



<b>DOCKET</b>	
07-AFC-8	
<b>DATE</b>	MAR 18 2008
<b>RECD.</b>	MAR 18 2008

March 18, 2008

Mr. B.B. Blevins  
Executive Director  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

Subject: Carrizo Energy Solar Farm (07-AFC-8)  
Applicant's Responses to Docketed Letters, Data Requests from the  
CEC, and Comments from Robin Bell (Part 2)  
URS Project No. 22239472.01800

Dear Mr. Blevins:

On behalf of Ausra CA II, LLC (dba Carrizo Energy, LLC), URS Corporation Americas (URS) hereby submits the Applicant's Responses to the Docketed Letters from J. Kilmer (Caltrans, District 5), R. Briggs (Central Coast RWQCB), A. Bugrove (APCD), and S. Cranor (SLO DPW); Data Requests from the CEC; and Comments from Robin Bell (Part 2).

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 the Docketed Letters from J. Kilmer (Caltrans, District 5), R. Briggs (Central Coast RWQCB), A. Bugrove (APCD), and S. Cranor (SLO DPW); Data Requests from the CEC, and Comments from Robin Bell (Part 2) on behalf of Carrizo Energy, LLC.

Sincerely,

URS CORPORATION

Angela Leiba  
Project Manager

AL:ml

Attachment

URS Corporation  
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**CESF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)**

Number	Comment	Name	Response:
1	Address the possible need for an encroachment permit from Caltrans, District 5. It is not clear if CESF will be planning a new connection to State Route (SR) 58 or improvements in our Right of Way (ROW) for an existing driveway are planned.	James Kilmer, Associate Transportation Planner District 5, Caltrans.	CESF is not planning any new connection or improvements to SR 58. However, CESF will secure encroachment permits for all traffic crossing work within the SR 58 right-of-way.
2	Compliance with the Aboveground Petroleum Storage Act (ASPA) and Title 40 of the Code of Federal Regulations Section 112. Required to: 1) file a storage payment with the State Water Resources Control Board, 2) pay a facility fee, and 3) prepare and implement a federal Spill Prevention Control and Countermeasure (SPCC) plan.	Roger W. Briggs, Central Coast RWQCB	The Applicant is aware of the need to comply with the Aboveground Petroleum Storage Act (APSA) and Title 40 of the Code of Federal Regulations Section 112 and will comply accordingly. The Applicant will file a storage statement with the State Water Resources Control Board, pay a facility fee, and prepare and implement a federal Spill Prevention Control & Countermeasure Plan.
3	Recommend you consider Low Impact Development (LID) design techniques.	Roger W. Briggs, Central Coast RWQCB	The Applicant will consider Low Impact Development design techniques where appropriate and feasible. The proposed site design will create numerous detention/infiltration areas distributed evenly throughout the site that will capture the generated stormwater runoff equivalent to or greater than the required stormwater quality treatment volume. Stormwater runoff from vehicle parking and paved areas in the power block will be collected and directed to an OWS.
4	Obtain General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) coverage prior to grading.	Roger W. Briggs, Central Coast RWQCB	The applicant is aware of the need to comply with the General Permit for Stormwater Discharges Associated with Construction Activity and will comply accordingly. The requirement is listed in AFC Section 5.5.5.5 Table 5.5-7.
5	Obtain General Industrial Activities Storm Water Permit (General Permit). Standard Industrial Classification (SIC) Code requires permit coverage under the General Permit.	Roger W. Briggs, Central Coast RWQCB	The applicant is aware of the need to comply with the General Industrial Activities Storm Water Permit and will comply accordingly. The requirement is listed in AFC Section 5.5.5.5 Table 5.5-7.
6	The Central Coast Water Board must certify that any permit issued by the Army Corps of Engineers pursuant to Section 404 of the Clean Water Act complies with state and federal water quality standards.	Roger W. Briggs, Central Coast RWQCB	The applicant is aware of the need to comply with the Section 401 Water Quality permit application requirements associated with a Section 404 permit and will comply accordingly. The requirement is listed in AFC Section 5.5.5.5 Table 5.5-7.
7	The operation and maintenance of the facility, e.g. washing of Fresnel Reflectors, may require issuance of Water Discharge Requirements (WDR) with respect to the discharge of any waste that can affect the quality of the ground or surface water of the state. Consideration for WDR enrollment or a waiver of WDRs requires a submittal of a report of waste discharge to the Central Coast Water Board.	Roger W. Briggs, Central Coast RWQCB	The applicant is aware of the potential need to comply with the issuance of Waste Discharge requirements by submitting a report of waste discharge and will comply accordingly. The requirement is listed in AFC Section 5.5.5.5 Table 5.5-7.
8	An initial assessment of the project indicates that due to the close proximity of the Carissa Plain Elementary school (located on the adjacent parcel) and the diesel PM and fugitive dust emissions exceedances of the APCD thresholds, a screening and/or refined health risk assessment may be necessary.	Alexander Bugrove, Air Quality Specialist, APCD.	A conservative screening health risk assessment (HRA) was conducted for the AFC and described in Section 5.16, Public Health and Safety. The purpose of the HRA was to provide information on the potential health risks due to the Project's emissions of toxic air contaminants. For the operational Project, such emissions will be limited to diesel particulate matter from periodic testing of the fire pump internal combustion engine driver. The Carissa Plains School is identified in this analysis as the nearest sensitive receptor to the Project site and was included as a model receptor in the HRA. The assessment demonstrated that the Project's maximum impacts to carcinogenic and non-carcinogenic risks at all receptors in the surrounding area will be well below the threshold values specified in SLOAPCD Rule 219.

