



# DOCKET

## 08-AFC-12

DATE May 20 2009

RECD. May 20 2009

May 20, 2009

Ms. Melissa Jones  
Executive Director  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

Subject: San Joaquin Solar 1 LLC and San Joaquin Solar 2 LLC  
Fresno County, California 08-AFC-12

Dear Ms. Jones:

In accordance with the provisions of Title 20, California Code of Regulations, URS Corporation (URS), on behalf of San Joaquin Solar 1 LLC and San Joaquin Solar 2 LLC, hereby submits this Supplemental Information to 08-AFC-12 in response to the CEC Staff Data Request Set #1.

Submitted under this cover are responses to 28 data requests from the CEC Staff Data Request Set #1. Objections to nine data requests are being submitted under separate cover with today's date. Additionally, the applicant's Project Status Report is being submitted today under separate cover. Another submittal will be filed on June 1, 2009 (30 days after receipt of the data request) to respond to 62 additional data requests.

The applicant respectfully requests additional time, beyond the 30-day period from when the CEC Staff Data Request Set #1 was docketed, to respond to the remaining data requests. We request an extension until July 15, 2009 to respond to all of the CEC Staff Data Request Set #1. The applicant will make every possible effort to submit these responses as soon as possible. The attached table presents the requested schedule of data response.

I hereby attest, under penalty of perjury, that the contents of this Supplemental Information are truthful and accurate to the best of my knowledge.

Sincerely,

URS CORPORATION

Anne Runnalls  
Project Manager

AR:ml



Ms. Melissa Jones  
Executive Director  
California Energy Commission  
May 20, 2009  
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<b>Data Response Submittal Date</b>	<b>Data request number from Set #1</b>
May 20, 2009	7, 37, 38, 39, 40, 52, 75, 84, 89, 91, 93-96, 100, 105, 114-118, 126-130, 132, 141, 142
May 20, 2009	Objections to 8-13, 24, 143, 144
June 1, 2009	17, 21-23, 25-27, 29-31, 36, 39, 42, 43, 53-71, 76, 77, 83, 85, 86, 90, 92, 97, 101, 119-125, 131, 133-140, 145-148
July 15, 2009	1-6, 14-16, 18-20, 28, 32-35, 41, 44-51, 72-74, 78-82, 87, 88, 98, 99, 102-104, 106-113

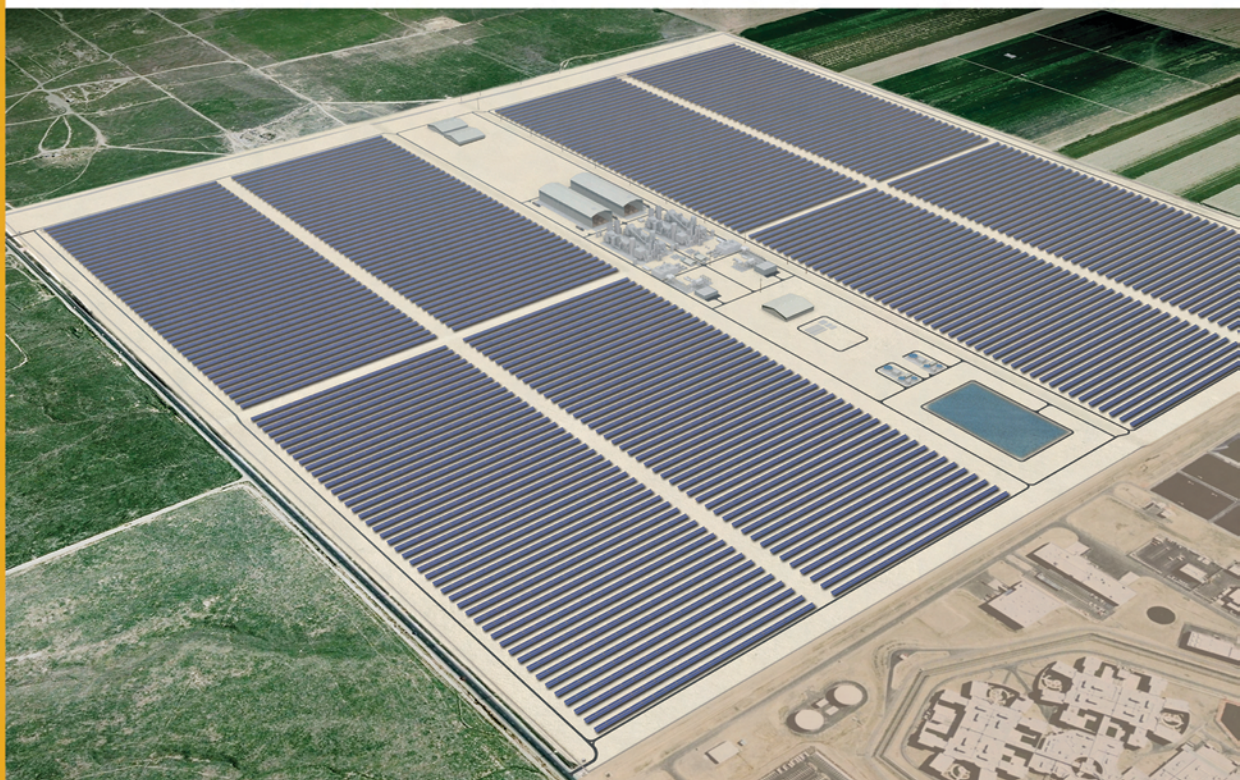
**MAY 20, 2009**

# **San Joaquin Solar 1 & 2 Hybrid Project**

**Initial Response to CEC Data Request**

**Set #1, 08-AFC-12**

**Submitted to:  
California Energy  
Commission**



**Submitted by:**

**MARTIFER**

**RENEWABLES SOLAR THERMAL**

**With Support from:**

**URS**



**San Joaquin Solar 1 & 2 Hybrid Project  
Supplemental Information  
In Response to CEC Data Request Set #1  
08-AFC-12**

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**TECHNICAL AREA: AIR QUALITY**

**Data Request 7:** Please confirm that cow manure would not be used as a fuel in the proposed project.

**Response:** Cow manure will not be used as any portion of the proposed fuel mix.

**San Joaquin Solar 1 & 2 Hybrid Project  
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**TECHNICAL AREA: BIOLOGY**

**Data Request 37:** Please provide a detailed report of the rare plant and BNLL surveys, including methodology, survey areas, results, and names/credentials of biologists involved in the field surveys. If surveys have not been conducted, please provide a status report and schedule for completion.

**Response:** The rare plant and BNLL surveys are ongoing at this time. The final of three rare plant survey visits will occur during the week of May 18, 2009. No rare plants have been detected at this time. Twelve adult BNLL surveys will occur along the transmission line route within non-agricultural lands during the months of May, June, and July, ending by July 15, 2009. Five juvenile BNLL surveys will be completed between August 1 and September 15, 2009. A report will be provided in October after completion of the BNLL surveys. If any special-status species are detected the location will be reported to CEC and CDFG.

