



## RESPONSES TO CEC DATA REQUESTS (#113-134)

APPLICATION FOR CERTIFICATION (07-AFC-8)

Carrizo Energy Solar Farm  
Carrizo Energy, LLC

**DOCKET**

**07-AFC-8**

DATE SEP 26 2008

RECD. SEP 29 2008



Submitted to:  
California Energy Commission



Submitted by:  
Carrizo Energy, LLC

With Support from:

**URS**

1615 Murray Canyon Road, Suite 1000  
San Diego, CA 92108

September 2008



September 26, 2008

Mr. John Kessler  
Project Manager  
Attn: Docket No. 07-AFC-8  
California Energy Commission  
1516 Ninth Street, MS-15  
Sacramento, CA 95814-5512

Subject: Carrizo Energy Solar Farm (07-AFC-8)  
Applicant's Responses to CEC Data Requests 113-134  
URS Project No. 27658060.01800

Dear Mr. Kessler:

On behalf of Ausra CA II, LLC (dba Carrizo Energy, LLC), URS Corporation Americas (URS) hereby submits the Applicant's Responses to CEC Data Requests 113-134 (Carrizo Energy Solar Farm 07-AFC-8).

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized to submit the Applicant's Responses to CEC Data Requests 113-134 on behalf of Carrizo Energy, LLC.

Sincerely,

URS CORPORATION

A handwritten signature in black ink, appearing to read "Angela Leiba".

Angela Leiba  
Project Manager

AL:kl

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**Data Request Response Guide**

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**TECHNICAL AREA: BIOLOGICAL RESOURCES**

**Data Request 113:** Establish a GIS database of existing land uses, habitat types, tule elk calving areas, and movement corridors of the focal animal species in the Carrizo Plains (San Joaquin kit fox, pronghorn, and tule elk);

**Response:** SJKF do not have “corridors” per se. They are a territorial species. California Valley is used by SJKF; however, it was not identified in the Recovery Plan for Upland Species of the San Joaquin Valley (USFWS 1998) as a corridor to be maintained (see response to background information, below, and Figure 1). The majority of the California Valley is open and allows for unconstrained wildlife movement. The CESF site is not in an overly constraining location for any of the three species of concern. CDFG data indicate that there are three Highway crossing segments with the one east of the CESF site used by both elk and pronghorn (see Figure 2).

In addition, in reference to the Background information provided by CEC for this Data Request, please note the following: CESF is located in California Valley northeast of the Carrizo Plain National Monument. According to the USFWS Recovery Plan for Upland Species of the San Joaquin Valley, and Figure 1 (attached), the CESF site is not located within: 1) An area along the valley's edges within which a contiguous band of natural lands and wildlife-compatible farmlands should be maintained, 2) Proposed specialty reserve areas, or 3) Proposed areas where connectivity and linkages should be maintained. During radio telemetry surveys, Tule elk were not recorded utilizing the CESF project site, and the GPS/GIS data shows the travel corridor of Tule elk does not cross the CESF project site. Instead they follow a travel corridor further east and north of the site. CDFG data indicate that there are three Highway crossing segments with the one furthest east of the CESF site used by both elk and pronghorn (see Figure 2).

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**TECHNICAL AREA: BIOLOGICAL RESOURCES**

**Data Request 114:** Utilize existing aerial photos to document and predict patterns of use under three scenarios:

- a) baseline conditions;
- b) with the proposed solar projects (i.e., Ausra's Carrizo Energy Solar Farm, Optisolar's Topaz Solar Farm, and Sun Power's project); and
- c) with potential mitigation measures such as use of conservation easements, pronghorn crossings, fencing with openings for kit foxes, or dedicated open spaces to demonstrate how the potential impacts may be mitigated;

**Response:** Since Sun Power has yet to file an application of any kind for its project, CESF would only be speculating at this time as to the area of impact from this project. In addition, although CESF has proposed mitigation at this time, CESF has no information about where any mitigation may be proposed for either of the other two projects. Therefore, it would be speculation on CESF's behalf to predict patterns of use based upon only initial information from Topaz Solar Farm in their Conditional Use Permit and no information about Sun Power.

In general, patterns of use can be documented, but predicting patterns cannot be done reliably. As described in Response to CEC Data Request 113, CESF will not impact the areas identified in the USFWS's recovery plan for SJKF in California Valley. CESF is not located along the edges of the natural lands, is not within any proposed specialty reserve area, or in an area proposed for connectivity and linkage. In regards to elk, the available information does not show elk using the CESF site or the site blocking access to areas used by elk.