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Number	Comment	Name	Response:
9	The Water Resources Unit has identified two areas of concern: water use and water disposal. Water use is of particular interest in the Project area because every water user in the area relies solely on groundwater to meet their needs and they do not have an alternative (affordable) source of water should the supply in the basin decline.	Sylas Cranor, Water Resources Engineer, SLO DPW	The Applicant is aware of the water supply and use concerns in the area and has analyzed potential alternative water sources. Alternative water sources have been evaluated as described in the Project AFC. Due to the remote location of the site and sparse population, there is no existing infrastructure (wastewater treatment facilities) that could serve as a source of reclaimed water. Additionally, there are no sources of agricultural wastewater in the site vicinity that could serve the operations at the proposed CESF facility. Use of surface water runoff as a consistent supply of water for facility operation is not feasible.
10	We are concerned about possible contaminants in the treated wastewater effluent, and the concentrate disposal method, both of which have an impact on groundwater quality. An ideal project would be one that has no negative impact on the quality and quantity of the water in the basin.	Sylas Cranor, Water Resources Engineer	It is not the intent of the Applicant and its operations to affect the local water supply and quality. This is why effective planning and management are needed to effectively use the water that is available. In addition to analyzing potential alternative water sources, in response to CEC Data Request 33 the Applicant's consultant has reviewed available information for estimates of typical water use for other property uses that may be applicable to the vicinity of the proposed CESF site. The expected project average water use will be approximately 20.8 acre-feet per year (afy), or approximately 18,500 gallons per day (gpd). The comparison showed that the estimated water usage by the facility is small in comparison to two alternative uses for the land (irrigated and dry land farming).
DR4.6.7.8	Data Requests 4, 6, 7, and 8 addressed additional information needed on chosen alternative sites. Staff would like to ask whether specific parcels for the alternative sites were evaluated, and if so, can you please provide parcel numbers and a map showing the exact location of the parcels.	CEC, ALTS	Applicant looked at alternative locations but did not get to the detailed level of parcel numbers. We can provide section level data for each Alternate site, except for the Kern County Alternative.
	cont.	cont.	1. Daggett-Soppeland Alternative: T 10 N, R 3 E; Sections 4-9 and 16-21.
	cont.	cont.	2. Harper Lake Alternative: T 11 N, R 4 W, Sections 19, 29-32 and T 11 N, R 5 W, Sections 13, 24-25, 36.
	cont.	cont.	3. Kern County Alternative: The general area framed by Interstate 5, SR 58, SR 46 and the Westside Highway.
	cont.	cont.	4. Old Mine Alternative: T 10 N, R 1 E; Sections 20-21, 27-29.
DR11(a)	Staff would like to ask you to please provide the results for 2008 botanical and wildlife surveys for areas to be impacted by the project, including botanical surveys, small-mammal trapping surveys, and blunt-nosed leopard lizard surveys.	CEC, BIO	The Project proponent has spoken with CDFG and will be providing additional information to the CDFG regarding 2007 surveys to clarify protocols used to survey for each species of interest. The project proponent clarified to CDFG that the CESF project site has been and continues to be cultivated on a regular basis, and was most recently disked and planted in December of 2007. CDFG continues to state that 2007 was a bad year and further surveys may be necessary. Results of any surveys that are deemed necessary in 2008 will be provided to CEC staff immediately upon completion.
DR11(i)	Staff would like you to please contact Deb Hillyard at CDFG ((805)772-4318) to ensure that the appropriate survey protocols are followed.	CEC, BIO	The Project proponent spoke with Deb Hillyard regarding mitigation lands on 3/10/2008. Mitigation lands for the CESF Project will likely be located within the Camanzo Plain National Monument, because there is a mechanism for monitoring already set up. CDFG and USFWS expect that mitigation will include the creation of an endowment fund to ensure mitigation will be completed as planned. At this time, CDFG is not prepared to make suggestions on mitigation lands because more information is needed for CDFG to prepare a complete take and jeopardy assessment of the species listed above.