**Data Request 38:** Please provide copies of California Natural Diversity Database (CNDDB) field survey forms for any special-status species, including the BNLL, observed at the California Department of Fish and Game (CDFG) Pleasant Valley Ecological Reserve in June 2008. These should also be submitted to CDFG for incorporation into the CNDDB.

**Response:** A field survey form was provided to CNDDB on May 6, 2009. A copy of this form is attached (next page).



*For Office Use Only*

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

**Date of Field Work (mm/dd/yyyy):** \_\_\_\_\_

## California Native Species Field Survey Form

**Scientific Name:** \_\_\_\_\_

**Common Name:** \_\_\_\_\_

**Species Found?** ☐ Yes ☐ No \_\_\_\_\_  
If not, why? \_\_\_\_\_

Total No. Individuals \_\_\_\_\_ Subsequent Visit? ☐ yes ☐ no

**Is this an existing NDDDB occurrence?** ☐ Yes, Occ. # \_\_\_\_\_ ☐ no ☐ unk.

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

**Reporter:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

### Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

### Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown
<input type="radio"/> breeding	<input type="radio"/> wintering	<input type="radio"/> burrow site	<input type="radio"/> rookery	<input type="radio"/> nesting
				<input type="radio"/> other

### Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: \_\_\_\_\_ Landowner / Mgr.: \_\_\_\_\_

Quad Name: \_\_\_\_\_ Elevation: \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H M S GPS Make & Model \_\_\_\_\_

**DATUM:** NAD27 NAD83 WGS84 Horizontal Accuracy \_\_\_\_\_ meters/feet

**Coordinate System:** UTM Zone 10 UTM Zone 11 **OR** Geographic (Latitude & Longitude)

**Coordinates:** \_\_\_\_\_

### Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Other rare taxa seen at THIS site on THIS date:  
(separate form preferred)

**Site Information** Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: \_\_\_\_\_

Visible disturbances: \_\_\_\_\_

Threats: \_\_\_\_\_

Comments: \_\_\_\_\_

### Determination: (check one or more, and fill in blanks)

Keyed (cite reference): \_\_\_\_\_

Compared with specimen housed at: \_\_\_\_\_

Compared with photo / drawing in: \_\_\_\_\_

By another person (name): \_\_\_\_\_

Other: \_\_\_\_\_

### Photographs: (check one or more) Slide Print Digital

Plant / animal

Habitat

Diagnostic feature

May we obtain duplicates at our expense? yes no

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**Data Request 39:**

Please provide any supporting documents (letter or record of conversation) that result from communication with USFWS and CDFG regarding potential impacts to state and/or federally protected species. Communication should be focused on:

A. Permits required for the project (*i.e.*, Incidental Take Permits), the steps the applicant has taken, a description of the process (*i.e.*, Section 7 or Section 10), and the schedule for obtaining the permits.

B. Any measures likely to be included in the Incidental Take Permits, including offsite habitat compensation and the contacts for purchase of mitigation credits/acreage.

**Response:**

Records of communication were included in the AFC Appendix F. CEC staff has been included in all subsequent email correspondence regarding permits and mitigation.

**Data Request 40:**

Please provide proposed transmission structure locations near Zapato-Chino Creek or an assurance that transmission structures would not be sited within 500-feet of the creek.

**Response:**

The locations of the transmission line poles have not been determined yet.

**Data Request 52:**

If any pipeline routes are proposed through Zapato-Chino Creek, please contact CDFG and RWQCB and provide a summary of their suggested impact avoidance and minimization measures and other mitigation measures.

**Response:**

The water line will not pass through Zapato-Chino Creek; therefore, no impacts will occur to the creek.

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**TECHNICAL AREA: HAZARDOUS MATERIALS**

**Data Request 75:** Please provide the estimated frequency of aqueous ammonia deliveries to the project, the capacity of the tanker trucks that would be used to ship the aqueous ammonia, and the designated transportation route from Interstate-5.

**Response:** The project is estimated to have 257 trucks of ammonia delivered to the site annually. Trucks will make ammonia delivery Monday through Friday. Therefore, there will be approximately one ammonia truck delivery to the project site per day. Each delivery truck has a capacity of 8,000 gallons of ammonia. The ammonia distributor for the project has not yet been determined. Therefore the designated transportation route has not been established. The anticipated route will be on I-5 to West Jayne Avenue.



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**TECHNICAL AREA: SOCIOECONOMICS**

**Data Request 75:**

Because a Williamson Act Contract is the legal document that obligates the property owner, and any successors of interest, to the contract's enforceable restrictions, please provide documentation that the Fresno County Board of Supervisors (or the Housing and Community Development Department) adopted (or approved) the project site as an Enterprise Zone.

**Response:**

Documentation from the Fresno County Board of Supervisors is presented in the following pages.



## Agenda Item

# 37

DATE: December 9, 2008

TO: Board of Supervisors

FROM: John Navarrete, Interim County Administrative Officer *for*

SUBJECT: Resolution in support of the proposed expansion of the Fresno County Regional Enterprise Zone (Phases IV and V)

### RECOMMENDED ACTION:

Approve resolution in support of the addition of industrial and commercial areas from the City of Coalinga and fourteen Fresno County business applications to expand the Fresno County Enterprise Zone.

### ALTERNATIVE ACTION:

This agenda item is consistent with your Board's support to expand the benefits of the Fresno County Enterprise Zone Program to as many businesses as possible. No other alternatives have been considered.

### FISCAL IMPACT:

The City of Coalinga has paid its proportional share for the processing of this Enterprise Zone expansion application (\$600.00) and each business application has paid a base fee of \$289.56 previously approved by your Board. Total funds received from these applications are \$6,338.36. The Enterprise Zone Advisory Board has allowed the County of Fresno to retain these funds for reimbursement of the expenses related to these applications.

### IMPACTS ON JOB CREATION:

The expansion of the Fresno County Enterprise Zone enhances the opportunities to increase the creation of jobs in Fresno County.

ADMINISTRATIVE OFFICE REVIEW

BOARD ACTION: DATE

December 9, 2008

APPROVED AS RECOMMENDED

X

Page 1 of 2

OTHER



Official Action of  
Board of Supervisors

Deputy

UNANIMOUS

X

ANDERSON

CASE

LARSON

PEREA

WATERSTON

**DISCUSSION:**

The City of Coalinga has submitted a request to the Enterprise Zone Advisory Board to add certain commercial and industrial areas that had been previously excluded from the current boundaries of the Fresno County Enterprise Zone. This application also contains certain technical corrections to include only areas zoned industrial and commercial. Additionally, County staff has received fourteen applications from existing and proposed businesses located in various locations in Fresno County. These businesses would like to join the Fresno County Enterprise Zone Program. Attachment 1 provides a resolution recommended for approval by your Board. Exhibits A and B provide maps of the industrial and commercial areas proposed for inclusion by the City of Coalinga and the fourteen businesses requesting to be added to the Enterprise Zone.

