

February 19, 2008

Mary Dyas
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

RE: Questions regarding Carrizo Energy Solar Farm
Docket# 07-AFC-08

Submitted By:
John A. Ruskovich
Ruskovich Ranch & Ruskovich Ranch Trucking
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Dear Ms. Dyas:

As stated in PG&E's booklet "How To Go solar", "Maybe it's the California Solar Initiative incentives or maybe it's the love for the environment." Because of this statement it is California's ambitious goal to install 3,000 megawatts of new solar energy by 2017. Two different companies are attempting to build power plants in the Carrizo Plain with power totaling about 360 megawatts. These companies, Ausra/Carrizo Energy Solar Farm (CESF) and OptiSolar out of Hayward, California, are both looking to buy between them 15 sections (9,800 acres) of land on the Carrizo.

I have been in and around construction most of my life and after reading their plans and your guide-lines, I believe that their proposals have been rushed through so fast by URS of San Diego, that I have found a lot of mistakes that must be corrected before they can continue with any thoughts of purchasing and building on the Plains.

Following are questions/concerns from me and the major majority of landowners, who call the Carrizo Plain (or known to us as Carrisa Plains) our home.

1. Airstrip

As stated in CEC's Rules of Practice and Procedure & Power Plant Site Certification Regulations, Siting Regulations under Traffic and Transportation (*attachment 1*) it states, "If the proposed project including any linear facility is be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual lengthdiscuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, visible water vapor plume....."

Now, as stated in Section Five, Environmental Information, 5.11.1.4.4 Airports (*attachment 1a*) of the URS's proposal, they state in writing, therefore perjuring themselves that...

An existing private airport is located in California Valley approximate 4.0 miles southwest of the CESF project site. As described in the Shandon Carrizo Area Plan, California Valley Airport is privately operated, with a II-C (General Aviation) functional classification. **The airport has a 2,500-foot graded runway with minimal traffic.**

This Airstrip is in fact **4,200 feet long and PAVED!** (*attachment 1b*). (*check with the FAA for airstrip number, as we are a certified strip) and within the 20,000 foot mark from the proposed project site. The Airstrip is owned by John Ruskovich, is used privately and as a landing site for CHP, BML, CalFire, and emergency medical Helicopter evacuation. This strip has the capacity to land a Super-King aircraft, which it has on numerous occasions, bringing in government officials to the National Monument.

We request, as stated in your regulations, that a Federal Aviation report be completed because of the potential thermal plumes and water vapor plumes. Also, that the length and type of strip be corrected in the proposal.

2. Highway 58 Traffic

We are very concerned that CEC did not consider this a major issue and did not request additional data regarding Traffic and Transportation. In CESF's Supplemental Information in response to CDC Data Adequacy Requests, states "Two-lane state highways such as SR-38 can carry up to 1,900 passenger car capacity per hour per lane." (*attachment 2*). Also please look at CESF's statement in Section Five, Environmental Information 5.11.1.3.1 Existing Roadway Segment Analysis (*attachment 2b*). In regards to their statement, we have the following questions and statements:

What is SR-38 (*see attachment 2*).

Highway 58 is not an "A" rated road. Signs are posted at either end of 58 stating limited truck traffic. Both ends of Highway 58 are either a "D" or "E" rating on the LOS scale, with no shoulders, steep and extremely sharp turn, with poor visibility in foggy conditions (Kern County side) (*see pictures—attachment 2c*). With 53-foot trailers transporting materials from Ausra's manufacturing plant in Las Vegas, NV, it would be extremely unsafe travel. It is actually unsafe for even me to pull my 34-foot End-Dump on this road, since corners are so tight (See attached photos taken of Hwy 58, showing the route trucks will be taking to bring in materials). I have hauled material on this road, but only because I know the road and I live here and it is only once in a great while and not everyday.

On Table 5.11-1 (*see attachment 2a&b*) it stated SR-58 at Cammati Creek. Cammati Creek is 30 miles from the proposed site and not anywhere near Carrisa Plains. So part of that traffic analysis done during the time frame, on their report, was traffic created from French Camp Vineyards transporting its seasonal grape harvest/ workers and trucks coming out of Navajo Rock & Block Sand Quarry, at mile post 27, all going west.