CECF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
DR11(c)	Staff would like you to please contact the U.S. Fish and Wildlife Service (USFWS) to determine the survey needs and protocols for the Kern primrose sphinx moth, and provide the results of the sphinx moth surveys.	CEC, BIO	The Project proponent left a message with USFWS regarding the moth. However, species lists from surveys of the site, as well as those from CNDDB and USFWS do not identify the larval host plant in the vicinity of the CEF Project area.
DR17	Data Request 17 addressed in four parts the CRHR eligibility of and project impacts to the Morro Bay-Midway 230-kV transmission line.	CEC, CUL	N/A
DR17(a)	Part "a": The applicant did not provide a response to part "a" and did not explain why no response was provided.	CEC, CUL	The portion of the Morro Bay-Midway 230-kV Line 1 which transverse the northern border of the architectural history APE was recorded and evaluated for eligibility to the CRHR in June 2007 as part of the CECF Cultural Resources Assessment (found in Appendix D of the Confidential Cultural Resources Appendix M in the Project AFC) by qualified architectural historian Mr. Jeremy Hollins.
cont.	cont.	cont.	The field investigation, coupled with primary and secondary source research, concluded that the Morro Bay-Midway 230-kV Transmission Line 1 did not appear to be eligible to the CRHR under Criterion 1 and Criterion 3. While the transmission line is part of a longer 55-mile corridor, it is not associated with a significant event, pattern of events, or historic trend (Criterion 1). The transmission line was constructed between 1943 and 1952 (per the 1952 La Panza USGS maps) and is representative of a common property type that has been well-documented in California and the West. The line was most likely constructed by Pacific Gas and Electric, and by the mid-20 <sup>th</sup> century the practice of installing steel lattice pylon towers to meet the housing and population booms of the state was commonplace in California. Dr. James Williams' <i>Energy and the Making of Modern California</i> identified the pioneering period for transmission lines in the state has been identified as 1908 through 1910 and the Morro Bay-Midway 230-kV Line 1 falls outside this period.
cont.	cont.	cont.	The structure does not transmit electricity over a great distance, is not the tallest or oldest, and is not representative of an experimental or pioneering engineering practice. Therefore, the Morro Bay-Midway 230-kV Line 1 is one of numerous nondescript similar facilities that dot California's landscapes and is not significant under Criterion 1.
cont.	cont.	cont.	In terms of the transmission line's significance under Criterion 3, the Morro Bay-Midway 230-kV Transmission Line 1 is a modest example of a steel lattice pylon tower transmission line corridor. Towers and transmission corridors that have previously been determined eligible under Criterion 3 are often aesthetically pleasing, local/regional landmarks, or symbols associated with a specific period and place. Oftentimes, they are distinctive examples of engineering achievements. None of this appears to be the case for the Morro Bay-Midway 230-kV Line 1, which features an economical utilitarian design and method of
cont.	cont.	cont.	construction. The structure utilizes commonly accepted technology and engineering principles that were in existence for nearly forty-years prior to its construction, and is typical of manufactured transmission towers from the mid-20 <sup>th</sup> century in California. Therefore, the Morro Bay-Midway 230-kV Line 1 is not significant under Criterion 3.