According to regulations of the California Department of Housing and Community Development Department, the addition of territory to the Enterprise Zone require that each member of the zone pass a resolution in support of this proposal before it can be forwarded to the California Department of Housing and Community Development. The Fresno County Enterprise Zone Advisory Board has already approved in concept these expansion proposals.

The Enterprise Zone Advisory Board is comprised of representatives from the thirteen-city members, the County, the Fresno County Workforce Investment Board and the Economic Development Corporation serving Fresno County. The Cities of Clovis and Fresno currently serve as ex-officio members.

The original boundaries of the Fresno County Enterprise Zone included 174,725.74 acres. Under State of California rules, the Zone is entitled to a 15% expansion or the possible addition of 26,208.86 acres. So far, the State has approved the addition of territory in Phases I and II (Coalinga, Huron and Kingsburg). The approval of Phase III with the City of Clovis is pending approval (Approval should be coming before the end of 2008). The current size of the Fresno County Enterprise Zone is 184,373.42 acres. There are 16,561.19 acres available for future expansions.

The City of Clovis is proposing to add 1,582 acres of industrial and commercial territory to the enterprise zone. Phases IV and V would add 710.80 acres to the boundaries of the Enterprise Zone.

The proposed additions/changes by the City of Coalinga and the fourteen new business applications broadens the job opportunities to participants of the Enterprise Zone Program by making available tax incentives to more industrial and commercial businesses in Fresno County. After the councils of all participating cities and the Board of Supervisors have passed resolutions in support of this EZ expansion proposal, this application will be forwarded to the California Department of Housing and Community Development for approval consideration.

**OTHER REVIEWING AGENCIES:**

The State of California's Housing and Community Development Department makes the final determination whether territory of a new city or county territory can be added to the enterprise Zone.

BEFORE THE BOARD OF SUPERVISORS  
OF THE  
COUNTY OF FRESNO, STATE OF CALIFORNIA

IN THE MATTER OF AUTHORIZING THE SUBMITTAL ) RESOLUTION  
OF EXPANSION PROPOSALS PHASES IV AND V )  
TO THE CALIFORNIA DEPARTMENT OF HOUSING )  
AND COMMUNITY DEVELOPMENT )

WHEREAS, Effective June 27, 2007 the County of Fresno, the Cities Firebaugh, Fowler, Kerman, Orange Cove, Mendota, Parlier, Reedley, San Joaquin, Sanger and Selma received official designation as a California Enterprise Zone by the California Department of Housing and Community Development (the Department).

WHEREAS, effective January 6, 2008 the California Department of Housing and Community Development Department approved Phases I and II. Phase I Expansion Proposal included commercial areas located in unincorporated Fresno County, and Phase II included the addition of unincorporated territory and areas from the Cities of Kingsburg, Coalinga and Huron ; and

WHEREAS, the California Department of Housing and Community Development Department is currently reviewing the proposed addition to the Fresno County Enterprise Zone (Phase III) of industrial and commercial areas located in the City of Clovis;

WHEREAS the City of Coalinga would like to add certain commercial and industrial areas previously not included within the boundaries of the Fresno County Enterprise Zone and some technical corrections are necessary to areas located in its vicinity;

WHEREAS fourteen existing and proposed businesses located throughout Fresno County have applied to join the Fresno County Enterprise Zone;

WHEREAS, the Fresno County Enterprise Zone Advisory Board has reviewed and approved the inclusion of industrial and commercial areas located in and around the City of Coalinga and other parts of Fresno County as depicted on maps of Exhibits A and B; and

1 WHEREAS, the County of Fresno as the lead agency and the Fresno County  
2 Enterprise Zone Manager will submit this application on behalf of all the participating cities;

3 WHEREAS, the expansion of the Fresno County Enterprise Zone enhances the  
4 opportunities to increase the creation of jobs in Fresno County and improve the quality of  
5 life of its residents; and

6 WHEREAS, the City of Coalinga and all participating jurisdictions commits to provide  
7 incentives equivalent to other Fresno County Enterprise Zone authorized cities and the  
8 County of Fresno, to include but not limited, Enterprise Zone targeted fee reductions,  
9 reduce permit processing time, appropriately designated business grant or loan programs  
10 and the expansion of local infrastructure and industrial park availability; and

11 WHEREAS, the City of Coalinga and all participating agencies authorize and  
12 supports job development, job creation, and economic development;

13 NOW, THEREFORE, BE IT RESOLVED by the Fresno County Board of  
14 Supervisors that the Board approves the submittal of this Phases IV and V Enterprise  
15 Zone expansion application, including the attached maps with the proposed City of  
16 Coalinga additions/changes, and fourteen business applications to the California  
17 Department of Housing and Community Development by the Fresno County Enterprise  
18 Zone Manager.

19 Passed, approved and adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2008.  
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1 THE FOREGOING was passed and adopted by the following vote of the  
2 Board of Supervisors of the County of Fresno this 9<sup>th</sup> day of December, to-wit:

3 AYES: Supervisors Larson, Case, Anderson, Waterston, Perea

4 NOES: None

5 ABSENT: None

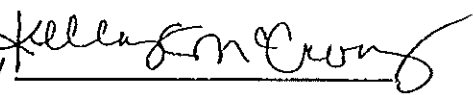
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CHAIRMAN, Board of Supervisors

10  
11  
12 ATTEST:

13 BERNICE E. SEIDEL

14 Clerk, Board of Supervisors

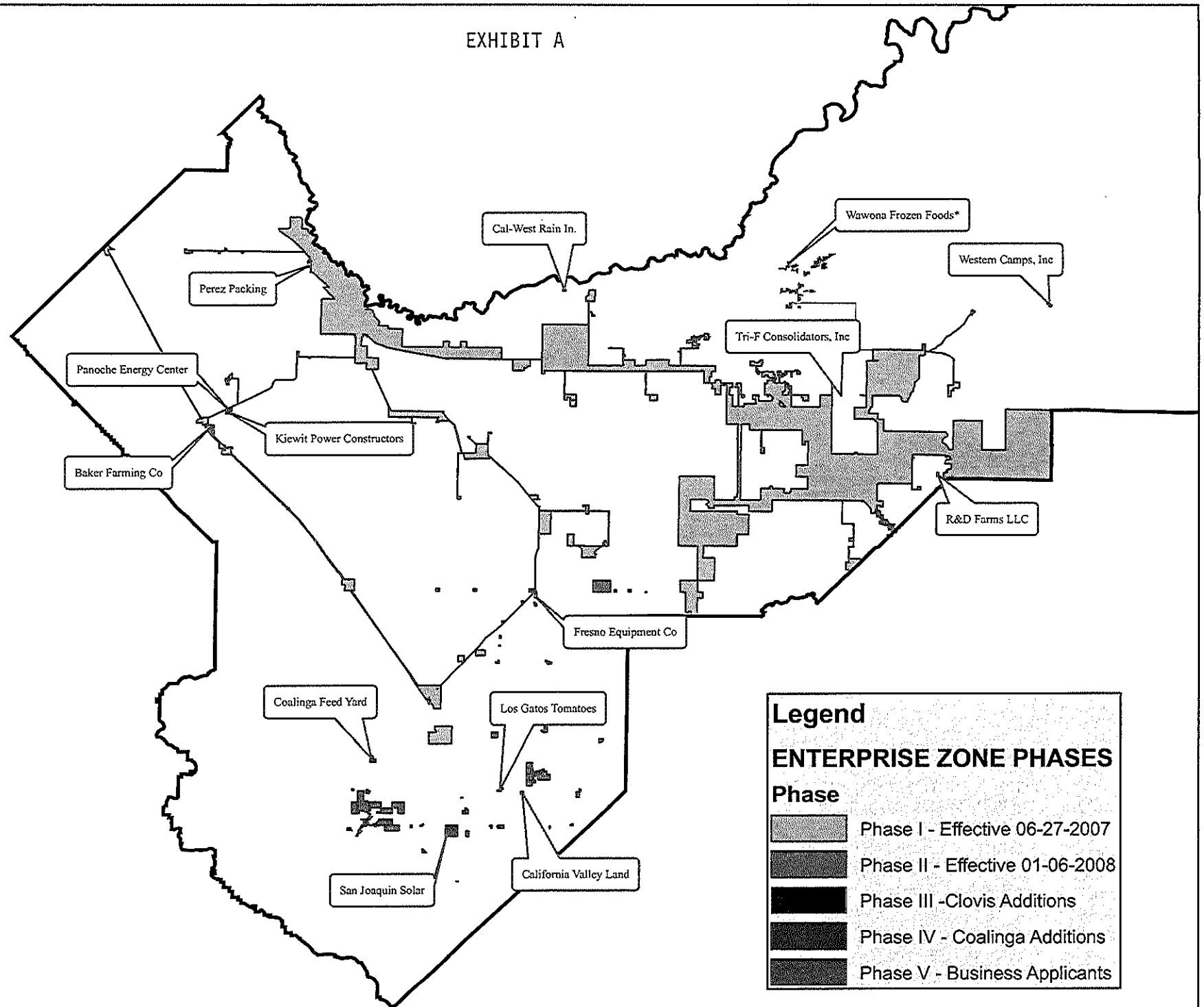
15  
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17 By   
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Deputy

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21 Resolution #08-512

22 Item #37  
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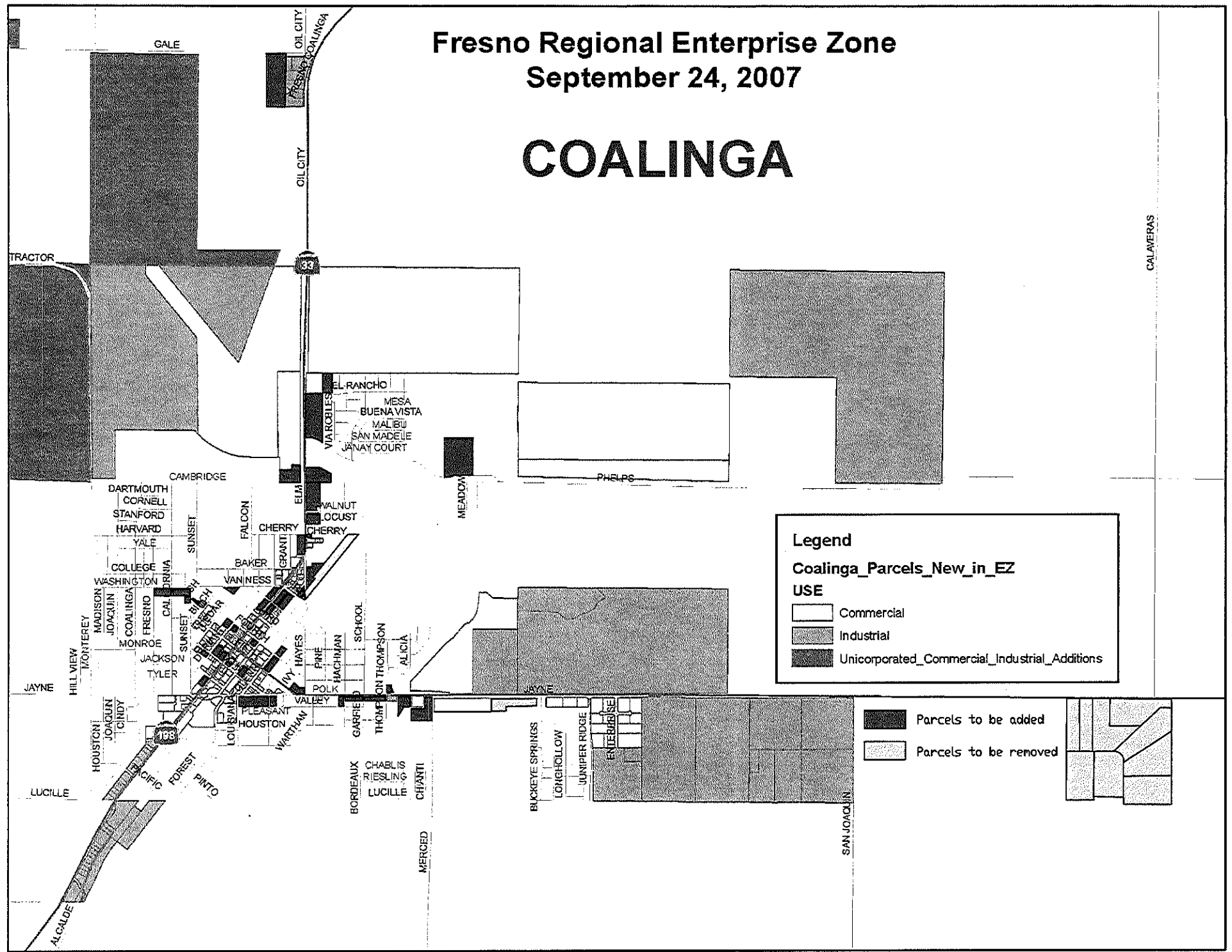
# EXHIBIT A





**Fresno Regional Enterprise Zone  
September 24, 2007**

# COALINGA



**San Joaquin Solar 1 & 2 Hybrid Project  
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**TECHNICAL AREA: WATER AND SOILS**

**Data Request 89:** Please provide a description of the methodology proposed if Caltrans requires a subsurface crossing of I-5 by the transmission line. This description shall provide the excavation and boring method, address soil and water management, erosion control, and provide a contingency plan in the event that groundwater is encountered.

**Response:** It is currently anticipated that a subsurface crossing of I-5 will not be necessary for the transmission line.

