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File No. 030137-0012

August 21, 2008

VIA FEDEX

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-3
1516 Ninth Street, MS-4
Sacramento, California 95814-5512

Re: CPV Sentinel Energy Project: Docket No. 07-AFC-3

Dear Sir/Madam:

Pursuant to California Code of Regulations, title 20, sections 1209, 1209.5, and 1210, enclosed herewith for filing please find Applicant's Comments on the Preliminary Staff Assessment.

Please note that the enclosed submittal was also filed today via electronic mail to your attention.

Very truly yours,

Paul E. Kihm
Senior Paralegal

Enclosure

cc: CEC 07-AFC-3 Proof of Service List (w/encl. via e-mail)
Michael J. Carroll, Esq. (w/ encl.)

Comments on the Preliminary Staff Assessment

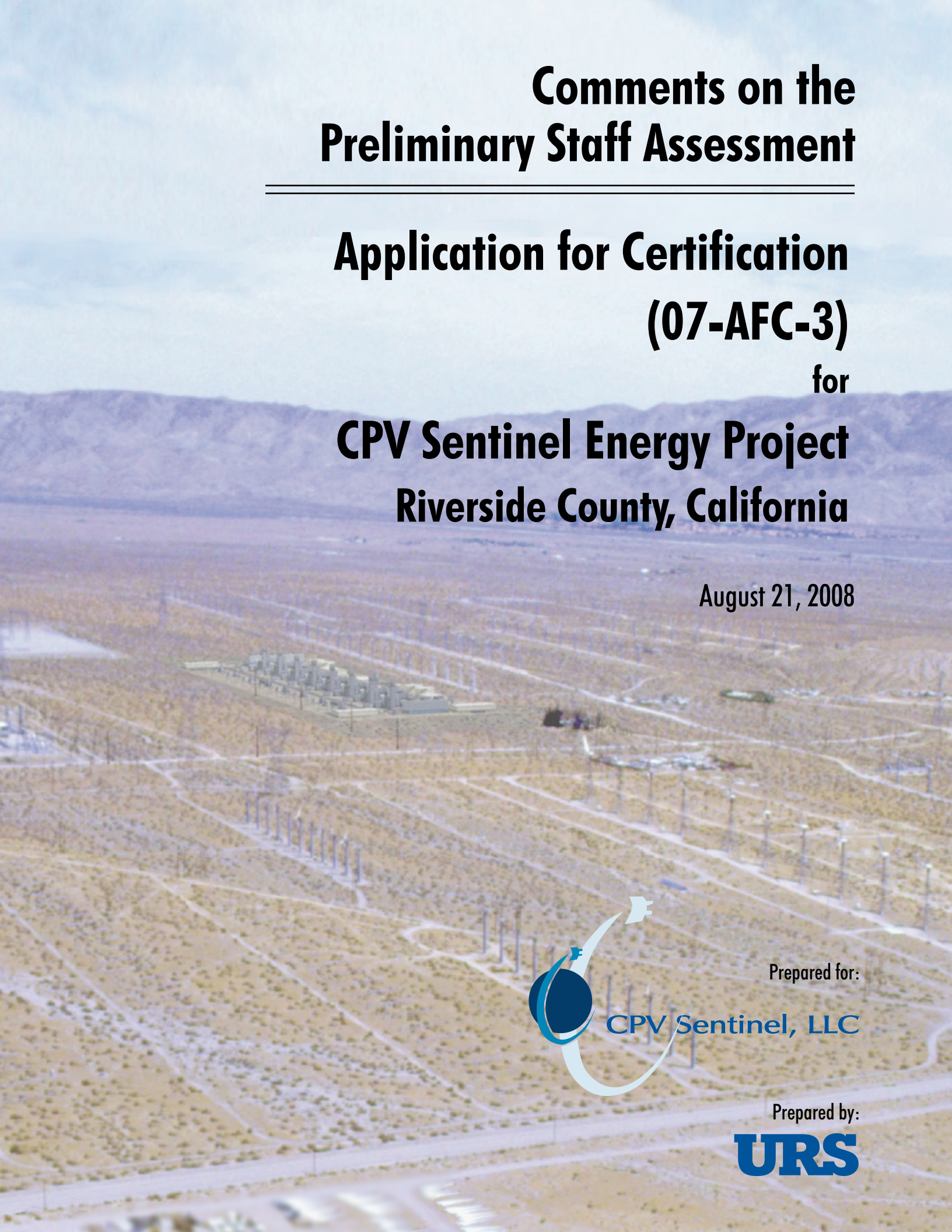
Application for Certification (07-AFC-3)

for

CPV Sentinel Energy Project

Riverside County, California

August 21, 2008



Prepared for:

CPV Sentinel, LLC

Prepared by:

URS

Comments on the Preliminary Staff Assessment
CPV Sentinel Energy Project
August 21, 2008

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 1.0, Executive Summary				
1.	Section 1, Executive Summary	Page 1-1, Project Location and Description, second sentence	"The other main project features will consist of a 37 acre power plant site, 14 acre construction laydown area, 3,250 feet of transmission lines, and 2.6 miles of natural gas pipeline."	The route of the proposed transmission line connecting CPV Sentinel Energy Project (CPVS) to the existing Devers substation has been modified slightly from the route presented in the Application for Certification (AFC). This minor modification is due to further detailed design by Southern California Edison (SCE) of the transmission interconnection. The currently proposed transmission line route will exit the 37-acre project site at the southwest corner, in the same location as previously presented in the AFC. However, the transmission line will be located approximately 270 feet north of the previous alignment proposed in the AFC as it continues west adjacent to Powerline Road to the Devers substation. This modification will reduce the length of the transmission line from 3,250 feet to approximately 2,300 feet; 1,850 feet of which would be located outside of the project site. No unidentified or new environmental impacts are expected with this minor modification to the transmission line route. Attachment A, includes a revised AFC Figure 2.3-1 and Figure 2.4-1 (Preliminary Staff Assessment [PSA] Figure 2 and Figure 3) and a more detailed discussion of environmental consequences associated with the proposed modification.
2.	Section 1, Executive Summary	Page 1-2, second paragraph, second sentence	"It is currently anticipated that SCE will execute contracts with CPV Sentinel, LLC under which SCE will be responsible for final design, engineering, construction, operation, and maintenance of the generator tie to the Devers substation."	SCE will be responsible for final design, engineering, construction, ownership, operation, and maintenance of the generator tie to the Devers substation.
3.	Section 1, Executive Summary	Page 1-2, second paragraph, last sentence	"The project would require the construction of a 3,250 foot-long transmission line connecting the proposed project site to the existing Devers substation."	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 2.0, Introduction				
4.				
Section 3.0, Project Description				
5.	Section 3, Project Description	Page 3-2, Project Features, third bullet	"A 3,250-foot-long transmission line connecting to the existing Devers substation;"	The current expected length of the transmission line is approximately 2,300 feet.
6.	Section 3, Project Description	Page 3-3, Transmission Lines, first sentence	"Electricity generated by the proposed project would be delivered to the existing SCE Devers substation via a 3,200-foot-long transmission line connecting the project switchyard to the Devers substation at the 220 kilovolt (kV) bus."	The current expected length of the transmission line is approximately 2,300 feet.
7.	Section 3, Project Description	Page 3-3, Transmission Lines, second sentence	"It is currently anticipated that SCE will execute contracts with CPV Sentinel, LLC under which SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line to the Devers substation."	Applicant suggests the addition of "CPV Sentinel, LLC, SCE and the California ISO entered into a Large Generator Interconnection Agreement (LGIA) effective June 6, 2008 for the purpose of interconnecting the project to the California ISO-controlled grid." It is currently anticipated that SCE will execute a separate tie-line agreement with CPV Sentinel, LLC under which SCE will be responsible for final design, engineering, construction, ownership, operation, and maintenance of the transmission line to the Devers substation.
8.	Section 3, Project Description	Figure 2		See Attachment A for Revised Figure 2 showing the modified transmission line route.
9.	Section 3, Project Description	Figure 3		See Attachment A for Revised Figure 3 showing the modified rack location resulting from the change to the transmission line route.
Section 4.1, Air Quality				
10.	Section 4.1, Air Quality	Page 4.1-6, Air Quality Table 2, third row, fourth column	Federal 8-hour Ozone standard is listed as 0.08 ppm.	The value of this standard has recently been changed to 0.075 parts per million (ppm).
11.	Section 4.1, Air Quality	Page 4.1-15, Project Description and Proposed Emissions,	"3,250 foot long transmission line"	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
		seventh bullet		
12.	Section 4.1, Air Quality	Pages 4.1-18 through 4.1-20, Air Quality Tables 8, 9, 10 and 11	Emissions are presented in tables for blackstart and firewater pump engines.	The South Coast Air Quality Management District (SCAQMD) and the applicant have agreed to revised hourly emission rates for these engines as shown below. These changes reflect a different split of the combined NOx and VOC Tier 2 emission limit, use of ultra-low sulfur diesel and the SCAQMD's finding that a particulate soot filter is required for BACT on the blackstart engine. <u>Fire pump engine:</u> NOx: 2.54 lb/hr CO: 0.31 lb/hr VOC: 0.05 lb/hr PM10: 0.07 lb/hr SOx: 0.0005 lb/hr <u>Blackstart Generator Engine:</u> NOx: 18.19 lb/hr CO: 3.84 lb/hr VOC: 1.07 lb/hr PM10: 0.03 lb/hr SOx: 1.05 lb/hr
13.	Section 4.1, Air Quality	Pages 4.1-20, Air Quality Table 11, fifth row, sixth column	The annual PM_{10} emissions from cooling towers in Air Quality Table 11 is listed as 571.14 lb/yr.	The annual PM_{10} emissions from cooling towers in Air Quality Table 11 is incorrect and should read 2,237 lb/yr.
14.	Section 4.1, Air Quality	Page 4.1-21, Direct/Indirect Impacts and Mitigation, third paragraph	"For this project, the meteorological data used as inputs to the model included hourly wind speeds and directions measured at the Riverside meteorological station, and background criteria pollutant measurements from a number of SCAQMD maintained ambient monitoring stations in the vicinity of the project site (CPV 2007a)."	Wind data from the adjacent Wintec Wind Energy facility was used.
15.	Section 4.1, Air Quality	Page 4.1-22, Construction Impact Analysis, tenth bullet	"Exhaust from locomotives used to deliver mechanical equipment; and"	Shipment of heavy equipment to the site by rail is not planned.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
16.	Section 4.1, Air Quality	Page 4.1-27, Commissioning Modeling Impact Analysis, fourth paragraph	"The applicant used the U.S. EPA approved SCREEN3 model (version 96043) for the calculation of commissioning impacts."	The AERMOD model, not SCREEN3, was used by the applicant to evaluate commissioning impacts.
17.	Section 4.1, Air Quality	Page 4.1-31, Emission Offsets, first paragraph	"At this time, staff is unaware of any ERCs that the applicant has secured."	CPV Sentinel has obtained volatile organic compound emissions reduction credits for the project and provided information to the SCAQMD. CPV Sentinel, LLC has acquired the following emission reduction credits: • Certificate No. AQ007877: 348 pounds per day of reactive organic gases; and • Certificate No. AQ007879: 64 pounds per day of reactive organic gases. The transaction date was March 27, 2008 and the seller was Tenaska (through Evolution Markets as the broker).
18.	Section 4.1, Air Quality	Page 4.1-61, Regulation XVII-Prevention of Significant Deterioration, fourth paragraph	The SCAQMD has sent the applicant a notification to contact the U.S. EPA directly for applicability of PSD to the proposed project. SCAQMD sent a letter to the applicant on December 8, 2005, and instructed the applicant to contact U.S. EPA directly regarding implementation of PSD. To staff's knowledge there has been no resolution to this issue, U.S. EPA has not at this time delegated the PSD analysis to the SCAQMD as has been the practice in the last few years. PSD delegation is expected post certification and will be specifically limited to this project.	The project does not trigger Prevention of Significant Deterioration analysis because the applicant will accept conditions limiting operating hours, and thus the potential to emit, to less than 250 tons per year for any individual pollutant (as shown in Air Quality Table 11).
19.	Section 4.1, Air Quality	Page 4.1-64 to 4.1-90, Proposed Conditions of Certification	CEC merging and editing of SCAQMD PDOC conditions	CPV Sentinel believes that the Conditions of Certification that are based on SCAQMD conditions in the Preliminary Determination of Compliance (PDOC) should not be combined or edited by the California Energy Commission (CEC) to read differently from the language used by SCAQMD. Having two sets of conditions to comply with will lead to unnecessary confusion. We recognize that it is appropriate for CEC to add additional conditions of its own, as represented in Conditions of