CESF states (*attachment 2a*) that 58 is 4 to 8 feet shoulders on flat terrain, and moderate grades. Also stating, bike lanes. (*see pictures—attachment 2c*) which show that the roadway is anything but straight, there are no shoulders and is very dangerous for bike traffic.

A report regarding road usage and safety should be requested from Kern County.

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Even though they are tax exempt, CESF needs to guarantee (in writing) that they will pay for all the road wear and damage done during the construction period from the potential truck and vehicle growth. Our road is minimally maintained right now.

3. Endangerment of Antelope Herd, Elk, Eagles, Hawks, and Falcons

CESF states in Section 5.6.1.2.2 Wildlife Resources (attachment 3)... "The CESF project study area provides limited habitat to support wildlife species as a result of the chronic disturbance caused by the historical and current extensive dry-land agricultural and grazing activities."

This statement is a lie. The Antelope and Tule Elk thrive on the planted farmlands. Their favorite food in the summer time is Morning Glory, which is a by-product of farming. They water often in section 33. As of this date the Antelope are foraging between the Cavenagh Ranch (what is to be the laydown area) and the Beck Ranch flat (next to the school). *(attachment 3a) (the top pictures was taken on February 18, 2008, picture is not entirely clear, but it is obvious that the animals in the distance are Antelope.) Also listed are other Antelope photos taken within the last 2 years.*

The Beck Ranch, King Ranch, along with what is known as the Cavenagh Ranch is a "Wildlife Corridor" for the Prong-Horned Antelope. The Tule Elk reside mostly on the Beck and Twisselman ranches. It is very important to keep the migration paths of these animals clear and undisturbed.

CESF states in Section 5.6.1.2.3.2 - that is because of farming, urbanization,... have eliminated up to 95 percent of the habitat for special status wildlife. If this is true then when do I see Golden Eagles, Falcons, Hawks everyday. Also why do BLM and the Nature Conservancy list us as having many endangered species. WHO IS LYING?

CESF - Section 5.6.2.1 – makes no sense as first they say they will significantly impact endangered wildlife, then they state that they will not.

To me this is nothing but legal jargon. They will dramatically affect many species of wildlife, especially the Antelope and bird population.

CESF states that the affects will only be temporary in the laydown area. How can they state this as their offices and such as listed in the plans as staying in the laydown area. Are they stating that they will be returning that section of property back to its natural state following the completion of the project? Also, once the Antelopes migrating corridor has been disturbed, the damage is already done.

CESF even states themselves in Section 5.6.1.2.4 - that animals have a natural aversion to situations or physical settings they perceive to be dangerous and will often shy away from situations in which they are exposed without cover and escape routes.

This is a true statement. The Prong Horned Antelope are well known for being very shy easily frightened creatures. I am afraid that the construction of this plant would disturb them to the point of their extinction on the Carrisa Plains. The Federal Government has spent millions of tax payers dollars to bring them back from extinction in this area. Only with the cooperation and assistance of the local ranchers have these animals survived.

We would like, in writing, why the other areas that were considered were denied. Stating the exact reasons why, i.e., could pass environmental impact report, wildlife, etc.

In conclusion, we are not just looking at the one section; we are looking at the 15 sections of total land that the two solar companies are opting for along the PG&E High Voltage Lines. In the end there will be no feed for any wildlife.

4. Water Concerns

How are they going to sterilize 640 acres of soil that is then covered with mesh/rock underneath the solar panels? How do you keep the ground free of grasses without getting the sterilant and the cleaning solutions (*see attachment 4*), or any of the other hazardous chemicals used on this site from getting into the water system and polluting everybody down stream.

From the beginning of this project we were told that they would be using 1,800 gallons of water per day, which in itself is too extreme for this area. Now we find as stated in the data request (*see attachment 4a*)....how often the total peak daily water usage of 700,000 gpd will occur. This amount of UNACCEPTABLE!!!!!!! Will the CESF guarantee, in writing, to compensate all land owners that no longer have water or their water is contaminated.