**Data Request 91** Please provide the proposed mirror washing schedule, including the frequency, duration, and quantity of water that would be used.

**Response:** Mirror washing will occur nightly, five days per week. Each solar field will use one truck per solar field for a total of two water trucks. Each truck will operate 12 hours using 2500 gallons per day, for a total of 5000 gallons per day.

**San Joaquin Solar 1 & 2 Hybrid Project**  
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**Data Request 93:** Please describe how vegetation would be managed, including treatment of noxious and invasive species, beneath the mirrors.

**Response:** General site monitoring of the operating facility will be conducted by grounds personnel on an ongoing basis. Vegetation and weed control will be conducted, as needed, by grounds personnel, at a minimum of every other week during the growing season (March through August), and once a month otherwise. Grounds personnel will be trained to identify weedy and native species.

Vegetation management, including treatment of noxious and invasive species may include both physical control and herbicides.

The type of physical control method employed will depend upon the size and extent of vegetation and weed species targeted for removal as well as the root structures of these plants. Physical control methods range from manual hand pulling of weeds to the use of hand tools to provide enough leverage to pull out the entire plant and associated root systems. In small areas, hoeing and weed whipping may be employed to control weeds.

Herbicide application is a widely employed, effective control method for removing invasive weed species. Prior to application of herbicide, the required permits from state and local authorities will be obtained. Herbicides will be applied in accordance with applicable laws, regulations, and permit stipulations. Only herbicides approved by the State of California will be used within or the project site.

**Data Request 94:** Please describe the chemical constituents and their concentration in the water that would be used to wash the mirrors.

**Response:** Washwater is boiler feed water quality. It is demineralized water with no chemical constituents.

**Data Request 95:** Please discuss how wastewater from the mirror washing would be managed.

**Response:** Most of the washwater will evaporate from the reflector surface upon application with only a small fraction falling to the ground surface where it will evaporate. Therefore there is no planned wastewater system or stream anticipated for managing the incidental amount of washwater that reaches the ground surface.

**San Joaquin Solar 1 & 2 Hybrid Project**  
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**In Response to CEC Data Request Set #1**  
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**Data Request 96:**

Please describe the specific chemicals compositions of any herbicides, dust suppressors, or soil stabilizers that would be used by the project.

**Response:**     Dust Suppressors and Soil Stabilizers

Currently it is not anticipated that the project will utilize dust suppressant chemicals for road and soil stabilization. Fly ash (by-product from the biomass facility) may be utilized for soil stabilization onsite.

Herbicides

At this time the use of herbicides has not been determined for the project. If herbicides are used in conjunction with physical vegetation and weed control, the following response provides a general characterization of herbicides and chemical constituents.

Herbicides are characterized by the way in which they inhibit plant growth. Herbicides are characterized as pre-emergent, post-emergent, selective and nonselective. A pre-emergent herbicide controls un-germinated seeds by inhibiting germination while a post-emergent herbicide is lethal to emerged plants. Some herbicides have both pre- and post-emergent activity. A selective herbicide will be active on some species of plants and not others, usually distinguishing between grasses (monocots) and broadleaf plants (dicots). A non-selective herbicide is one that is lethal to any plant species to which it is applied.

Pre-emergent herbicides inhibit germination of annuals from seed, but generally do not control perennial plants that germinate from bulbs, corms, rhizomes, stolens, or other vegetative structures. Common pre-emergent herbicide classes include the following:

- Dinitroaniline Type: Examples of this class are pendimethalin (Weedgrass™), trifluralin (Treflan™), benefin (Balan™), and combinations of these. These herbicides provide for pre-emergence control of annual grasses and other annuals. These herbicides need to be watered into the soil for proper activation. Some can persist for several months.
- Dithiopyr (Dimension™) belongs to a new class of herbicide known as pyridines. It is a selective herbicide primarily used for pre-emergence annual grass control in established turfgrass. However, it can be used for post-emergence control of young grass seedlings. Dithiopyr is lost from soil by chemical and microbial degradation.

The most commonly used post-emergent, non-selective herbicides contain a family of chemicals called glyphosates (N-[phosphonomethyl] glycine). Glyphosate (Rodeo™, Roundup™, and Accord™) is a non-selective, systemic herbicide that is effective on many annual and perennial plants.

The United States Environmental Protection Agency has deemed glyphosate to have a relatively low degree of oral and dermal acute toxicity. It is considered to be immobile in soil and readily degraded by soil microbes to the metabolite aminomethyl phosphonic acid and then to carbon dioxide. EPA states that it is minimally toxic to birds, fish, aquatic invertebrates, and honeybees.

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**Data Request 100:** Please discuss whether the intent is to provide groundwater for both phases of the project if recycled water does not become available in accordance with the anticipated schedule for development of the WWTP.

**Response:** Groundwater would be used for both phases of the project (construction and operation) if recycled water does not become available in accordance with the anticipated schedule for development of the WWTP.

**Data Request 105:** Please provide the projected total volume of recycled water that would be produced by the City of Coalinga's WWTP during the first 10 years of the proposed power plant's operation and provide a copy of the source of that information.

**Response:** According to the City of Coalinga Wastewater Treatment Plant Final Program EIR, dated April 2006, the existing City WWTP was operating at an average daily flow of 0.93 million gallons per day (mgd) in 2005. The proposed WWTP is not currently constructed. Conservatively assuming the 2005 average daily flow rate of 0.93 mgd applies for the first 10 years of the proposed SJS 1&2 project's operation, this would result in a total volume of 3.4 billion gallons (0.93 mgd x 365 days/year x 10 years = 3394.5 million gallons), or about 10,400 acre-feet. It is likely that the total volume of recycled water produced by the WWTP over the first 10 year of operation of SJS 1&2 will exceed this amount assuming population growth will increase the WWTPs effluent.

The City of Coalinga 2005 Sewer System Master Plan provides information on current and projected wastewater flows from the City of Coalinga's WWTP. Information from the 2005 Sewer System Master Plan is provided in the City of Coalinga Wastewater Treatment Plant Final Program EIR in Table III-1, and is provided below.

City of Coalinga Estimated Population and Sewer Flows

Year	Estimated Population	Projected Wastewater Flow (mgd) @ 90 gallons per day per capita (gpcpd)
2005	14,057	1.27
2010	16,855	1.52
2015	19,540	1.76
2020	22,652	2.04
2025	22,260	2.36

Using the average of projected flows provided in the table above for the years 2010 through 2020 (approximately 1.75 mgd), the total estimated volume of recycled water that could be provided to SJS 1&2 would be approximately 6.4 billion gallons (1.75 mgd x 365 days/year x 10 years = 6387.5 mgd), or about 19,600 acre-feet.

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**TECHNICAL AREA: TRAFFIC**

**Data Request 114:** Please provide the basis for the fraction of daily trips assumption. Also discuss the affects of daily trips on roadway capacity, flow and Average Daily Trips (ADT).

