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Via E Filing
January 16,2014
Carlsbad Energy Center Project (07-AFC-06C)

Karen Douglas, Commissioner and Presiding Member
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California Energy Commission
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Sacramento, CA 95814-551

Response to Project Owners Supplemental Response to Data Request Set 3 (TN 203512)

Dear Committee Members:

On December 18, 2014 the Committee issued an order (TN# 203468) denying Power of Vision's petition to compel data responses, but required "...the Project Owner to articulate specific standards regarding the necessary heights of poles and constraints (whether based on engineering requirements, site limitations, or otherwise) against placing the poles within the bermed area and reducing the heights of poles that cannot be placed in the bermed area. This articulation by the Project Owner shall include an explanation of the basis for its assertion and may take the form of a drawing, text, or any other way to most effectively communicate the constraints. In addition, the Project Owner shall indicate any areas of flexibility to mitigate or overcome the identified constraints and the means and methods to do so. Staff shall be called upon to review the information provided by the Project Owner and provide its independent evaluation and opinion on the identified constraints and whether there is any flexibility to mitigate the identified limitations.

"Both Project Owner and Staff shall discuss the issues regarding the placement and height of poles in workshops.

"A visual rendering showing the transmission lines as now proposed will be most helpful should it remain necessary to litigate the visual impacts of the transmission lines. "

On January 12, 2015 Locke Lord LLP responded (TN# 203512), on behalf of the Project Owner, with a partial answer to the Committee's requirements as stated in TN# 203468 by indicating that transmission line design standards in the State of California are governed by California Public Utilities Commission General Order 95 and listed some of these design standards in their Table 1. Unfortunately, in Table 1 they also added a column labeled "Recommended clearance (including buffer), ft" which, according to the Project Owner's transmission expert at the January 13, 2105 workshop, was a judgement call on their part for added safety. We respectfully submit that the numbers in this added column be ignored since they do not reflect any legal or code requirement. The clearance requirements specified in GO-95 are amongst the most stringent in the nation and do not need further augmentation. For example, the National Electric Safety Code (NESC) 2012 edition clearance values vs. GO-95 clearance values are:

	Minimum Clearance, ft	
For 230 kV	GO-95	NESC
Phase to phase same circuit	10.1667	9.6
Vertical clearance above railroad	34	32.9
Vertical clearance above roadways	30	24.9
Vertical clearance above pedestrian ways	25	20.9

Please note that Project Owner, in their Table 1, erroneously listed the minimum clearance for 230 kV phase-to-phase same circuit as 10.6 ft, whereas GO-95 Table 2, case 17J specifies the clearance as 90 inches plus (footnote gg) 0.4 inches for each kv above 150, yielding 90" + 0.4"(230 - 150) = 122" = 10.1666', as shown above.

Thus far, Project owner has not responded to Committee's request for the "...the Project Owner to articulate ...constraints (whether based on engineering requirements, site limitations, or otherwise) against placing the poles within the bermed area and reducing the heights of poles that cannot be placed in the bermed area." Nor have the responded to Committee's request that they "...indicate any areas of flexibility to mitigate or overcome the identified constraints and the means and methods to do so." Furthermore, Power of Vision was not successful when trying to engage the Project Owner and their transmission line expert on "... issues regarding the placement and height of poles..." at the workshop. We evoked no response when we indicated to the Project Owner that for northernmost pole, currently located in the pit could be reduced in height from the currently indicated 98 ft to 56.333 ft (30' clearance roadway to lowest conductor + 2 x 10.1667' phase to phase clearance for the upper two conductors + 6' for top of pole conductor). Power of Vision also pointed out that this would be more consistent with transmission tie line heights of about 60' for similar peaker plants such as Panoche and Pio Pico recently approved by the CEC. We also indicated that the 98 - 106 ft transmission line poles selected for the tie line was more consistent for use in cross-country lines where span distances, and thus sag, are much greater than for the short distances involved in the amended CECP.

