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July 24, 2009

Mr. Jensen Uchida
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Re: Comments on Draft Environmental Impact Report –
Southern California Edison's San Joaquin Valley Cross Valley Loop
200KV Transmission Line Project
CPUC A.08/05-039, SCH # 2008081090

I appreciate the opportunity to provide comments regarding the Draft Environmental Impact Report (DEIR) prepared for the Southern California Edison's (SCE) San Joaquin Valley Cross Valley Loop 200KV Transmission Line Project.

The DEIR analyzes the effects of constructing transmission lines through newly acquired right-of-way along a route adjacent to Highway 198 from Visalia through Farmersville and beyond and northeast through Lemon Cove as the Proposed Project and the assesses the effects of projects that can also accomplish the project objectives through a number of alternative routes. The conclusions in the document indicate that the program objectives to provide safe and reliable electric service can be met through any of several project alternatives that are environmentally superior to the Proposed Project. On behalf of Kaweah Lemon Company and my family, I support that conclusion of the DEIR and request that the Proposed Project be rejected in favor of one of the environmentally superior project alternatives.

The DEIR identifies Alternative Route 2 as the Environmentally Superior alternative. However, the report indicates that Alternative Route 3 would have been the Environmentally Superior alternative, had it not been for impacts to Biological Resources. The DEIR states that the EIR team looked for a feasible alignment for Alternative 3 that would bypass sensitive habitat in the Stone Corral Ecological Reserve, however a bypass was not feasible.¹ The DEIR does not,

¹ DEIR page 5-7

however, provide specific information or identify the reasons that lead to that conclusion. Therefore, additional study of a potential bypass appears appropriate with the goal being to attain an alternative route that can take advantage of the environmentally superior aspects of Alternative 3 while also avoiding impacts to the critical habitat.

Attached is a study entitled "Alternative 3A Reroute Around the Stone Corral Ecological Reserve Cost Impacts," prepared by Mr. Hank Zaininger. The study was submitted as testimony before The Public Utilities Commission by PACE (Protect Agricultural Communities Environment) dated July 20, 2009 (pages 1 – 17 of the submitted testimony are attached). The study identifies a plan route to reduce potential environmental effects associated with Alternative 3. The study proposes a slight modification to Alternative 3 to avoid the state owned Stone Corral Ecological Reserve which can also incorporate careful siting of SCE towers or poles to avoid sensitive habitat, should any be found on private property along the alternate alignment. I request that consideration be given to this proposal.

Each of the three alternatives presented in the DEIR are considered to be Environmentally Superior to the Proposed Project. Each also uses existing transmission line right of way to a greater extent of the Proposed Project. The Proposed project calls for use of 1.1 mile existing right of way; Alternatives 2, 3 and 6 call for using between 8.1 to 14.6 miles of existing right of way. All three alternatives appear to adhere to the "Garamendi" principles established by the California Legislature² which:

1. Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
2. When construction of new transmission lines is required, encourage expansion of existing rights-of-way, when technically and economically feasible.
3. Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons, as determined by the appropriate licensing agency.
4. Where there is a need to construct additional transmission, seek agreement among all interested utilities on the efficient use of that capacity.

Specific Comments

Even with the impacts associated with the Proposed Project that were identified in the DEIR, which concludes that the Proposed Project creates the most adverse environment effects of any of the alternatives studied, the analysis

² SB 2431, Chapter 1457

minimizes the adverse effects and does not fully describe the full extent of the impacts on Farmland and Agricultural operations associated with the Proposed Project, as described below.

Number of Acres Affected or Adversely Impacted as the Result of the Proposed Project May be Greater than Identified

- Restrictions placed on farming operations within the right of way may effectively result in formally productive Farmland becoming unusable for citrus orchards.

The approach taken in the DEIR to assess impacts to Farmland due to orchards being within new transmission line right of way appears to assume that except for permanently removed walnut trees, there is no impact. The ability to irrigate and maintain trees will be hampered by the SCE requirements for land within the right of way. Impact 4.2-5 acknowledges that the Proposed Project could impact existing irrigation...systems...resulting in the conversion of Farmland to non-agricultural use. Mitigation Measure 4.2-5 indicates that SCE would re-route irrigation systems, etc. and the DEIR states that the mitigation measure “would ensure that no additional Farmland is indirectly converted to non-agricultural use because of the impacts to existing irrigation ...systems required for farming productivity.”³