**Response:** The daily trips were shown at 100 percent in the project construction (Table 5.11-5) and operations (Table 5.11-6) trip generation tables. During the preparation of the traffic analysis, there was no detailed breakdown provided on peak hour worker commute, in order to evaluate a worst case analysis scenario, it was conservatively assumed that 2/3rds of the workers would commute during the 7-9 AM and 4-6 PM peak hours respectively. Typically workers arrive and leave project sites before the 7-9 AM and 4-6 PM work sites, therefore the assumption used was conservative.

Daily trips will be spread throughout the day and consistent with the findings from the peak hour traffic analysis, there is sufficient roadway capacity to handle daily traffic flow during both project construction and operations.

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**Data Request 115:** Please provide data regarding peak hour LOS for I-5. If data is not available to present peak hour LOS, please provide assumptions and describe methodology for establishing peak hour LOS.

**Response:** Consistent with the Freeway Segment Analysis Procedure of the Highway Capacity Manual, the Peak Hour LOS was derived from the Caltrans Traffic Count Database peak hour directional volume and peak hour project added traffic. The result of the peak hour analysis shows that the I-5 freeway study segment will operate at LOS D or better on all traffic analysis scenarios described below.

**Peak Roadway Segment LOS  
Year 2010 No Project Conditions**

Roadway	Segment	Cross-Section Classification	Peak Hour Traffic Volume <sup>1</sup>	Peak Hour Level of Service (LOS) <sup>2</sup>
Existing Conditions				
I-5 Freeway	Kings/Fresno County Line to RTE 198 (North of W Jayne Avenue)	4-Lane Freeway	2359 / 2640	C / C
Year 2010 No Project Conditions				
I-5 Freeway	Kings/Fresno County Line to RTE 198 (North of W Jayne Avenue)	4-Lane Freeway	2595 / 2904	C / D
Year 2010 Peak Project Construction Conditions				
I-5 Freeway	Kings/Fresno County Line to RTE 198 (North of W Jayne Avenue)	4-Lane Freeway	2722 / 2906	C / D
Year 2011 No Project Conditions				
I-5 Freeway	Kings/Fresno County Line to RTE 198 (North of W Jayne Avenue)	4-Lane Freeway	2666 / 2983	C / D
Year 2011 Project Operations Conditions				
I-5 Freeway	Kings/Fresno County Line to RTE 198 (North of W Jayne Avenue)	4-Lane Freeway	2697 / 3010	C / D

Note: Highest Peak Project Added Directional Volume was added to Peak Directional Base Traffic (NB I-5, north of Jayne Avenue)

<sup>1</sup>AM / PM Peak Hour Volume

<sup>2</sup>AM / PM Peak Hour LOS



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**Data Request 116:** Please provide school bus routes and schedules and discussion on the potential impacts during construction and operation to school bus transportation.

**Response:** According to Coalinga-Huron Unified School District Transportation staff, there are no existing pick-up and drop-off points along Jayne Avenue near the vicinity of the project site. The school bus route does pas by the project site during the morning and afternoon transport of students from the community of Huron to Coalinga and vice versa. In the morning, school buses travel from Huron between 7:00-7:30 AM and in the afternoon, the buses travel from Coalinga between 3:15-4:00 PM. The study roadway (Jayne Avenue) and intersections along Jayne Avenue have sufficient capacity to handle project construction and operation traffic, therefore no impacts to the school bus route via Jayne Avenue is anticipated.

**Data Request 117:** Please provide documentation or correspondence demonstrating coordination with Caltrans for transmission lines crossing I-5. In addition, please indicate whether the transmission line would cross over or under the Caltrans right of way (ROW).

**Response:** URS has contacted Caltrans staff concerning the transmission line crossing and was directed to develop an encroachment permit application for a freeway aerial crossing (Permit Code UF). The encroachment permit application is being finalized and will be submitted to CalTrans District 6 shortly. Transmission support structures for the aerial crossing will be located on private property, not in the Caltrans ROW.

**Data Request 118:** Please provide discussion regarding potential of glint/glare and plumes to impact crop dusting activities.

**Response:** According to the findings of the Glare and Glint Study (AFC Appendix L, Pages 2-3), "beyond the focal length of the SCA (approximately 5 feet), beam intensity decreases and by 10' from the SCA, beam intensity is the equivalent of the incident solar intensity," and "the risk to passing planes is considered to be negligible". Therefore, there is no anticipated impact to crop dusting activities. The project site is located in an arid environment, ideal for solar energy, so plume formation will be minimal. Additionally, the pieces of equipment likely to occasionally produce a plume (the cooling towers and the biomass facility stack) are located in the center of the project site. They are located approximately ½ mile from the project boundary where no crop dusting planes should be flying low enough to be impacted by plumes.

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**TECHNICAL AREA: VISUAL**

**Data Request 126:**

A. Please prepare a photo simulation of the transmission line crossing of the I-5 vicinity from a Key Observation Point (KOP) located within the Fresno County scenic highway corridor of I-5. The KOP should be located where the transmission line crossing (and any associated structures), would be most visible to I-5 travelers.

B. Given the potential for an underground placement of the I-5 crossing of the transmission line, please provide a photo simulation of the transmission area from above ground to underground.

**Response:**

A. A KOP for travelers along I-5 was not selected with the concurrence of CEC siting staff, due to (1) likely traveler inability to distinguish the presence of an additional transmission line crossing at that location, as well as (2) short viewing durations of the Project's transmission line.