5. Deeds & Deception

We were lead to believe that all CESF/Ausra was purchasing was the 640 King piece, and 380 acres of the Lowery as the lay down site. We have now found, according to County Records, that CESF/Ausra has placed options on all of sections 31, 32, 33, 34, 35, 28, 27 and part of 26. A total of 4,980 acres.

Why are they placing options on so much additional land if they are only going to build on 640 acres. Also, according to Alberta Lewis, she did not know that they had to remove all abandon buildings and equipment, prior to transfer of ownership. (*attachment 5*) Is the Lowery family also unaware of this fact?

OptiSolar is looking at 9 sections of property north of the proposed site. So, in truth, within one year, this proposal could be in your hands. The community would prefer to stay agricultural and not become an industrial valley.

6. Climate

This is issue should be one of your major areas of concern, as the information that CESF states in Section Five, 5.2.1.1 Climate and Meteorology is highly inaccurate. (*attachment 6 and attachment 6a*) Their documentation states, Summer Averages in the high 80's to mid 90's, reaching into the 100's and Winter Averages in the mid 60's and low 30's

It is well known and documented that winter temperatures average in mid 50's during the daytime hours. Lows average in the low 20's, going as low as 2 degrees. In 2007 there was about a week of 8 degrees at night. In January of 2007 I was breaking 2" solid ice off water troughs for cattle to drink out of for 20 days straight.

High plains do get snow. Check the pictures of Highway 58 (attached) in the road section; the sand on the pavement is from the last snow and ice storm that closed our local State Highway 58 in approximately mid-January 2008.

7. Height Limit

Agricultural land height limits are 35 feet. Most of this project is 56 feet and higher. No one in the area is happy at all about the extreme heights of this project, especially the 115-foot tall block houses/air cooling condensers.

The proposed development from OptiSolar is stated as being 5 feet tall.

8. Noise

We want to know what will be the level of noise this plant will create. As of this date, Aura has sidestepped this question. Their report does not state how loud this plant will be in terms for us to understand.

9. Misc Problems/Concerns

Problems that need to be looked at:

- **Land Values** – Will CESF guarantee land values will not go down because of this eye sore, primarily agricultural people buy out here for the beauty and peacefulness and I feel the price of our land will lose value being within 3 miles of an industrial site. Will CESF guarantee to purchase our land at its stated value prior to the construction of the Solar Plant.
- **Septic System** - 1-3, 1,000 tank for all toilets and sinks with 70 full-time employees is extremely too small. 1200 to 1500 gallon tank is used for a 3 bedroom 2 bath home in San Luis County.
- **Outdoor Lighting** – 1,768 outdoor lights, a minimum of 35 feet high, are going to make this plant look like a Prison from a long distance.
- **3.4.13.1.9 Promise to Hire Local People** – CESF and the local union will enter into a project labor agreement to ensure that sufficient supply of skilled craft workers is available for the project. No one in this area is in the Union. But there is a large family owned Construction Company, Switzer/Twissleman Construction that is based out of Carrisa Plains and Paso Robles. But we cannot work on the job for we are non-union. We need a compromise. CESF keeps saying they want to work with the local people. All we get is “Submit an application On-Line”, with no reply back. Navajo Sand & Gravel (also a local company) needs to know about the rock. Ruskovich Ranch Trucking would like to haul the material, but even at the last meeting at the old school house Perry Fontana, of Ausra did not even know that they were building a production plant in Los Vegas to pre-fab the solar plant. We found that out on-line searching about other solar companies. More deception wanting to work with locals????
- **Alternative Sites** – The best site for this plant is located at Highway 33, Lo Kern Road and Highway 58, west of Buttonwillow. With the only neighbors being a Haz-Mat Dump and to the west the oil fields. No one lives close to this location and would complain about the heights, the night-lights, and the water since there is an aqueduct through the property and it is half the distance to Bakersfield and the majority of the labor force. Transportation savings costs would pay the additional costs, if any, for the land sense it is owed by the Department of Energy and BLM. This is not the land that was previously looked at by I-5 and Buttonwillow. This is also a sign of a young and immature company.