The DEIR does not quantify the number of acres of Farmland that would be affected or acknowledge the complexities of implementing the mitigation measure 4.2-5. Of particular concern are the great number of orchards that are planted with rows parallel to the right of way which therefore have irrigation lines that would be parallel, rather than perpendicular to the centerline of the right of way, as required (see Figures 2.3a – j). It is likely that the parts of orchards in this orientation, along with the irrigation systems and underground piping may need to be removed. Once this is done, the feasibility of replanting to reorient the rows and installing new irrigation systems to be compliant with right of way requirements, while incorporating the new trees in the existing orchard, will need to be assessed. It may or may not be feasible to replant, similar to the issue of the removal of walnut trees, which the DEIR indicates... “would lead to formerly productive Farmland becoming permanently unusable.”⁴ It is very likely that remnant areas not feasible to be reincorporated into the existing orchard would be created. It is not likely that Mitigation Measure 4.2-2 can be implemented to achieve the its’ statement that “no additional Farmland” will be converted to non-

³ DEIR page 4.2-16

⁴ DEIR page 4.2-15

agricultural use because of the practicalities of reorienting the layout of orchards to accommodate a 100 foot wide band of restricted land cutting through existing orchards.

The DEIR indicates that the land used for work areas and pull and tension sites would be returned to agricultural use upon completion of the project.⁵ The document did not indicate if the land would become part of the right-of-way, or if it would be placed in an easement. The DEIR should indicate if the land would become under permanent restriction, through easement or right of way, and evaluate the impacts associated with those impacts, if such is the case.

- The DEIR offsets the total number of Farmland lost by indicating that the area of the foot base of 12 individual existing structures which are slated for removal, each only 24 feet by 24 feet in size, can be reclaimed as Farmland.

The DEIR discusses on Page 4.2-13 that under the Proposed Project, twelve existing lattice towers would be removed that are located on farmland as designated by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP).

The area covered by each foot base, 24 feet by 24 feet, was considered to be land reclaimed for agricultural use and was used to offset the number of acres of agricultural resources lost. The report does not indicate if the individual 576 sq. ft. "new" agricultural sites were studied to determine if they could be reasonably integrated into existing farming operations. It would seem hardly worth considering. Yet, the methodology of the number of acres of farmland lost becomes important, as Mitigation Measure 4.2-2 states that for each acre that is permanently converted to non-agricultural land use, SCE would be required to obtain one acre of agricultural conservation easements. The DEIR states that "The calculations for total permanent impacts take into account this **potentially** (emphasis added) reclaimed land." By minimizing the number of acres lost, the number of acres to be placed in conservation easement and the total number of acres of Farmland identified as lost is reduced.

- There may be additional lands in Williamson Act contract than identified in the DEIR.

DEIR Figure 4.2-2 illustrates the Williamson Act Contracted Land. It appears that some properties may have been omitted. Please verify that properties identified as Tulare County Assessor Parcel Numbers 113-250-

⁵ DEIR page 4.2-11

019 and 026 were included and adjust the total Williamson Act Contracted Land acres within the Proposed Project right-of-way, if appropriate.

Potential Impact to Available Water Supply

- The DEIR fails to identify and quantify the amount of water delivery systems within the Proposed Project right of way and therefore does not identify the impacts or mitigate the impacts to water production and delivery systems.

Kaweah Lemon Company owns a well and booster pump within the Proposed Project right of way in proximity to Structure #85. The booster pump receives water from Wallace Ranch Water Company whose distribution line runs parallel to the transmission lines and is within the proposed right of way which is understood to be not permitted⁶.

Kaweah Lemon Company owns a wagon wheel well, southwest of Structure # 95, which has lateral piping that extends diagonally into the right of way. Lemon Cove Ditch Company owns pipe that appears to run underneath Structure # 95 and continues to run in the right of way. Further, there is another privately owned water distribution line that runs parallel to the transmission line and within the right of way. Both of these systems run in easements across private property, one to the east and one to the south of Structure #95. Since the restrictions pertaining to uses within the Proposed Project right of way preclude parallel water delivery systems, new easements for water lines would need to be acquired. The DEIR does not discuss how new easements on private property to mitigate relocation of water lines would be achieved. The DEIR fails to identify the number of acres of citrus trees that would need to be removed in order to provide for the relocation of piping.

In addition, Wallace Ranch Water Company owns an underground line under Structure #91, which runs east within the Proposed Project right of way toward Structure # 92.

Without identifying the order of magnitude of wells and water delivery systems that are impacted by the Proposed Project, the full impacts of the project cannot be identified and the mitigation costs to the Proposed Project cannot be known. Therefore, the DEIR does not adequately identify, evaluate and mitigate impacts to water availability and water delivery systems that are essential in order to maintain productive Farmland as usable and prevent the conversion of Farmland to non-agricultural use.

⁶ DEIR page 2-40

- Loss or reduction of water supply through well and irrigation pipe relocation is likely to be more challenging to replace than indicated.

The DEIR acknowledges that there are numerous wells within the proposed right of way in the Environmental Analysis Section on Hazards and Hazardous Materials and discusses the hazards associated with the use of boom trucks or other equipment that may be necessary to maintain the wells. Mitigation Measures 4.7-11a and 4.7-11b indicate that during the construction of the Proposed Project, SCE would inventory the groundwater wells that fall within the right of way and would relocate the wells and pipes if necessary.