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
				Certification AQ-SC1 through AQ-SC12. However, for the remainder of the conditions, the CEC and SCAQMD should agree on mutually acceptable language to be used in both the CEC Final Decision and in the Permit to Construct / Permit to Operate issued by SCAQMD.
20.	Section 4.1, Air Quality	Page 4.1-66, Air Quality Table 18, ninth row, first column	Air Quality Table 18 states that SCAQMD Condition B61.2 corresponds to CEC Condition of Certification AQ-6.	The correct corresponding SCAQMD Condition is B61.1.
21.	Section 4.1, Air Quality	Page 4.1-66, Air Quality Table 18, eleventh row	Description of CEC Condition of Certification AQ-6 (SCAQMD Condition C1.2) reads: "Limits the fuel usage for each turbine to 418 mmcf per month (non-commissioning). Units 6-8"	The original SCAQMD condition limits fuel usage for Units 6-8 to 598 million cubic feet (mmcf) per month, not 418 mmcf per month.
22.	Section 4.1, Air Quality	Page 4.1-74 to 4.1-75, AQ-SC8	Condition AQ-SC8 requires a SCAQMD letter stating that the project is eligible for PRCs because it is in the first 2700 MW of capacity for which PRCs have been requested and evidence of a long term contract for project power generation. It also requires the applicant to provide evidence of a long-term power purchase agreement.	Condition AQ-SC8 is unnecessary and should be deleted. Pursuant to SCAQMD Rule 1309.1 and the SCAQMD's new source review requirements, Applicant must satisfy the requirements set forth in Condition AQ-SC8 prior to obtaining its permit to construct, which in turn must be obtained prior to commencing construction. Thus, the requirements in AQ-SC8 will be satisfied without the conditions, and the condition merely imposes additional administrative burdens on the Applicant.
23.	Section 4.1, Air Quality	Page 4.1-77 to 4.1-78, AQ-1	Condition AQ-1 incorporates SCAQMD Conditions A63.1 and A63.2.	The Applicant and the SCAQMD have agreed to modification of SCAQMD Conditions A63.1 and A63.2 since issuance of the PDOC. Specifically, the restriction that did not allow commissioning and some subsequent normal operation of the turbines within the same month is proposed to be removed in the Final Determination of Compliance (FDOC).
24.	Section 4.1, Air Quality	Page 4.1-78, AQ-2	"The project owner/operator shall not produce emissions of oxides of nitrogen from the facility, including the firewater pump and all <u>five</u> gas turbines combined, that exceed the RECLAIM Trading Credits holdings required in Condition of Certification AQ-16 within a calendar year."	The condition should refer to all "eight" gas turbines.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
25.	Section 4.1, Air Quality	Page 4.1-78 to 4.1-79, AQ-3	Condition AQ-3 incorporates SCAQMD Conditions A99.1 through A99.10, A433.1 and A433.2	The Applicant and the SCAQMD have agreed to modification of SCAQMD Conditions A99.1 through A99.10, A433.1, and A433.2 since issuance of the PDOC. Specifically, the allowable time for completion of a turbine restart following a trip during an initial start is proposed to be extended in the FDOC.
26.	Section 4.1, Air Quality	Page 4.1-80, AQ-6	Condition AQ-6 incorporates SCAQMD Conditions B61.2, C1.1 through C1.7, and D12	The Applicant and the SCAQMD have agreed to modification of SCAQMD Conditions B61.2, C1.1 through C1.7, and D12 since issuance of the PDOC. Specifically, it is proposed that the restriction in Condition SCAQMD C1.3 disallowing commissioning and some subsequent normal operation of the turbines within the same month be removed in the FDOC, and minor word changes be made in SCAQMD Conditions C1.6 and C1.7.
27.	Section 4.1, Air Quality	Page 4.1-82 to 4.1-83, AQ-8	Condition AQ-8 incorporates SCAQMD Condition D29.2	The Applicant and the SCAQMD have agreed to modification of SCAQMD Condition D29.2 since issuance of the PDOC. It is proposed that SCAQMD Condition D29.2 be changed in the FDOC so that source testing for ammonia would not be required during calendar quarters during which the turbines would not otherwise be operated.
28.	Section 4.1, Air Quality	Page 4.1-86 to 4.1-87, AQ-15	Condition AQ-15 incorporates SCAQMD Conditions C1.4, D12.5, E193.4, and K67.2	The Applicant and the SCAQMD have agreed that SCAQMD Condition E193.4 should be deleted in the FDOC.
29.	Section 4.1, Air Quality	Page 4.1-88, line 2	"A First Year Total of: 304,767 lbs NOx RTC."	Total should be 304,738 lbs.
30.	Section 4.1, Air Quality	Page 4.1-88 to 4.1-89, AQ-17	Condition AQ-17 incorporates SCAQMD Conditions D29.4 and E193.2	The Applicant and the SCAQMD have agreed to modification of SCAQMD Conditions D29.4 and E193.2 since issuance of the PDOC. The following changes are proposed to be made in the FDOC: it is proposed that the restriction in SCAQMD Condition E193.2 against operating the firewater pump except when the electricity grid is down be removed; and a typographical error would be corrected in SCAQMD Condition D29.4.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 4.2, Biological Resources				
31.	Section 4.2, Biological Resources	Page 4.2-1 (Summary of Conclusions), 4.2-20 to 4.2-22 (Groundwater Use, Groundwater Recharge Schedule, Deep Irrigation of Mesquite Hummocks), 4.2-22 to 4.2-23 (Cumulative Impacts), 4.2-23 to 4.2-24 (Compliance with LORS), 4.2-24 to 4.2-25 (Conclusions)	Discussion of potential impacts on the mesquite hummock plant community in the Willow Hole Conservation Area from groundwater use	The extent to which CPV would contribute to the potential cumulative impact of lowering water levels at the Mesquite Hummocks is represented by the extent to which the CPVS project would contribute to the cumulative overdraft of the sub-basin. This is consistent with the approach being taken for other new projects that impact the basin water balance. Since CPV would import more recharge water than it would pump, the CPVS project would not contribute to the cumulative overdraft of the basin. Thus, the project's contribution to the potential impact is not cumulatively considerable. Moreover, the potential drawdown of the basin caused by the project shown in the groundwater modeling is temporary and largely theoretical. The actual drawdown would likely be immeasurable and far less than the natural fluctuation of water in the basin, and is thus, not cumulatively considerable.
32.	Section 4.2, Biological Resources	Page 4.2-6, Project Area And Vicinity Description, fourth sentence	"The project components include a 3,250 foot transmission interconnection to SCE Devers Substation, 2.6 miles of new natural gas pipeline (24-inch diameter), a new access road connecting the site to Dillon Road (3,200 feet), a new potable water supply line (3,200 feet long), eight natural gas-fired, GE Energy LMS100 combustion turbine generators (13.5 feet in diameter and 90 feet tall), and a 14-acre construction laydown area."	The current expected length of the transmission line is approximately 2,300 feet.
33.	Section 4.2, Biological Resources	Page 4.2-16, CPV Sentinel Power Plant Site and Transmission Line to Devers Substation, first paragraph, first sentence	"The 37-acre CPVS site and 3,200-foot long 220 kilovolt (kV) transmission line are surrounded by the SCE Devers Substation to the west and wind energy and transmission infrastructure to the east and south."	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
34.	Section 4.2, Biological Resources	Page 4.2-18, Avian Collision and Electrocution, second sentence	"It is possible that birds could collide with the 3,250-foot long transmission line or power plant structures."	The current expected length of the transmission line is approximately 2,300 feet.
35.	Section 4.2, Biological Resources	Page 4.2-19, first paragraph, second-to-last sentence	"The proposed CPVS transmission lines would be 230-kV;"	The transmission line will be at 220-kV.
36.	Section 4.2, Biological Resources	Page 4.2-31, Proposed Conditions of Certification, BIO-7, first paragraph	"Any time the project owner modifies or finalizes the project design they shall incorporate all feasible measures that avoid or minimize impacts to the local biological resources, including the following:"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "Any time the project design is modified or finalized, all feasible measures that avoid or minimize impacts to the local biological resources shall be incorporated, including the following:"
Section 4.3, Cultural Resources				
37.	Section 4.3, Cultural Resources	Page 4.3-4, first paragraph, third sentence	"The components outside of the main power plant include a 250-foot long, 220-kV transmission interconnection (T-Line) composed of a single circuit;"	The current expected length of the transmission line outside of the main power plant is approximately 1,850 feet.
38.	Section 4.3, Cultural Resources	Page 4.3-4, third paragraph, last sentence	"Currently, the proposed CPV Sentinel project site is primarily vacant, with an unoccupied dwelling located within the southeastern corner of the site (CPVS2007a, p. 2-1)."	The vacant dwelling unit and detached garage on the project site were demolished in January 2008.
39.	Section 4.3, Cultural Resources	Page 4.3-15, Results: Historic Structures Identified and Evaluated for Historical Significance, second bullet	"Resource #2: This two-story structure is a house located within the APE, inside the southeastern section of the main power plant. It is composed of a 1,416-square-foot residence on a 5-acre lot, displays an irregular T-plan design, and is composed of plywood and masonite materials. This resource also includes an associated garage and two corrugated metal sheds. The house is dated to 1959."	The vacant dwelling unit, detached garage, and two metal sheds previously on the project site were demolished in January 2008. As indicated in responses to Data Requests 29 and 31, the landowner had long-term plans (not associated with the proposed project) to demolish these structures.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
40.	Section 4.3, Cultural Resources	Page 4.3-20, Direct Impacts on Historic Structures and Proposed Mitigation, first paragraph	"A total of 12 standing structures over 50 years of age were identified within one-half mile of the proposed project. Only one of these structures would be directly impacted by the construction activities of the proposed project. This building, unoccupied structure Resource #2, located within the southeastern extremity of the main project site would be torn down, along with the associated garage and appurtenances, by the owner of the dwelling (URS2007f, p. 2-3)."	The dwelling unit and detached garage previously on the project site were demolished in January 2008.
Section 4.4, Hazardous Materials Management				
41.	Section 4.4, Hazardous Materials Management	Page 4.4-1, Introduction, third paragraph, first sentence	"Aqueous ammonia (29 percent ammonia in aqueous solution) is the only acutely hazardous material proposed to be either used or stored at CPV Sentinel in quantities exceeding reportable amounts defined in the California Health and Safety Code, section 25532 (j) (CPVS 2007a)."	There is no reference to reportable quantities in California Health and Safety Code Section 25532. The use of "reportable quantities" is likely referring to "threshold quantities." A connecting statement should be made between reportable quantities and threshold quantities.
42.	Section 4.4, Hazardous Materials Management	Page 4.4-6, Use of Hazardous Materials, first bullet	"Step 1: Staff reviewed the chemicals and the amounts proposed for on-site use as listed in Table 7.122-1 of the AFC and determined the need and appropriateness of their use."	The table number is listed incorrectly and should read Table 7.12-1.
43.	Section 4.4, Hazardous Materials Management	Page 4.4-8, Aqueous Ammonia, third paragraph, bullet number 3	"3. the emergency response planning guideline level 2 of 150 ppm, which is also the RMP level 1 criterion used by U.S. Environmental Protection Agency (EPA) and California; and"	The statement is not correct. The third benchmark level used was 200 ppm, not 150 ppm. The 200 ppm concentration used is equivalent to the 0.14 milligram/Liter toxic endpoint presented by California Accidental Release Prevention Program (CalARP) regulations and U.S. Environmental Protection Agency (U.S. EPA) Chemical Accident Prevention Provisions. This 200 ppm concentration is equivalent to the former emergency response planning guide line level 2 (ERPG-2), before it was updated to 150 ppm.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
44.	Section 4.4, Hazardous Materials Management	Page 4.4-9, third paragraph, second sentence	"Pursuant to the California Accidental Release Program (CalARP) regulations (federal risk management plan regulation do not apply to sources that store or use aqueous ammonia solutions below 20 percent), the OCA was performed for the worst-case release scenario, which involved the failure and complete discharge of the storage tank, as well as an alternative release scenario involving a spill during truck unloading."	"California Accidental Release Program (CalARP)" should be amended to read "California Accidental Release Prevention (CalARP) Program." The PSA statement "(federal risk management plan regulation do not apply to sources that store or use aqueous ammonia solutions below 20 percent)" should be deleted. Although this statement is accurate, it is not applicable because the project will be using an aqueous ammonia solution that is 29 percent ammonia in aqueous solution. The facility is subject to both Federal Risk Management Plan and State CalARP requirements.
45.	Section 4.4, Hazardous Materials Management	Page 4.4-9, third paragraph, last sentence	"Potential off-site ammonia concentrations were estimated using the SLAB numerical dispersion model."	The off-site consequence analysis was performed using the SCREEN3 atmospheric dispersion modeling program.
46.	Section 4.4, Hazardous Materials Management	Page 4.4-17, HAZ-3, Verification	"At least 30 days prior to the delivery of any liquid hazardous material to the facility, the project owner shall provide the Safety Management Plan as described above to the CPM for review and approval."	The elements of the Safety Management Plan (SMP) must be approved by the Riverside County Department of Environmental Health as a component of the Risk Management Plan. The approved SMP can be provided to the compliance project manager (CPM) for review. To reflect this, the verification component of proposed Condition of Certification HAZ-3 should be amended to read: "The project owner shall submit the Safety Management Plan (SMP) to the Riverside County Department of Environmental Health (RCDHE) for review and approval. At least 30 days prior to the delivery of any liquid hazardous material to the facility, the project owner shall provide the approved SMP to the CPM for review."
Section 4.5, Land Use				
47.	Section 4.5, Land Use	Page 4.5-5, Other Project-Related Features and Facilities, third bullet	"A 3,250-foot long transmission line connecting the power plant site to Southern California Edison Company's existing Devers Substation, which is approximately 700 feet to the west of the proposed power plant site;"	The current expected length of the transmission line is approximately 2,300 feet.
48.	Section 4.5, Land	Page 4.5-5, Power	"The southern portion of the third parcel (APN	The vacant dwelling unit and detached garage on the project

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
	Use	Plant Site, first paragraph, last sentence	668-140-001) currently contains a vacant dwelling unit, a detached garage, a domestic water well and a septic system."	site were demolished in January 2008. The domestic water well and septic system still remain on the southeastern portion of the project site.
49.	Section 4.5, Land Use	Page 4.5-10, Physical Disruption or Division of an Existing Community, first paragraph	"One vacant dwelling unit and garage are located on the proposed power plant site, and a few scattered rural residences are also located near the proposed power plant site, including a house located 330 feet to the east, a dwelling unit located 340 feet to the south, and a house located 660 feet to the east. The dwelling unit located on the proposed power plant site and the nearby residences are not located within any established residential communities or developments. Any potential relocation of these residences would not result in the division of an established community."	The vacant dwelling unit and detached garage on the project site were demolished in January 2008.
50.	Section 4.5, Land Use	Page 4.5-10, last sentence	"In addition, electricity generated by the proposed project would be delivered to the existing SCE Devers Substation via a 3,200-foot long electric transmission [line] connecting the project station switchyard to the Devers Substation at the 220-kilovolt (kV) bus."	The current expected length of the electric transmission line (typo) is approximately 2,300 feet.
51.	Section 4.5, Land Use	Page 4.5-11, first sentence (carried over from previous page)	"currently anticipated that SCE will execute contracts with CPV Sentinel, LLC under which SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line to the Devers substation."	SCE will be responsible for final design, engineering, construction, ownership, operation, and maintenance of the transmission line to the Devers substation.
52.	Section 4.5, Land Use	Page 4.5-18, second-to-last sentence in table	"Both of these lines and numerous other 230-kV transmission lines connect to the adjacent SCE Devers Substation."	The transmission lines are at 220-kV.
Section 4.6, Noise and Vibration				
53.	Section 4.6, Noise and Vibration	Page 4.6-8, Linear Facilities, first	"Linear facilities include a 2.6-mile long pipeline for natural gas, a 3,200-foot long potable water line, a 900-foot long reclaimed	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
		sentence	water line carrying water from the existing Desert Water Agency reclaimed water system to the Palm Springs National Golf Course, and a 3,250-foot long transmission interconnection to the Devers substation . . . ."	
54.	Section 4.6, Noise and Vibration	Page 4.6-17, NOISE-7	NOISE-7 The project owner shall acquire control of the dwellings east of the project site identified as Residence C and Residence D on NOISE and VIBRATION Figure 1, and shall make necessary arrangements to relocate the occupants. Verification: Prior to first fire of the first gas turbine generator unit, the project owner shall provide the CPM documentation, signed by the project owner's Project Manager, verifying that these two properties are under the project owner's control and that the residents have been relocated.	The Applicant does not believe that proposed CEC Condition of Certification NOISE-7 is necessary due to high ambient noise conditions, the use of conservative noise modeling techniques, and the zoning of the project site and nearby area, which allows for a wide range of uses (including industry). An analysis supporting this comment is presented in Attachment B.
Section 4.7, Public Health				
55.	Section 4.7, Public Health	Page 4.7-1, Introduction, first paragraph	"The purpose of this Public Health analysis is to determine if toxic emissions from the proposed CVP Sentinel project could potentially cause significant adverse public health impacts or violate standards for public health protection in the project area."	Should read "CPV" not "CVP."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
56.	Section 4.7, Public Health	Page 4.7-11, Public Health Table 2	Public Health Table 2 lists the air toxic pollutants analyzed in the HRA and presents the types of health impacts associated with each pollutant.	The following air toxic pollutants were listed in Table 2 but not analyzed in the health risk assessment (HRA) conducted for CPVS: • Cadmium • Hexane • Mercury • Propylene • Lead – non-cancer chronic (there is no Office of Environmental Health Hazard Assessment approved chronic reference exposure level for lead)
57.	Section 4.7, Public Health	Page 4.7-11, Public Health Table 2	Public Health Table 2 lists the air toxic pollutants analyzed in the HRA and presents the types of health impacts associated with each pollutant.	The following air toxic pollutants were included in the HRA conducted for CPVS, but not listed in Table 2: • Chlorine • Fluoride • Selenium • Silica • Sulfate • Vanadium • Particulate emissions from diesel-fueled engines
58.	Section 4.7, Public Health	Page 4.7-13, Cumulative Impacts, second paragraph	"The worst-case long-term non-cancer health impact from the project (represented as a chronic hazard index of 0.030) is well below staff's significance level of 1.0 at the location of maximum impact. At this level, staff does not expect any contribution to existing area non-cancer health impacts to be cumulatively significant."	No discussion is included in the cumulative section regarding the potential cumulative acute non-cancer health impacts.
Section 4.8, Socioeconomic Resources				
59.	Section 4.8, Socioeconomics	Page 4.8-13, Cumulative Impacts and Mitigation, fourth bullet, second sentence	"The project would increase the reliability and voltage support of the existing system by upgrading to the 230-kV standards of existing corridors."	The transmission line will be at 220-kV.