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- **Hazardous Material Haul Off.** If this is a “Green” system, then why is there any hazardous materials being hauled off and why so much? It is also our concern that CEC did not request additional data on Hazardous Materials Management and does not consider it a major issue. Please reconsider this action.
- **Errors in Supplemental Report (too many to list).** Only people that live in the Carrisa Plains would catch these common mistakes, such as, Tracy Road is listed as going North & South and then in another document it is listed as going East & West; Grain tanks are listed as water tanks; Hubbard Hill has changed location 3 times; a picture of the entrance of the National Monument that was actually taken on Branch Mountain Road (10 mile difference). Just a lot of little mistakes that add up to a very poor job from URS. Was this done as a favor to Perry Fontana since he used to work for them, so they covered up a lot of facts?

As stated at the beginning of this letter, the majority of the population on the plains does not want this solar plant. In conclusion, we need to know the truth, what their intention are from the start, from any company wishing to build here. It is a shame that the Energy Commission will decide on destroying 15 sections of land and natural wildlife in our area to create the same amount of energy that Morro Bay Power Plant creates today, so it can be torn down. To correct the multiple problems in the supplement I would be willing to travel to Sacramento and work with you for a day to find and address the errors.

Thank you for your assistance and support.

Sincerely,

John A. Ruskovich

attachments

Attachment 1

(B) If the proposed project including any linear facility is to be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water

vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.

Attachment 1a

SECTION FIVE

Environmental Information

As shown in Table 5.11-1, all study roadway segments are currently operating at acceptable LOS-A under existing conditions.

5.11.1.4 Other Transportation Elements

5.11.1.4.1 Parking

Where there is adequate shoulder width, on-street parking on local streets is generally allowed within the Project study area. With the exception to roadway emergencies, parking or stopping is restricted along the two-lane state highway segments.

5.11.1.4.2 Public Transportation

There is no public transportation provider servicing the area.

5.11.1.4.3 Bicycle and Pedestrian Circulation

SR-58 is a designated Class III bicycle route and is used as a motorcycle recreational route. Due to the remoteness of the CESF project site, there was no observed pedestrian activity.

5.11.1.4.4 Airports

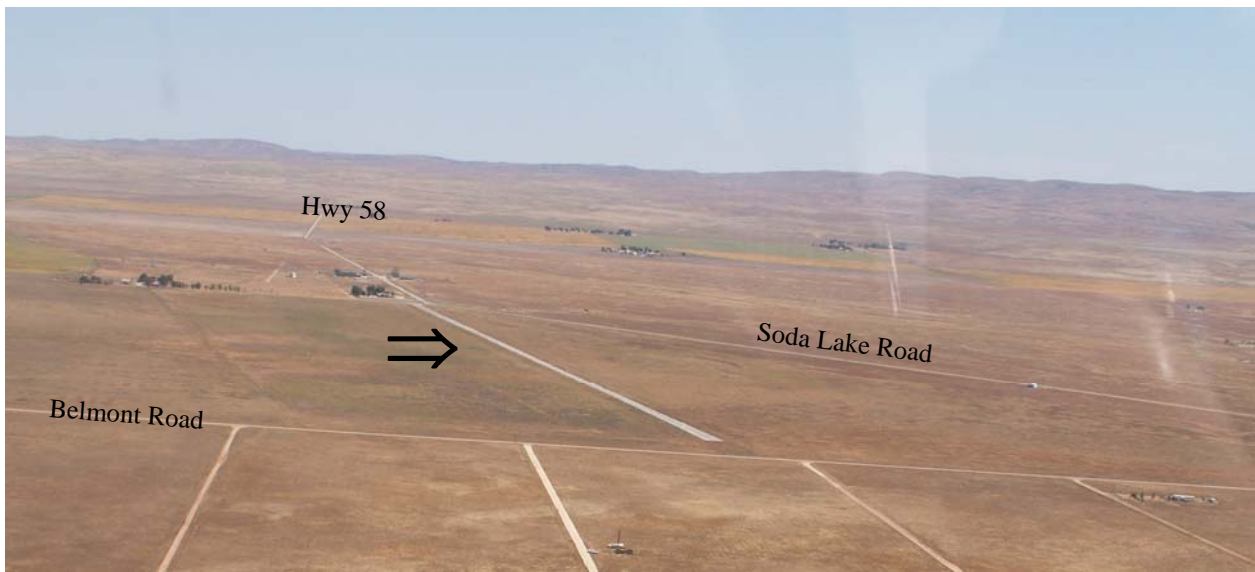
An existing private airport is located in California Valley approximate 4.0 miles southwest of the CESF project site. As described in the Shandon Carrizo Area Plan, California Valley Airport is privately operated, with a II-C (General Aviation) functional classification. The airport has a 2,500-foot graded runway with minimal traffic.