In addition, CESF proposes to set aside adjacent lands in an agricultural easement to permit and provide CESF's fair share of lands for wildlife crossing, including modifications to fencing and water locations for pronghorn, wildlife movement, and mitigation for SJKF. CESF's proposed mitigation property provides for movement both north and south around the CESF site. By specifically selecting the adjacent parcel, CESF has provided property that can be combined with other pieces to create wildlife movement corridors both north and south, and east and west.

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**TECHNICAL AREA: BIOLOGICAL RESOURCES**

**Data Request 115:** Identify boundaries and features of the proposed solar projects;

**Response:** The boundaries and features of the OptiSolar project have been provided by OptiSolar in their application to the County; and the Sun Power project has not yet submitted an application.

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**TECHNICAL AREA: BIOLOGICAL RESOURCES**

**Data Request 116:** Estimate the resistance to animal movements from existing and proposed developments including existing and proposed fencing; and

**Response:** Estimation of resistance cannot be done reliably. As stated in Response to CEC Data Request 114, only limited information is available about the Topaz Solar Farm and no information is available about the Sun Power project. Therefore, not only is it difficult to estimate resistance, in this case CESF does not have sufficient information upon which to create an estimate. Any such estimate would be speculation.

CESF proposes to modify existing fencing along SR-58 in the CESF project vicinity, where appropriate, to be compatible with pronghorn movement. These modifications are in conjunction with land upon which CESF plans to place an agricultural easement as well as water sources to support pronghorn. This same land will provide mitigation for impacts to SJKF from development of CESF.

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**TECHNICAL AREA: BIOLOGICAL RESOURCES**

**Data Request 117:** Identify potential compensation lands and migration corridors while coordinating with wildlife experts who understand the species requirements.

**Response:** CESF proposes to mitigate for impacts to pronghorn movement by providing an agricultural easement over parcels in the Project vicinity to allow for pronghorn movement past the CESF site. Purchase of this agricultural easement would not exceed 705 acres, resulting in a 1.1:1 mitigation ratio to compensate for impacts to biological resources. The land selected for mitigation will allow for development of wildlife corridor movement both north and south, as well as east and west, if combined with other nearby property. Through the dedication of this land, CESF has met its responsibility to provide its fair share of the mitigation required for cumulative impacts.

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**TECHNICAL AREA: CULTURAL RESOURCES**

**Data Request 118:** Please provide building length, width, height, and foundation/excavation depth (where required) for each of the following structures:

- a) two power-block buildings enclosing Steam Turbine Generators;
- b) two power-block air-cooled condensers;
- c) power-block administrative control/office building;
- d) two power-block buildings housing water treatment equipment;
- e) power-block building housing a warehouse and shop;
- f) power-block building housing maintenance equipment;
- g) power-block control tower adjoining the south end of the maintenance building;
- h) three power-block water storage tanks;
- i) power-block sewer system septic tank and leach field;
- j) laydown-area temporary building for manufacturing;
- k) laydown-area temporary building for mirror storage;
- l) laydown-area temporary building for steel storage;
- m) laydown-area temporary building for footings storage;
- n) laydown-area temporary building for equipment storage (west);
- o) laydown-area temporary building for equipment storage (east);
- p) two laydown-area temporary buildings for offices;
- q) laydown-area temporary building for conference room;
- r) laydown-area temporary building for worker meal/break room;
- s) laydown-area temporary building for worker restrooms;
- t) laydown-area temporary foundations for bulk fuel storage tanks;
- u) laydown-area bridge footings for permanent creek crossing (west); and
- v) laydown-area bridge footings for permanent creek crossing (east).

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**Response:**

	<b>Structure</b>	<b>Length</b>	<b>Width</b>	<b>Height</b>	<b>Excavation Depth</b>
<b>a</b>	Power-Block STG building (Two)	160'	100'	40'	7'
<b>b</b>	Power-Block Air Cooled Condenser (Two)	249'	170'	115'	4'
<b>c</b>	Power-Block Administrative, Control, & Office Building	100'	53'-6"	13'	4'
<b>d</b>	Power-block water treatment building (two)	N/A	N/A	N/A	N/A
<b>e</b>	Power-block warehouse and shop	120'	50'	26'	2'
<b>f</b>	Power-block maintenance building	120'	50'	26'	2'
<b>g</b>	Power-block control tower	46'	40'	40'	N/A
<b>h</b>	Power-block water storage tanks (three)	50' (dia)		34'	4.5'
<b>i</b>	Power-block sewer system septic tank	101"	52"	66"	
<b>i</b>	Power-block leach field	200'	70'	14' deep	14'
<b>j</b>	Laydown-area temp building for manufacturing	420'	300'	32'	2'
<b>k</b>	Laydown-area temp building for mirror storage	160'	160'	32'	2'
<b>l</b>	Laydown-area temp building for steel storage	120'	80'	14'	2'
<b>m</b>	Laydown-area temp building for footings storage	120'	80'	14'	2'
<b>n</b>	Laydown-area temp building for equipment storage (west)	120'	120'	14'	2'
<b>o</b>	Laydown-area temp building for equipment storage (east)	120'	120'	14'	2'
<b>p</b>	Laydown-area temp building for offices (two)	65'	65'	10'	2'
<b>q</b>	Laydown-area temp building for conference room	60'	60'	10'	2'
<b>r</b>	Laydown-area temp building for worker meal/breakroom	80'	80'	10'	2'
<b>s</b>	Laydown-area temp building for worker restrooms	80	40'	10'	2'
<b>t</b>	Laydown-area temp foundation for bulk fuel storage tanks	100'	100'	2'	2'
<b>u</b>	Laydown-area bridge footings for permanent creek crossing (west)	140'	130'	4'	4'
<b>v</b>	Laydown-area bridge footings for permanent creek crossing (east)	130'	140'	4'	4'

