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MEMORANDUM

Date: July 10, 2008

To: Mr. David Flores, California Energy Commission

From: Ms. Heather Keresztes, Sr. Transportation Engineer

Subject: ***Canyon Power Plant Traffic and Transportation Review***

The following comments are based upon a review of the traffic and transportation section (posted July 3, 2008) and Responses to Data Adequacy Requests (posted March 10, 2008 and June 10, 2008) of the Application for Certification for the Canyon Power Plant (CPP) in the City of Anaheim, California. Both documents were obtained via electronic files located on the California Energy Commission web site. Our responsibilities included reviewing these documents for accuracy and completeness based upon best practices and local protocols for traffic impact analyses.

COMMENTS

6.11.1.1.3 – Existing Freeway / Roadway Level of Service

1. What capacities were utilized for the "Freeway Segments" and what was the source?
2. Caltrans guidelines require analysis of Freeway Segments be conducted utilizing the Highway Capacity Manual (HCM), operational analysis. These analyses should be performed for the peak hour. Until these analyses are performed it is unknown whether the freeway segments are currently operation at acceptable Levels of Service during the peak hours.

Figure 6.11-3 – Intersection Geometrics

1. A field check of the geometrics for intersection #5 – Glassell / Fronteria indicated that those shown in the report are incorrect for the west leg (eastbound direction).

Figure 6.11-4- Existing Traffic Volumes

1. The incorrect existing volumes are provided at the following study intersections:
   Kraemer / Coronado – Northbound left turn lane (AM Peak Hour)
   Kraemer / La Palma – Southbound left turn lane (AM Peak Hour)
   Eastbound left & right turn lanes (PM Peak Hour)
   Kraemer / SR-91 WB OFF Ramp – Northbound through lane (AM Peak Hour)

   Note: The correct volumes were utilized in the analyses worksheets.

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Analysis Worksheets – Appendix L2

1. Kraemer / La Palma – PM Peak Hour: There is a right turn overlap phase for the eastbound direction, therefore it is not a critical movement. The intersection worksheets indicate this as a critical movement and it should be revised.
2. Glassell / Frontera – AM and PM Peak Hours: The lane geometrics for the eastbound and westbound directions are switched. The worksheets should be revised.

Table 6.11-4 – Peak Hour Intersection Level of Service – Existing Conditions

1. There will be changes to the Volume to Capacity (V/C) ratios due to the errors within the Existing Analyses worksheets mentioned above. Table 6.11-4 will need to be revised after corrections are made to the worksheets.

6.11.1.1.5 – Other Transportation Elements

1. Parking: No On-street parking is permitted on Mira Loma Avenue along the project frontage.

Table 6.11-6 – Project Construction Trip Generation

1. Footnotes 3 and 4: The trip generation table and footnotes improperly mix one way and round trip information in the same context. We suggest all numbers be in trip ends, which is common engineering practice.
2. Based upon information provided in the study under "Construction Truck Deliveries" it was assumed that one-half of the daily truck trips would occur during the AM and PM peak hours. As shown in Table 6.11-6, half of the light trucks would equate 45 trips and half of the heavy trucks would equal 9 trips. This is not represented in the table for peak hour trips. Both the AM and PM peak hour trips are grossly under estimated. The analysis should be revised to reflect a more representative estimate.

6.11.2.2.4 – Freeway and Roadway Level of Service During Project Construction

1. Caltrans guidelines require analysis of Freeway Segments be conducted utilizing the Highway Capacity Manual (HCM), operational analysis. These analyses should be performed for the peak hour. Until these analyses are performed it is unknown whether a significant impact occurs.

Analysis Worksheets – Appendix L3 & L4

1. Kraemer / La Palma – PM Peak Hour: There is a right turn overlap phase for the eastbound direction, therefore it is not a critical movement. The intersection worksheets indicate this as a critical movement and it should be revised.
2. Glassell / Frontera – AM and PM Peak Hours: The lane geometrics for the eastbound and westbound directions are switched. The worksheets should be revised.

6.11.2.2.5 – Intersection Level of Service During Project Construction (2009)

1. There will be changes to the Volume to Capacity (V/C) ratios due to the errors within the analyses worksheets mentioned above. Tables 6.11-9 and 6.11-10 will need to be revised after corrections are made to the worksheets. The V/C ratios will need to be revisited and compared following the COA Significant Transportation Impacts guidelines.

6.11.2.2.8 – Bicycle and Pedestrian Circulation

1. Due to the increased pedestrian activity at the intersection of Kraemer and Mira Loma from the construction workers, there would be an increase in vehicle delay at this intersection. As stated previously in the report, this area is largely industrial and field observations indicated that there is minimal pedestrian activity in the study area under existing conditions, however with the addition of 225 workers arriving during the AM peak hour and 225 workers leaving during the PM peak hour there would be a substantial change to the study intersection due to increased pedestrian activity. This should be reflected in the intersection analysis within the report.

6.11.2.3.1 – Freeway and Roadway Level of Service During Project Operation (2010)

1. Caltrans guidelines require analysis of Freeway Segments be conducted utilizing the Highway Capacity Manual (HCM), operational analysis. These analyses should be performed for the peak hour.

Analysis Worksheets – Appendix L5 & L6

1. Kraemer / La Palma – PM Peak Hour: There is a right turn overlap phase for the eastbound direction, therefore it is not a critical movement. The intersection worksheets indicate this as a critical movement and it should be revised.
2. Glassell / Frontera – AM and PM Peak Hours: The lane geometrics for the eastbound and westbound directions are switched. The worksheets should be revised.

6.11.2.3.2 – Intersection Level of Service During Project Operations (2010)

1. There will be changes to the Volume to Capacity (V/C) ratios due to the errors within the analyses worksheets mentioned above. Tables 6.11-13 and 6.11-14 will need to be revised after corrections are made to the worksheets.

Miscellaneous

1. The Street name "Kraemer" is spelled incorrectly periodically throughout the report and should be corrected.

We have completed our review and recommend that the above items be addressed before the transportation section of the application is considered complete and accurate.