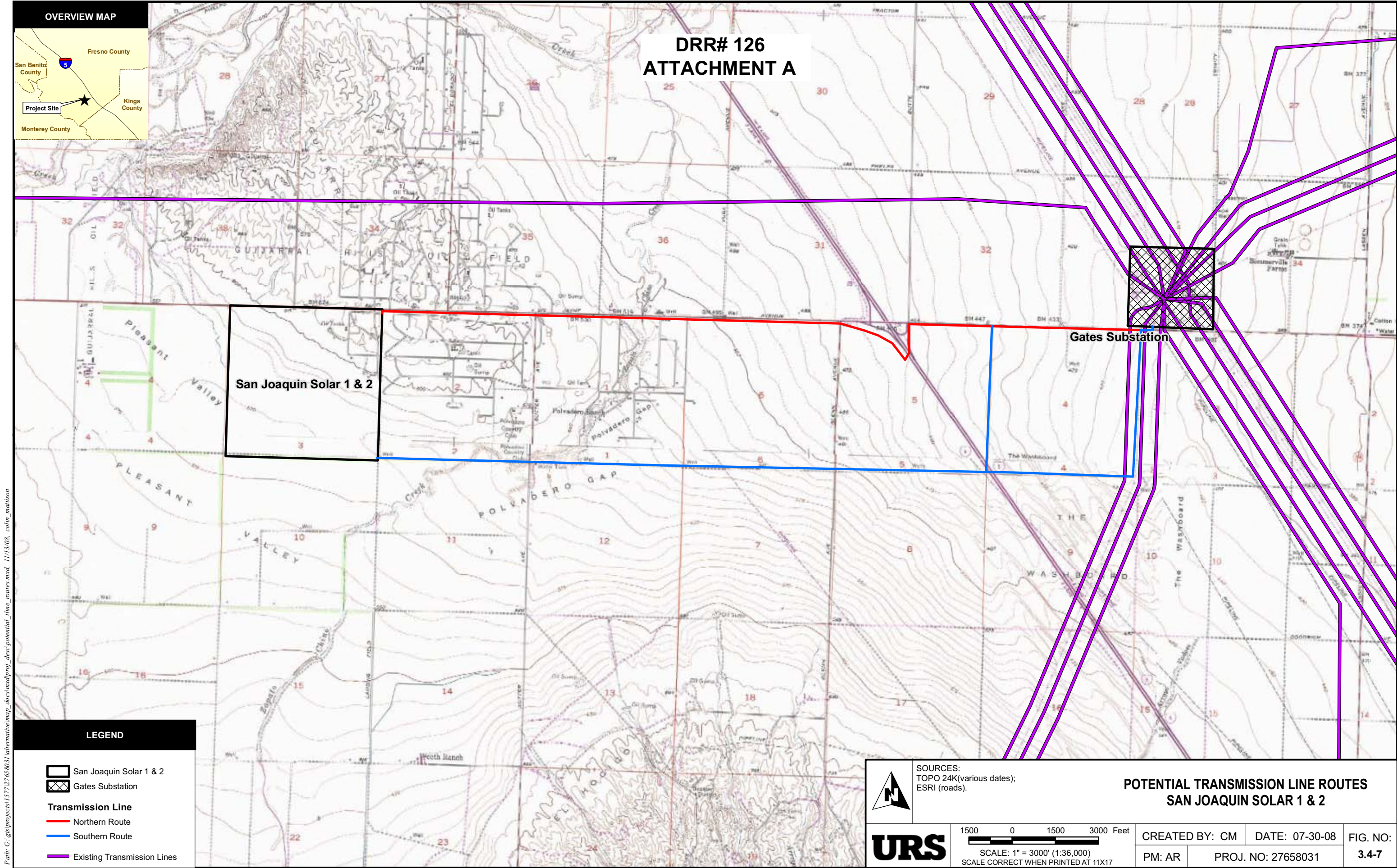
(1) There are numerous existing transmission lines currently crossing I-5 both north and south of the Project's proposed transmission line (see Attachment A, next page) which reduces viewer sensitivity to the presence of additional overhead transmission lines in the area.

(2) Viewer is traveling at a high rate of speed perpendicular to Project transmission line, which provides for short viewing durations, reduces visibility and sensitivity.

KOP#4 was selected to represent worst-case, and/or the most unobscured and longest duration, views to the proposed transmission line route and interconnection for travelers along West Jayne Avenue and in the Project area. For this KOP, the viewer is traveling parallel to the proposed transmission line which provides for longer viewing durations in comparison to a perpendicular traveler. KOP#4 is representative of travelers and how they would view an additional transmission line. For these reasons, and per URS coordination with Mark Hamblin in June and July of last year (06/2008-07/2008), a KOP depicting the Project's transmission line crossing of I-5 is not necessary to assess the visual impacts of this project.

B. As discussed in Section 3.0, Project Description, of the AFC, the two potential transmission line routes that have been identified (see Figure 3.4-7) include overhead lines. The Project's transmission line is proposed to cross over I-5 as proposed in the AFC. The applicant has not amended the AFC Project description to conduct another action.







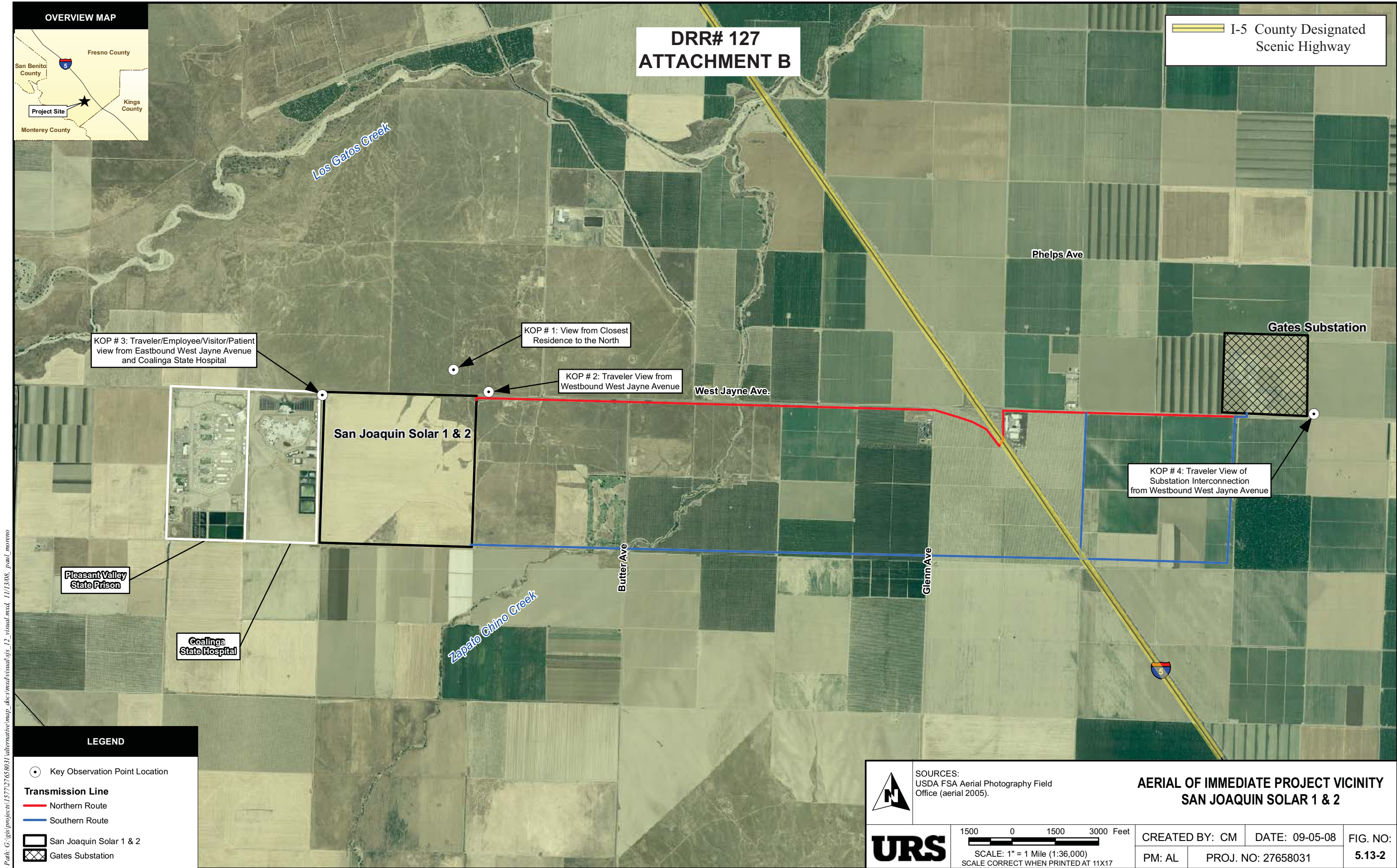
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**Data Request 127:** Please describe the existing visual condition and analyze the visual effects associated with the new KOP consistent with the analysis of other KOPs in the AFC, including an evaluation of consistency with laws, ordinances, regulations and standards (LORS), and mitigation measures. Please provide a revised Figure 5.13-2 that shows the location of the new KOP and highlight the County scenic highway segment of I-5.