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**TECHNICAL AREA: CULTURAL RESOURCES**

**Data Request 119:** Please provide a description of the components of the re-designed on-site switchyard, including the number of transformers, the number of circuit breakers, the length of all new on-site 230-kV transmission lines and the number, height, and foundation depth of all transmission line support poles, dead-end structures, and take-off structures.

**Response:** The components of the re-designed onsite switch yard are shown on Figure 1.6-1, Conceptual One Line, in the Supplement to the CESF AFC. The main components of the onsite CESF substation include the following:

1. Generator Step up Transformers 100/123 MVA Quantity – 2  
Specifications: Primary 13.8Kv CESF side, Secondary 230Kv (PGE side)
2. Switchyard Circuit Breakers – 6  
Voltage: 230kv Line to Line
3. CESF HV Circuit breakers Quantity – 2  
Voltage: 230kv Line to Line (PG&E side)
4. Power Distribution Center: Connects the generator to the step up transformer and to the 4.16kV auxiliary transformer Quantity–2
5. Auxiliary Transformer : Primary 13.8Kv secondary 4.16Kv 10MVA  
Quantity – 2
6. Auxiliary Transformer : Primary 4.16Kv secondary 480 V 2 MVA  
Quantity – 2
7. Station Service Transformer: Primary 115Kv Secondary 4.16kv. This transformer is fed by a dedicated overhead line from the new P&GE switch yard. A HV fused switch is connected to the primary side of the transformer

230Kv Transmission Lines, Dead End Structure

The station yard with the above equipments is to be connected to a new PG&E switchyard located on the northern boundary of the site. The distance in length, from the CESF GSUs to the PG&E dead-end structures, is approximately 1,000 feet. On the CESF side, there are 5 transmission towers of height between 65 to 100 feet. The foundation depths for these poles is expected to be approximately 30 feet. The dead-end structure foundation depth is expected to be on the order of 20 feet.

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**TECHNICAL AREA CULTURAL RESOURCES**

**Data Request 120:** Please provide a description of the proposed looping interconnection to the Carrizo Plain Switching Station, including the length of all new off-site 230-kV interconnection lines, and the number, height, and foundation depth of all interconnection line support poles.

**Response:** The Midway 230kV Line 1 will be looped into the Carrizo Plain Switching Station by the installation of four new transmission poles and looping the line into the switching station. This loop will bypass one of the existing towers. See Figure 1.6-3 in the Supplement to the CESF AFC.

The distance from the new PG&E Carrizo Plain substation dead-end structures to the new poles is approximately 140 feet before turning in the east-west direction. See Figure 1.2-4 of the Supplement to the CESF AFC. On the PG&E side there will be four new towers approximately 100 feet tall. The two towers whose lines terminate at the dead-end structures will be separated by 90 feet. There will be an additional tower approximately 625 feet away in each direction, which will connect the loop into the existing towers. Total length of the two transmission segments added is approximately 2,600 feet. These new towers will be designed and installed by PG&E. The foundation for these towers will follow the standard PG&E design for such tower and the depth is expected to be approximately 30 feet.

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**TECHNICAL AREA: CULTURAL RESOURCES**

**Data Request 121:** Please provide a scaled and labeled figure showing the plan of the re-designed switchyard, including the transformers, the circuit breakers, all new on-site 230kV transmission lines, and placement of all transmission line support poles, dead-end structures, and take-off structures. Please also show in the same figure the plan of the proposed looping interconnection to the Carrizo Plain Substation, including all new off-site 230-kV interconnection lines and placement of all interconnection line support poles.