The proposed low structure heights of the CESF project components will not interfere with current and future airport operations. Due to distance and the orientation of the CESF reflector arrays, the potential glint/glare from the solar reflectors will not distract and/or affect pilots during landing or take-off operations. This conclusion is consistent with the detailed visual impact analysis conducted for the CESF presented in Section 5.13, Visual Resources.

Attachment 1b



Arrows indicate
Airstrip



Attachment 1b



Attachment 2

Carrizo Energy Solar Farm Supplemental Information In Response to CEC Data Adequacy Requests 07-AFC-8

TECHNICAL AREA: TRAFFIC AND TRANSPORTATION

Data Adequacy Request 19: Please provide roadway design capacities for State Route 58.

Response: Two-lane state highways such as SR-38 can carry up to a 1,900 passenger car capacity per hour per lane. Table 5.11-3 in the Project document (07-AFC-8) specifies the Caltrans Level of Service Criteria used in the analysis.

Attachment 2b

5.11.1.3.1 Existing Roadway Segment Analysis

Table 5.11-1 displays the roadway segment LOS analysis results for the key study area roadway segments under existing conditions. The two roadway segments were selected for evaluation, as they are the locations that would most likely be affected by Project traffic during both Project construction and operations.

**Table 5.11-1
Roadway Segment LOS, Existing Conditions**

Roadway	Segment	Cross-Section Classification	Average Daily Traffic	Peak Hour Traffic Volume	Peak Hour LOS
SR-58	At Cammati Creek	2-Lane Collector	720	80	A
SR-58	West of Soda Lake Road	2-Lane Collector	350	50	A

SECTION FIVE

Environmental Information

5.11 TRAFFIC AND TRANSPORTATION

This section assesses traffic and transportation impacts associated with the construction and operation of the proposed Carrizo Energy Solar Farm (CESF or Project). The analysis primarily examines impacts on roadway system circulation levels of service within the Project study area during the construction and operation of the CESF.

This section also identifies and reviews applicable laws, ordinances, regulations, and standards (LORS) relevant to traffic and transportation activities.

Information sources include data collected from the California Department of Transportation (Caltrans) traffic count database, field review and observations, and communications with local, regional, and federal level agencies. URS staff performed study area reconnaissance on June 25, 2007, to document roadway characteristics, identify physical constraints, and assess general traffic conditions.

Figure 5.11-1 shows the CESF project site in context to the regional circulation system.

5.11.1 Affected Environment

This section describes the existing conditions of the roadway circulation system within the proposed CESF study area. This section also presents the traffic volume and existing operating conditions of the study roadway segments near the vicinity of the Project site. Figure 5.11-2 shows the CESF project study area.

The relatively rural isolation of the Carrizo Plains in general and the Project site in particular from major population centers effectively eliminates potential conflicts with infrastructures associated with urban environment including major airports, transportation centers, rail lines, bus and other ancillary facilities supporting commerce and industries; therefore, the focus of the traffic impact analysis is the evaluation of transportation and circulation impacts to California State Route 58 (SR-58)/Carrisa Highway, the main and only Project access route during the construction and operation phase of the Project.