**Response:** Based on the responses to Data Request #126, no new KOPs have been prepared. According to the Conservation and Open Space Element of the County of Fresno General Plan (*October 2000, page 5-36*), the entire length of I-5 within Fresno County is a Fresno County Designated Scenic Highway. Figure 5.13-2 has been revised to highlight the length of I-5 shown in the figure. See Attachment B, next page.





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**Data Request 128:** Please discuss the potential visual effects of the project on residents of the state hospital, and if there is the potential for significant effects, prepare a photo simulation from an east-facing window of the hospital that would be representative of the potential project effects.

**Response:** Per a telephone conversation with Deborah Ireland, a representative at Coalinga State Hospital on 5/7/2009, the eastern buildings of the Coalinga State Hospital (located adjacent to the western Project boundary), consist of an administration building and warehouse buildings. There are no general public viewers or resident viewers in the eastern buildings of the hospital facility. Further, KOP #3 provided in the AFC, is intended to depict worst-case eastbound West Jayne Avenue traveler views as well as employee, visitor, and resident views from Coalinga State Hospital. Therefore, a photo simulation from an east-facing window of the hospital has not been prepared.

**Data Request 129:** A similar discussion of the effects of late afternoon glint and glare on locations to the west is needed.

**Response:** In the afternoon after sunset, the collectors rotate back to the stow position facing east, there is no stow position facing west. Therefore, while potential glint/glare from the mirrors may be visible to adjacent areas to the east in the morning, glint/glare from the mirrors to adjacent areas to the west in the evening is not expected to occur.

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**Data Request 130:** Please discuss the types of activities that could occur within 60 feet of the project fence, and the types of users that could have access to the area within 60 feet of the project fence. Please explain to what degree the privacy slats would block out potentially harmful beams.

**Response:** A description of the activities that could occur within 60 feet of the project fence, and the types of users that could have access to the area within 60 feet of the project fence is provided below:

60 feet from the northern Project boundary:

West Jayne Avenue is located along the northern Project boundary. There are no pedestrian sidewalks or bicycle lanes along the eastbound or westbound alignments of West Jayne Avenue north of the Project site. Therefore, no pedestrians are anticipated to be within 60 feet of the northern Project boundary.

60 feet from the eastern and southern Project boundaries:

The land uses adjacent to the south and east of the Project site consist of agricultural/farming uses. Immediately outside the Project fence to the south and east are private, dirt agricultural roads and agricultural fields. There are no pedestrian sidewalks outside the eastern or southern Project fenceline. Therefore, no pedestrians are anticipated to be within 60 feet of the eastern or southern Project boundary.

60 feet from the western Project boundary:

The closest building to the west of the Project site is approximately 120 feet from the site fence line. An existing dirt area is found immediately outside the western Project fence, and an approximately 30-foot paved access/maintenance road for the Coalinga State Hospital is located beyond the dirt area. This area does not have public access. No pedestrians are anticipated to be within 60 feet of the western Project boundary.

**Data Request 132:** Describe in text, or with drawings, mitigation measures that would be needed to protect the human eye from unsafe levels of beam intensity.

**Response:** According to the Glint and Glare Study, provided as Appendix L in the AFC, the Project will install privacy slats in the perimeter fence as a mitigation measure to ensure that pedestrians outside of the plant perimeter fence to the east, or west are not exposed to unsafe glint or glare from the Project. However, as discussed in Data Request response #131, there is no public use of the areas immediately to the east or west of the site, and no pedestrians are anticipated to be within 60 feet of the eastern or western Project boundary.



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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 141:** Please indicate whether the county of Fresno operates a Construction and Demolition Waste Diversion Program.

**Response:** The Fresno Integrated Waste Management Authority (IWMA) has passed a construction and demolition (C&D) Ordinance. The Ordinance is based on the California Waste Management Act of 1989, Assembly Bill 939, requiring each local jurisdiction in the state to divert fifty percent (50%) of discarded materials from landfill disposal. The C&D ordinance bans the disposal of C&D debris at the American Avenue and Coalinga Landfills except for the following: individual loads consisting of three cubic yards or less; mixed loads where C&D debris represents less than 20 percent of the load; loads containing disaster debris resulting from a locally or federally declared disaster; loads containing more than 50% of C&D debris for which there is no adequate local market infrastructure (as determined by the department of public works and planning); loads that have been pre-processed at a C&D debris processing facility; and loads containing non-friable asbestos that meet county guidelines. (Fresno County Integrated Waste Management Authority website <http://www.ciwmb.ca.gov> and Title 8, Section 8.25 of the Fresno County Ordinance Code).

**Data Request 142:** Please provide information on how the San Joaquin Solar Project will meet each of the requirements of the program cited in the previous data request.

**Response:** During construction, wastes will be separated between recyclable and non-recyclable wastes. Recycling of construction wastes will be done when possible. The management methods are further described in Section 5.14.2.1 Construction, of the project AFC. The project will follow the requirements of diversion from the C&D ordinance with respect to disposal at the American Avenue and Coalinga Landfills.



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
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**APPLICATION FOR CERTIFICATION  
FOR THE *SAN JOAQUIN SOLAR UNITS 1 AND 2*  
*LICENSING PROJECT***

**Docket No. 08-AFC-12**

**PROOF OF SERVICE**

*(Revised 5/14/2009)*

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## **Declaration of Service**

I, Anne Runnalls, declare that on May 20, 2009, I served and filed copies of the attached Initial Response to CEC Data Request Set #1. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [\[http://www.energy.ca.gov/sitingcases/sjsolar/index.html\]](http://www.energy.ca.gov/sitingcases/sjsolar/index.html). The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

*(Check all that Apply)*

**For service to all other parties:**

  X   sent electronically to all email addresses on the Proof of Service list;

       X by personal delivery or by depositing in the United States mail at San Diego, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

**AND**

**For filing with the Energy Commission:**

  X   sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

**OR**

       depositing in the mail an original and 12 paper copies, as follows:

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 08-AFC-12

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Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct.



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Anne Runnalls