



SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

August 13, 2009

John Kessler, Energy Commission Project Manager
California Energy Commission
1516 Ninth St.
Sacramento, CA 95814-5512

DOCKET	
07-AFC-8	
DATE	AUG 13 2009
RECD.	SEP 8 2009

RE: County Response to Review of the draft Final Staff Assessment for Transportation of the Carrizo Energy Solar Farm Project (07-AFC-8)

Mr. Kessler,

The County of San Luis Obispo Planning and Building Department (County) has reviewed the CEC's draft Final Staff Assessment (dFSA) on traffic impacts. The County has significant concerns with the analysis and conclusions reached regarding the use of larger construction vehicles and buses on county maintained roads, especially Bitterwater Road. Proposed mitigation TRANS1-A1 limits the number of daily truck and bus trips on State Route 58 to 20 thus requiring the remaining 153 daily trips¹ to utilize county maintained roadways (specifically Bitterwater Road as proposed by the applicant or San Juan/Shell Creek Roads as recommended by the County). The dFSA lacks the adequate analysis, trip distribution and recommendations necessary to mitigate these impacts to county maintained roads.

As stated in the analysis, State Route 58 easterly from the project has an approximate four-mile section of sharp curves with paved lane widths as narrow as 9 feet with no shoulders on mountainous terrain. This being a significant constraint and deterrent for use, the traffic modeling must be expanded to include other routes with fewer constraints, and if they exist, be assigned a reasonable trip distribution.

As stated in our PSA comments, the San Juan/Shell Creek Road connection between State Route 41/46 and State Route 58 is considered by the county the preferred alternative truck route over the Bitterwater Road route, and should be evaluated as such. It has about a 22-foot average pavement width in fair to good condition, and with the exception of two 90-degree curves is straight and aligned upon relatively flat terrain (please refer to the below table with the limitations identified for the county road routes, as well as for State Route 58). Use of the San Juan/Shell Creek Road haul route as opposed to Bitterwater Road may result in a lower accident potential over the construction period of the project because it is half the length, wider, better pavement and has considerably flatter terrain.

Since State Route 58 may not be physically conducive to the majority of construction and post-construction related truck traffic it can be reasonably anticipated that truck drivers will choose State Route 41/46 as the preferred haul route then merge onto county maintained roads (Bitterwater, San Juan/Shell Creek Roads) to access the proposed project site. If a 50% east-west split were assigned

¹ Draft FSA Table 3 Peak Daily Trips excluding 15 "On-Site Manufacturing" trips & 20 trips on SR 58

to bus and truck destinations, given the projected 173² daily truck and bus trips, the majority of trips should be assigned to the San Juan/Shell Creek Road link with a smaller percent being assigned to State Route 58.

Also, it appears the suggested 10 “time sensitive” trips for Bitterwater Road is an arbitrary and very low number to be assigning for a north/south link to State Route 41/46. Additionally, this figure conflicts with Table 3 and proposed mitigation TRANS-1-A1. Given the constraints of State Route 58 east of the project site, especially if the other solar power plants are approved and being constructed concurrently, other safer routes must be analyzed. Even if this condition remained, it is unclear how the use of travel logs would prevent the use of a safer north/south connection to State Route 41/46, and subsequently unaccounted impacts to county roads.

Had the County been the permitting agency for the Carrizo Energy Solar Farm project, the following Operational Limitations and Recommendations would have been more adequately addressed as part of the project’s CEQA analysis. These same concerns will be provided for analysis to both of the photovoltaic plants currently requesting county permits.

All of the potential access routes to the project have differing levels of operational constraints. The following table briefly summarizes some of these constraints for State Route 58, Bitterwater Road, San Juan Road and Shell Creek Road.