CESE (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
DR17(b)	Part "b": The applicant did not provide a response to part "b" and did not explain why no response was provided.	CEC, CUL	The portion of the Morro Bay-Midway 230-kV Line 1 which transverse the northern border of the architectural history APE was recorded and evaluated for eligibility to the CRHR in June 2007 as part of the CESF Cultural Resources Assessment (found in Appendix D of the Confidential Cultural Resources Appendix M in the Project AFC) by qualified architectural historian Mr. Jeremy Hollins. As part of the eligibility assessment, an analysis concerning the structure's historic integrity was completed. For a property to qualify for listing to the CRHR, besides meeting one of the criterion, it must also retain a significant amount of its historic integrity. The integrity analysis was completed by URS Architectural Historian Jeremy Hollins.
cont.	cont.	cont.	Location: Based on a review of historic maps and photographs (included in Appendices D and E of the Confidential Cultural Resources Appendix M in the Project AFC), the structure appears to be in its original location and has retained its integrity of location.
cont.	cont.	cont.	Design: While the structure has preserved its original organization of space, form, and plan, its integrity of design has been impacted by alterations caused by routine maintenance and service. It appears that many of the conductors and insulators have been replaced within the last 30 years. Additionally, it appears a barbed wire fence has been placed around the base of one of the towers. The installation of the fence impacts the structure's historic aesthetics which is reflective of its integrity of design.
cont.	cont.	cont.	Setting: While the structure has maintained its topographic features and relationship between the towers, the introduction of simple manmade features have disturbed the structure's integrity of setting. For example, the installation of the barbed wire fence and construction of nearby agricultural/residential properties within the past 20-years have impacted the mid-20 <sup>th</sup> century setting of the structure.
cont.	cont.	cont.	Materials: The structure has retained some of its original materials, but several original materials have been replaced to ensure the continued operations of the transmission corridor. The major extant materials include the steel lattice pylon towers (five total in the project area) characterized by a non-distinctive cross-bracing pattern. These elements were configured in this pattern during the structure's original construction; however, the economical design and pattern of configuration does not particularly indicate the types of materials and technologies available at the time or is it representative of a local, regional, or indigenous building tradition. In several locations, the bolted angle sections have been replaced with non-historic period materials, which disrupts the visual feel and appearance of the integrity of materials.
cont.	cont.	cont.	Workmanship: The property is in good structural condition and expresses a high level of workmanship. Feeling: impacts to the structure's original materials and setting have impacted its expression of an aesthetic or historic sense of a period of time. Association: The property is not associated with a significant person or event.
DR17(c)	Part "c": The applicant restated only the information already provided in the AFC about the interconnection of their proposed transmission line with the existing PG&E transmission line. Staff sought details on the planned physical interconnection, so staff can assess that impact.	CEC, CUL	The Applicant anticipates the proposed CESE Project will not materially alter or modify the Morro Bay-Midway 230 kV Line 1, and the transmission line will retain its footprint, form, materials/fabric, and visual appearance and narrative. The System Impact Study has not been completed yet (anticipated to be completed March 20 <sup>th</sup> ), if the System Impact Study identifies changes to the transmission line, additional analysis will be conducted.

CESE (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
DR17(d)	Staff also sought detailed information on any other modifications to the Morro Bay-Midway 230-kV transmission line that might be required, including reconductoring, but the applicant provided none. The applicant stated that at this time it is unknown if reconductoring of some portion or all of the Morro Bay-Midway 230-kV transmission line would be necessary. The applicant did not offer to provide more information when the System Impact Study is completed.	CEC, CUL	N/A
DR17(d)	Part "d": The applicant restated the opinion expressed in the AFC that the interconnection of their proposed transmission line to the existing PG&E transmission line would be a negligible impact, but did not indicate whose opinion this was or the qualifications of this person. The applicant did not discuss any other possible modifications to the Morro Bay-Midway 230-kV transmission line or offer any opinions on the modifications as potential impacts to the line.	CEC, CUL	At this point, the proposed CESE Project will not materially alter or modify the Morro Bay-Midway 230 kV Line 1. If the System Impact Study (anticipated to be completed March 20 <sup>th</sup> ) determines that the Morro Bay-Midway 230 kV Line 1 will be impacted by modifications, then a supplemental architectural history evaluation will occur to determine the impacts the Project may have on the property and its historic integrity.
DR18	Data Request 18 addressed in four parts the CRHR eligibility of and project impacts to the Midway Substation.	CEC, CUL	N/A
DR18(a)	Part "a": The applicant provided some useful historical information about the Midway Substation, but did not provide a response to part "a" and did not explain why no response was provided.	CEC, CUL	After a review of the project description and primary and secondary sources, Mr. Jeremy Hollins, qualified architectural historian, did not record or evaluate the Midway Substation as part of the CESE Cultural Resources Assessment (found in Appendix D of the Confidential Cultural Resources Appendix M in the Project AFC), since it was located 42-miles east of the APE. The Applicant did not propose to modify the Midway Substation as part of this Project, and due to its distance from the project site did not appear to be directly or indirectly impacted by the project. Therefore, since the property was outside of the APE and not anticipated to be impacted by the Project, it was not evaluated for eligibility to the CRHR. If the System Impact Study (anticipated to be completed March 20 <sup>th</sup> ) determines that the substation will be impacted by modifications, then a supplemental architectural history evaluation will occur to determine the CRHR-eligibility and effects to the property.
DR18(b)	Part "b": The applicant did not provide a response to part "b" and did not explain why no response was provided.	CEC, CUL	After a review of the project description and primary and secondary sources, Mr. Jeremy Hollins, qualified architectural historian, did not evaluate the historic integrity of the Midway Substation as part of the CESE Cultural Resources Assessment (found in Appendix D of the Confidential Cultural Resources Appendix M in the Project AFC), since it was located 42-miles east of the APE. The Applicant did not propose to modify the Midway Substation as part of this Project, and due to its distance from the project site did not appear to be directly or indirectly impacted by the project. Therefore, since the property was outside of the APE and not anticipated to be impacted by the Project, it was not evaluated for eligibility to the CRHR. If the System Impact Study (anticipated to be completed March 20 <sup>th</sup> ) determines that the substation will be impacted by modifications, then a supplemental architectural history evaluation will occur to determine the eligibility and impacts to the property.