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Section 4.9, Soil and Water Resources				
60.	Section 4.9, Soil and Water Resources	Page 4.9-9, Project, Site And Vicinity Setting, second paragraph, third sentence	"The project would include the construction of a 2.6-mile long natural gas line from the Indigo power plant to the project site, a 3,250-foot long transmission from the project site connecting to the Devers Substation, and a 3,200-foot long potable water supply line from Dillon Road to the south of the project site."	The current expected length of the transmission line is approximately 2,300 feet.
61.	Section 4.9, Soil and Water Resources	Page 14.12-5, Regional Water Resources, fourth paragraph, last sentence	"Overdraft is defined herein defined as natural recharge to a groundwater basin that is less than outflow from the basin. (This definition specifically excludes artificial recharge to the groundwater basin.)"	The definition of overdraft is not consistently applied in the PSA. In some instances, overdraft describes the conditions in the basin without recharge of imported water. In other instances, the term overdraft relates to a condition in which groundwater storage is projected to decline even when considering recharge with imported water. Overdraft refers to a condition in which total outflow from the groundwater basin or sub-basin exceeds total inflow. It would be clearest to the reader if in every case where the term overdraft is used the PSA clearly state whether this is a term relative to the natural conditions in the basin absent artificial recharge or whether this condition includes accounting for artificial recharge operations including recharge with imported water.
62.	Section 4.9, Soil and Water Resources	Page 14.12-5, Regional Water Resources, fifth paragraph, third sentence	"This water is delivered by the Metropolitan Water District of Southern California (MWD) through its aqueduct to facilities owned and operated by DWA and CVWD."	The recharge pipeline and recharge basins in the Mission Creek Groundwater Sub-basin (MCGS) are owned and operated by the Desert Water Agency (DWA). The Coachella Valley Water District (CVWD) owns and operates the Whitewater Sub-basin spreading grounds. CVWD and DWA share the operation and maintenance costs for both facilities.
63.	Section 4.9, Soil and Water Resources	Page 14.12-5, Regional Water Resources, fourth paragraph, first two sentences	"A relatively new source of water to the basin is imported surface water. Since 2002 water agencies responsible for protection and enhancement of groundwater resources in the basin have imported surface water for spreading and recharge of the groundwater basin."	Applicant suggests that the following two sentences be inserted after the first sentence, to replace the second sentence: The Upper Coachella Valley Groundwater Basin has been artificially recharged since 1973. The Mission Springs Creek Sub-basin has been artificially recharged since 2002.

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64.	Section 4.9, Soil and Water Resources	Page 4.12-6, Upper Coachella Valley Groundwater Basin, second paragraph, fourth sentence	"From north to south, the faults are the Banning, Mission Creek, and Garnet Hill faults…"	The Applicant suggests amending the text to read: "From north to south, the faults are the Mission Creek, Banning, and Garnet Hill faults."
65.	Section 4.9, Soil and Water Resources	Page 4.12-6, Upper Coachella Valley Groundwater Basin, second paragraph, sixth sentence	"The four sub-basins defined by these faults are known as the Desert Hot Springs, Mission Creek, Garnet Hill, and Whitewater sub-basins (Tyley 1971)."	The Applicant suggests amending the text to read: "Whitewater River sub-basins."
66.	Section 4.9, Soil and Water Resources	Page 4.12-6 and Figure 1	Discussion of Upper Coachella Valley Groundwater Basin and Mission Creek Groundwater Sub-Basin	Figure 1 should include labels for major mountains, creeks, and faults.
67.	Section 4.9, Soil and Water Resources	Page 4.12-6, Mission Creek Groundwater Sub-Basin, third paragraph	"The MCGS is considered an unconfined aquifer with a saturated thickness of 1,200 feet or more (GSI2005) and an estimated effective groundwater storage capacity of 1.2 million acre-feet."	The storage of 1.2 million acre-feet seems too low because: 1. The PSA states: "The MCGS is 76 square miles (2.12×10^9 ft^2) and a saturated thickness of 1,200 ft." The total volume if the saturated aquifer is calculated as $2.12\times10^9\times1{,}200 = 2.54\times10^{12}$ ft^3 = 5.83×10^7 acre-feet. Assuming an average specific yield of 0.15, the storage capacity is calculated as high as $5.83\times10^7\times0.15 = 8.75\times10^6$ acre-feet. 2. The PSA (page 14.12-19, paragraph 5) also states: "The 2008 Engineer's Report shows a reduction of approximately 245,600 acre-feet of groundwater in storage from 1955 to 2007." If the storage capacity is only 1.2 million acre-feet, this reduction will be 20 percent of the storage capacity which is unlikely. 3. The PSA (page 14.12-7, paragraph 2) also states: "Water levels have declined in the MCGS approximately 63 feet from 1955 to 1997 (Slade, 2000)." The 63-foot water decline is approximately 5 percent or less of the total saturated thickness (1,200 feet or more). Thus, from 1955 to 1997, the reduction of groundwater storage is also approximately 5 percent or less.

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				Additional Note: Slade, May 2000 on pp. 37-39 cites GTC, 1979 with some calculations, saying the MCGS storage capacity was 1,448,600 acre-feet (AF) in 1978. Paraphrased Slade, May 2000, states the following: "A total loss of 106,800 AF in storage between 1978 and 1997 with a resulting amount in storage of approximately 1,333,800 AF." This amounts to 5,340 acre feet per year (AFY) of loss in groundwater storage during the 20-year period from 1978 through 1997. This value can be compared with the 2,400-AFY loss in groundwater storage reported by GTC, 1979, between 1955 and 1970; and the 4,400-AFY loss in groundwater storage between 1970 and 1978, as originally determined by GTC, 1979. Page III-4 of K&S, April 2007, reports: "Extrapolating from the northwesterly three quarters of the Sub-basin to the entire Sub-basin (assuming uniform aquifer characteristics), the groundwater stored within the entire Sub-basin would have been as follows: 2,015,733 AF in 1955, 1,967,733 AF in 1970, 1,920,800 AF in 1978, 1,778,400 AF in 1997, and 1,689,000 in 2006, a change of about 45,000 AF or about 11,000 AFY over the latter five years." Attached Table A is a summary of MCSB Groundwater Storage numbers from various authors for consideration. Page 2-5 of the Mission Springs Water District (MSWD) Urban Water Management Plan (UWMP) prepared by PSOMAS, states that the theoretical capacity is 2.6 million AF and the actual storage is 1.4 million AF.
68.	Section 4.9, Soil and Water Resources	Page 14.12-7 fourth paragraph, last sentence	"Rather, it simply re-allocates the amount that is paid to cover the costs of water that is obtained for replenishment amongst a greater number of pumpers."	This statement does not acknowledge that CVWD and DWA have consistently used funds from the Replenishment Assessment to obtain increasing amounts of water to satisfy the growing demand. Over time, the Replenishment Assessment is clearly used to increase the quantities of water that are imported into the Upper Coachella Valley Groundwater Basin. Also, increased pumping in one sub-basin and decreased pumping in another sub-basin increases recharge in the first sub-basin (with increased pumping) and reduces recharge in the second sub-basin (with reduced pumping). Also, the last sentence is

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				confusing and should more clearly refer back to the first part of the paragraph. One could take it that increased pumping in one sub-basin decreases rather than increases recharge and vice versa, unless the agreements are that with increased pumping more recharge water is allocated and supplied to the specific sub-basin.
69.	Section 4.9, Soil and Water Resources	Page 14.12-7, fifth paragraph, third sentence	"As part of this agreement, a Water Management Plan was created by the MSWD and an annual Engineer's Report is completed by the DWA."	This statement should be amended to reflect that a Water Management Plan has not been prepared by MSWD. A Water Management Plan is currently under development by CVWD, DWA and MSWD.
70.	Section 4.9, Soil and Water Resources	Page 14.12-7 sixth paragraph, third sentence	"MSWD is a water retailer with a jurisdictional boundary covering much of the sub-basin."	DWA's boundaries incorporate all of MSWD's boundaries. MSWD offers retail water service but does not have jurisdictional authority over DWA.
71.	Section 4.9, Soil and Water Resources	Page 4.12-8, second paragraph, third sentence	"From 2010 to 2035 the combined SWP water allocation for the DWA and CVWD will be 187,000 AFY with 54,000 AFY going to the DWA and 133,000 AFY going to the CVWD (MWD2008)."	The combined entitlements in 2010 will be 194,000 AFY. DWA's entitlement will be 55,750 AFY.
72.	Section 4.9, Soil and Water Resources	Page 14.12-9, first paragraph, second and third sentences	"The 2008 Engineer's Report states that the full allocation of SWP water deliveries is required to maintain the current conditions in the MCGS (K&S2008). Without full allocation deliveries, overdraft will continue."	The 2008 Engineer's Report indicates that allocations of approximately 60 percent of DWA's storm water plan (SWP) entitlement are needed to prevent annual overdraft in the Upper Coachella Basin and the MCSB. The Engineer's statement relates to the need to order full entitlement and not forego deliveries that are available because of accumulated overdraft. Staff should contact the DWA Engineer to understand this statement and the relationship between current conditions of overdraft and the current availability of SWP entitlements. Applicant suggests that the CEC staff contact Mr. Robert Krieger, principal of Krieger and Stewart, to review sections of the PSA which quote the DWA Engineers report to ensure that the data from this report is accurately portrayed in the Final Staff Assessment.

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73.	Section 4.9, Soil and Water Resources	Page 14.12-9 Reclaimed Wastewater, first sentence	"There are two wastewater treatment plants (WWTP) in the MCGS, both operated by the Mission Springs Water District (Psomas 2004; Psomas 2005)."	The Horton WWTP is the primary plant with a current capacity of 2.5 mgd, but with a permitted discharge capacity of 2 mgd. The Desert Crest plant has a capacity of 0.18 mgd and is planned to be abandoned (MSWD Water Recycling Feasibility Study-Phase I by PSOMAS, dated March 20, 2007)
74.	Section 4.9, Soil and Water Resources	Page 4.12-10, first paragraph, last sentence	"Both the golf course and WWPT..."	"WWPT" should be changed to "WWTP."
75.	Section 4.9, Soil and Water Resources	Page 4.12-10, second paragraph, first sentence	"These new irrigation controllers would conserve water within the Whitewater Groundwater Sub-basin"	This statement should be corrected to reflect that irrigation controller retrofits would conserve water in the Upper Coachella Valley Groundwater basin, within the boundaries of the DWA, which is within both the Whitewater River Sub-basin and the MCSB.
76.	Section 4.9, Soil and Water Resources	Page 4.12-10, third paragraph	"Last, the project applicant proposes a water transfer and exchange program intended to replenish groundwater in the MCGS. The applicant proposes to recharge a volume of water equal to that extracted from onsite wells."	The water supply plan proposes to recharge more than 108 percent of the water extracted and also pay to DWA an extraction fee equal to the Replenishment Assessment to recharge the basin as though the Applicant had not brought in replacement water. This results in substantially more water being recharged in the sub-basin than would be extracted from the basin.
77.	Section 4.9, Soil and Water Resources	Page 14.12-11, third paragraph, third sentence	"Collected runoff would be retained in retention basins that would be discharged with non-point source flows that would equal or be less than the pre-developed peak flows."	Only one retention basin is proposed. The basin would be a retention, not detention basin. There would be no discharge of flows from the retention basin, because all water collected in the basin would either percolate to the subsurface or be evaporated.
78.	Section 4.9, Soil and Water Resources	Page 14.12-11, Project Water Supply, third sentence	"All of the water supplied by the MSWD comes from wells installed in the MCGS."	This statement should be amended to note that MSWD currently has a producing well (Well 33) in the Garnet Hill Sub-basin that produces between 800 and 900 gallons per minute (gpm). (reference: MSWD Water Master Plan PEIR, page 4-32).
79.	Section 4.9, Soil and Water Resources	Page 14.12-11, Project Water Supply, sixth sentence	"This would avoid any approval and service fee by the MSWD, but still require payment of the replenishment fee to the DWA."	Payment of the Replenishment Assessment is not required because the project will import and recover its own water supply to the groundwater basin. However, CPV Sentinel has voluntarily agreed to pay an extraction fee equivalent to

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				DWA's Replenishment Assessment.
80.	Section 4.9, Soil and Water Resources	Page 4.12-12, Operations Water Use, second sentence	"Approximately 1,100 AFY would be used for plant processes, with an average use of 550 AFY.	This statement should be amended to read: "Up to a maximum of 1,100 AFY would be used for plant processes..."
81.	Section 4.9, Soil and Water Resources	Page 4.12-12, Operations Water Use, last sentence	"Groundwater would also be used as the backup water supply should one or more of the onsite wells fail."	This sentence should be amended to read: "The onsite well field would include enough wells for redundancy in case one or more of the onsite wells fail."
82.	Section 4.9, Soil and Water Resources	Page 4.12-14, second paragraph, first sentence	"An analysis required in accordance with Senate Bill 610 (SB-610) was also conducted."	Senate Bill (SB) 610 does not apply to power plants. Please clarify the intent of the California Energy Commission (CEC) in performing this analysis and the basis for the evaluation criteria. The primary focus of SB 610 (and a companion bill, SB 221) was to require "Water Supply Assessments" for residential developments greater than 500 dwelling units in size. SB 610 does also apply to certain commercial and industrial projects, including industrial projects "having more than 650,000 square feet of floor area" (see Water Code section 10912(a)(5)) or that "would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project" (see Water Code section 10912(a)(7)). Thus, if the power plant meets these requirements, it would arguably fall within the definition of a "project" per Water Code section 10912(a). However, Water Code section 10910(a) states that any "city or county that determines that a project, as defined in Section 10912, is subject to [CEQA] shall comply with this part." (Emphasis added.) All references in Water Code section 10910 et seq. (and SB 610) refer to environmental review by a "city or county" and no reference is made to a State agency, such as the CEC. Thus, it would appear that SB 610 is limited to projects that require approval by a city or county and does not apply to State agencies such as the CEC. For this reason, the Applicant also recommends that the seventh row in Soil and Water Table 1 on page 14.12.-3 be deleted, because it lists SB 610 as a state law, ordinance, regulation, or standard (LORS).

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83.	Section 4.9, Soil and Water Resources	Page 4.12-14, third paragraph, second sentence	"Staff is still evaluating whether refinement of these criteria are warranted, given the precarious water supply conditions in the project area."	This statement should be amended so that is more objective, particularly the use of the word "precarious." Staff should provide clear criteria for establishing thresholds for significance in potential impacts. CPV Sentinel is prepared to work with the staff to establish agreed-upon criteria prior to the issuance of the Final Staff Assessment.
84.	Section 4.9, Soil and Water Resources	Page 4.12-14, sixth bullet	Sixth bullet: "Would the project contribute to any lowering of water levels in the groundwater wells of other water users."	These criteria should be revised to comply with California Environmental Quality Act (CEQA) guidelines. Any lowering of groundwater levels does not constitute a significant impact. Rather, CEQA Guidelines Appendix G specifies that a significant impact could occur upon "lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)". CPV Sentinel has conveyed a threshold of significance in conjunction with its groundwater model simulations provided in the most recent workshops with CEC. This issue is discussed further in Comment 96 below.
85.	Section 4.9, Soil and Water Resources	Page 4.12-16, Project Water Supply, fifth sentence	To meet the construction water demand, the applicant estimates that daily water demand during construction would average 25,000 gallons per day (gpd) with a maximum of 250,000 gpd. The average annual groundwater use would be 27 acre-feet. Up to 300,000 gallons of groundwater would be used during hydrotesting operations. This proposed use of groundwater for construction of the project does impact water resources, however, this water use is limited in duration and volume.	25,000 gallons per day (gpd) and 250,000 gpd translate to 17.4 gpm and 173.6 gpm, respectively. Applicant agrees that this water use is limited in duration and volume. Furthermore, onsite well data suggest that pumping rates from PW-1 at 17.4 and 173.6 gpm would result in minimal drawdown at the pumping well with almost instantaneous recovery. Using specific capacity data (July 9, 2008 Responses to Data Request Appendix A Table 2) ranging from 93.72 gallons per minute per foot (gpm/ft) to 110.47 gpm/ft suggests that drawdowns in PW-1 from construction would result in ranges from 0.16 to 0.19 foot of drawdown at 17.4 gpm pumping and 1.57 to 1.85 feet at 173.6 gpm. This drawdown cone would be very limited in extent (probably less than 200 feet) and duration as soon as the pumps were turned off. Thus, to the extent there is an impact at all, it is less-than-significant.