Road Name	Status/Condition	Operational limitations
State Route 58	“Arterial” Classification; State facility maintained by Caltrans	<ul style="list-style-type: none"> Mountainous alignments. Narrow lanes (9-12 feet wide). Minimal shoulder widths (0-1 feet for sections). Insufficient roadside recovery areas. Horizontal and vertical curves not meeting current standards for sight distance. Road advisory restrictions for trucks with kingpin-to-rear axel length of 30-feet or more. A prohibition of motor homes and buses over 40-feet in length. Part of school bus route.
Bitterwater Road (#3099)	“Collector” Classification; Pavement widths - 20 to 22-ft; Pavement Condition Index (PCI) - Poor to Fair (30-52)	<ul style="list-style-type: none"> ±32-miles between SR41/46 and SR 58. Subject to extended periods of closure during the wet season due to unstable soil conditions. Road currently has a poor PCI index. Portions located along the San Andres fault and subject to continual movement resulting in uneven pavement surfaces, constant maintenance would be required to keep road in working order. Added heavy truck trips would accelerate its deterioration including creating potholes and loose gravel. Privately maintained cattle guards may result in third party conflicts if damaged by project related traffic.

² Draft FSA Table 3 Peak Daily Trips excluding 15 “On-Site Manufacturing” trips

Road Name	Status/Condition	Operational limitations
		<ul style="list-style-type: none"> • Drainage improvements needed. • Portions have operational constraints similar to those of SR 58 including mountainous alignments (sharp curves), narrow lanes, minimal shoulder widths, insufficient roadside recovery areas, and horizontal and vertical curves not meeting current standards for sight distance. • Improvements may be required before road can be used as the project proposed project truck route. Due to low usage otherwise, such county upgrade and maintenance not planned in foreseeable future. • Due to low usage/low densities, ongoing maintenance is very low county priority. • Intersection with State Route 46 less accommodating for larger vehicles when compared to San Juan Road intersection. • Multi-jurisdictional, a portion of the roadway is located with Kern County. • Not part of school bus route.
Bitterwater Valley Road (#5217)	"Local" Classification; Pavement width – 22 ft; PCI - Poor to Fair (38-43)	<ul style="list-style-type: none"> • Mostly located within Kern County – no information available.
San Juan Road (#5281)	"Local" Classification; Pavement width – 26 ft; PCI - Fair to Good	<ul style="list-style-type: none"> • Skirts around the Shandon community.
Shell Creek Road (#4413)	"Collector" Classification; Pavement width - 22-feet; PCI - Fair to Good	<ul style="list-style-type: none"> • ±16-miles between SR41/46 and SR 58 (including San Juan Rd), half the distance of the Bitterwater Road route. • While some narrow shoulders exist, due to flatness, shoulder width is there for emergencies • Shell Creek Road has a concrete at-grade (Arizona) crossing of San Juan Creek near San Juan Road that may result in temporary road closures during periods of heavy rains. • Two 90-degree curves. • Minor drainage issues. • Connection with San Juan Road & intersection with State Route 46 more accommodating for larger vehicles when compared with Bitterwater Rd. intersection. • Popular seasonal tourist area for native flower displays. • Very large annual organized bike ride once a year (Wildflower). • Not part of school bus route.

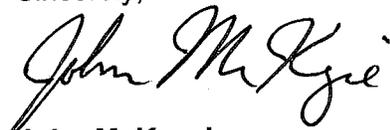
Given the operational constraints specified above for State Route 58 and Bitterwater Road the county concludes it is reasonable to assume State Route 41/46 and San Juan/Shell Creek Roads are more appropriate routes that will be used by truck drivers during construction and operation. As the County will be recommending the San Juan/Shell Creek Road connection between State Route 41/46 and State Route 58 for the other two solar projects, if they get approved, we would anticipate a cost sharing program equitably distributed amongst all of the solar power companies.

Recommendations

The County strongly recommends that revisions be made to the proposed TRANS-1, TRANS-2 & TRANS-3 conditions to address our concerns. County-proposed revisions can be found in Exhibit A (attached to this letter) that relate to the above discussion. The newly proposed Road Restoration Plan (RRP) will be used to determine the baseline road conditions so that any damage to the county maintained roads which can be attributed to the project shall be repaired at the applicant's expense, and any roadway operational issues can be corrected prior to the introduction of project trips. The axel counters should be installed to document trips on the roadway segments.