CESEF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWCCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
DR18(c)	Part "c": The applicant restated only the information already provided in the AFC on how their generated electricity would reach the Midway Substation. Staff sought details on any physical modifications to the substation that would be needed to accommodate the proposed project's output, so that staff can assess that impact. The applicant provided no additional information on any modifications to the Midway Substation. The applicant stated that at this time it is unknown if reconductoring would be required, although the pertinence of this to the Midway Substation is unclear. The applicant did not offer to provide more information when the System Impact Study is completed.	CEC, CUL	The Applicant anticipates the proposed CESEF Project will not materially alter or modify the Midway Substation and the property will retain its footprint, form, materials/fabric, and visual appearance and narrative. However, the System Impact Study has not been completed yet (anticipated to be completed March 20 <sup>th</sup> ). If the System Impact Study determines that the substation will be impacted by modifications, then a supplemental architectural history evaluation will occur to determine the eligibility and impacts to the property.
DR18(d)	Part "d": The applicant stated that modifications to the Midway Substation are not proposed as part of the CESEF project and restated the opinion expressed in the AFC that the proposed project would not materially alter or modify the substation. The applicant, however, did not indicate whose opinion this was or the qualifications of this person. The applicant did not discuss any other possible modifications to the Morro Bay-Midway 230-kV transmission line or offer any opinions on the modifications as potential impacts to the line.	CEC, CUL	At this point, the proposed CESEF Project will not materially alter or modify the Midway Substation. If the System Impact Study (anticipated to be completed March 20 <sup>th</sup> ) determines that the Morro Bay-Midway 230 kV Line "1" will be impacted by modifications, then a supplemental architectural history evaluation will occur to determine the impacts the Project may have on the property and its historic integrity.
TR (1)	Please identify specifically which roads, in addition to SR-58, will be used for equipment deliveries.	CEC, Traffic & Transportation	In addition to SR 58, it is anticipated that I-5, a National Network route and SR 58 in Kern County would be used. From SR 33 to I-5, SR 58 in a California Legal or Terminal Access route. US 101 is also a National Network route. These routes have no restrictions.
TR (2)	Will the heavy equipment referenced in AFC Section 3.4.13.1.8 be able to be delivered to the project site on trucks with KPRRA < 30 feet?	CEC, Traffic & Transportation	All deliveries will comply with the KPRRA restrictions.
TR (3)	Was the KPRRA restriction of less than 30 feet considered in the calculation of the estimated number of construction truck trips was calculated? If not, please provide a new estimate of estimated peak construction truck trips.	CEC, Traffic & Transportation	Yes it was.
WA(1)	What is the estimated water use (evapo-transpiration) for the existing site under the existing non-irrigated pasture/grass land use?	CEC, Water Use	The evapo-transpiration is assumed to be that water that falls on the property as precipitation, which is approximately 0.67 feet per year.
WA(2)	What impacts will ground water pumping have on neighboring wells? Please provide: a map illustrating distance to surrounding wells.	CEC, Water Use	The Applicant prepared a map showing the location of water wells that appear on the U.S. Geological Survey 7.5-minute La Panza NE, California Valley and Simmler topographic quadrangle maps. Well information is not public information in California, so it is difficult to know the locations of wells in the site vicinity. Locations of seven wells in the site vicinity were readily available in a previous Bechtel study for the Former ARCO solar facility. These additional wells are plotted on the map. See map attached to Item 20 of the Responses to Questions from the Informational Hearing.
WA(2)	What impacts will ground water pumping have on neighboring wells? Please provide: a drawdown analysis to determine potential impacts to surrounding wells.	CEC, Water Use	URS is in the process of conducting a model run of drawdown (the change in water level), including recharge, in the aquifer and will provide the results as soon as they become available.