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86.	Section 4.9, Soil and Water Resources	Page 14.12-17, Stormwater, second paragraph	"The CPV Sentinel site would be located in an undeveloped area except for one residence on the power plant property."	The vacant dwelling unit and detached garage on the project site were demolished by the landowner in January 2008.
87.	Section 4.9, Soil and Water Resources	Page 14.12-17, Stormwater, second paragraph, third sentence	"The stormwater runoff percolates either into the soil or into flows overland off-site."	The Applicant suggests that this sentence be amended to read "The stormwater runoff percolates into the soil or flows as overland flow off-site."
88.	Section 4.9, Soil and Water Resources	Page 14.12-19, Potable Water, last sentence	"Staff concludes that the proposed project's use of MSWD potable water for domestic needs would cause no impact to the regional groundwater supply if proposed Condition of Certification SOIL&WATER-5 is adopted to ensure the project owner uses no more than 2.0 AFY and monitors and records the potable water use during construction."	The word "construction" should be changed to "operation."
89.	Section 4.9, Soil and Water Resources	Page 14.12-19, Process Water, first paragraph, last sentence	"The applicant estimates that the project would use an annual maximum of 1,100 acre-feet of groundwater for project operations, including cooling, process operations, fire protection, and landscaping."	The statement should be amended to note that the average use over time is estimated to be 550 AFY.
90.	Section 4.9, Soil and Water Resources	Page 14.12-19, Process Water, third paragraph, second sentence	"The proposed volume of pumping for the project represents an increase of up to 6 to 7% of the total pumping for the sub-basin."	The expected increase in pumping, at 550 AFY, compared to current production, is approximately 3 percent. The maximum increase in pumping, at 1,100 AFY, compared to current production, would be up to 6 to 7 percent. In any event, project pumping volume would be offset by proposed groundwater recharge and conservation programs by a ratio greater than 1:1.
91.	Section 4.9, Soil and Water Resources	Page 14.12-23, first paragraph, second sentence	"The Water Conservation Program proposes to conserve 1,100 AFY of groundwater, an amount equal to the maximum estimated amount of groundwater that would be consumed by the power plant (LW2008b)."	Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. Table 1 of this analysis indicates that estimated fresh water conservation from the Applicant's water supply plan is between approximately 1,500 and 1,700 AFY.
92.	Section 4.9, Soil and Water Resources	Page 14.12-23, first paragraph, fifth sentence	"The golf course currently uses approximately 680 AFY of water from onsite wells."	This statement should be amended to reflect that the golf course pumps approximately 1,050 AFY of fresh water from onsite wells.

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93.	Section 4.9, Soil and Water Resources	Page 14.12-23, second paragraph	"This water conservation program is proposed for the Whitewater Sub-basin, one of the four sub-basins in the upper Coachella Valley groundwater basin (Soil & Water Figure 1). Therefore, the water conservation program would not affect the overdrafted basin from which the project would be pumping groundwater."	All conservation proposed by the Applicant is in the Upper Coachella Valley Groundwater basin. Some of the conservation would occur in the Whitewater River Sub-basin and some in the MCSB in which the project would pump. Conservation that occurs in the Whitewater River Sub-basin will increase the volume of recharge water in the MCSB from DWA's existing replenishment program.
94.	Section 4.9, Soil and Water Resources	Page 14.12-23, third paragraph, sixth sentence	"The SWP proposes using the more conservative number of 0.1 AFY per residential house."	The word "SWP" should be changed to "WSP." The Applicant used 0.1 AFY per residential service as an estimate of the savings for the conceptualization of the Water Supply Plan (WSP). As noted elsewhere in the PSA, Applicant has proposed that actual savings from the fresh water conservation element of the WSP, rather than estimated savings, would be determined and verified by a monitoring and reporting program.
95.	Section 4.9, Soil and Water Resources	Page 4.12-24 to 14.12-25	Description of well interference beginning at fourth paragraph of page 4.12-24	The term "well interference" describes only potential impacts from the instantaneous drawdown of pumping. The effects on wells could also result from dewatering of the aquifer from pumping in excess of recharge. Recharge volumes and rates should be included in the source of effects, or an additional section should describe these impacts. These statements seem too subjective and overstate probable impacts to other wells when all work completed to date shows that project-specific impacts to other wells would be minimal and nowhere near the possible impacts as stated.
96.	Section 4.9, Soil and Water Resources	Page 14.12-25, second paragraph	Groundwater pumping and recharge scenarios	CPV Sentinel has presented groundwater model simulations in the most recent workshops with CEC. These model simulations show probable project-specific drawdowns from pumping, and mounding from recharge respective to major surrounding water supply wells. Very conservative pumping/recharge scenarios (i.e., up to 1,100 AFY pumping recharge on top of other conservative assumptions) were used. For example, the Applicant believes that some of the assumptions of these simulations, such as the use of ½ of

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				Tyley's 1974 Transmissivity (T) values (while used in the sensitivity analysis) were overly conservative, resulting in higher impacts than what would be expected. As elaborated in Response to Data Request 6 (July 9, 2008), and as discussed in the June CEC Groundwater Workshops, the actual T values are probably two or more times greater than Tyley's T values. In addition, actual project pumping would be approximately 550 AFY, or half of what was simulated. As such, and combined with probable actual T values in the basin, the impacts simulated for June through July 2008 workshops and data requests would be less.
97.	Section 4.9, Soil and Water Resources	Page 4.12-26, Soil & Water Table 7	Soil & Water Table 7	Table 7 is a partial summary of July 9, 2008 Response to Data Request submittal, Appendix C, Tables 1, 2, and 3. Table 7 should include the results for Baseline (Tyley's T). It only includes the results for ½ and 2X Tyley's T. Table 7 also needs some footnotes to clarify tabulated numbers. At present, the results are presented converse to the table title and first row T=S, where by the T=2 result is presented first and the T=0.5 is presented second. This table may require three columns with headings to accurately report the results for the three Transmissivity cases.
98.	Section 4.9, Soil and Water Resources	Page 14.12-27, first paragraph, first sentence	"Both public and private wells <u>would</u> be affected by the project's pumping of groundwater."	The Applicant suggests that this statement be amended to read: "Water levels at both public and private wells <u>may</u> be affected by project-specific pumping and recharge."
99.	Section 4.9, Soil and Water Resources	Page 14.12-27, first paragraph, second sentence	"Using the most conservative aquifer parameter assumptions, drawdown at the closest municipal well to the project (Mission Springs Water District wells 27 and 31) would be between 1.6 to 4.9 feet within 15 to 20 years of pumping."	This statement should be revised to reflect that this is the maximum projected drawdown over the 30 year life of the project. The basis of assumptions that led to this potential impact should be stated. This analysis is based on project pumping at twice the expected rate of use. It is based on transmissivity in the basin being one-half the estimated transmissivity from the U.S. Geological Survey studies and much less (approximately 8.4 times less) than the estimated transmissivity from aquifer tests performed by the Applicant. These results also assume that pumping at these maximum rates would occur for 5-year periods without recharge. The effects of compounding these sources of uncertainty should be

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				compared to the more realistic scenarios prepared by the Applicant. Also, the temporary nature of the projected drawdown should be placed in the context of drawdown that has been experienced in these wells in the past and the projected drawdown that is expected to occur over the next 30 years, with or without the project. Finally, the statement does not follow the procedures described by the introduction to this section, which would compare the potential impact to the threshold at which significant impact would occur. It should be clarified that even with the conservatism of the modeling, there would not be a significant impact to any municipal well.
100.	Section 4.9, Soil and Water Resources	Page 14.12-27, first paragraph, sixth sentence	"In addition, based on the groundwater modeling completed by the project applicant, the Mesquite Hummocks Willow Hole Conservation Area (Soil & Water Figure 1), which is approximately 6 miles southeast of the project wells, could be affected by a decline in water levels of approximately 2 feet. It is not clear that WSP is intended to mitigate the potential impacts to the Mesquite Habitat area."	As stated above in Comment 30, the extent to which CPV would contribute to the potential cumulative impact of lowering water levels at the Mesquite Hummocks is represented by the extent to which the CPVS project would contribute to the cumulative overdraft of the sub-basin. This is consistent with the approach being taken for other new projects that impact the basin water balance. Since CPV would import more recharge water than it would pump, the CPVS project would not contribute to the cumulative overdraft of the basin. Thus, the project's contribution to the potential impact is not cumulatively considerable. Moreover, the potential drawdown of the basin caused by the project shown in the groundwater modeling is temporary and largely theoretical. The actual drawdown would likely be immeasurable and far less than the natural fluctuation of water in the basin, and is thus, not cumulatively considerable.
101.	Section 4.9, Soil and Water Resources	Page 14.12-27, second paragraph, second sentence	"As currently proposed, recharge would not occur until project pumping has begun. This condition would create a lag time between any beneficial increase in groundwater levels and basin storage. In addition, it would not fully mitigate all effects of drawdown and interference with other wells in the vicinity of the project."	This statement is not completely accurate in several respects. First, Applicant has not proposed to delay recharge until project pumping has begun. This is a conservative assumption used in the groundwater modeling. It is quite likely that recharge would in fact occur prior to the commencement of project pumping. Moreover, the effects of well interference (Scenario 3) should be stated separately from the effects of potential drawdown (Scenario 2). Finally, the statement that impacts would not be fully mitigated should be corrected to

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				clarify that while not fully mitigated, the effects of drawdown and well interference would be mitigated to a level of insignificance.
102.	Section 4.9, Soil and Water Resources	Page 4.12-28, first paragraph, first sentence	"In sum, the proposed project would impact the MCGS."	This statement should be amended to read: "In sum, the project would not impact the MCGS in a significant way."
103.	Section 4.9, Soil and Water Resources	Page 4.12-28, first paragraph, third sentence	"Cumulatively, over the expected life of the power plant, 33,000 AFY of groundwater could be consumed by the power plant."	This statement should be qualified with: "The 33,000 AF is an extreme case and in reality the power plant is expected to consume approximately half as much water (i.e., 16,500 AF)."
104.	Section 4.9, Soil and Water Resources	Page 4.12-28, Soil & Water Table 9	Soil & Water Table 9	The table should be revised to reflect expected values. Pumping is expected to be 550 AFY and corresponding importation of water/recharge volumes is expected to be 598 AFY. Conservation from connection of the Golf Course should ramp up to 1,034 AFY by the time the project commences pumping for operations. This matches historic pumping of groundwater by the golf course, and conservation from the installation of irrigation controllers would be between 480 AFY and 700 AFY more. Moreover, the benefits of the conservation program at conserving water within the MCGS and increasing recharge volumes in the MCGS should be identified. Some estimate should be provided of the amounts of recharge that would result from payment of the Extraction Fee. DWA should be contacted to provide such an estimate.
105.	Section 4.9, Soil and Water Resources	Page 4.12-28, second paragraph, first sentence	"It should be noted that the WSP does not take into account losses through evaporation at the WWTP percolation ponds or evaporation at the golf course's irrigation water storage reservoir."	The PSA statement is incorrect. The Applicant provided an analysis of these potential losses. The evaporative losses at the WWTP would be reduced by the conservation program and losses at the irrigation reservoir would be unchanged. As such, the sentence should say that conservation of fresh water would likely exceed the estimates presented in Table 9.

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106.	Section 4.9, Soil and Water Resources	Page 4.12-28 (second paragraph, second sentence) to 14.12-29	"In addition, evaporation losses during percolation at the Mission Creek spreading grounds could be between 240 to 4,650 acre-feet over the life of the project as estimated in Appendix B."	The reference to Appendix B is incorrect as it does not contain this estimate. The estimate of evaporation is from Appendix C, Footnote 6. The estimated evaporation losses from the Applicant's spreading of imported water is grossly overstated. Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. Appendix 2 to this analysis indicates evaporative losses will be approximately 0.7 to 0.8 percent of the project-specific recharge. Thus, the Applicant's WSP, which causes 8 percent more water to be recharged than the amount pumped by the Applicant, provides excess recharge that is an order of magnitude greater than the expected losses from evaporation during the recharge operation.
107.	Section 4.9, Soil and Water Resources	Page 14.12-29, Water Quality, first paragraph, fourth sentence	"The project would be additionally contributing up to 1,100 acre-feet per year through the Implementation Program. This could amount to up to 7 % of the total water imported to the basin on an annual basis, depending on the actual volume of groundwater that would be used by the project."	This statement and the math may overstate the project's contribution to recharge. If one were to use the 15,619 AFY Colorado River water recharge figure stated earlier in the paragraph and add the maximum of 1,100 AFY of additional project recharge water, the total would be 16,719 AFY. As such, the project's contribution would be 6.6 percent. The statement should also convey that the actual expected project-specific recharge is closer to 593 AFY. Adding this amount to the 15,619 AFY average yields 16,212 AFY, resulting in a 3.7 percent contribution.
108.	Section 4.9, Soil and Water Resources	Page 14.12-29, Water Quality, third paragraph, first sentence	"Since 2002 when the Mission Creek spreading grounds were constructed, approximately 228,225 acre-feet of Colorado River water has been recharged through these spreading grounds (Soil & Water Table 2)."	The 228,225 AF reflects recharge by DWA in both the Mission Creek recharge basin and the Whitewater recharge basin. Soil and Water Table 11 shows the amounts for the Mission Creek recharge basin, which was 55,932 acre-feet for 2002-2007. Applicant suggests that the CEC staff contact Mr. Robert Krieger, principal of Krieger and Stewart, to review sections of the PSA which quote the DWA Engineers report to ensure that the data from this report is accurately portrayed in the Final Staff Assessment.

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109.	Section 4.9, Soil and Water Resources	Page 14.12-29, Water Quality, third paragraph, second sentence	"The MCGS has an effective groundwater storage capacity of 1.2 million acre-feet with an aquifer thickness of 1,200 feet or more."	1.2 million AF storage capacity does not appear to be accurate. Applicant's calculations suggest storage is closer to 8.76 million AF. Accordingly if 228,225 AF of Colorado River water has been recharged, it amounts to approximately 2.6 percent of the effective storage capacity. The range of project-specific imports would be 593 AF multiplied by 30 years, which would equal a total of 17,790 AF. This is 0.2 percent of the effective storage of the MCGS (expected for the project) of 1,100 AF multiplied by 30 years, a total of 33,000 AF, or 0.38 percent of the effective storage of the MCGS (project maximum recharge).
110.	Section 4.9, Soil and Water Resources	Page 14.12-29 to 14.12-31, Water Quality	Water Quality	The Water Quality section needs to relate the volume of Colorado River water that would be recharged by the Applicant to the historic recharge volumes and the expected recharge volumes that would occur over the life of the power plant without the Applicant's proposed recharge operation. Applicant's recharge is approximately 3 percent of the anticipated recharge that would occur without the power plant operation (and without allowing for future increases in recharge resulting from future increases in pumping by others). Not only is this recharge a very small increment of the projected recharge that would occur over time, the no-project recharge is likely to change the characteristics of the basin water to such an extent that the quality of recharge water provided by the Applicant would be insignificantly different than the likely water quality that would exist in the basin with or without the project.
111.	Section 4.9, Soil and Water Resources	Page 4.12-32, first paragraph	"FMEA has designated…"	The word "FMEA" should be changed to "FEMA."
112.	Section 4.9, Soil and Water Resources	Page 14.12-33, Water Reliability Assessment, first paragraph, last sentence	"The 2005 Urban Water Management Plan prepared for the MCGS by the MSWD was used in this reliability assessment (Psomas2005)."	Given the fact that Applicant proposes to recharge more water from the basin than it pumps through a WSP implemented through DWA with no participation by MSWD, there seems to be no rationale for using the UWMP of MSWD.