We appreciate your consideration of our comments as the CEC continues towards a Final Staff Assessment. We look forward to working with you further on the outstanding issues, as well as reviewing the final environmental document. Should you have any questions, please give me a call at (805)781-5452 or e-mail (jdmcKenzie@co.slo.ca.us).

Sincerely,



John McKenzie

Senior Environmental Planner

County Planning & Building Department



Glenn Marshall

Development Services Manager

County Public Works Department

EXHIBIT A - PROPOSED COUNTY REVISIONS TO TRAFFIC CONDITIONS (in red and underlined)

TRANS-1 Prior to construction of the CESF, the project owner shall prepare and implement a traffic control and implementation plan for the CESF construction traffic haul routes, containing:

A. Traffic Mitigation Plan prepared by a registered civil engineer addressing the movement of vehicles and materials, that ensures:

1. no more than 10 trucks per day would travel to the project site along eastbound SR-58 and no more than 10 trucks per day travel to the project site along westbound SR-58 (all types of trucks, including all tractor trailer trucks, dump trucks, cement trucks, and straight trucks. This restriction would not apply to passenger vehicle trucks such as pickup trucks, vans, and sport utility vehicles weighing less than 14,000 pounds).
2. the rationale for any planned exceptions to the ~~40~~ 20 trucks per day rule must be documented and forwarded to the Compliance Project Manager (CPM) for review and approval prior to implementation. The rationale for any unanticipated exceptions to this rule must be documented and forward to the CPM within 5 business days of prior to occurring.
3. buses transporting workers to the site, that travel on assigned school bus routes, are required to wait on-site and delay their return trip until after 9:00 AM to avoid conflicts with school bus routes and peak hour traffic;
4. coordination with the Atascadero USD at least 30 days prior to the beginning of each school year to ensure that construction truck traffic does not conflict with school bus traffic to result in substantial delays to school bus routes;
5. coordination with San Luis Obispo County Public Works and Caltrans to review and approve the Plan prior to implementation;
6. one dedicated crossing point between the CESF site and the construction laydown area to eliminate multiple crossings across SR-58;
7. rerouting of construction traffic in the vicinity of the CESF site and construction laydown area with a flag person;
8. signage, lighting, and traffic control device placement at the project construction site and laydown areas;
9. signage placed along the south and north shoulders of SR-58 at appropriate intervals (as recommended in the Caltrans WATCH Manual) notifying drivers of increased construction traffic on SR-58 and the duration of the construction period;
10. signage placed along the south and north shoulders of SR-58 at appropriate intervals (as recommended Part 7 of Traffic Control for School Areas of the California Manual on Uniform Traffic Control Devices) in the vicinity of the

Carissa Plains Elementary School notifying drivers of the school entrance and school traffic; and

11. Implementation of Caltrans recommendations to prevent off tracking along SR-58 and San Luis Obispo County maintained roadways.
 12. a specific haul and/or commute route is identified, which shall include San Juan/Shell Creek Roads link as the main north/south link to State Route 41/46; all construction-related personnel shall be directed to use this haul route; the plan shall identify how use of the haul route shall be accomplished and what enforcement measures used for compliance.
- B. A Heavy Haul Plan addressing the transport and delivery of heavy and oversized loads requiring permits from Caltrans, the County of San Luis Obispo or other local, state and federal agencies during off-peak hours.
- C. A Truck and Bus Safety Plan that ensures:
1. that construction material and equipment deliveries requiring pilot cars and/or CHP escorts are limited to traveling along SR-58 and San Luis Obispo County maintained roadways during off peak hours (between 9:00 a.m. and 4:00 p.m.)
 2. that designated pick-up and drop-off areas are located on site and do not result in construction-related buses parking or queuing along SR-58 or San Luis Obispo County maintained roadways;
 3. all project-related construction traffic adheres to the California Legal Advisory of kingpin to rear axle less than 30 feet;
 4. all project-related construction traffic adheres to the prohibition of buses over 40 feet in length on SR-58;
 5. funding for at least two additional CHP units or CHP Commercial Officers to patrol SR-58 and San Luis Obispo County maintained roadways through the entire construction duration is provided to CHP (Applicant shall coordinate with CHP and San Luis Obispo County on an annual basis to ensure other projects contributing to traffic on SR-58 and San Luis Obispo County maintained roadways during the same time frame as the CESF would contribute fair share funds to CHP);
 6. all construction truck and bus drivers are informed of road conditions along SR-58 and San Luis Obispo County maintained roadways;
 7. inform all construction truck and bus drivers of, and require them to follow, the traffic haul route plan;
 8. all construction truck and bus drivers are informed of the additional CHP patrols; and
 9. ~~any truck travel along Bitterwater Road shall be restricted to daylight hours; exceptions must be documented in writing and forwarded to the CPM. Documentation shall clearly explain why travel along Bitterwater Road during daylight hours could not be achieved.~~