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Number	Comment	Name	Response:
WA(3)	We understand that CESF plans to plant trees and shrubs to provide visual cover along the perimeter of the site. Do the current estimates for annual water use include irrigation of this landscaping? If not please provide updated water use estimates.	CEC, Water Use	Irrigation for landscaping was not included in the annual water use estimates for the project. Rather than perimeter project screening, CESF has opted to work with potentially affected individuals and offer a Tree Planting Allowance for individual screening. Tree planting will be handled in coordination with individual property owners. CESF has recommended the California Juniper, a native tree to the area, which will be able to sufficiently thrive without additional irrigation.
WA(4)	What is the estimated water use during construction including use for compaction, dust suppression, etc.?	CEC, Water Use	Water use during construction will be on the order 1/3 of the water during operations. For example, as described in the AFC, the amount of water that will be used during the three years of construction is approximately 5 acre-feet to mix concrete. This is approximately 1.63 million gallons. Over the three-year period, this would be an average of about 1,500 gallons per day (gpd), or about 1 gallon per minute (gpm) from the water supply well that is located on site. Other uses include dust control and compaction which are included in the estimated 1/3 of water during operations.
WA(5)	Please provide a map showing the up-gradient sub-watersheds described in Soil and Water Resources Data Response 38.	CEC, Stormwater Management	Map to be provided.
WA(6)	What impact will the changed hydrology have on the seasonal wetlands/vernal pools that exist in the laydown area? Please estimate current average annual runoff volumes feeding the vernal pools under the existing and proposed conditions.	CEC, Stormwater Management	Per the Biology analysis there are no vernal pools or vernal pool habitat areas on the project site or construction laydown area. Additionally, there are no wetlands associated with the jurisdictional Waters of the United States delineation. The jurisdictional Waters of the U.S. delineation area is not a wetland or vernal pool that is reliant on annual flows from a biological standpoint. Therefore, the proposed hydrology condition will not adversely affect this area from a biological standpoint.
cont.	cont.	cont.	The total tributary area to the jurisdictional Waters of the United States within the construction laydown area is approximately 50 square miles. The associated total potential runoff flow volume is approximately 10,133 acre-feet per year (afy), assuming 10 inches annual rainfall and a runoff coefficient of 0.38. This is a conservative flow volume that does not consider storage and infiltration areas within the 50 square mile watershed upstream of the construction laydown area. Under the proposed condition, the onsite average annual rainfall will be collected and infiltrated/evaporated onsite, and the existing upstream flows will be routed around the site and flow to the jurisdictional Water. Under the proposed annual average condition, there will be a reduction in tributary area from 50 square miles to 49 square miles (a 2-percent decrease). Total runoff volume tributary to the jurisdictional Water under this proposed condition, would be approximately 9,930 afy, a reduction of 203 afy. This is a minor reduction and is not considered a significant amount because this area is not a wetland or vernal pool that is re
WA(7)	Once the USACE provides their jurisdictional determination, how will CESF limit use of the laydown area to prevent potential impacts to sensitive seasonal wetlands and/or vernal pools?	CEC, Stormwater Management	The Applicant will employ temporary construction site sediment and erosion control Best Management Practices (BMP) to limit access to the delineated jurisdictional Waters of the United States and minimize sediment from entering the waters. The construction BMPs will include clear delineation of the jurisdictional waters and installation of linear sediment barriers such as silt fence and fiber rolls. Two permanent stream crossings (culverts) will be installed to prevent erosion damage due to vehicle crossing. BMP descriptions and locations will be provided in the DESCP.
WA(8)	Data Response 48 indicated that a draft DESCP will be available in March 2008, when will the DESCP be provided? Also, please include measures to protect any existing seasonal wetlands/vernal pools in the draft DESCP.	CEC, Stormwater Management	The DESCP is scheduled to be complete by March 28, 2008