5.11.1.1 Existing Transportation Facilities

5.11.1.1.1 Regional Roadway Facilities

SR-58: SR-58 is an east-west state highway, located immediately south of the Project site providing regional and primary access route to the Project site. Within the study area, it is a two-lane highway posted at 55 mph. SR-58 is designated as a state truck route. Originating from Highway 101 to the west, (San Luis Obispo, Post Mile (PM) 0.0 to 1.64) it is a 2-lane conventional state highway with 4 to 8 feet shoulders on flat terrain and moderate grades. From San Luis Obispo PM 1.64 to 57.15 at the Kern County line to the east, it has 0 to 2 feet shoulders on rolling terrain with moderate to steep grades. It is also designated as a Class III bike route as described in Caltrans District 5 bicycle map for state highways in the central coast. The average daily traffic (ADT) on the roadway segments within the Project study area ranges from 720 vehicles per day to the west and 350 vehicles per day to the east of the Project site respectively.

Attachment 2c



Notice sharp curve and grade. One of many such curves.



Notice sand on the sides of the road, put down for snow. Also notice how narrow road is.



No shoulders
and narrow
winding road.

Attachment 2c



Attachment 2c



Sharp curve and grade. One of many such curves. The road you see at the bottom of this picture is a continuation of the one you see on the hillside across.



The arrow indicates a sharp curve, followed immediately by another one. Hazardous for single Semi traffic, let alone multiple ones all day long going both directions.

Attachment 2c



Note sharp curve and no shoulders.



Road coming west on 58 as it winds down into the Carrisa Plains.

Attachment 3

5.6.1.2.2 Wildlife Resources

The CESF project study area provides limited habitat to support wildlife species as a result of the chronic disturbance caused by the historical and current extensive dry-land agricultural and grazing activities. Within the 1,020 acres of the CESF site study area, nineteen species of birds, four reptile species and six mammal species were observed or their sign was detected. Typical bird species observed included house finch (*Carpodacus mexicanus*), western kingbird (*Tyrannus verticalis*), western meadowlark (*Stunella neglecta*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), turkey vulture (*Cathartes aura*), and American kestrel (*Falco sparverius*). Coyote (*Canis latrans*), California ground squirrel (*Spermophilous beecheyi*), cottontail rabbit (*Sylvilagus audubonii*), and American badger (*Taxidea taxus*) were common mammals observed or detected throughout the CESF site. Cattle (*Bos taurus*) were grazing on Section 33 during the survey period. Small burrows were observed that appeared to be excavated by gophers or other small mammal species such as mice. Pronghorn (*Antilocapra americana*) are common in the vicinity and were observed in the southern portion of Section 33. A red-tailed hawk nest was observed in a cottonwood tree (*Populus fremontii*) along the drainage located in Section 33 near the highway. Common raven nests were observed on the power line towers along the northern boundary of Section 28, and barn owls were observed and most likely nesting in an abandoned structure in Section 28. Wildlife species identified on the Project survey area and the vicinity are identified in Appendix L-3, Biological Resources.

Attachment 3a



Picture taken 2-18-08, late afternoon after the Antelope herd crossed from the Laydown area to the Beck flat by the School. Roachers hay barn on Hwy 58 can be seen in the distance. Picture taken by John Ruskovich



Picture taken on a ranchers driveway. The rest of the herd was behind me. Picture taken by Agena Ruskovich.

Below:
Picture in grain field next to Hwy 58 & Soda Lake Road. Picture taken by Agena Ruskovich.



**CARRIZO ENERGY SOLAR FARM (07-AFC-8)
DATA REQUESTS**

DATA REQUEST

56. a. Please discuss whether the CESF will utilize a RO system.
- b. If so, address the fate of the reject water.

BACKGROUND

Section 3.4.7 describes the function of the oil /water separator (OWS) and that the discharge water will be sent to the water treatment system and reused. This data request will help determine the impact of OWS wastewater disposal.

