thank you providing the information in Exhibit 1 of your letter.