The Mitigation Measures appear to imply that it is a simple matter to relocate a well. However, wells on our ranch were drilled by default. It took many dry holes to find a well that hit a good water aquifer. The discussion on Groundwater Hydrology and Groundwater Quality⁷ is very general. It does not adequately describe the conditions in the east end of the Proposed Project area and foothill area, specifically with regard to availability of suitable aquifer to support well removal and replacement at the various locations where they may be needed. The inability to replace equal water supply and quality due to removal of wells found to be incompatible with transmission line right of way would adversely impact Prime Farmland and contracted Williamson Act lands. The DEIR acknowledges this impact and states that "Removing farmers' ability to irrigate crops and orchards could effectively render formerly productive Farmland unusable, resulting in the conversion of additional Farmland to non-agricultural use."⁸ Given the very serious nature of that impact and of that statement, additional documentation should be provided in the DEIR that demonstrates the mitigation is achievable. Without demonstration and documentation that supports the feasibility that the water systems can be replaced, the mitigation measure is merely empty words and is meaningless.

Mitigation Measure 4.7-11b should be amended to add "The relocated wells will be required to meet or exceed water production, including water volumes and water quality." Documentation should be provided in the DEIR to demonstrate that the mitigation measure is achievable.

Other Issues Associated with Water Systems

There is a seasonal creek, locally known as Lipsy Creek, that runs within the Proposed Project right of way and under structures 98, 99, 100, and

⁷ DEIR page 4.8-4 & 5

⁸ DEIR page 4.2-16

101. The creek runs during periods of heavy rain and runs continuously for months during wet seasons. The DEIR should acknowledge this waterway and indicate how the Proposed Project may or may not be affected by this waterway.

Impact to Farming Operations

- Use of Aircraft in Farming Operations

The DEIR includes a section on Agricultural Aerial Spraying in the analysis of Hazards and Hazardous Materials. The DEIR identifies one rancher's need to spray his citrus orchards from the air. The DEIR continues, however, with a discussion about crop dusting and how they operate under a waiver that allows flying several feet above ground surface and states that "pilots fly over, beside and even under transmission lines."⁹ It appears that the DEIR is attempting to describe the circumstance of aerial spraying of row crops which is not the predominate agricultural product grown within the boundaries of the Proposed Project. It is not reasonable to assume that with the pole height at a maximum 160 feet, the conductor sag minimum 32' above ground¹⁰ and tree height at a maximum 15 feet¹¹ that the discussion of aerial spraying contained in the DEIR is even remotely applicable to use of aircraft for management of orchards or the typical crops grown within the area of the Proposed Project.

Impact 4.7-6 states that "The Proposed Project could create a safety hazard to aerial spray applicators." The DEIR attempts to mitigate this impact with Mitigation Measure 4.7-6, which indicates that SCE will provide aerial applicators with information regarding the location of the transmission lines. This Mitigation Measure does not address aerial spraying of orchards as the Proposed Project affects the ability to effectively utilize this practice.

More common than the use of aircraft for pesticide spraying is the practice of the use of helicopters for frost control in their orchards. The DEIR does not describe the practice of use of aircraft for this purpose in citrus orchards and the DEIR omits a description and analysis of the hazards created by the Proposed Project with regard to this existing practice. The DEIR should be amended to identify this practice and identify the impacts associated with the Proposed Project on the ability to implement frost

⁹⁹ DEIR page 4.7-4

¹⁰ DEIR Figure 2-6

¹¹ DEIR page 2-40

control measures which are used to prevent loss or reduction of annual citrus harvest and permanent loss of tree stock.

Physical Division of an Established Community

Impact 4.9-1¹² indicates the Proposed Project could physically divide an established community. The discussion that follows indicates that the Proposed Project would pass through the community of Lemon Cove. It states "...all homes in Lemon Cove would be located on the north side of the alignment, and there are no buildings currently located to the south of the Proposed Project alignment." As evidenced by the aerial photographs on DEIR Figures 2-3h and 2-3i, the statement is clearly not factual. The DEIR should be corrected to accurately describe the condition of the Proposed Project as it passes through Lemon Cove.

Other Considerations

California State Parks has issued a Central Valley Vision Draft Implementation Plan. The Draft Implementation Plan focuses on helping to meet the public's recreation needs in the Central Valley. It outlines specific initiatives to build economic and volunteer partnerships, acquire new park lands and develop new and improved recreation opportunities. The plan includes a proposal to develop a new park identified as Rocky Hill at Exeter which would:

- *Acquire about 2,300 acres to create a new park that celebrates Native American culture.*
- *Develop accessible trails and viewing platforms to view the rock art.*
- *Develop a visitor center and museum, 50 picnic sites, self-guided interpretive trails and a vista point.*¹³

The DEIR should identify how this planned park resource may be affected by the Proposed Project with regard to cultural and aesthetic impacts.