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113.	Section 4.9, Soil and Water Resources	Page 14.12-33, second paragraph, last sentence	"The project's pumping of groundwater alone would contribute to this overdraft."	This statement is incorrect, given that the project will import more water than it will pump. Furthermore, the project will pay a fee equivalent to the Replenishment Assessment that is also used to import more water. This statement should be deleted or corrected.
114.	Section 4.9, Soil and Water Resources	Page 14.12-33, Water Reliability Assessment, third paragraph, second sentence	"The California Department of Water Resources (DWR) defines safe yield as, "the maximum quantity of water that can be continuously withdrawn from a groundwater basin without adverse effect" (DWR 2008b)."	Based on this definition, MSWD has estimated the safe yield of the basin to be 40,000 AFY. (reference: MSWD UWMP and several water supply assessments [WSAs] approved by the MSWD Board.) Applicant believes that this definition is confusing to the reader and the more appropriate analysis is based on the groundwater modeling from the Applicant.
115.	Section 4.9, Soil and Water Resources	Page 14.12-33 (Water Reliability Assessment, third paragraph, last sentence) and Page 4.12-34 (Soil & Water Table 11)	"The volume of water imported for recharge has been insufficient to halt or slow overdraft of the groundwater basin in the MCGS."	This PSA statement and Soil and Water Table 11 are not consistent with Soil and Water Table 5 and Table 6, which correctly show a positive or gain in water balance with imported water. Applicant suggests that the CEC staff contact Mr. Robert Krieger, principal of Krieger and Stewart, to review sections of the PSA which quote the DWA Engineers report to ensure that the data from this report is accurately portrayed in the Final Staff Assessment.
116.	Section 4.9, Soil and Water Resources	Page 4.12-34, Soil & Water Table 11, last row, second column	"104.152"	The number "104.152" should be changed to "140,152."
117.	Section 4.9, Soil and Water Resources	Page 4.12-34, first paragraph, seventh sentence	"In addition, the 2008 Engineer's Report states that 100% of the DWA SWP water allocation is necessary to arrest overdraft in the MCGS (K&S 2008)."	As stated above, this statement is misinterpreted. The statement is correct that there is no plan or intention to recharge volumes sufficient to correct the accumulated overdraft. It is incorrect, however, that 100 percent of DWA's SWP allocation is needed to offset annual overdraft. That volume is much closer to 60 percent. Applicant suggests that the CEC staff contact Mr. Robert Krieger, principal of Krieger and Stewart, to review sections of the PSA which quote the DWA Engineers report to ensure that the data from this report is accurately portrayed in the Final Staff Assessment.

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118.	Section 4.9, Soil and Water Resources	Page 4.12-34, second paragraph, first sentence	"According to the MSWD 2005 Urban Water Management Plan, the capacity to continue groundwater recharge of the sub-basin depends on the availability of future water from the Colorado River and the MWD's exchange agreements with DWA."	The MSWD 2005 UWMP contains numerous errors regarding the projections of future volumes of recharge for the MCSB. CEC staff should obtain correct numbers from the DWA.
119.	Section 4.9, Soil and Water Resources	Page 14.12-35 (first paragraph, last sentence) to Page 14.12-36	"As presented in the MSWD 2005 Urban Water Management Plan, the baseline scenario population estimate in the MSWD's service area is expected to more than double between 2005 to 2030 and is estimated to nearly triple under a high growth scenario. Along with this increase in population will be an increase in water demand. Even given this increase in water demand and the increased efforts to secure new sources of water, the 2008 Engineer's Report estimates a net deficiency of approximately 10,500 acre-feet in water supply versus demand by the year 2030 (K&S2008). Given all these factors together, staff believes overdraft in the sub-basin will continue with or without the proposed project.	The plan presents estimated population increases from the MSWD UWMP. These casual statements of future population are inappropriate for a WSA. A WSA should account for the demands that exist and the growth in demands that are reasonably projected from development that has been approved. The K&S engineers report notes that if such speculative development is to be approved, it will either cause an overdraft of the basin or will require obtaining additional supplies of imported water. The Applicant believes that it is reasonable to assume that the basin will be in overdraft in the future but the analysis presented in this portion of the PSA is not completely accurate.
120.	Section 4.9, Soil and Water Resources	Page 4.12-36, second paragraph	"As a property owner in the MCGS…"	This paragraph suggests that prior paragraphs indicate that there is sufficient native water in the basin to sustain the project. While this is likely true, no supporting statements of fact presented. Moreover, the paragraph describes the rights of the Applicant to pump water incorrectly and out of context. The Applicant has an overlying right to pump groundwater and may also have a right to appropriate water for its use. The Applicant, however, is not proposing to exercise those rights. The Applicant is proposing to pump groundwater as a means to recover imported water that is brought into the basin for its benefit. The Applicant would pump groundwater that it would own (hold title to) within the basin. The Applicant's rights to pump water are separate and distinct from any determination of rights of various pumpers within the basin to native water supplies. In this regard, the Applicant would not contribute to the future projected overdraft within the basin.

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121.	Section 4.9, Soil and Water Resources	Page 4.12-36, Response to Agency and Public Comments	Response to Agency and Public Comments	Correspondence from outside agencies should include all written correspondence received by the CEC from the Mission Springs Water District. This would include the March 5, 2008 letter from Brent Gray to Mr. Kris Helm which was cc'd to the CEC project manager and the June 24, 2008 correspondence from Dan Patneaude at MSWD to Mr. John Kessler which is referenced in the PSA as MSWD 2008b but is not available on the CEC website. Also, there is a reference in the PSA to a Record of Conversation between John Kessler and MSWD on July 25,2008 (MSWD 2008c) which is not available. Applicant requests that these and any other pieces of correspondence from the MSWD be referenced in this section of the PSA and that copies of all correspondence from MSWD and Records of Conversations with MSWD be provided to the applicant.
122.	Section 4.9, Soil and Water Resources	Page 14.12-37, Compliance with LORS	Compliance with LORS	Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. As detailed in prior submittals as well as this forthcoming analysis, Applicant believes that the conservation program presented by the Applicant would comply with CEC polices related to not increasing use of fresh water.
123.	Section 4.9, Soil and Water Resources	Page 14.12-39, third paragraph, last sentence	"Staff considers MSWD's reclaimed water to be a reasonable alternative to the proposed use of 100% groundwater."	The potential development of a recycled water supply from the secondary effluent of MSWD should be described as a less effective alternative to the Applicant's proposed fresh water conservation program, which would more than offset Applicant's use of fresh water. Indeed, the Applicant has evaluated numerous proposals for the potential creation of recycled water supply from the MSWD secondary effluent as one alternative means to conserve freshwater. Direct use of this supply is far less economical than other alternatives considered by the Applicant and would cause adverse environmental impacts. Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. This issue will be discussed further in that submittal.

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124.	Section 4.9, Soil and Water Resources	Page 14.12-39, fourth paragraph	"In addition, staff is concerned about the potential degradation of groundwater quality…100 to 200 TDS groundwater…"	The water quality concerns expressed here are inconsistent with the more rigorous evaluations presented earlier in the PSA. This should be corrected. Moreover, the WSP should be evaluated in total, not by isolating elements out of context. The reference to the project site well water quality in the range of 100 to 200 milligrams per Liter (mg/L) total dissolved solids (TDS) should be corrected. The lab test results, as reported by Applicant, tend to under-report total dissolved solids. A correction made by the Applicant's water specialist to add back chlorides indicates that the TDS is in fact 236 mg/L rather than the lab result of 176 mg/L.
125.	Section 4.9, Soil and Water Resources	Page 4.12-40, Water Supply and Cooling Alternatives, first paragraph, third sentence	"Staff is expanding upon the applicant's analysis in order to analyze…"	The basis for the comparison of alternatives is misstated. The Applicant's proposed WSP complies with LORS and CEC policy. In addition, no significant impacts have been identified from the Applicant's Water Supply and Conservation Plan to water resources or biological habitat. Please refer to Applicant's analysis of CEC Staff alternative water plans, which will be supplied under separate cover, for additional information and supporting documentation.
126.	Section 4.9, Soil and Water Resources	Page 4.12-40, Proposed Project, third sentence	"The project owner would be required to participate in DWA's groundwater replenishment program."	This should be amended to state that the Applicant has agreed to import water more than its use and to voluntarily pay an extraction fee equivalent to DWA's normal replenishment assessment.
127.	Section 4.9, Soil and Water Resources	Page 4.12-40, Proposed Project, last sentence	The applicant also proposes to offset the imported water use by a water conservation program in the Whitewater Groundwater Sub-basin.	This statement should be revised to state that the Applicant also proposes a water conservation program in the Upper Coachella Groundwater basin (Whitewater River Sub-basin and MCSB) to more than fully offset the project's net use of fresh water. Also, any evaluation of cost must acknowledge the extremely limited ability of the project to absorb additional costs as a result of commitments to Southern California Edison (SCE) as set forth in the power purchase agreement.
128.	Section 4.9, Soil and Water Resources	Page 4.12-40 to 14.12-41, Water Supply and Cooling Alternatives	Water Supply and Cooling Alternatives	The description of the alternatives should include a statement that in the CEC staff alternatives, the staff has assumed that the Applicant would not import water to replace lost water from the groundwater basin attributable to its water use. Moreover, the

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				staff has assumed that the use of tertiary effluent as proposed would supplant the Applicant's conservation of fresh water program, which would conserve substantially higher volumes of fresh water. Use of tertiary effluent as proposed would reduce conservation of fresh water by between 65 and 85 percent, compared to Applicant's proposal. The alternative proposals, however, would both increase overdraft of the MCSB by amounts greater than the Applicant's use of water. Alternatives 1 and 2 assume that the project would have a priority use of recycled water compared to other potential users. This would likely reduce potential use of recycled water from Horton by other users in amounts 2 to 3 times the potential use by Sentinel. Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. These comments will be further detailed in that submittal.
129.	Section 4.9, Soil and Water Resources	Page 4.12-40 to 14.12-41, Alternative 2 - Reclaimed Water Augmented by MSWD's Groundwater & Wet Cooling	Alternative 2 - Reclaimed Water Augmented by MSWD's Groundwater & Wet Cooling	MSWD's wells are fresh water wells, suitable with treatment or blending for domestic use. As the Applicant understands it, MSWD Wells 28 and 30 are in use, but experience intermittent detections of uranium. Use of these wells by MSWD can continue through blending with water from other MSWD wells or treatment of the wells. Alternative 2 suggests that the Applicant would pay MSWD for use of groundwater from Wells 28 and 30, under the assumption that these refurbished wells, now being 19 and 16 years old, respectively, are as efficient and sustainable as the well WSW-1 recently installed by the Applicant at the project site. In addition, Alternative 2 assumes the Applicant will install a new well for MSWD (cost of large production wells generally running $1 million to $1.5 million each,, not including pumps and plumbing), so that MSWD could earn additional revenue from its customers for that well's water supply. It is the Applicant's position that its new onsite well and other onsite wells that would be installed for the project in the future would be of superior quality, more efficient, and more sustainable for the 30-year project lifespan than MSWD Wells 28 and 30, which CEC staff assumes the project can use at face value. As

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				such, this aspect of Alternative 2 is highly questionable.
130.	Section 4.9, Soil and Water Resources	Page 14.12-41, MSWD's Groundwater	"Groundwater as currently produced from MSWD's Well Numbers 28 and 30 is available and of sufficient quantity to meet the peak instantaneous demand for the project of up to 2,059 gpm and an annual volume of up to 1,100 AFY."	As stated above, the expected productivity and reliability of MSWD Wells 28 and 30 is unknown. Wells 28 and 30 are reported by MSWD to have capacities when new of 1,900 gpm and 850 gpm, respectively. Well 28 is now 19 years old and Well 30 is 16 years old. The only reason these wells are being made available to the project is that uranium has been intermittently detected, an issue that can be practically solved by blending with other wells, but would be difficult to solve politically due to public perception of the possible presence of uranium. Accordingly, MSWD suggests that it is willing to sell the water from these wells to CPV, earning revenue and at the same time asking that CPV, at CPV's expense, install a new well so that, if no uranium is detected in the new well, MSWD can gain revenue. As such, this Alternative is not about water conservation in the basin. Rather, it is a way that MSWD can make the most of a difficult situation while at the same time gaining maximum revenue while pumping more water from the sub-basin. In addition, this alternative does not have the built-in redundancy needed to meet instantaneous pumping demands with just the two wells. It appears that both wells must operate to supply the maximum water demand of the project. The age and condition of MWSD Wells 28 and 30 may render them less reliable than the existing new well (PW-1) at the CPV site or the additional new wells that would be installed at the site to meet redundancy requirements.
131.	Section 4.9, Soil and Water Resources	Page 4.12-42, Soil & Water Table 13	Soil & Water Table 13	Table 13 suggests that 1.3 million gallons per day (or 900 gpm) of effluent could be converted to recycled water in 2008. In fact, the supply of water from Horton is approximately 700 gpm in the summer months when the power plant would likely operate. The increases in wastewater supply projected thereafter are dependent on completion of projects that are not fully funded, are stalled, and are highly speculative. This speculation overstates the likely supply of recycled water that could be created by addition of tertiary treatment to Horton. Whatever the Horton supply to CPV would be in the staff alternatives, that supply would eliminate that volume of water

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				from MCSB recharge.
132.	Section 4.9, Soil and Water Resources	Page 4.12-42, Soil & Water Table 13 and first paragraph	"The proposed 1,128,000-gallon tank would provide 8 hours of onsite storage to support peak process water demands of 2059 gpm, while retaining 120,000 gallons for fire water reserve."	This PSA statement should be corrected. As shown in AFC Table 2.4-1, two 1,128,000-gallon raw water storage tanks are proposed. Fire water supply capacity will be 2,000 gpm. The National Fire Protection Association requires 2 hours of fire water capacity, so the retained amount should be 240,000 gallons
133.	Section 4.9, Soil and Water Resources	Page 4.12-42, first paragraph, third sentence	"Instead, the onsite water storage tank could remain the same capacity as currently proposed for the project."	The use of storage capacity to regulate the supply of recycled water would necessarily increase the volumes of water tanks on site. Moreover, the lower reliability of a recycled water supply compared to onsite wells would also increase the need for onsite storage tanks.
134.	Section 4.9, Soil and Water Resources	Page 14.12-43, Soil & Water Table 14	Soil & Water Table 14	This table should be expanded to describe the water quality from the DWA treatment plant, Palm Springs National Golf Course, onsite wells, and the potable water served by DWA that would be conserved via the irrigation controller retrofit program. Also, the basis for the wide range of Colorado River Aqueduct water should be cited. Project groundwater should be shown as 200 to 400 mg/L TDS, consistent with the corrected onsite testing from the test well and the projected water quality that would likely be withdrawn over the useful life of the project. Finally, the TDS of Horton Wastewater is shown in a wide range. The source of these data should be cited and the range explained. If supplies increase in the future as speculated earlier, the TDS of Horton Water would increase as basin water TDS increases. The existing Horton permit allows discharge of TDS up to 400 mg/L over the natural background level in the basin. Given that background TDS is in the 400 mg/L range, the future effluent TDS levels could increase over time.
135.	Section 4.9, Soil and Water Resources	Page 4.12-44, first paragraph	"…staff will also consider MSWD's concerns."	The MSWD concerns appear to reflect a misunderstanding of the Applicant's water plan. Applicant below specifically addresses each of the MSWD "concerns" listed in this PSA paragraph: *(1) "MSWD is concerned about the long-term effects of CPV Sentinel withdrawing a significant quantity of groundwater*