**Response:** Please see Figures 1.2-4 and 1.6-3, located in the Supplement to the CESF AFC.

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**TECHNICAL AREA: SOIL AND WATER RESOURCES**

**Data Request 122:** Please provide an estimate of the difference between anticipated evaporation/evapo-transpiration rates at the CESF site under (a) existing conditions and (b) following construction. Please factor in this estimated change in evaporation/evapo-transpiration in an updated analysis of surface water balance, including estimated recharge and runoff from the site.

**Response:** Applicant's Response to CEC Data Request 122 is included within the Revised Hydrology/Hydrogeological Report. Specifically, refer to Section 2.2.3.

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**TECHNICAL AREA: SOIL AND WATER RESOURCES**

**Data Request 123:** Please revise the estimates of average annual runoff utilizing runoff coefficients that are more appropriate for typical daily rainfall depths. Please use the Soil Conservation Service Curve Number approach with at least 5 to 10 years of daily rainfall records to yield better estimates of average annual runoff.

**Response:** Applicant's Response to CEC Data Request 123 is included within the Revised Hydrology/Hydrogeological Report. Specifically, refer to Sections 2.2.3.1 and 2.2.3.2.

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**TECHNICAL AREA: SOIL AND WATER RESOURCES**

**Data Request 124:** Please revise the assumed groundwater pumping rate for wells identified in the Carrizo Plain based on known pumping rates within the plain from data collected from existing property owners." Please ensure that all revised assumed pumping rates reflect the typical water use requirements in the Carrizo Plain for dry farming, rangeland cattle ranching activities (1 head of cattle per approximately 10 acres), and household water use (~0.5 to 1 ac-ft/yr).

**Response:** Applicant's Response to CEC Data Request 124 is included within the Revised Hydrology/Hydrogeological Report. Specifically, refer to Section 3.6.2.3.

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**TECHNICAL AREA: SOIL AND WATER RESOURCES**

**Data Request 125:** Please provide groundwater model results using the revised pumping rates and revised recharge rate determined in the surface water analysis for the following:

- a. the existing no-project scenario;
- b. a CESF pumping scenario; and
- c. a CESF + Topaz/ Opti-Solar scenario to help assess potential cumulative impacts of ground water withdrawal from the two proposed projects.

**Response:** Applicant's Response to CEC Data Request 125 is included within the Revised Hydrology/Hydrogeological Report. Specifically, refer to Sections 3.6.3.2 and 3.6.3.3.

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**TECHNICAL AREA: TRAFFIC AND TRANSPORTATION**

**Data Request 126:** Please provide an estimate of how many truck deliveries would require pilot cars or escorts (according to the Caltrans requirements set forth above) during peak construction, as well as an estimate of the additional pilot and escort vehicle trips that will result, and indicate on which routes the escorted delivery trucks would travel.

**Response:** Several questions were raised about peak and daily construction traffic numbers, referencing Table 2.11-1 in the Supplement to the AFC, dated July 2008. The table has been included below for easy reference. In addition, URS has reviewed traffic routes associated with the Project and foresees using SR-58 for all truck trips from both the East and West to access the site; SR-46/Bitterwater Road will only be used for limited truck trips, if required. Bus trips may use other routes including, but not limited to, Bitterwater Road, La Panza Road, and/or Creston Road to access SR-58 and the Project site.

**Table 2.11-1  
Peak Construction Trip Generation**

	Peak Daily Trips	Average	AM Peak Hour Trips		PM Peak Hour Trips	
		Daily Trips	In	Out	In	Out
Peak CESF Construction (Workers) Buses	84	52	21	21	21	21
Equipment Deliveries	14	6	4	4	0	3
Construction Trucks	75	36	5	5	0	5
Onsite Manufacturing	15	12	2	2	1	2
Total Trips Per Peak Hour	188	106	32	32	22	31

See below for a descriptive breakdown of the average daily and peak daily construction trips from Table 2.11-1 above.

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**Average Daily Trips:**

CA legal reflector parts truck trips requiring CHP escort\* from Kern County: 2  
 CA legal oversized truck trips requiring CHP escort\* from San Luis Obispo County: 1  
 SR-58 legal truck trips requiring 1 pilot/escort car and flaggers from Kern County: 7  
 SR-58 legal truck trips requiring 1 pilot/escort car and flaggers from San Luis Obispo County: 2  
 CA legal truck trips requiring 2 pilot/escort cars and flaggers from Kern County: 2  
 53' long CA legal truck trips with decking and maximum weight requiring 2 pilot/escort cars and flaggers from San Luis Obispo County: 2  
 Permitted miscellaneous delivery truck trips (not requiring flaggers or pilot/escort cars): 38  
 Buses: 52

**TOTAL: 106**

\*Trucks exceeding 38-foot kingpin to rear axel or are > 15-feet in width.

