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

August 21, 2008

VIA MAIL AND EMAIL

Susan Nelson, Project Manager
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, CA 91770

SUBJECT: Data Request No. 4 for the San Joaquin Cross Valley Loop Project (A.08-05-039)

Dear Ms. Nelson:

As the California Public Utilities Commission (CPUC) proceeds with our review of Southern California Edison (SCE)'s Application and Proponent's Environmental Assessment (PEA) for the San Joaquin Cross Valley Loop Project, we have identified additional information required to complete our analysis of the Proposed Project. Please provide the information requested on the pages attached to this letter.

We would appreciate your prompt response to this data request by September 4, 2008, which will help us maintain our schedule for analysis and processing of this application. Please submit your response in hardcopy and electronic format to me and also directly to our environmental consultant, ESA, at the mail and e-mail addresses noted below. If you have any questions please direct them to me as soon as possible.

Sincerely,

Jensen Uchida

Jensen Uchida
CPUC CEQA Project Manager
Energy Division
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Data Request #3
San Joaquin Cross Valley Loop Project

Alternative 4: EMF

Background:
Alternative Route 4 as described and illustrated in the PEA leaves the Rector Substation running to the west for 0.5 mile, then turns south 2.3 miles and then turns east to paralleling Avenue 264 to Parkside Avenue. The western end of the route could be shortened by using about 2 miles of the ROW of the existing Rector-Vestal 220 kV lines between Rector and Avenue 264 rather than running from Rector to the west and then south prior to turning east along Avenue 264. This route change would mitigate some of the potential visual and land use issues. The new line length would be about 1.7 miles shorter than for the route as shown in the PEA, and would reduce the requirement for new ROW by 3.7 miles. Also, a crossover of the existing 220 kV lines by the new lines could be avoided. Using the existing easement would require reconstructing the existing lines for approximately 2 miles similar to the proposals for Alternatives 1, 2, and 3 using the existing easement north from Rector to Big Creek. However, SCE indicated use of the existing 220 kV transmission route south could create an EMF issue with a school located on the east side of Road 148 just north of Visalia Road (Caldwell Avenue) near Rector Substation. Using Google Earth, the school property appears to be approximately 100 feet from the nearest existing 220 kV conductor.

Questions:

1. What is the distance from the east edge of the existing easement to the school property boundary?
2. What are the specific EMF regulatory requirements for the construction of new power lines in the vicinity of schools that resulted in your decision to avoid the existing ROW in that area?
3. Does the EMF of the existing transmission lines violate those regulatory requirements?
4. Could the existing and proposed new 220 kV power lines in the vicinity of the school be configured to meet the current EMF regulatory requirements regarding the school?
5. Would under-grounding and shielding the new transmission lines in the vicinity of the school resolve the EMF issue?

Reconductoring with ACCR

Background:
The Comprehensive Report of Appendix C of the PEA indicates that the largest and highest capacity conductor that could be accommodated by the existing towers would be 666.6 kcmil ACSS/TW, only slightly larger than the existing 605 kcmil ACSR on the BC-Rector, Vestal-Magunden, and the BC4-Springville-Magunden lines. BC3-Springville-Magunden is currently 1033 kcmil ACSR (aluminum conductor steel reinforced) conductor.

However ACSS/TW may not be the highest capacity product currently available for reconductoring. There are several new high capacity cable products are now being manufactured and adopted by utilities for upgrade projects. For example, an article on 3M's website states that, "*3M ACCR can carry twice the current of conventional steel-core conductors of the same diameter, without requiring larger towers, even across long spans.*" (See Attachment A for additional articles).

Questions:

6. Why has SCE apparently not considered use of ACCR conductors for upgrading the 220 kV transmission serving the Rector Substation?
7. How would the conductivity and other critical properties of 3M ACCR compare to ACSS/TW identified in the 2004 Comprehensive Report?
8. Would doubling the capacity of the Big Creek 1 and 3 – Rector lines and the two Rector – Vestal – Magunden lines using ACCR meet SCE's project objectives for improved capacity and reliability including scenarios for simultaneous outages on any two of the four lines serving Rector?
9. Would reconductoring only one Big-Creek – Rector line and one Rector – Vestal – Magunden line with ACCR meet the project objectives in the near term allowing the upgrade of the other Big Creek - Rector –Vestal – Magunden line to be deferred for one or more years? If yes, how many years could the upgrade of the second line be deferred? (Obviously simultaneous outages of the two upgraded lines would leave Rector in the same situation as the existing system with any two lines down. But the likelihood of simultaneous outages on the two upgraded lines would be substantially less than the likelihood of simultaneous outages on any two of the existing four lines.)
10. In general, how would the cost of a reconductoring alternative using 3M ACCR (or similar high capacity conductor) compare to ACSS/TW conductors?

Federal Energy Regulatory Agency (FERC) Jurisdiction Over Hydroelectric Project Related Transmission Lines

Background:

The four 220 kV transmission lines from the Big Creek Hydroelectric Projects to the Rector and Springville Substations may be included as "project facilities" in the several FERC hydroelectric licenses for the for the Big Creek hydro projects. These licenses include:

License No. 67	Big Creek 2A, Big Creek 8, Balsam Meadows
License No. 120	Big Creek 3
License No. 2085	Mammoth Pool
License No. 2175	Big Creek 1, Big Creek 2
License No. ????	Big Creek 4

Presuming that the subject transmission lines are included in the FERC hydro licenses, FERC would have jurisdiction over the transmission lines in regards to any significant physical changes, or upgrades. Thus, the proposed SJXVL Transmission Project modifications may require FERC "license amendment" applications supporting Federal NEPA reviews and approvals in addition to meeting CEQA requirements. (Applicable excerpts for the FERC "Compliance Handbook" are included as Attachment B)

Questions:

11. Are the Big Creek 1 – Rector, Big Creek 3 – Rector, Big Creek 3 – Springville, and Big Creek 4 – Springville 220 kV transmission lines included in the FERC hydro project licenses? If so, how far along the lines does that jurisdiction extend? Would it stop at the Rector and Springville substations?
12. Will FERC require hydro project license amendments for the proposed SJXVL Project transmission modifications?
13. If the transmission lines are not covered in the FERC licenses, does FERC still have a jurisdictional role over the transmission lines under the Interstate Commerce Act?
14. Assuming the answer to Question 3 is affirmative, what type of application and regulatory process will FERC require for Project approval?