Summary

The DEIR provides three alternative routes, each of which is identified as Environmentally Superior to the Proposed Project. Each of the alternatives utilizes existing right of way which is consistent with principles adopted by the State Legislature. There is the potential that Alternative 3 can be made to be the

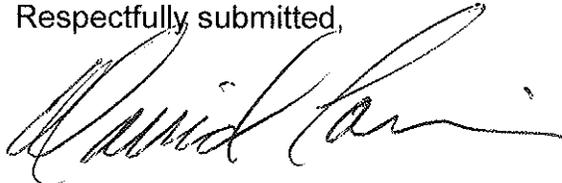
¹² DEIR page 4.9-14

¹³ Central Valley Vision Draft Implementation Plan, California State Parks, Planning Division, October 28, 2008, page 23

most Environmentally Superior with a minor alteration in the proposed alignment. Each of the three alternatives can accomplish the project objectives to provide safe and reliable electric service.

I respectfully request that the California Public Utilities Commission consider the conclusions of the Draft Environmental Impact Report and the comments in this correspondence, reject the Proposed Project, and select an alternative environmentally superior route. It is our hope that Alternative 3 will rise to the designation of being the Environmentally Superior project, with the minor adjustment in the alignment, which would then warrant selection of this alternative. I appreciate the opportunity to review and provide comment on the document.

Respectfully submitted,



David Cairns, Partner
Kaweah Lemon Company

Attachment: Opening Testimony of Pace (Protect Agriculture Communities Environment), submitted to the State Of California Public Utilities Commission, dated July 20, 2009, pages 1 – 17.

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN)
CALIFORNIA EDISON COMPANY (U-338-E))
for a Certificate of Public Convenience and)
Necessity for the San Joaquin Cross Valley Loop)
Transmission Project)

A.08-05-039
(Filed May 30, 2008)

OPENING TESTIMONY OF PACE
(PROTECT AGRICULTURE COMMUNITIES ENVIRONMENT)

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Date: July 20, 2009

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I. INTRODUCTION

In the Assigned Commissioner’s Scoping Memo and Ruling¹ the Commission requested additional testimony on

- “5. Are the mitigation measures or project alternatives infeasible? (CEQA Guideline 15091(a)(3).) This issue includes consideration of community values pursuant to Pub. Util. Code § 1002(a)(1).
- 6. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative? (CEQA Guideline § 15093.)
- ...
- 8. Is the proposed project and/or project alternative designed in compliance with the Commission’s policies governing the mitigation of EMF effects using low-cost and no-cost measures? (GO 131-D, Part X.)
- 9. If a certificate is granted, what is the maximum cost of the approved project? (Pub. Util. Code § 1005.5(a).)” (Scoping Memo, pg. 4)

The PACE (Protect Agriculture Communities Environment) opening testimony addresses (5) mitigation measures, (6) unavoidable impacts, and (9) the cost of an approved project².

II. ALTERNATIVE 3A REROUTE AROUND THE STONE CORRAL ECOLOGICAL RESERVE COST IMPACTS – Witness Hank Zaininger

Section 5 of the draft Environmental Impact Report³ compares the San Joaquin Cross Valley Loop (SJXVL) project alternatives. In Section 5.3, p.5-7, the report states that Alternative 3 results in the least impacts on agricultural resources, but due to unmitigable impacts to biological resources Alternative 3 would not be environmentally superior. Further, the report states that the EIR team looked for a feasible alignment (reroute) for Alternative 3 to bypass the sensitive habitat in the Stone Corral Ecological

¹ Dated June 23, 2009.

² The Scoping Memo orders, on page 7: “Issue No. 9: Edison has provided prepared testimony on the cost of its proposed project and Alternatives 2 and 3. We direct Edison to serve this prepared testimony pursuant to the schedule set forth in this ruling, and to provide additional prepared direct testimony setting forth its cost estimate for Alternative 6, taking into account the limitations presented by the schedule set forth in this ruling. Any party to the proceeding (see Rule 1.4) may offer prepared rebuttal testimony on this issue.” Rather than wait for rebuttal testimony, which would have hampered other parties ability to respond, we are providing this testimony in our opening comments.

³ Southern California Edison’s San Joaquin Cross Valley Loop 220 kV Transmission line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, June 2009.

Reserve⁴. However, they could not find a feasible reroute due to additional sensitive habitat, residential structures, and other physical constraints on both sides of the reserve. Since the significant unmitigable impact to biological resources for Alternative 3 could not be avoided through rerouting, Alternative 2 was selected as the environmentally superior route.