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				over the life of the project." The withdrawal of water by CPV Sentinel is offset by the importation of more water than is to be withdraw, and the effects have been analyzed by Applicant and CEC staff based on using very conservative groundwater modeling techniques. MSWD does not raise any new concern here. (2) *"MSWD would not like to see CPV Sentinel or any other user establish a new water right to groundwater in the already declining MCGS."* As stated in Applicant's Comment number 120, no overlying or appropriative water rights will be established by CPV Sentinel, although such water rights are potentially available as a matter of law and property right to any landowner in the state who pumps water for a beneficial use from an overlying basin. Rather, CPV Sentinel will exercise its right to import, store and recover water, which is a well-established principle. *(3) "MSWD considers their agency as having the best interests for considering the long-term management of the MCGS in coordination with DWA."* CEC Staff should consult with DWA as well as MSWD to obtain a balanced perspective on management of the MCGS. *(4) "In addition, MSWD believes the project could contribute to more withdrawal from the MCGS while the effects of future growth in the region could compound the groundwater decline."* MSWD does not seem to understand the CPV Sentinel water plan which features importation of more water than is pumped with no significant short-term basin impacts and no long term impacts. *(5) "MSWD expects that future development will be greater within the area overlying the Whitewater Subbasin, than the area overlying the MCGS, which would lead to a lesser portion of recharge over time among the two subbasins. DWA's formula for applying recharge is factored according to the production of groundwater in each subbasin and according to*

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				the SWP supply in any year." This "concern" is actually benefited by pumping of groundwater at CPV Sentinel, as this would increase the proportion of water allocated to the MCGS vs the Whitewater Subbasin. As noted elsewhere, CPV Sentinel is paying an extraction fee equivalent to the recharge assessment. The formula for applying recharge is not a "DWA formula" it is rather based on agreement among DWA, CVWD and MSWD contained in a settlement agreement among these parties. CEC Staff should consult with DWA to obtain a more balanced perspective on the groundwater management practices in the Upper Coachella Valley Groundwater Basin.
136.	Section 4.9, Soil and Water Resources	Page 14.12-45, third paragraph, last sentence	"However, in the case of CPV Sentinel, staff believes that dry cooling is not necessary because if an alternative is needed to reduce or avoid a significant adverse impact or to conform to LORS, there is a degraded source of reclaimed water supply available from MSWD's Horton WWTP that can be used with wet cooling."	Applicant agrees that dry cooling is not a viable option. However, Applicant disagrees with the premise that wastewater is available from Horton, or that if it was available, it would present a viable alternative to the Applicant's proposal. Recycled water is not produced at Horton, and all secondary effluent is currently put to beneficial use for groundwater recharge. More to the point, the Applicant has proposed a fresh water conservation program with DWA that would conserve much greater quantities of fresh water than proposed for use by the power plant. Applicant has also proposed a groundwater recharge program that would more than compensate for use of groundwater from the MCSB.
137.	Section 4.9, Soil and Water Resources	Page 4.12-46, Soil and Water Resources Table 16	Soil and Water Resources Table 16	The values used in this table contain errors. Moreover, the basis of comparison presumes that with Alternative 1 and 2 the conservation program proposed with DWA would not be developed and the importation of water to eliminate overdraft would be eliminated. Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. This analysis will present correct numbers for these tables. The presentation of values based on the project's maximum potential use (rather than its expected use) of water skews the projected cost impact of the alternatives relative to the kilowatt-hour output of the power plant, and also skews the comparison between alternatives. The assumption that operations and maintenance costs would be reduced with lower hours of

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				operation by the power plant is in many instances incorrect. The costs presented in this table (once it is corrected) should be placed in the context of the project's commitments to deliver power to SCE and the apparent economic infeasibility of the alternatives in this context.
138.	Section 4.9, Soil and Water Resources	Page 14.12-49, first paragraph	"Staff believes that either of the reclaimed water alternatives is economically sound."	Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover, which will further detail why the Applicant refutes this statement.
139.	Section 4.9, Soil and Water Resources	Page 14.12-49, second paragraph	"CPV Sentinel's use of reclaimed water would accomplish utilization for process needs..."	This paragraph is inaccurate. First, the alternatives presented by the staff would substantially reduce the conservation of fresh water proposed by the Applicant in its contract with DWA. The Applicant's fresh water conservation would be more than 3 times the conservation of fresh water that would be accomplished by the use of Horton Wastewater. The proposal of the Applicant is far superior to the alternatives proposed by staff for accomplishing CEC and statewide objectives regarding the priority of water supplies for power plants.
140.	Section 4.9, Soil and Water Resources	Page 14.12-49, Conclusions	Conclusions	The staff has not considered the environmental impacts from the proposed alternatives. A cursory review of these potential environmental impacts would include the following: • The reduction of conservation within the Upper Coachella Valley Groundwater Basin would cause adverse impacts that need to be evaluated. • The increased overdraft of the MCSB needs to be evaluated. • The loss of recharge in the area of the Horton Plant would significantly impact the groundwater levels in the vicinity of the Mesquite Hummocks. • The loss of recharge in the area of the Horton Plant would likely cause a migration of highly saline groundwater from the Southern end of the MCSB into production wells of MSWD. This is particularly true if groundwater pumping were to increase by the speculative amounts suggested in the staff's projections of future flow of effluent from Horton. All of these issues are addressed in detail in Applicant's

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				analysis of CEC Staff alternative water plans, which will be submitted under separate cover.
141.	Section 4.9, Soil and Water Resources	Page 14.12-51, Verification, first sentence	"No later than 90 days prior to start of site mobilization, the project owner shall submit a copy of the DESCP to Riverside County and the RWQCB for review and comment."	The Applicant suggests that the Drainage Erosion and Sediment Control Plan should not be submitted to the Regional Water Quality Control Board, because it is a CEC-required document.
142.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-65, Assumptions, third bullet	"Recharge and pumping effect the entire thickness of the aquifer."	This statement should be amended to read: "Recharge and pumping <u>affect</u> the entire thickness of the aquifer."
143.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-66, last bullet, last sentence	"Based on data we considered, over the lifetime of the project an additional 0.7- to 14-percent of water is required to produce the recharge rates simulated by the model."	The estimation of "an additional 0.7 to 14 percent of water is required to produce the recharge rates simulated by the model" is based on an evaporation rate of 5.2 feet per year and an infiltration rate ranging from 0.1 to 2.0 feet per day. At the DWA recharge basin area, the conductivity is calculated as 1.34 to 3.35 feet per day (based on transmissivity of 10,000 to 25,000 gpd per foot [gpd/ft] in the DWA recharge basin area; Tyley, 1974). Conservatively assuming unit gradient and ignoring the lateral spreading beneath the DWA recharge basin, the infiltration rate is calculated as 1.34 to 3.35 feet per year. The high value of infiltration rate of 0.1 to 2.0 feet per day (i.e., 2.0 feet per day) is therefore likely closer to reality. Consequently, the 0.7 percent of additional water required to produce the recharge rates seems more realistic. Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. Appendix 2 of that analysis will provide additional discussion of evaporative losses.
144.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-68, three bullets	Transmissivity	It would be helpful if the units are consistent in this section, or that corresponding values should be included in parentheses. For example in the first bullet: 2,703 (20,020 gpd/ft), 61,000 square feet per day (456,300 gpd/ft). This helps the reader put these statements in context of the introductory paragraph where both units are presented.

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145.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-68, second bullet	"URS (July, 2008) reports transmissivity data that when considered in their entirety (i.e., no data are excluded) are 0.06 to 3.69 times Tyley's (1974) values (on the average, their transmissivity data is 1.7 times greater than Tyley's values specified in the Mission Creek sub-basin model)."	This statement should be amended to read: "URS (July, 2008) reports transmissivity data that when considered in their entirety (i.e., no data are excluded) are 0.06 to 3.69 times Tyley's (1974) values (on the average, their represented transmissivity data is 1.7 times greater than Tyley's values specified in the Mission Creek sub-basin model)." This relates to the cited values presented in Table 1 (last column as footnoted) and Table 2 (fourth column as footnoted) of the July 9, 2008 Response to Data Requests.
146.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-68, third bullet, second sentence	"…which is about 8 times greater…"	The PSA statement should be amended to read: "…which is about 8.5 times greater…"
147.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-68, sixth paragraph, first sentence	"The Mission Creek sub-basin model also assumes…"	The PSA statement should be amended to read: "The Mission Creek sub-basin model conservative sensitivity analyses also assumes…"
148.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-69, Storage Coefficient, last paragraph, third sentence	"We adjusted the specific yield values by factors of 0.5 and 1.5, and determined that the resulting differences in simulated maximum water level changes ranged from 0.1 to 0.8 feet, which seem modest relative to the model's greater sensitivity to transmissivity."	The uncertainty in specific yield is generally much less than that in transmissivity/hydraulic conductivity, so adjusting the specific yield used by the model by a factor of 0.5 seems too much (corresponding to specific yield ranging 0.04 to 0.09). While the model is relatively insensitive to specific yield (as noted in additional Appendix C), sensitivity runs at specific yields this low are unrealistic with respect to what is currently known about the sub-basin. Specific yield equal to that used or 1.5 times that used (0.12 to 0.27) seem more realistic. The issue here seems to be the same as cutting the Tyley values by half. They introduce an extremely conservative analysis and results that the Applicant does not believe are realistic respective to a responsibly conservative analysis.
149.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-69, Storage Coefficient, last paragraph, last sentence	"These tests do not consider possible cumulative effects…"	It is not clear what is meant by this statement. The model simulations for this project as stated in submittals and workshop presentations to the CEC show project-specific pumping and recharge cumulative effects over a 35-year period (30 years of operation and 5 years of post operation).

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
150.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-69, Storage Coefficient, last paragraph, last sentence	"…and if more analyses (scenarios) were to be run, we recommend the uncertainty in both transmissivity and specific yield be considered both separately and in combination."	As stated in the PSA, the CEC sensitivity runs already concluded that the simulation results are much less sensitive to specific yield, and we know the uncertainty in specific yield is small. As such, even if more runs were conducted for different scenarios, no more sensitivity runs are needed with respect to specific yield.
151.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-72, first paragraph, first sentence	"The expected groundwater level changes are simulated by the model using Tyley's (1974) transmissivity values in the northerly (y) direction and one-half of Tyley's values in the easterly (x) direction (anisotropy of 2.0)."	There is either an error in this statement or a misunderstanding that the Applicant understood was cleared up in the June 2008 Workshops and the June and July 2008 submittals, along with the groundwater model backup files. The statement should read: "The expected groundwater level changes are simulated by the model using Tyley's (1974) transmissivity values in the easterly (x) direction and two times of Tyley's values in the northerly (y) direction (anisotropy of 2.0)".
152.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-72, Drawdown Results and General Uncertainty, first paragraph, last sentence	"This corresponds to an average uncertainty in simulated drawdown of ± 0.6 feet."	This statement should be amended to read: "This corresponds to an average uncertainty in the simulated drawdown of ± 0.6 foot, excluding the recharge basin and pumping wells."
153.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-72 to page 14.12-75, Table 1(a and b) to Table 4	Table 1(a and b) to Table 4	The PSA should be clarified to identify what the text "(8)" means that appears after Pumping Wells on Table 1 (a and b) through Table 4. It does not seem to be related to footnote 8 or other footnotes. It can't mean the number of simulated CPV Sentinel pumping wells, as there were 3.
154.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-73, first paragraph, second sentence	"…and the differences between the isotropic and anisotropic model runs, excluding the recharge basin and pumping wells, range from 0.0 to 1.4 feet (0- to 350-percent)."	The use of 350 percent is misleading, because it gives the appearance of a very large difference. The 350 percent difference is from Well 28, where the expected water change (with anisotropy of 2) is 0.4 foot and the simulated change is 1.8 feet for isotropic case (so the difference is 1.4 feet). If the expected simulated head change is zero or very small (if a well happens to be located at/near the zero contour line, as Well 28 is,), then the difference could be an infinite or large number in terms of ratio (percentage). Therefore, the Applicant suggests dropping the 0- to 350- percent statement.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
155.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-73, Table 1 (b)	Table 1 (b)	The Recharge Basin Numbers should be negative ("-"), representing a rise in water levels under the recharge basins.
156.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-73, third paragraph, first sentence	"For Scenarios 1 and 2, the minimum drawdown is generally simulated using the larger transmissivity values; whereas…"	This statement should be amended to read: "For Scenarios 1 and 2, the minimum drawdown is generally simulated using the larger transmissivity values and anisotropic case; whereas…."
157.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-73, third paragraph, first sentence	"…whereas, depending upon which well location is of interest, the maximum drawdown could either be simulated by decreasing transmissivity by a factor of 0.5 or specifying isotropic conditions."	This statement should be amended to read: "…whereas, depending upon which well location is of interest, the maximum drawdown could either be simulated by decreasing transmissivity by a factor of 0.5 or specifying isotropic conditions, or both."
158.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-73, fourth paragraph, second sentence	"After adjusting the transmissivity distribution, the difference between the expected drawdown and new drawdown at the corresponding private well locations ranged from -1.8 to 4.9 feet. The maximum water level rise at the recharge basin ranges from 7.3 to 28.7 feet..."	This statement should be amended to read: "After adjusting the transmissivity distribution, the ~~difference between the expected drawdown and new~~ expected drawdown at the corresponding private well locations ranged from -1.8 to 4.9 feet. The maximum water level rise at the recharge basin ranges from 7.3 to ~~28.7~~ 42.2 feet..."
159.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-74, Table 2, second last row, last column	"-28.7"	This should be amended to "-42.2." It also appears that the maximum drawdown at Wells 28 and 30 should be "-3.6" feet, not "-1.8" feet.
160.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-74 to 4.12-74, Tables 2, 3 and 4	Tables 2, 3 and 4	While the Applicant understands the concept behind Tables 2, 3, and 4, they seem confusing because they sometimes mix and match modeling run and sensitivity analyses from Appendix Tables 1, 2, and 3 of July 9, 2008 Response to Data Requests. While the Applicant understands the intent to show minimum, maximum, and expected drawdowns, there could be some debate about the selected simulations to illustrate expected drawdowns (see page 14.12-73, second paragraph, last sentence; one could argue using 2 times Tyley and an isotropic ratio). The Applicant wants to reiterate (as was discussed in detail in the July 9, 2008, Response to Data Requests [see Response to Comment 6]) that the use of ½ Tyley T values is too conservative and not realistic considering what is now known about the basin (where T values could likely be higher than Tyley).