DATA REQUEST

57. Please confirm that all water from "contact areas" will be directed to the OWS.
58. Please describe the raw water requirements of the water treatment system.
59. Please describe the system for monitoring OWS discharge water.
60. Please describe the OWS discharge water if it doesn't meet the water treatment system requirements.

BACKGROUND

WATER QUALITY

Section 3.4.7 states that softened water will be used along with cleaning solutions to clean the solar collectors. Softened water contains relatively high concentrations of sodium (a plant toxin). This data request will help determine the impact to groundwater and soil and plant health.

DATA REQUEST

61. Please provide information related to the frequency of solar collector cleaning, likely concentrations of sodium in the water runoff and plant toxicity levels.
62. Please describe the types of solvents or cleaning solutions that may be added to the solar collector (reflector) cleaning solutions, and discuss the potential impacts to groundwater quality.
63. Please describe what impacts washdown with softened water / cleaning solutions over the life of the CESF would have on the health of the soil and groundwater for future agricultural or residential use of the property.

**CARRIZO ENERGY SOLAR FARM (07-AFC-8)
DATA REQUESTS**

Technical Area: Soils and Water Resources
Authors: Mark Lindley and Scott Stoller

BACKGROUND

WATER SUPPLY

The CESF is an innovative energy production facility that uses comparatively little water relative to other power generation activities such as natural gas-fired plants. It is estimated that the facility will use an average of 18,700 gallons per day (gpd) or 22 acre feet per year (afy). Total peak daily usage is estimated to be 700,000 gpd or approximately 784 afy.

The CESF is located in an area that is dominated by dry-farming and rangeland activities as well as a number of rural residences. Section 5.5.1 describes the groundwater basin as follows (referenced from the DWR Bulletin 118, 2004 update): the Carrizo Plain Groundwater Basin encompasses approximately 270 square miles. The total groundwater storage capacity of the basin is estimated to be 400,000 acre feet. The basin's safe yield is estimated to be 600 afy, which is equal to the natural recharge of the basin. Existing (2001) water demand in Water Planning Area 8 is 930 afy and is projected to rise in the future. Staff is concerned that Carrizo Plains may currently be in an overdraft situation.

DATA REQUEST

33. Please provide:
 - a. a comparison of typical water use per acre of the neighboring land uses with the proposed CESF.
 - b. a comparison of water use per MW produced relative to other power generating options such as gas-fired combined cycle, gas-fired combustion turbines, and existing solar thermal facilities in California.

34. Please discuss:
 - a. how often the total peak daily water usage of 700,000 gpd will occur.
 - b. how often the average annual water use will surpass the estimated 22 afy.

35. Please discuss whether alternative water sources have been fully evaluated. *Agricultural waste water, recycled water or surface water runoff could offer alternative potential water sources.*

36. Please discuss whether surface water runoff has been considered for water supply. The AFC indicates that average annual rainfall in the area is seven to nine inches. Over 640 acres, that equates to 375 to 480 afy falling onsite.

**CARRIZO ENERGY SOLAR FARM (07-AFC-8)
DATA REQUESTS**

Technical Area: Waste Management
Author: Suzanne Phinney

BACKGROUND

AFC Section 5.14.2.2 discusses waste streams, including non-hazardous solid waste, expected to be generated during operation of the CESF facility. However non-hazardous solid waste is not listed as a waste stream in Table 5.14-3, and an estimated quantity is not provided.

DATA REQUEST

75. Please quantify the non-hazardous solid waste expected to be generated during operations.

BACKGROUND

AFC Section 3.3.1 states, "Abandoned farm structures currently on Section 28 will be demolished prior to change of ownership." There are also structures on Sections 27 and 33, primarily an abandoned 7,000 square foot metal building and above ground storage tanks (Appendix Q, page ES-2). The AFC does not give the fate of these structures. Since the demolition will take place prior to the change in ownership, it is unclear which entity is responsible and whether demolition is considered part of the CESF project.

DATA REQUEST

76. Please clarify whether structures on Sections 27 and 33 will be demolished.
77. Please clarify the entity responsible for the demolition of existing structures, and whether demolition is considered part of the CESF project.