This testimony summarizes the results of my independent investigation into finding a preliminary feasible reroute of Alternative 3 to bypass the Stone Corral Ecological Reserve and its impact on the cost of the proposed project. In summary, the results of this preliminary investigation are Alternative 3 is modified slightly to reroute the new double circuit San Joaquin Cross Valley Loop transmission line around the Stone Corral Ecological Reserve, avoid construction within the ecological reserve, and avoid disturbing the two existing Big Creek – Rector 220 kV transmission lines crossing within the ecological reserve⁵.

Figure 4.4-4 in Section 4 of the draft Environmental Impact Report shows the location of the Stone Corral Ecological Reserve and generally defines designated critical habitat in the vicinity. The proposed Alternative 3A reroute path is shown in Figure 1. Figure 2 shows a closer view of the Stone Corral Ecological Reserve and surrounding area with the ecological reserve area outlined in blue, the existing Big Creek – Rector 220 kV transmission lines path across the ecological reserve marked in white, and the proposed preliminary Alternative 3A reroute path around the ecological reserve marked in yellow.

⁴ PACE representatives called the CPUC Environmental Project Manager, on June 26, 2009 to request backup data to support the above statements in the draft Environmental Impact Report. He did not have any further backup information available describing the potential reroutes studied.

⁵ Called Route 3A in this testimony.



Figure 1. Alternative 3A Reroute to Bypass the Stone Corral Ecological Reserve

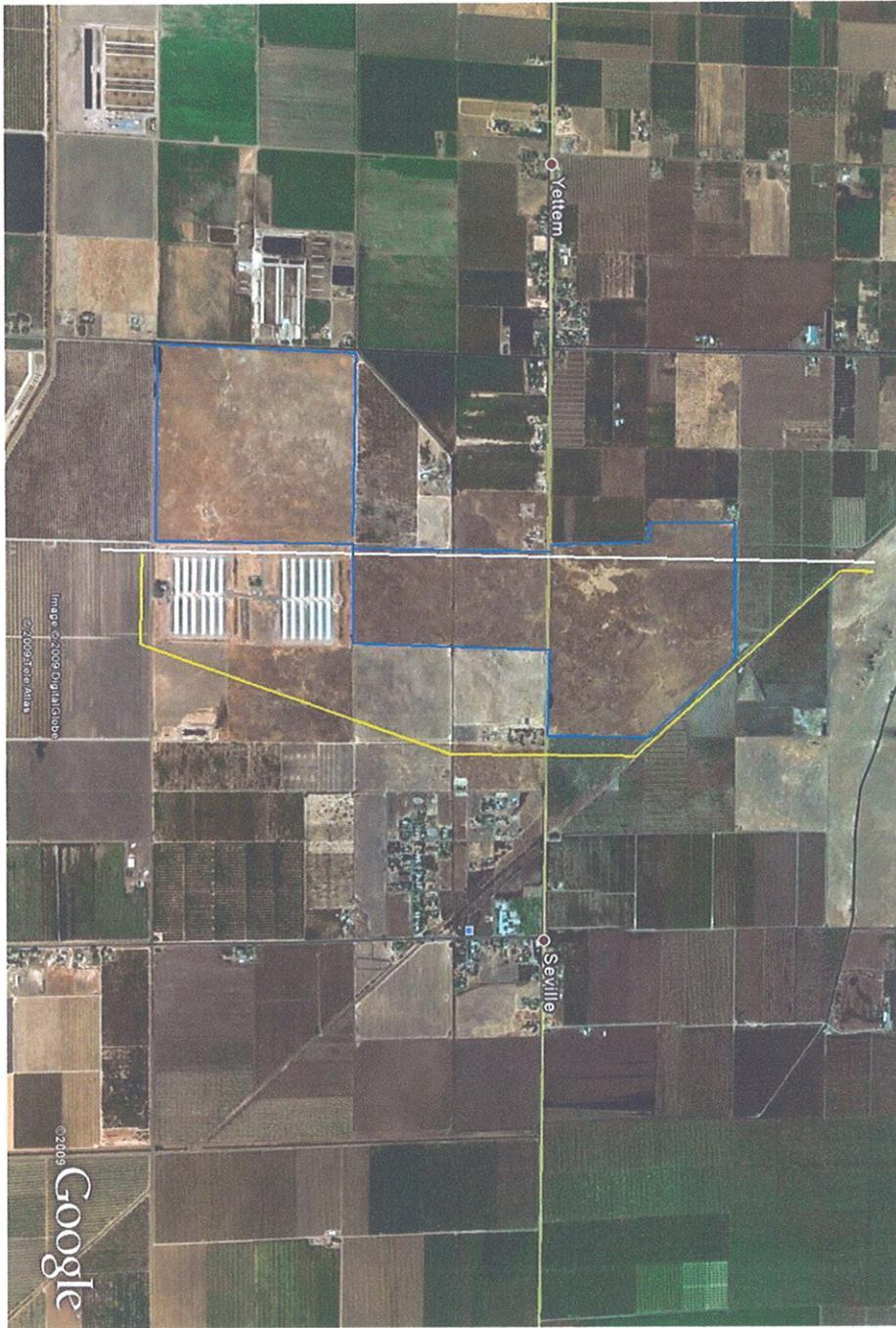


Figure 2. Closer view of Stone Corral Ecological Reserve area outlined in blue, existing line path shown in white, and proposed preliminary Alternative 3A reroute shown in yellow.