- D. A Travel Log documenting the arrival and departure time, and route travelled to and from the CESF site, for all trucks and buses weighing greater than or equal to 14,000 pounds.

The project owner shall consult with the County of San Luis Obispo and Caltrans in the preparation and implementation of the Traffic Control and Implementation Plan and shall submit the proposed Traffic Control Plan to the County of San Luis Obispo and Caltrans in sufficient time for review and ~~comment~~ approval and to the CPM for review and ~~approval~~ implementation prior to the proposed start of construction. ~~and implementation of the plan. The project owner shall provide a copy of any written comments from the County of San Luis Obispo or Caltrans and any changes to the traffic control plan to the CPM prior to the proposed start of construction.~~ Revisions to the plan shall be approved by the regulating agency prior to implementation by the CPM.

- E. A Road Restoration Plan (RRP) for proposed haul routes over San Luis Obispo County maintained roadways for County Public Works review and approval, prior to construction work commencing. At a minimum, the RRP shall:
1. Provide a video log of the proposed haul route.
 2. Determine the current Pavement Condition Index (PCI) of the haul route roadway(s).
 3. Identify roadway operational constraints specific to the proposed haul route and provide corrective recommendations.
 4. Propose location(s) to place traffic axle counters to measure project related traffic.
 5. Identify the funding mechanism for identified roadway upgrades and ongoing maintenance. The proposed energy project's impacting the roadway segments will be responsible for all costs. Should more than one energy project be using the same road within a similar window of time, a cost sharing program shall be developed.
 6. Identify post construction traffic impacts associated with employee commuting, tourism, truck deliveries and major facility maintenance activities.
 7. Ensure all identified operational corrective recommendations, as identified in the RRP, shall be completed prior to commencement of project-related construction activities.
- F. Prior to the start of site mobilization the project owner shall enter into an agreement with County of San Luis Obispo Department of Public Works to repair, or cause to be repaired, any and all damage which may result from the operation of construction vehicles on the road and to post a good and sufficient bond in an amount deemed sufficient by the county road commissioner to guarantee compliance with the agreement.

TRANS-2 The project owner shall restore all public roads, easements, and rights-of-way that have been damaged due to project-related construction activities ~~to original or near-original condition in a timely manner~~ to the satisfaction of the regulating agency.

Prior to the start of site mobilization, the project owner shall consult with the County of San Luis Obispo and Caltrans and notify them of the proposed schedule for project construction. The purpose of this notification is to request that the local jurisdiction and Caltrans consider postponement of public right-of-way repair or improvement activities in areas affected by project construction until construction is completed and to coordinate with the project owner regarding any concurrent construction-related activities that are planned or in progress and cannot be postponed (Applicant shall coordinate with Caltrans and San Luis Obispo County on an ongoing basis to ensure other projects contributing to traffic on SR-58, Bitterwater Road, Bitterwater Valley Road, San Juan Road and Shell Creek Road during the same time frame as the CESF would contribute to the repair of damaged rights of way).

TRANS-3 The project owner shall coordinate with CPM to ensure that all access driveways to the CESF site and construction laydown area are at least 30 feet wide to facilitate safe turning movements for trucks into these areas and that all project access gates shall be setback a minimum of 75-feet from the nearest edge of pavement of State Route 58.