**Peak Daily Trips:**

CA legal reflector parts truck trips requiring CHP escort\* on SR-58 from Kern County: 5  
 CA legal oversized truck trips requiring CHP escort\* from San Luis Obispo County: 2  
 SR-58 legal truck trips requiring 1 pilot/escort car and flaggers from Kern County: 9  
 SR-58 legal truck trips requiring 1 pilot/escort car and flaggers from San Luis Obispo County: 4  
 CA legal truck trips requiring 2 pilot/escort cars and flaggers from Kern County: 4  
 53' long CA legal truck trips with decking and maximum weight requiring 2 pilot/escort cars and flaggers from San Luis Obispo County: 2  
 Permitted miscellaneous delivery truck trips (not requiring flaggers or pilot/escort cars): 78  
 Buses: 84

**TOTAL: 188**

\*Trucks exceeding 38-foot kingpin to rear axel or are > 15-feet in width.

Note 1: All equipment deliveries are assumed to be "truck trips." In addition, half of the equipment deliveries are assumed to require CHP escorts, the other half is assumed to require pilot/escort cars. This is a "worst-case" estimate, since likely many of these trips will be in permitted trucks not requiring CHP nor pilot/escort cars or flaggers.

Note 2: The 17 average daily/25 peak daily pilot/escort cars were not included in the original AFC or in the Supplement to the AFC. However, because the number of pilot/escort trips associated with the Project is far below the threshold to affect the current Level of Service (LOS) for the affected Project roadways, no changes to the original or supplemental analyses are required. LOS for all roadways remain unchanged.

Note 3: Caltrans regulates if a pilot/escort car or CHP escort are needed. This is determined by vehicle width (as shown below). Pilot/escort vehicles and CHP escorts are separate.

**Caltrans Pilot Car Requirements**

Route	>10'0" to 11'0"	>11'0" to 12'0"	>12'0" to 13'0"	>13'0" to 14'0"	>14'0" to 15'0"	>15'0" to 16'0"	>16'0"
SR-58	1 Pilot Car	1 Pilot Car	2 Pilot Cars	2 Pilot Cars	2 Pilot Cars	CHP	CHP

Pilot Car Legend, Single Trip Permits Pilot Car Maps, Caltrans. 2008.

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**TECHNICAL AREA: TRAFFIC AND TRANSPORTATION**

**Data Request 127:** Please include the additional estimated pilot and escort vehicle trips identified in your response to the preceding Data Request in your construction trip generation assumptions and provide a revised analysis.

**Response:** Please refer to Response to CEC Data Request 126, above.

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**TECHNICAL AREA: TRAFFIC AND TRANSPORTATION**

**Data Request 128:** Please provide an estimate of the average delay expected to be caused to vehicles traveling between the project site and SR-33 during peak hours by construction truck and bus traffic.

**Response:** A typical vehicle traveling at an average speed of 45 mph westbound on SR-58 from SR-33 to the Project site can negotiate the 31 mile segment in approximately 41 minutes. A pilot car and CHP escorted vehicle traveling at an average speed of 25 mph can negotiate the same segment in approximately one hour and 12 minutes.

Based on the above speed and distance assumptions, non-Project related vehicles on average could potentially get delayed approximately 31 minutes assuming they are following a pilot car or escorted Project-related truck without the opportunity of passing.

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 129:** Please provide the amount, type and method of disposal of hazardous and non-hazardous wastes from construction and dismantling of the onsite manufacturing building.

**Response:** The onsite manufacturing building will be constructed of reinforced concrete flooring with a modular panel system for walls and roofing. The modular panel systems will be dismantled and removed from the Project site after manufacturing operations are complete for reuse at another location. Wastes from dismantling of the manufacturing building will include concrete and rebar as summarized below.

**Summary of Demolition of On-Site Manufacturing Building Waste Streams  
and Management Methods<sup>1</sup>**

<b>Waste Stream and Classification</b>	<b>Origin and Composition</b>	<b>Estimated Amount</b>	<b>Estimated Frequency of Generation</b>	<b>On-site Treatment</b>	<b>Waste Management Method</b>
Demolition waste -Non-hazardous	Concrete and rebar	65 ksf at 6" slab	Generated during demolition of onsite manufacturing building	None	Dispose to recycling facility (70-90%) or dispose to a non-hazardous waste landfill

Note:

<sup>1</sup> All numbers are estimates.

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 130:** Please discuss whether there are any local ordinances or regulations that apply to demolition waste.