For the preliminary Alternative 3A reroute, the new double circuit 220 kV San Joaquin cross valley loop transmission line leaves the existing Big Creek – Rector 220 kV transmission lines right of way South of Avenue 376 approximately 11.6 miles north of the Rector Substation. First, the line proceeds easterly approximately 1200 feet through existing newly planted orchard. Second, the line proceeds northeasterly approximately 4400 feet through previously cultivated fields, which apparently are private property, to a point about 50 feet east of Road 152 and about 1250 feet South of Avenue 384. Third, the line proceeds north approximately 2400 feet through a previously cultivated field, which apparently is private property, across Avenue 384 and through an orchard to an abandoned railroad right of way. Fourth, the line proceeds northwesterly approximately 4100 feet along the abandoned railroad right of way to a point about 50 feet east of the existing Big Creek – Rector 220 kV transmission lines and north of the ecological reserve. Fifth, the line then proceeds north adjacent to the existing Big Creek – Rector 220 kV transmission lines to the point of intersection approximately 14.6 miles north of the Rector Substation, where the new line proceeds easterly and crosses Stokes Mountain as before.

Preliminary tower spotting for the Alternative 3A reroute is shown in Figures 3 through 7. The preliminary tower spotting uses span lengths between structures similar to those used in the preliminary tower spotting for the alternative routes presented in Section 2 and Appendix C of the draft Environmental Impact Report. Figures 3 through 7 are black and white copies of Pages 18 through 22 of the Alternative 3 Road Story⁶ respectively with the Alternative 3A preliminary line reroute centerline, towers and poles marked in red. The new Alternative 3A reroute structures added to bypass the Stone Corral ecological reserve are labeled alphabetically to differentiate them from the existing Alternative 3 structures passing through the reserve.

Figure 3 shows Alternative 3A replacement pole structure #58 and new pole structure #58 replaced with dead end double circuit tower structures relocated South of Avenue 376. The two existing Big Creek – rector 220 kV lines will transition to double circuit configuration at the relocated replacement tower structure #58. The new double circuit San Joaquin cross valley loop transmission line exits the existing right of way, proceeding easterly to a new tower structure A. All construction associated with the placement of these towers, transitioning the existing Big Creek – rector lines to double circuit configuration, and conductor stringing will be located East of Road 144 and South of Avenue 376, which is outside the Stone Corral Ecological Reserve.

⁶ Southern California Edison's San Joaquin Cross Valley Loop 220 kV Transmission Line Project, CPUC A.08-05-039, SCH #: 2008081090, Draft Environmental Impact Report, Appendix C, Section 2.

Figures 3 and 4 show the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure A to the next point of intersection, tower structure E located East of Road 152 and South of Avenue 384, using three tangent pole structures, B, C, and D.

Figure 4 also shows the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure E to the next point of intersection, tower structure G located on the abandoned railroad right of way and north of Avenue 384, using one tangent pole structure, F.