BACKGROUND

If demolition is considered part of the CESF project, the resulting waste stream has not been accounted for in the table and discussion of construction waste streams in AFC Section 5.14.2.1.

DATA REQUEST

78. Please describe and quantify (in tons and cubic yards) the waste stream generated from the demolition of existing structures.

SECTION FIVE**Environmental Information****5.2.1 Affected Environment**

This section describes the regional climate and meteorological conditions that influence transport and dispersion of air pollutants and the existing air quality within the Project region. The data presented in this section are considered to be reasonably representative of the CESF site.

The proposed CESF site will be a newly constructed solar power plant located near the towns of Simmler and California Valley in San Luis Obispo County, California. The CESF site will encompass approximately 640 acres of fenced area on Section 28 adjacent to California State Route 58 (SR-58)/Carrisa Highway. The 380-acre construction laydown area would be located entirely on Section 33, directly south of the Project site across SR-58. This location is within a valley between the Temblor and Caliente mountain ranges, near Carrizo Plain National Monument, and 10 miles northwest of Soda Lake (Figure 5.2-1). The Carrizo Plain is an approximately 45 mile long by 15 mile wide native grassland that follows the San Andreas Fault. The Project site is generally flat, gently sloping down in elevation to the southeast. Two existing residences are located approximately one mile north of the site. The nearest Class I area is San Rafael Wilderness, about 30 miles to the south.

5.2.1.1 Climate and Meteorology

The climate of the Central Coast is considered to be a Mediterranean classification, with warm, dry summers and mild winters. Further inland, the climate becomes increasingly arid with more extreme high and low temperatures, and decreased precipitation. The surrounding mountain areas tend to be cooler than the Carrizo Plain due to their higher elevations.

Long-term average temperature and precipitation data have been collected at the nearest surface meteorological station, approximately 8 miles west of the Project at La Panza, California. These data are summarized in Table 5.2-1. During the summer, the average minimum temperature is in the high 40s to low 50s (degrees Fahrenheit [°F]) and the average maximum temperature is in the high 80s to mid 90s (°F); however, summertime highs can easily reach into the 100s (°F) and drop more than 45 °F overnight. During the summer the northern location of the semi-permanent Pacific high-pressure system offshore California results in clear, sunny skies in the inland areas of San Luis Obispo County.

In the winter, the average minimum temperature is in the low 30s (°F) and the average maximum temperature is in the mid 60s (°F). Wintertime lows frequently dip below freezing.

Winds measured at La Panza, CA (approximately 8 miles west of the Project site) frequently blow up and down the Carrizo Plain, as airflow in the area is channeled between the mountain ranges that lie to the west and to the east. Winds are predominantly from the south and southeast and from the north-northwest. The winds are often calm or light. The annual average pattern of joint wind speed and wind direction frequencies in the area is illustrated in the wind rose presented in Figure 5.2-2. A detailed discussion of the meteorological data used to support dispersion modeling for evaluation of the CESF air quality impacts is presented in Section 5.2.2.4.3.

SECTION FIVE

VERY WROKY

Environmental Information

**Table 5.2-1
Temperature and Precipitation Data for La Panza Station
La Panza, California**

Month	Average Temperatures (°F)		High	Average Precipitation (inches)
	Low	High		
Jan	32.0 <i>few</i>	60.7	50.5	1.88
Feb	34.2 <i>few</i>	61.6	50.5	2.32
Mar	35.5	65.1		0.83
Apr	36.5	70.1		0.72
May	42.7	80.0		0.40
Jun	47.3	88.3	100.5	0.02
Jul	52.9	95.7	110.5	0.04
Aug	52.1	95.0	110	0.00
Sep	47.8	89.8		0.07
Oct	40.7	79.6		0.35
Nov	33.2	67.1		0.87
Dec	30.0 <i>few</i>	61.0		1.39
Annual Average	40.4	76.2		8.89 (total)

Reference: Western Regional Climate Center, 1991-2006.

Note: Average temperature data for years 1991-2006, and average precipitation data for years 1996-2006.