**Response:** The San Luis Obispo County Integrated Waste Management Authority (IWMA) and its member jurisdictions, private haulers, and landfills offer a comprehensive integrated waste management program for its community.

The San Luis Obispo County Recycling Ordinance requires that 50% (by weight) of the waste from construction or demolition projects be recycled, if the project is greater than \$50,000 in value (as noted on the Building Permit) or if demolition includes 1,000 square feet or more. Waste includes anything that is discarded from the site, such as wood scraps, cardboard, drywall, flashing, paint or other finishing products, tools, concrete, asphalt, plastic bags, remnants of insulation, etc. Prior to receiving a Building Permit from the San Luis Obispo County Planning and Building Department, the applicant must describe how the project's waste streams will be handled and must complete a Construction and Demolition Recycling Plan and Disposal Report. Failure to achieve the recycling goal could result in delays in receiving Final Inspection Approval and could result in a penalty equal to 2% of the project's value. (San Luis Obispo County IWMA-Integrated Waste Management Authority website <http://www.iwma.com>, San Luis Obispo County Planning and Building Department website at: <http://www.slocounty.ca.gov/planning/building/regulationsandpolicies.htm>).

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 131:** Please quantify the waste materials from onsite manufacturing.

**Response:**

**Summary of On-Site Manufacturing Waste Streams  
and Management Methods<sup>1</sup>**

<b>Waste Stream and Classification</b>	<b>Origin and Composition</b>	<b>Estimated Amount</b>	<b>Estimated Frequency of Generation</b>	<b>On-site Treatment</b>	<b>Waste Management Method</b>
Waste Adhesive - Hazardous	Adhesive	30 liters	Per day	Store for <90 days	Dispose to hazardous waste disposal facility
Waste Adhesive Prep (polyurethane) - Hazardous	Adhesive preparation	2 liters	Per day	Store for <90 days	Dispose to hazardous waste disposal facility
Empty Adhesive Drums - Hazardous	Adhesive use	5 empty drums	Per day	Store for <90 days	Dispose to hazardous waste disposal facility
Mirror Glass – Non-hazardous	Mirror manufacturing	100 kg	Per week	None	Recycle or dispose of to non-hazardous waste disposal facility
Waste Filters Containing Copper, Manganese, and Zinc Oxide	Air cleaning system filters	Copper = 160 ug Manganese = 5 ug Zinc oxide = 1024 ug	Per day	Store for <90 days	Recycle

Note:

<sup>1</sup> All numbers are estimates.

**Carrizo Energy Solar Farm  
Responses to CEC Data Requests 113-134  
07-AFC-8**

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 132:** Please clarify which wastes are considered hazardous.

**Response:** Please refer to Response to CEC Data Request 131, above.

**Carrizo Energy Solar Farm  
Responses to CEC Data Requests 113-134  
07-AFC-8**

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 133:** Please provide the cumulative amount of hazardous and non-hazardous wastes from demolition and construction.

**Response:**

**Summary of Demolition Waste Streams  
and Management Methods<sup>1</sup>**

<b>Waste Stream and Classification</b>	<b>Origin and Composition</b>	<b>Estimated Amount</b>	<b>Estimated Frequency of Generation</b>	<b>On-site Treatment</b>	<b>Waste Management Method</b>
Demolition waste - Non-hazardous	Wood, roofing, drywall, concrete, brick, glass, metals plastic, or other building materials	3,171,645 pounds	Generated during demolition of onsite structures	None	Dispose to recycling facility (70-90%) or dispose to a non-hazardous waste landfill.
Demolition Waste – Hazardous	Waste building materials containing hazardous materials (asbestos or lead-based paint)	12,920 pounds	Generated during demolition of onsite structures	Store for <90 days	Dispose to hazardous waste disposal facility

Note:

<sup>1</sup> All numbers are estimates.