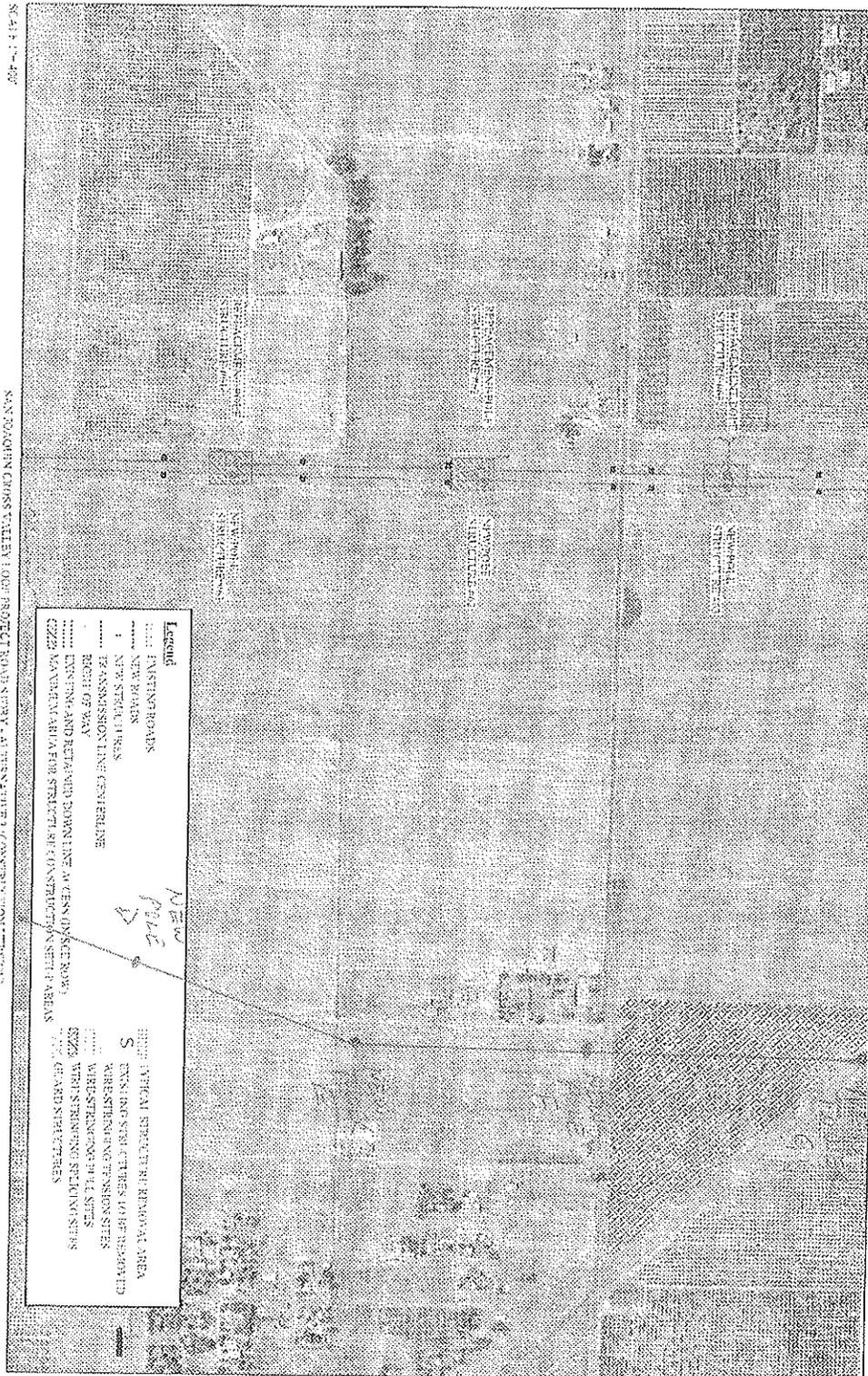


Figure 4. Alternative 3 Road Story, Page 19, with Reroute Marked in Red

Figure 5 shows the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure G along the abandoned railroad right of way to the next point of intersection, tower structure K located adjacent to the existing Big Creek – Rector lines, using three tangent pole structures, H, I and J.

Figures 5, 6 and 7 show the Alternative 3A cross valley loop reroute preliminary tower spotting from new tower structure K proceeding north adjacent to the existing Big creek – Rector lines to the next point of intersection, new tower structure #74, using seven tangent pole structures, #67 through #73. This tower spotting is similar to the preliminary Alternative 3 tower spotting, but located adjacent to the existing Big Creek – Rector 220 kV transmission lines, which will remain undisturbed.

Figures 3 through 7 also show that 24 Alternative 3 structures, replacement structures #59 through #74 and new structures #59 through #66, will not be needed if the proposed preliminary Alternative 3A reroute is employed. These changes are marked in green.

The Alternative 3A reroute, modified to include the reroute of the new cross valley loop transmission line around the Stone Corral Ecological Reserve, results in the following incremental impacts on line mileage and right of way requirements:

- The total Alternative 3A reroute transmission line mileage increases about 0.5 miles from 24.3 miles to 24.8 miles.
- The Alternative 3A reroute requires rebuilding approximately 11.6 miles vs. 14.6 miles of existing Rector – Big Creek 220 kV transmission line right of way.
- For the Alternative 3A reroute, approximately 1.2 miles of existing Rector – Big Creek 220 kV transmission line right of way needs to be widened north of the Stone Corral Ecological Reserve, where the new cross valley loop transmission line is located adjacent to the existing Rector – Big Creek 220 kV transmission lines.
- For the Alternative 3A reroute, about 12 miles vs. 9.7 miles of new right of way needs to be acquired.

The Alternative 3A reroute, modified to include the reroute of the new cross valley loop transmission line around the Stone Corral Ecological Reserve, results in the following incremental impacts on construction requirements:

- Demolition of 11.6 miles vs. 14.6 miles of existing Big Creek 3 – Rector transmission line.
- Demolition of 11.6 miles vs. 14.6 miles of existing Big Creek 1 – Rector transmission line.
- Construction of 11.6 miles vs. 14.6 miles of new Big Creek 3 – Rector and Big Creek 1 – Rector double circuit transmission line on existing right of way.
- Construction of 11.6 miles vs. 14.6 miles of new Cross Valley Loop double circuit transmission line on existing right of way.
- Construction of 12 miles vs. 9.7 miles of new Cross Valley Loop double circuit transmission line on new right of way.
- Construction of 1.2 miles of new Cross Valley Loop double circuit transmission line adjacent to existing right of way.