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161.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-74, first paragraph, third sentence	"The maximum water level rise at the recharge basin ranges from 26.8 to 104.5 feet, with an expected water level rise of 46.0 feet. The maximum drawdown at the pumping wells ranges from 6.8 to 32.0 feet, with an expected drawdown of 12.1 feet."	This statement is confusing to the reader because it mixes column results. This statement could be amended to read: "The simulated water level increases at the recharge basin range from 26.8 feet (minimum case) to 104.5 feet (maximum case), with an expected water level rise of 46 feet. Drawdown at the pumping wells ranges from 6.8 (minimum case) to 32.0 feet (maximum case), with an expected drawdown of 12.1 feet."
162.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-74 to 14.12-75, last paragraph	"In Scenario 3 (Table 4), the expected maximum drawdown at the private well locations ranges from 0.1 to 0.5 feet. There is no water level increase beneath the recharge basin because no recharge is simulated, but there is pumping induced drawdown beneath the basin. The water level decline beneath the basin ranges from 0.0 to 0.3 feet. At the pumping wells, the maximum drawdown ranges from 11.8 to 47.3 feet, with an expected drawdown of 20.4 feet."	This statement could be amended to read: "In Scenario 3 (Table 4), the expected drawdown at the private well locations ranges from 0.1 to 0.5 foot. There is no water level increase beneath the recharge basin because no recharge is simulated, but there is pumping induced drawdown beneath the basin. The water level decline beneath the basin ranges from 0.0 foot (minimum case) to 0.3 foot (maximum case). At the pumping wells, the maximum drawdown ranges from 11.8 feet (minimum case) to 47.3 feet (maximum case), with an expected drawdown of 20.4 feet." In addition, please clarify the use of "private" for the wells.
163.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-75, second paragraph, third sentence	"For example, in Scenario 1 the maximum expected drawdown at one private well location (Well 27) is 1.6 feet (Table 2)."	This statement should be amended to read: "For example, in Scenario 1 the ~~maximum~~ expected drawdown at one private well location (Well 27) is 1.6 feet (Table 2)."
164.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-75, second paragraph	"0.05 feet per year"	This is too simplistic, because the true effect is shown in Appendix A, Figure 43, Hydrograph of the July 9, 2008, Response to Data Requests. Most of the drawdown occurs during the first 10 years of pumping and remains relatively stable at approximately 1.6 feet from years 15 to 30, with a rebound after year 30 when project-specific pumping ends.
165.	Section 4.9, Soil and Water Resources, Appendix C	Page 14.12-75, second paragraph, last sentence	"If future intentional recharge activities or groundwater consumption should change, resulting in a reversal in groundwater level declines, the water level increase at the Well 27 location will be 0.05 feet per year less than would be observed without power plant pumping."	This sentence is confusing to the reader and should be amended. For example: "While future non-project-specific pumping and recharge may change, resulting in a reversal in water level declines, the project-specific change in water levels would remain similar to that already simulated."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
166.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-76, Item 5	"5. The parameterization is based primarily on a previous U. S. Geological Survey study (Tyley, 1974). Subsequent studies suggest Tyley's (1974) transmissivity values may be lower than the actual transmissivity values in the Mission Creek sub-basin."	This statement could be expanded on as follows, and in accordance with July 9, 2008, Response to Data Request 6: "Post-Tyley data and project-specific drilling indicate that not only is Tyley's T distribution reasonable but that it is somewhat conservative in that actual T values, at least in the project-specific pumping and recharge areas (i.e., upper Mission Creek Subbasin) are considerably higher (by a factor of 2 or more)."
167.	Section 4.9, Soil and Water Resources, Appendix C	Page 4.12-76, Item 6	"6. No effort was made to calibrate the Mission Creek sub-basin model. Instead, URS assumed Tyley's (1974) analysis of specific capacity data, well driller logs, aquifer test results, and his own analog-model calibration effort provide sufficient representation of transmissivity and specific yield."	This statement could be amended by adding the following sentence: "However, the Applicant ran sensitivity analyses at ½ Tyley and 2 times Tyley T as well as isotropic (1:1) and anisotropic (2:1) cases."
Section 4.10, Traffic and Transportation				
168.	Section 4.10, Traffic and Transportation	Page 4.10-9, first paragraph	"Staff has also proposed Condition of Certification TRANS-4 which requires the applicant to repair affected public rights-of-way (e.g., highway, road, bicycle path, pedestrian path) to original or near original condition <u>that have been damaged</u> due to construction activities conducted for the project."	Suggest that "have been" be changed to "may be" so the statement does not presume that damage will occur.
169.	Section 4.10, Traffic and Transportation	Page 4.10-10, first sentence	"The project proposes a <u>1,800-foot long</u> 220 kV single circuit transmission line to interconnect the power plant and the Devers Substation."	The current expected length of the transmission line is <u>approximately 2,300</u> feet.
170.	Section 4.10, Traffic and Transportation	Page 4.10-21, TRANS-2	TRANS-2 requires review and approval of a parking plan(s) for construction and operation phases of the project.	The temporary construction parking area is likely to be rough graded and would not be striped or marked. However, operational parking areas would be finished and marked. For this reason, only a conceptual parking layout for construction parking areas should be required to demonstrate adequate parking capacity and access. The Applicant suggests that TRANS-2 be amended to reflect the different level of detail and finish required for temporary construction parking areas and operational parking areas.

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171.	Section 4.10, Traffic and Transportation	Page 4.10-22 to 4.10-23	TRANS-3 requires review and approval of a traffic control and implementation plan. Second bullet reads: "Redirecting construction traffic with a flag person;" Last bullet reads: "Provide a construction workforce organized ridesharing plan (ridesharing refers to carpooling and vanpooling. Rideshare programs typically provide carpool matching, vanpool sponsorship, marketing programs and incentives to rideshare rather than drive alone)."	Applicant suggests that these descriptions of the traffic control and implementation plan requirements be amended as follows: Second bullet: • "Redirecting construction traffic with a flag person <u>if needed</u>"; Last bullet: • An "organized ridesharing plan" will be difficult to implement in a very dynamic construction environment. An "organized ridesharing plan" may be more feasible/successful after construction when workers are more permanent. Applicant suggests that the first sentence be amended to read "Encourage construction workforce ridesharing…"
172.	Section 4.10, Traffic and Transportation	Page 4.10-23, TRANS-4, second paragraph, second sentence	"The purpose of this notification is to request the county of Riverside Transportation Department, the city of Palm Springs Department of Public Works and Engineering, and Caltrans to consider postponement of public right-of-way repair or improvement activities until after project construction has taken place and to coordinate construction-related activities."	The Applicant suggests amending TRANS-4 to require the project owner to "coordinate construction activities" with public agencies rather than requiring the project owner to ask these agencies to "consider postponement" of their construction activities.
Section 4.11, Transmission Line Safety and Nuisance				
173.	Section 4.11, Transmission Line Safety and Nuisance	Page 4.11-3, Setting, first paragraph, second sentence	"The site is currently vacant except for an unoccupied dwelling located approximately 690 feet to the south. This dwelling would be purchased by the applicant and evacuated before the start of construction leaving the nearest building as the one currently located 1,300 feet away from the site."	The vacant dwelling unit and detached garage on the project site were demolished in January 2008.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
174.	Section 4.11, Transmission Line Safety & Nuisance	Pages 4.11-3 and 4.11-4, Setting, second paragraph, first sentence	"The current proposal is to connect CPV Sentinel to the SCE electric power grid at the Devers Substation using a 220-kV single-circuit, overhead transmission line with a total length of the 3,250 feet 1,800 feet of which would be located outside the property boundaries for CPV Sentinel and the Devers Substation."	The current expected length of the transmission line is (delete the) approximately 2,300 feet, of which approximately 1,850 feet would be located outside the property boundaries for CPVS and the Devers substation.
175.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-4, Project Description, first bullet	"The 3,250-foot, 220-kV, single-circuit, overhead 230-kV line extending from the project's switchyard to the SCE Devers substation to the west;"	The current expected length of the transmission line is approximately 2,300 feet, and the transmission line will be at 220-kV.
176.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-4, Project Description, second bullet	"The project's on-site 230-kV switchyard from which the conductors would extend to the connection points at the Devers Substation; and"	The switchyard will be at 220-kV.
177.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-9, first sentence	"As one focuses on the strong magnetic fields from the more visible high-voltage power lines, staff considers it important, for perspective, to note that an individual in a home could be exposed too much stronger fields while using some common household appliances than from high-voltage lines . . . ."	Typo: ". . . exposed to much stronger fields . . . ."
178.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-11, Proposed Conditions of Certification, TLSN-1	"The project owner shall construct the proposed transmission lines according to the requirements of California Public Utility Commission's GO-95 . . . ."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "The proposed transmission lines shall be constructed according to the requirements of California Public Utility Commission's GO-95 . . . ."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
179.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-11, Proposed Conditions of Certification, TLSN-1, Verification	"At least thirty days before starting construction of the transmission line or related structures and facilities, the project owner shall submit to the Compliance Project Manager (CPM) a letter signed by a California registered electrical engineer affirming that the lines will be constructed according to the requirements stated in the condition"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least thirty days before starting construction of the transmission line or related structures and facilities, a letter signed by a California registered electrical engineer affirming that the lines will be constructed according to the requirements stated in the condition shall be submitted to the Compliance Project Manager (CPM)."
180.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-11, Proposed Conditions of Certification, TLSN-2, first sentence	"The project owner shall ensure that every reasonable effort will be made to identify and correct, on a case-specific basis, any complaints of interference with radio or television signals from operation of the project-related lines and associated switchyards."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "Every reasonable effort will be made to identify and correct, on a case-specific basis, any complaints of interference with radio or television signals from operation of the project-related lines and associated switchyards."
181.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-11, Proposed Conditions of Certification, TLSN-2, second sentence	"The project owner shall maintain written records for a period of five years, of all complaints of radio or television interference attributable to line operation together with the corrective action taken in response to each complaint."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. SCE has an existing complaint resolution program regarding interference with radio or television signals, which will apply to the proposed transmission line. Therefore, this condition should be deleted.
182.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-11, Proposed Conditions of Certification, TLSN-2, Verification	"All reports of line-related complaints shall be summarized for the project-related lines and included during the first five years of plant operation in the Annual Compliance Report."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. SCE has an existing complaint resolution program regarding interference with radio or television signals, which will apply to the proposed transmission line. Therefore, this condition should be deleted.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
183.	Section 4.11, Transmission Line Safety & Nuisance	Pages 4.11-11 and 4.11-12, Proposed Conditions of Certification, TLSN-3 and Verification	"The project owner shall use a qualified individual to measure the strengths of the electric and magnetic fields from the line at the points of maximum intensity for which intensity estimates were provided by the applicant. The measurements shall be made before and after energization according to the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) standard procedures. These measurements shall be completed not later than six months after the start of operations. Verification: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. As noted in the PSA, SCE will design, build and operate the line in accordance with its CPUC-approved field reduction requirements. Therefore, it is not necessary for CPV to conduct field strength measurements, and these conditions should be deleted.
184.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-12, Proposed Conditions of Certification, TLSN-4 and Verification	"<u>The project owner shall ensure that</u> the rights-of-way of the proposed transmission line are kept free of combustible material, as required under the provisions of Section 4292 of the Public Resources Code and Section 1250 of Title 14 of the California Code of Regulations. Verification: During the first five years of plant operation, the project owner shall provide a summary of inspection results and any fire prevention activities carried out along the right-of-way and provide such summaries in the Annual Compliance Report."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "The rights-of-way of the proposed transmission line <u>shall be</u> kept free of combustible material . . ." and the Verification should be deleted.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
185.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-12, Proposed Conditions of Certification, TLSN-5	"The project owner shall ensure that all permanent metallic objects within the right-of-way of the project-related lines are grounded according to industry standards regardless of ownership. In the event of refusal by any property owner to permit such grounding, the project owner shall so notify the CPM."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "all permanent metallic objects within the right-of-way of the project-related lines shall be grounded according to industry standards regardless of ownership. In the event of refusal by any property owner to permit such grounding, the CPM shall be notified."
186.	Section 4.11, Transmission Line Safety & Nuisance	Page 4.11-12, Proposed Conditions of Certification, TLSN-5, Verification	"At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 30 days before the lines are energized, a letter confirming compliance with this condition shall be transmitted to the CPM."
Section 4.12, Visual Resources				
187.	Section 4.12, Visual Resources	Page 4.12-7, Project Location, second paragraph, first sentence	"The 37-acre power plant site is currently vacant except for an unoccupied dwelling at the southeast corner of the site."	The vacant dwelling unit and detached garage on the project site were demolished in January 2008.
188.	Section 4.12, Visual Resources	Page 4.12-8, Project Operation, fifth bullet	"A 3,250-foot long 220 kV transmission line and nine steel transmission poles, 85-115 feet in height, connecting to the existing Devers Substation;"	The current expected length of the transmission line is approximately 2,300 feet.
189.	Section 4.12, Visual Resources	Page 4.12-9, Table 2, Switchyard, Buses & Towers Row	Length (feet) Column: 3,250	The current expected length of the transmission line is approximately 2,300 feet.
190.	Section 4.12, Visual Resources	Page 4.12-9, Table 2, Transmission Line Row	Length (feet) Column: 3,250	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
191.	Section 4.12, Visual Resources	Page 4.12-13, Impact Significance, first paragraph, fourth sentence	"Staff is concerned that the AFC did not address night lighting impacts from KOP 3 (Diablo Road), which is the KOP closest to the project site."	AFC Section 7.11.2.4 on page 7.11-11 lists all the key observation points (KOPs) and lists KOP 3 as having the greatest impact (where listing impacts in descending order). As concluded in this AFC section, it was determined that the project would have an adverse but not significant impact on visual resrources from night lighting.
192.	Section 4.12, Visual Resources	Page 4.12-15, Visual Change, third sentence	"The 3,200 foot long transmission line would be strung on 85- to 115-foot tall, steel poles."	The current expected length of the transmission line is approximately 2,300 feet.
193.	Section 4.12, Visual Resources	Page 4.12-20, Viewer Exposure, sixth and seventh sentences	"Staff observed that most homes could not be seen from this KOP due to vegetative screening, fencing, and intervening topography. Based on this, it is assumed viewer exposure of the residents in this area would be moderate."	If most homes "could not be seen from this KOP" the conclusion that viewer exposure is moderate seems elevated.
194.	Section 4.12, Visual Resources	Page 4.12-12 (Scenic Resources) and 4.12-24 (Impact Significance)	The second paragraph, fourth sentence on page 4.12-12 reads: "Therefore, in the context of the existing level of scenic quality, the project would result in an adverse visual impact on the scenic corridor of SR 62. However, this impact would not be significant due to the poor existing visual condition. These effects on the visual character and quality of the landscape are discussed in detail under KOP 4 below." The fourth paragraph, second sentence on page 4.12-24 reads: "The Moderately High overall visual sensitivity, combined with the Moderate overall visual change could result in a potentially significant visual impact."	These two statements appear to be contradictory. It is stated on page 4.12-12 that "…the impact would not be significant due to the poor existing visual condition." This being the case, can a "potentially significant visual impact" occur for a KOP on or near State Route 62 as stated on page 4.12-24?
195.	Section 4.12, Visual Resources	Page 4.12-31, Policy LU 13.5 Row	"CPV Sentinel proposes 3,250 feet of transmission line to be carried on nine steel poles (85- to 115- feet tall)."	The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
196.	Section 4.12, Visual Resources	Page 4.12-34 to 4.12-35, Permanent Exterior Lighting, VIS-2, first sentence	"…a) lamps and reflectors are not visible from beyond the project site, including any off-site construction laydown areas and security buffer areas;…"	Construction laydown areas have been included in this lighting condition. On the whole, this condition is consistent with what would be expected. However, extending it to construction laydown areas implies that a lighting plan for construction will have to be separately developed and reviewed by the CPM and Riverside County, and possibly the City of Palm Springs.
Section 4.13, Waste Management				
197.	Section 4.13, Waste Management	Page 4.13-6, Setting, second paragraph, second sentence	"The project would include the construction of a 2.6-mile-long natural gas line from the Indigo power plant to the project site, a 3,250-foot long transmission line from the project site connecting to the Devers Substation, and a 3,200-foot long potable water supply line from Dillon Road to the south of the project site."	The current expected length of the transmission line is approximately 2,300 feet.
198.	Section 4.13, Waste Management	Page 4.13-9, third paragraph, second sentence	"The linear facilities include a 2.6-mile long natural gas line, a 3,250-foot long transmission line, and a 3,200-foot long potable water supply line."	The current expected length of the transmission line is approximately 2,300 feet.
199.	Section 4.13, Waste Management	Page 4.13-15, Conclusions, fourth bullet	"The project owner shall conduct a Phase I ESA along the linear facility corridors, such as pipelines and transmission lines in accordance with ASTM guidelines;"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "a Phase I ESA along the linear facility corridors, such as pipelines and transmission lines, shall be conducted in accordance with ASTM guidelines."
200.	Section 4.13, Waste Management	Page 4.13-18, Proposed Conditions of Certification, WASTE-6	"The project owner shall ensure that all spills or releases of hazardous substances, hazardous materials, or hazardous wastes associated with the construction or operation of the project are reported, delineated, cleaned-up, and remediated as necessary . . . ."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "All spills or releases of hazardous substances, hazardous materials, or hazardous wastes associated with the construction or operation of the project shall be reported, delineated, cleaned-up, and remediated as necessary . . . ."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
201.	Section 4.13, Waste Management	Page 4.13-18, Proposed Conditions of Certification, WASTE-6, Verification	"The project owner shall document all unauthorized spills or releases of hazardous substances, materials, or wastes that occur on the project property or related pipeline and transmission corridors."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "All unauthorized spills or releases of hazardous substances, materials, or wastes that occur on the project property or related pipeline and transmission corridors shall be documented."
202.	Section 4.13, Waste Management	Page 4.13-19, Waste-8	"WASTE-8. The project owner shall obtain a hazardous waste generator identification number from the U.S. EPA prior to generating any hazardous waste during construction and operations in accordance with CCR Title 22, Division 4.5. Verification: The project owner shall keep a copy of the identification number on file at the project site and provide the number to the CPM in all compliance reports."	A Resource Conservation and Recovery Act Hazardous Waste Part A permit application will be required 180 days prior to the start of construction. In accordance with standard industry practices, the "project owner" may require the "construction contractor" to initially apply for this permit for construction related activities and then, after construction, transfer the permit to the project owner with applicable modifications to the listed waste streams. The following amendments are suggested to WASTE-8 to allow this to occur: "WASTE-8. The construction contractor or project owner shall obtain a hazardous waste generator identification number from the U.S. EPA prior to generating any hazardous waste during construction and operations, in accordance with CCR Title 22, Division 4.5. Verification: The construction contractor or project owner shall keep a copy of the identification number on file at the project site and provide the number to the CPM in all compliance reports."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 4.14, Worker Safety and Fire Protection				
203.	Section 4.14, Worker Safety and Fire Protection	Page 4.14-10, Operation, first paragraph	"The information in the AFC indicates that the project intends to meet the fire protection and suppression requirements of the California Fire Code, all applicable recommended National Fire Protection Association (NFPA) standards (including Standard 850 addressing fire protection at electric generating plants), and all Cal/OSHA requirements with one exception (see below). Fire suppression elements in the proposed plant would include both fixed and portable fire extinguishing systems. The fire water would be potable water supplied from the Sweetwater Authority (CPV Sentinel 2007a)."	Subsequent PSA text does not appear to identify the exception to California Occupational Safety and Health Administration requirements referred to in this paragraph. The source of fire water should be changed from water supplied from the Sweetwater Authority to raw water pumped from on-site production wells that would be stored in raw water storage tanks. The source of fire water is described in AFC Section 2.4.4 and Section 2.4.8.
204.	Section 4.14, Worker Safety and Fire Protection	Page 4.14-13, Worker Safety-2, Verification, second sentence	"The project owner shall provide a copy of a letter to the CPM from the Palm Springs Fire Department stating the Fire Department's comments on the Operations Fire Prevention Plan and Emergency Action Plan."	Proposed condition Worker Safety-2 also requires the "Hazardous Materials Management Program" to be submitted to the Palm Springs Fire Department for review and comment. This should be added to the verification component of the condition.
Section 5.1, Facility Design				
205.	Section 5.1, Facility Design	Page 5.1-7, Facility Design Table 2	Table 2 states that there are six (6) Auxiliary Power Transformers Foundations and Connections	This should be amended to be consistent with AFC Table 2.6-2, which states that there are eight (8) Auxiliary Power Transformers.
Section 5.2, Geology and Paleontology				
206.	Section 5.2, Geology and Paleontology	Page 5.2-1, Summary of Conclusions, first paragraph, last sentence	"A design-level geotechnical investigation required for the project by the CBC, and proposed Facility Design Conditions of Certification GEN-1, GEN-5, and CIVIL-1, would present standard engineering design recommendations for mitigation of potential expansive clay soils, as well as excessive settlement due to compressible soils, hydrocompaction, or dynamic compaction."	A geotechnical report has been prepared for the project site and will be submitted under separate cover. Some CEC geotechnical report requirements may need to be provided as an addendum to this report prior to the start of site grading, such as potential subsidence due to compressible soils (see comments below).