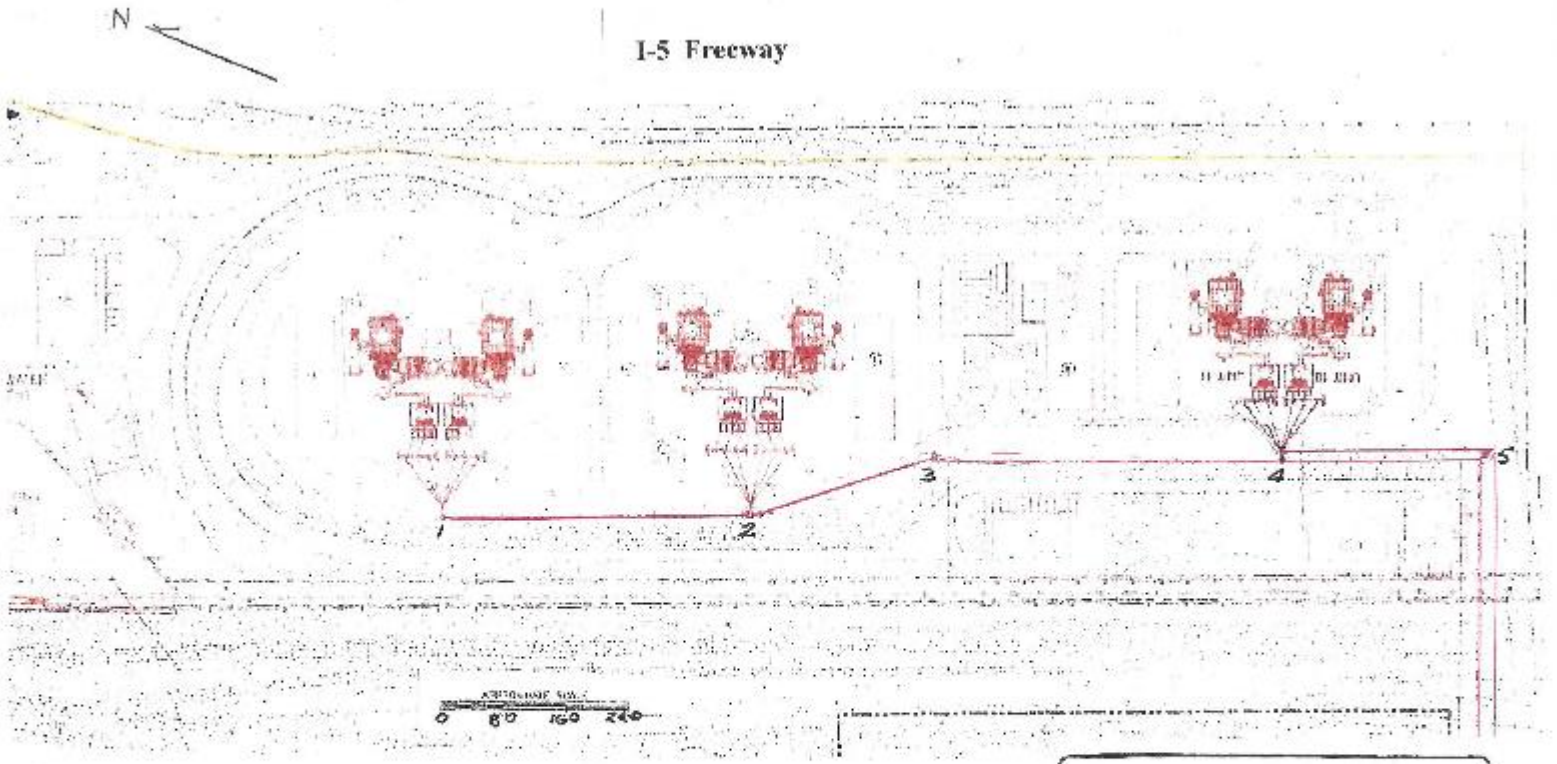
At the workshop, we also pointed out to the Project Owner that careful thought had not been given to their addition of another pole in the pit since, since with the existing 98' height of the poles, the lowest conductor crossing over the upper rim road would be approximately 36' (60' from base of pole to lowest conductor, less worst case of 6' conductor sag, less 18' from base of pole to upper rim road), well above the GO-95 required minimum clearance of 30'.

More importantly, at the workshop, the Project Owner balked at discussing any one of the numerous alternative locations for the transmission tie line that we have been recommended to them since April, 2014. Amongst these alternatives are: a) direct burial; b) eliminating the poles completely by using the H-frames to carry the lines within the pit area; c) rotating each pair of units 180 degrees around a point midway between the smoke stacks (to avoid re-doing the airmod calculations) so that the poles are on the Western edge of the pit (see attached POV Figure VIS-1); and lastly and least desirable, d) lowering all of the poles into the Eastern edge of the pit.

We look forward to the Committee being able to persuade the Project Owner into being more forthcoming in the attempt to reduce the visual impacts of their proposed transmission tie line.

Julie Baker

Arnold Roe, Ph.D.



Poles 1, 2, & 3 located at the bottom of the pit.

Pole 4 can be located either at the bottom of the pit or west of the upper rim road.

Pole 5 located adjacent to pit access road.

POWER OF VISION

POV Figure VIS-1

Transmission Tie Line Relocated

To West Side of The Pit

January 21, 2015