The Alternative 3A reroute, modified to include the reroute of the new San Joaquin Cross Valley Loop (SJXVL) 220 kV transmission line around the Stone Corral Ecological Reserve, is expected to

result in the following approximate incremental impacts on Alternative 3 direct costs with contingency presented in Appendix A of SCE’s cost support testimony⁷:

Table 1. Cost Impact of Route 3A Reroute Around Stone Corral

Line No.	Alternative 3 Cost \$1000	Alternative 3A Reroute Cost \$1000	Cost Change \$1000
10	10,620	8,690	-1,930
11	43,465	30,200	-13,265
12	68,380	69,800	1,420
Total			-13,775

In Line 10 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to remove 14.6 miles of existing Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$10,620,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 10 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 removal cost of \$8,090,000 in Line 6 of Appendix A.

In Line 11 of Appendix A of SCE’s cost support testimony, for Alternative 3, the estimated cost to build 14.6 miles of new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line is \$43,465,000. For the Alternative 3A reroute, the new SJXVL transmission line exits the existing Big Creek – Rector 220 kV transmission line right of way at approximately 11.6 miles north of the Rector Substation, about 0.8 miles further north than Alternative 2, which exits at 10.8 miles north of the Rector Substation. So Line 11 for the Alternative 3A reroute in Table 1 is assumed to cost about 11.6/10.8 times the corresponding Alternative 2 new double circuit Big Creek #1 – Rector & Big Creek #3 – Rector 220 kV transmission line rebuild cost of \$28,140,000 in Line 7 of Appendix A.

In Line 12 of Appendix A of SCE’s cost support testimony, for Alternative 3A, the estimated cost to build 24.3 miles of new double circuit 220 kV transmission line is \$68,380,000. For the Alternative 3A reroute, the new SJXVL transmission line is about 0.5 miles longer. So Line 12 for the Alternative 3A reroute in Table 1 is assumed to cost about 24.8/24.3 times the corresponding Alternative 3 new double circuit SJXVL transmission line cost in Line 12 of Appendix A.

⁷ Southern California Edison Company’s Testimony on San Joaquin Cross-Valley Loop Project (SJXVL) Cost Support for SJXVL Project and Alternatives, Frank Harris, June 26, 2008.

These Line 10, 11 and 12 incremental direct cost changes for the Alternative 3A reroute result in expected total direct cost savings with contingency of about \$13,775,000 compared to Alternative 3 original estimates.

Assuming a P&B and A&G rate of 7.5% similar to the rate used in Appendix A of SCE's cost support testimony for Alternative 3, the resulting total direct plus contingency plus P&B and A&G cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$14,800,000. In addition, assuming an AFUDC rate of 12.6% similar to the rate used in Appendix A of SCE's cost support testimony for Alternative 3, the resulting AFUDC cost savings for the Alternative 3A reroute compared to Alternative 3 is about \$1,900,000.

On July 13, 2009, members of PACE, David Cairns and Carol Cairns, and Phyllis Coring (consultant) and I met with two representatives of the California Department of Fish and Game, Justin Sloan, Environmental Scientist responsible for the Stone Corral Ecological Reserve, and his supervisor, Annee Ferranti, Senior Environmental Scientist, to discuss the feasibility of rerouting Alternative 3 around the ecological reserve. We discussed the proposed preliminary Alternative 3A reroute around the ecological reserve described above. In summary their opinion was that it will be feasible to reroute Alternative 3A around the Stone Corral Ecological Reserve on private property. There is critical habitat only in some spots in the previously cultivated fields outside the ecological reserve. These areas can be specifically identified with a biological survey, and the preliminary Alternative 3A reroute transmission structures relocated appropriately to avoid these areas.

Summing up, this preliminary Alternative 3A reroute bypasses the Stone Corral Ecological Reserve by crossing a small amount of orchards, crossing previously cultivated fields, which apparently are private property, utilizing an abandoned railroad right of way, and avoiding residential structures. This Alternative 3A reroute will mitigate the impacts to the sensitive habitat located within the Stone Corral Ecological Reserve described in the draft Environmental Impact Report. The Alternative 3A reroute also provides the flexibility to adjust structure locations to appropriately mitigate any identified biological resources in sensitive habitat located on private property outside the ecological reserve on the alternative 3A reroute path, while still resulting in the least amount of impacts to agricultural resources. This Alternative 3A reroute is feasible and it will significantly reduce the costs of constructing Alternative 3.