CESSF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
DR27	Data Request 27 asked whether or not residents of nearby receptors would be at home during the construction hours of 7:00 a.m. and 7:00 p.m. Monday through Friday. Staff has requested this information verification regarding ML1 and ML3, via email 3/5/08.	CEC, Noise	At this time, the Applicant's consultant has yet to reach the individuals residing at ML1 and ML3. CESSF will provide this information as soon as it can be obtained from these locations.
RB2(1)	Although there may not be any specific studies that determine the construction of a nearby solar plant has a negative effect on local property values, common sense certainly says it does. The property becomes less desirable due to the presence of a power plant. Everyone would rather look out their window to see a grazing herd of antelope or cattle rather than an industrial power plant. Everyone would rather sit on their porch and hear the quiet sound of the country rather than construction noise or steam turbines. In fact, at Austra's first presentation meeting, when we asked three of Austra's own employees, including Mr. Perry Fontana, if they would want this plant in their neighborhood, all three admitted they would not want to live near it. And, since we also don't want to live near a power plant, we have contacted a local real estate agent to evaluate the prospects of selling our property.	Robin Bell, Response Set 2	Comment Noted.
cont.	The agent, with thirty years experience in selling local rural property, stated that the biggest challenge in selling our property would be to convince a buyer that living near a solar plant is not a negative. The plant's construction obviously has an effect on its neighborhood's property value.	cont.	cont.
RB2(2)	It is clear that CESSF's agenda is to construct this plant within a certain timeframe and budget. And it is clear CESSF has chosen a site that meets those requirements regardless of its affects on the neighborhood surrounding it. However, it is unjust that so many families' homes and property investments will be affected simply because this site is the most convenient and least expensive option for CESSF.	Robin Bell, Response Set 2	The Applicant is developing the proposed project as a result of entering into a power purchase agreement with Pacific Gas & Electric, and PG&E is required under state law to purchase 20% of its delivered electricity from renewable resources by the end of 2010. Applicant is definitely working on a schedule and budget that support the responsibilities Applicant has undertaken in the agreement with PG&E. As Applicant has stated, the site of the CESSF was chosen using a careful screening process based on elements including availability, cost, direct normal solar insulation, slope, proximity to transmission, and biological characteristics. Applicant respectfully believes it has designed a project that has less than significant impacts on the surrounding environment.
RB2(3)	It is understand that air cooled condensers are required for the project however in this age of technology, it must be possible to design one with a lower height. Just because this height condenser is a stock design does not mean it is the best choice for the community. It is unjust that these enormous condensers desecrate the beauty of the plains simply because it is the most convenient and least expensive option for CESSF.	Robin Bell, Response Set 2	The air cooled condensers must move large volumes of air with large fans located inside. Unfortunately, the requirement to move a large volume of air requires a large structure. The height of the air cooled condensers allow for clean air to be pulled into the units. With the large volume of air moving through these units, a lower structure height would pick up dust and dirt with the air which accumulates on the fans and reduces efficiency of the units. In addition, with the current design, the air cooled condensers only require one washing per year. The increased dust and dirt accumulation associated with a shorter structure would require additional washings throughout the year. Therefore, the height of the condensers also provide for increased water efficiency for the CESSF Project.

CESF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
RB2(4)	<p>CESF's proposal to provide landscaping at a few individual homes is inadequate. CESF has indicated a small number of sensitive receptors in the AFC however; the number of homes and home sites that will be affected is far greater. Perimeter landscaping (as also suggested by the San Luis Obispo County Planning and Building Department) is the best solution for mitigating the plant's visual impact. With this solution all home sites will receive the same benefit and the added bonus will be visual screening for motorists on Hwy 58.</p>	Robin Bell, Response Set 2	<p>Carrizo Energy believes that individual screening is a preferred alternative to perimeter screening. The Applicant is also evaluating including privacy fencing as a screening feature.</p>
RB2(5)	<p>To clarify we were promised landscaping at CESF initial project presentation by Mr. Perry Fontana however, we are not indicated as a sensitive receptor in the AFC. After the response to the Data Adequacy Request that outlined CESF's landscaping program, we contacted Mr. Fontana to discuss the landscaping proposal. We stated that we did not want trees planted close to our house as shown in the Data Adequacy Response and nor did we want Leiland Cypress. We suggested instead 190 eucalyptus trees to be planted on our eastern property line. Mr. Fontana said this amount and species was acceptable and that CESF "just wanted to do whatever would make us happy". Mr. Fontana never mentioned that landscaping was now limited to only the sensitive receptors indicated in the AFC. Given this change in attitude and these false promises, perimeter landscaping at the plant site is the only fair solution for the entire community.</p>	Robin Bell, Response Set 2	<p>The Applicant has not reached any agreement with individual property owners regarding the type or amount of landscaping. Carrizo Energy has discussed alternatives with several property owners and believes it is appropriate to involve professional landscaping consultants in developing the final landscaping plans. The Applicant believes that any vegetation used for screening be appropriate given the water supply and biology of the area.</p>
RB2(6)	<p>Since perimeter landscaping seems to be the best solution for landscaping, it would be beneficial to also submit all views showing perimeter landscaping so this option can be fully evaluated.</p>	Robin Bell, Response Set 2	<p>As stated above (see responses prepared for Questions RB2 (4) and RB2 (5), CESF believes that individual receptor screening is a preferred alternative to perimeter project screening. CESF has made it a priority to limit water use for the project wherever feasible. Revised simulations will be prepared as required.</p>
RB2(7)	<p>The question of noise levels and limits at night was not answered. Additionally, it is very optimistic that pouring concrete will be the only activity to occur at night because summer daytime temperatures frequently exceed levels that would permit any work being done during the majority of the day.</p>	Robin Bell, Response Set 2	<p>From page 2-26 of the Final Project Description, section 2.4.13.1 states: Heavy construction will be scheduled to occur between 7:00 am and 7:00 pm, Monday through Friday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. Some activities will continue 24 hours per day, 7 days per week. These activities include, but are not limited to, refueling equipment, staging material for the following day's construction activities, quality assurance/control and commissioning. Concrete pours that occur in the early evening might be considered a critical construction activity with respect to peak summer temperatures. Other identified potential activities taking place outside of the 7AM to 7PM period include equipment refueling and material staging. One way to estimate night-time construction noise from these activities would be to alter the prediction model so that only equipment active during the night-time period are "on", with the remaining inactive equipment "turned off".</p>