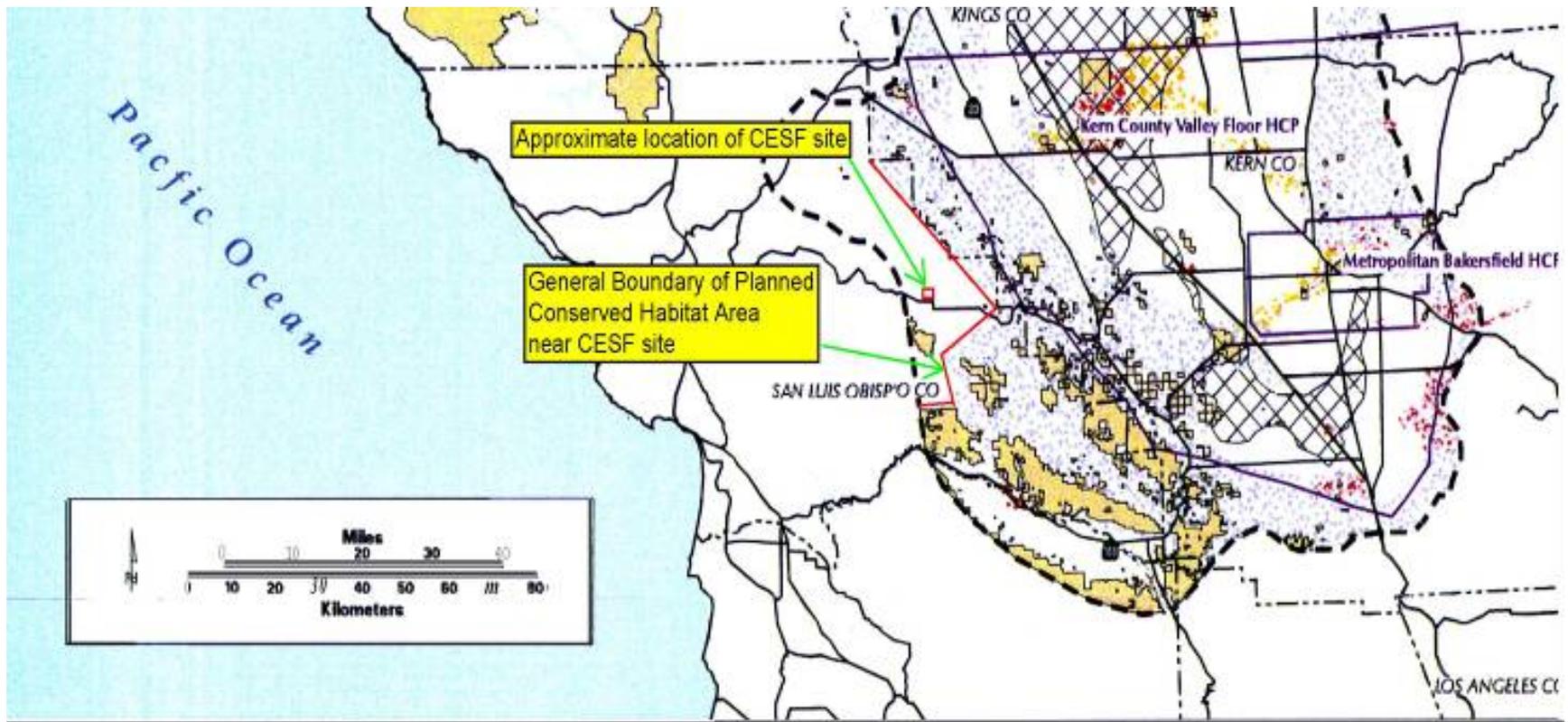
**Carrizo Energy Solar Farm**  
**Responses to CEC Data Requests 113-134**  
**07-AFC-8**

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**TECHNICAL AREA: WASTE MANAGEMENT**

**Data Request 134:** Please provide the cumulative amount of hazardous and non-hazardous wastes from demolition and construction.

**Response:** Per Suzanne Phinney (CEC), requested information was moved to Data Request 133. Data Request 134 no longer needs to be addressed.



-  Public lands: Federal, State & Conservation lands (some lands unsuitable for species addressed in this plan)
-  Areas along the valley's edges within which a contiguous band of natural lands and wildlife-compatible farmlands should be maintained
-  Proposed Specialty Reserve areas
-  Proposed areas where connectivity and linkages should be promoted

-  Drainage problems areas  
Data Source: U.S. Bureau of Reclamation
-  San Joaquin Valley Multispecies Recovery Plan study area
-  Existing and proposed Habitat Conservation Plans