CESEF (07-AFC-8) RESPONSES TO DOCKETED LETTERS FROM J. KILMER (CALTRANS, DISTRICT 5), R. BRIGGS (CENTRAL COAST RWQCB), A. BUGROVE (APCD), AND S. CRANOR (SLO DPW), DATA REQUESTS FROM CEC, AND COMMENTS FROM R. BELL (PART 2)

Number	Comment	Name	Response:
cont.	cont.	cont.	For example, if one anticipated that only 10 pieces of equipment would be active for some period of time in the evening, the resulting noise prediction would be considerably less than that anticipated for a daytime period quantity of equipment ranging from 53 to 171 pieces in given month (from Table P-2 of Appendix P). The predicted value would depend on what equipment are active, the individual source levels, and so on. Hypothetically, and as a way to illustrate what the difference between daytime and nighttime construction noise generation might be, if all equipment were identical with respect to sound generation, and the distance between a quantity of such equipment and a receiver were the same for both cases, the difference between 53 pieces and 10 pieces would be $10 \cdot \text{LOG}(53/10)$ or 7.24 dB.
RB2(8)	Highway lighting is very bright. The number of these lighting units and the length of time they will be used should be evaluated. Since this is a three year construction process, there may be impacts.	Robin Bell, Response Set 2	CESEF is limiting nighttime lighting, therefore minimizing temporary impacts wherever practical. Nighttime operations would occur only when necessary processes cannot occur in peak daytime temperatures. There are two primary activities that might have to be performed on off-peak hours due to temperature: pouring concrete foundations, in which case typical highway lighting would be used, and millwright work. Foundation pouring would happen approximately once a month over the course of three to four months, although the number could feasibly average half a dozen nights in total. Millwright work requires smaller, portable, halogen lights. These lights are not pole-mounted, and would therefore have more limited temporary impacts to nighttime lighting conditions.
RB2(9)	I have read many descriptions of decibel levels that are intended for the layman to understand and they vary significantly. While we appreciate your efforts to accurately describe the plants noise levels, a simulation with the decibel levels metered would be the only objective way to explain the sound level and type.	Robin Bell, Response Set 2	As a follow-up to the Applicant's initial response to this question, our response to similar questions posed by Ms. Bell (identified as #60 on the 2/29/08 list or pg. 55, line 20 from the transcript) and Mr. Ruskovich was as follows: Table 5.12-1 (pg. 5.12-3) shows a table that associates typical noises and sound environments with decibel levels. Table 5.12-7 (pg. 5.12-15) shows that predicted operational noise levels at selected noise-sensitive locations are all below 50 dBA, which Table 5.12-1 suggests is comparable in magnitude to "light traffic at 100 feet". Since the project's pair of dry cooling systems are expected to be the dominant plant operational noise sources, the character of the sound will probably resemble that of a household window fan (at low speed setting), clothes dryer, or dehumidifier at 3-5' distance.
cont.	cont.	cont.	(Source of these analogies: USEPA, "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances", NTID300.1, December 31, 1971.) Note that this fan-like sound would become part of the aggregate sound environment, which includes noise generated from wind traversing obstacles, human activity, wildlife, air and surface traffic noise, etc.
RB2(11)	The question was not answered. Additionally, agriculture in the area is primarily dry land farming or grazing rather than irrigated.	Robin Bell, Response Set 2	Please see response to "water - aquifer" previously recorded.

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 2/5/2008)

**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:

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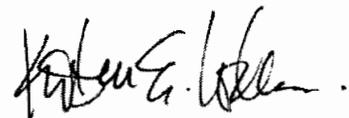
**DECLARATION OF SERVICE**

I, Kristen E. Walker, declare that on March 18, 2008, I deposited copies of the attached Applicant's Responses to the Docketed Letters from J. Kilmer (Caltrans, District 5), R. Briggs (Central Coast RWQCB), A. Bugrove (APCD), and S. Cranor (SLO DPW); Data Requests from the CEC; and Comments from Robin Bell (Part 2) in the United States mail (FedEx) 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.



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