1997

**PLANNED LINKAGES FIGURE FROM USFWS  
RECOVERY PLAN (PAGE 225)**

**URS**

NO SCALE

CREATED BY: TM

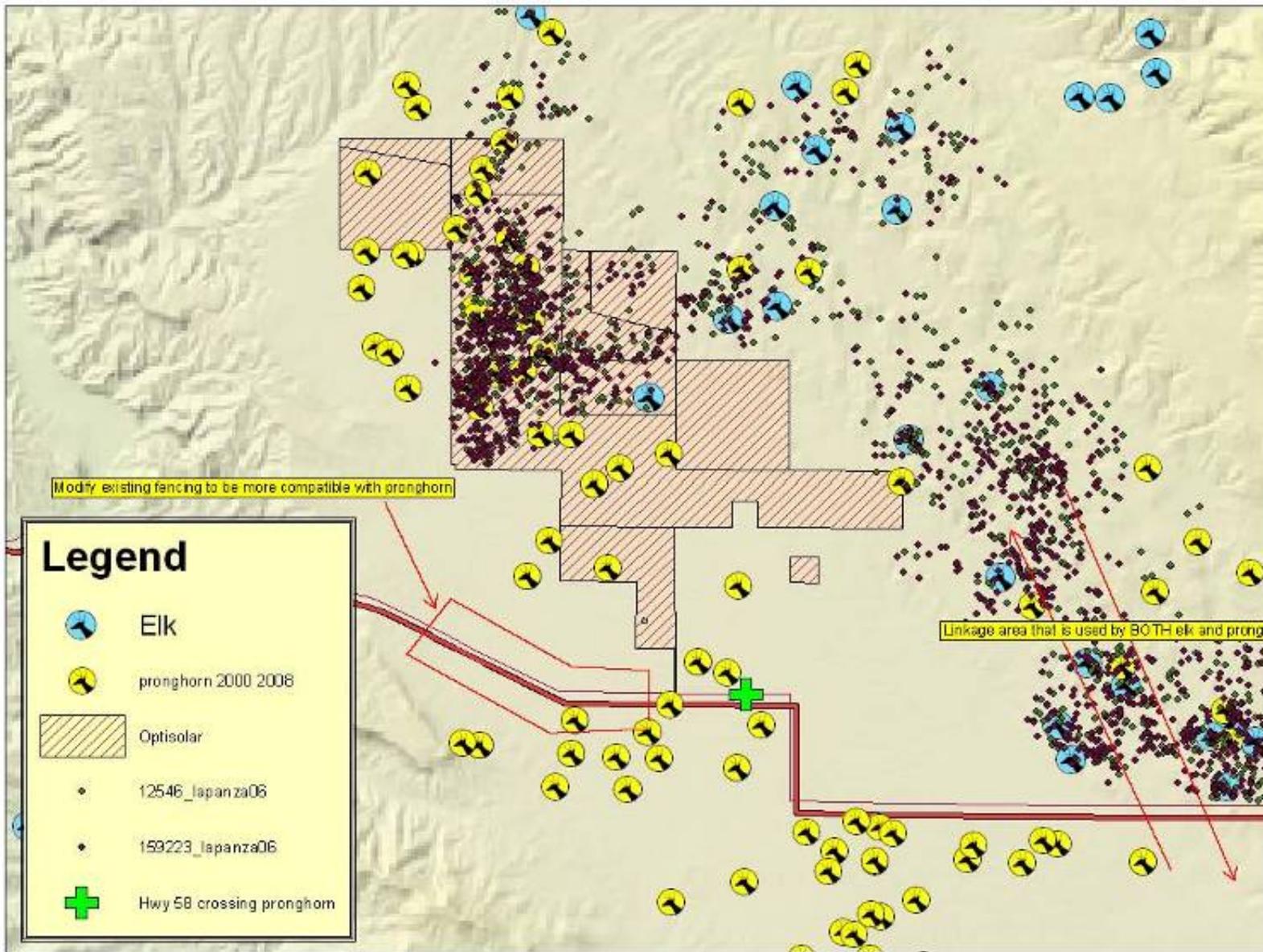
DATE: 9-23-08

FIG. NO:

PM:AL

PROJ. NO: 27658060

1



**RESULTS OF PRONGHORN AND ELK AERIAL  
AND RADIO TELEMETRY SURVEYS AND APPARENT CORRIDORS**



NO SCALE

CREATED BY: TM

DATE: 9-23-08

FIG. NO:

PM:AL

PROJ. NO: 27658060

2

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE  
STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION  
*For the CARRIZO ENERGY*  
SOLAR FARM PROJECT

Docket No. 07-AFC-8

PROOF OF SERVICE

(Revised 7/24/2008)

**INSTRUCTIONS:** All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

**\*CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 07-AFC-8  
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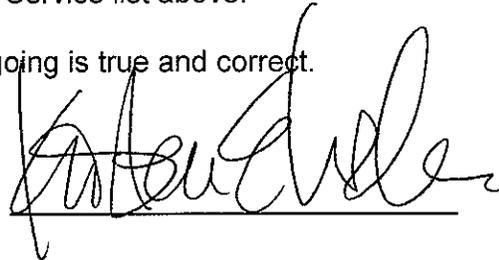
**DECLARATION OF SERVICE**

I, Kristen E. Walker, declare that on September 26, 2008, I deposited copies of the attached Applicant's Responses to CEC Data Requests 113-134 in the United States mail with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

**OR**

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

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



A handwritten signature in black ink, appearing to read 'Kristen E. Walker', is written over a horizontal line.