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
207.	Section 5.2, Geology and Paleontology	Page 5.2-3, Setting, third paragraph, first sentence	"A new 3,250-foot long single-circuit, 220 kilovolt (kV) transmission line would connect the proposed on-site 220-kV switchyard on the west side of the plant site to the south end of Southern California Edison's (SCE) Devers substation."	The current expected length of the transmission line is approximately 2,300 feet.
208.	Section 5.2, Geology and Paleontology	Page 5.2-12, Direct/Indirect Impacts and Mitigation, first paragraph	"Ground shaking and potential settlement represent the main geologic hazards at this site. These potential hazards can be effectively mitigated through facility design by incorporating recommendations contained in a project-specific geotechnical report per CBC (2007) requirements. Proposed Conditions of Certification GEN-1, GEN-5, and CIVIL-1 in the Facility Design section should also mitigate these impacts to a less than significant level."	Refer to the project geotechnical report, pages 20 and 21.
209.	Section 5.2, Geology and Paleontology	Page 5.2-13, Geological Hazards, first paragraph, last sentence	"Geologic hazards, such as potential for expansive clay soils and settlement due to compressible soils, hydrocompaction, or dynamic compaction, must also be addressed in a project geotechnical report per CBC (2007) requirements."	Refer to the project geotechnical report, page 15, for dynamic compaction. The remainder of this information will be provided in an addendum report prior to the start of site grading.
210.	Section 5.2, Geology and Paleontology	Page 5.2-14, fifth paragraph, first sentence	"The soil profile for this site is assumed to be Type D. However, a geotechnical report is needed to confirm the soil profile and provide appropriate seismic design parameters per CBC (2007) requirements and proposed Conditions of Certification GEN-1, GEN-5, and CIVIL-1 of the Facility Design section."	Refer to the project geotechnical report, page 20.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
211.	Section 5.2, Geology and Paleontology	Page 5.2-14 (last sentence) to 5.2-15	"However, ground water levels and subsurface soil types should be confirmed, and the liquefaction potential on the CPV Sentinel site should be addressed in a project-specific geotechnical report per CBC (2007) and proposed Facility Design Conditions of Certification GEN-1, GEN-5, and CIVIL-1."	Refer to the project geotechnical report, page 14.
212.	Section 5.2, Geology and Paleontology	Page 5.2-15, Dynamic Compaction, fourth sentence	"It is not possible to assess the potential for dynamic compaction without site-specific geotechnical exploration. The potential for and mitigation of the effects of dynamic compaction of site soils during an earthquake should be addressed in a project-specific geotechnical report, per CBC (2007) and Facility Design GEN-1, GEN-5, and CIVIL-1 requirements."	Refer to the project geotechnical report, page 15.
213.	Section 5.2, Geology and Paleontology	Page 5.2-15, Hydrocompaction, fourth sentence	"It is not possible to assess the potential for hydrocompaction without site-specific geotechnical exploration. The potential for and mitigation of the effects of hydrocompaction of site soils should be addressed in a project-specific geotechnical report, per CBC (2007) and proposed Facility Design Conditions of Certification GEN-1, GEN-5, and CIVIL-1."	This information will be provided in an addendum report prior to the start of site grading.
214.	Section 5.2, Geology and Paleontology	Page 5.2-15, Subsidence, second sentence	"It is not possible to assess the potential for subsidence without site-specific geotechnical exploration. The potential for and mitigation of the effects of subsidence due to compressible soils on the site should be addressed in a project-specific geotechnical report, per CBC (2007) and proposed Facility Design Conditions of Certification GEN-1, GEN-5, and CIVIL-1."	This information will be provided in an addendum report prior to the start of site grading.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
215.	Section 5.2, Geology and Paleontology	Page 5.2-16, Expansive Soils, fourth sentence	"It is not possible to assess the potential for expansive soils without site-specific geotechnical exploration. The geologic environment is such that a 1 to 3-foot-thick near-surface horizon of expansive clay would be likely at this site. The potential for and mitigation of the effects of expansive soils on the site should be addressed in a project-specific geotechnical report, per CBC (2007) and proposed Facility Design Conditions of Certification GEN-1, GEN-5, and CIVIL-1."	This information will be provided in an addendum report prior to the start of site grading.
Section 5.3, Power Plant Efficiency				
216.	Section 5.3, Power Plant Efficiency	Page 5.3-1, Summary of Conclusions, first sentence	"The project, if constructed and operated as proposed, would generate a nominal 850 MW of peaking electric power at an overall project fuel efficiency of 42 percent lower heating value (LHV) at maximum full load and average annual ambient conditions1."	AFC Table 2.4-3 does not support the statement that the plant will generate 850 MW at 70 degrees Fahrenheit and 40 percent relative humidity (actual generation: 779 MW net at these ambient conditions). The plant does not generate 850 MW in any of the test cases.
217.	Section 5.3, Power Plant Efficiency	Page 5.3-2, Project Energy Requirements and Energy Use Efficiency, second sentence	"Under average ambient conditions, CPV Sentinel would burn natural gas at a nominal rate of 6,139 million Btu[3] per hour LHV (CPVS 2007a, AFC §5.2, Table 2.9-1)."	AFC Table 2.9-1 uses million British thermal units (Btu) per year, not Btu. Also, this statement/calculation uses data from a 90-degree day and refers to it as "nominal." Later in the same paragraph, a 72-degree day is referred to as "nominal." In the Summary of Conclusions for this section, data are used from a 72-degree day for "nominal" day calculations. Applicant suggests that the text be amended to remain consistent with the data and definition of nominal, whether it is a 72- or 90-degree day or another point.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 5.4, Power Plant Reliability				
218.	Section 5.4, Power Plant Reliability	Page 5.4-2, last paragraph, first sentence; and Page 5.4-7, Conclusion, first sentence	Text on Page 5.4-2 reads: "The project is expected to achieve an equivalent availability factor of over 95 percent (CPVS 2007a, AFC §2.9.3)." Text on Page 5.4-7 reads: "The applicant predicts an equivalent availability factor of over 95 percent, which staff believes is achievable."	AFC Section 2.9-3 refers to "availability," not "equivalent availability factor." The terms are not interchangeable because equivalent availability factor includes facility de-rates in its calculation and AF does not.
219.	Section 5.4, Power Plant Reliability	Page 5.4-4, first paragraph, second sentence	"A typical approach for achieving reliability in such circumstances is to provide redundant examples of those pieces of equipment most likely to require service or repair."	The Applicant suggests that this text be amended to read: "A typical approach for achieving reliability in such circumstances is to provide redundancy in areas where a single point of failure can or will cause a disruption ~~redundant examples of those pieces of equipment most likely to require service or repair~~."
Section 5.5, Transmission System Engineering				
220.	Section 5.5, Transmission System Engineering	Page 5.5-1, Summary of Conclusions, first paragraph, first sentence	"The proposed interconnecting facilities including the CPV Sentinel 230 kV switchyard, the single circuit 230 kV tie line to the Devers substation and its termination are adequate in accordance with good utility practices and acceptable to staff according to engineering Laws Ordinances Regulations and Standards."	The switchyard and transmission line will be at 220-kV.
221.	Section 5.5, Transmission System Engineering	Page 5.5-1, Summary of Conclusions, second paragraph, first sentence	"The current Southern California Edison (SCE) System Impact Study (SIS) and Facilities Study (FS) indicate that under certain conditions the addition of the CPV Sentinel would overload the Devers-San Bernardino No. 1 230 kV line."	The Devers-San Bernardino No. 1 line is at 220-kV.
222.	Section 5.5, Transmission System Engineering	Page 5.5-1, Summary of Conclusions, third paragraph, first sentence	"The CPV Sentinel has a long term existing Power Purchase Agreement with SCE for selling power from the five new generating units."	CPV Sentinel has long term existing Power Purchase Agreements with SCE for selling power from the new generating units.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
223.	Section 5.5, Transmission System Engineering	Page 5.5-2, SCE's Role, second sentence	"SCE will provide the analysis and reports in their System Impact and Facilities studies, and their approval for the facilities and changes required in the SCE system for addition of the proposed transmission modifications."	The underlined text is incorrect. SCE has provided the analysis and reports in their System Impact and Facilities studies . . . .
224.	Section 5.5, Transmission System Engineering	Page 5.5-2, SCE's Role, second sentence	"SCE will provide the analysis and reports in their System Impact and Facilities studies, and their approval for the facilities and changes required in the SCE system for addition of the proposed transmission modifications."	The Applicant suggests that this text be amended to read: "SCE ~~will~~ has provided the analysis and reports in their System Impact and Facilities studies, and their approval for the facilities and changes required in the SCE system for addition of the proposed transmission modifications."
225.	Section 5.5, Transmission System Engineering	Page 5.5-2, California ISO's Role, fifth sentence	"The California ISO will, therefore, review the System Impact Study (SIS) performed by SCE and/or any third party, provide their analysis, conclusions and recommendations."	The Applicant suggests that this text be amended to read: "The California ISO ~~will, therefore,~~ has reviewed the System Impact Study (SIS) performed by SCE and/or any third party, and will provide their analysis, conclusions and recommendations."
226.	Section 5.5, Transmission System Engineering	Page 5.5-2, California ISO's Role, fifth sentence	"The California ISO will, therefore, review the System Impact Study (SIS) performed by SCE and/or any third party, provide their analysis, conclusions and recommendations."	The underlined text is factually incorrect and should be corrected to state that "The California ISO has reviewed the System Impact Study (SIS) performed by SCE and/has provided its approval for the proposed project to interconnect to the grid." (*See* Aug. 8, 2007 letter from CAISO.)
227.	Section 5.5, Transmission System Engineering	Page 5.5-2, California ISO's Role, sixth sentence	"On satisfactory completion of the SCE Facility study and in accordance with the Large Generator Interconnection Procedure (LGIP) as in the California ISO Tariff, the California ISO instead of issuing a final approval letter, would perform an Operational study examining the impacts of the project on the grid based on 2010 in-service date as a requisite for execution of the Large Generator Interconnection Agreement (LGIA) between the California ISO and the project owner."	The underlined text is factually incorrect and should be corrected to state that "CPV Sentinel, LLC, SCE and the California ISO entered into a Large Generator Interconnection Agreement (LGIA) effective June 6, 2008. The LGIA requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE expects to conclude the operational study in early 2008."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
228.	Section 5.5, Transmission System Engineering	Page 5.5-4, Existing Facilities and Related Systems, first sentence	"The applicant has proposed interconnection of the CPV Sentinel via a new single circuit 230 kV line at the Devers substation, which is about 700 feet west from the project site."	The transmission line will be at 220-kV.
229.	Section 5.5, Transmission System Engineering	Page 5.5-4, Project Description, third sentence	"Each CTG unit rated 155 MVA, 13.8 kV would be connected through a 7,000-ampere segregated bus duct to the low voltage terminal of a dedicated generation station unit (GSU) 76/104/130 MVA, 13.8/230 kV step-up transformer with a specified impedance of 11.59 percent @76 MVA . . . ."	The transformer will be at 220-kV.
230.	Section 5.5, Transmission System Engineering	Page 5.5-5, Switchyard and Interconnection Facilities, first paragraph, first sentence	"The new CPV Sentinel 230 kV switchyard is proposed for a 3,000-ampere single bus arrangement for with nine switch bays."	The switchyard will be at 220-kV.
231.	Section 5.5, Transmission System Engineering	Page 5.5-5, Switchyard and Interconnection Facilities, first paragraph, fourth sentence	"The remaining switch bay with a 3,000-ampere breaker would be used for the new 230 kV overhead interconnection line to the Devers 500/230/115 kV Substation."	The transmission line will be at 220-kV. The substation is at 500/220/115 kV.
232.	Section 5.5, Transmission System Engineering	Page 5.5-5, Switchyard and Interconnection Facilities, second paragraph, first sentence	"The new CPV Sentinel 230 kV switchyard would be interconnected to the SCE Devers Substation 230 kV bus by building a new 3,250-foot long 230 kV single circuit overhead transmission line with a bundled 1590 kcmil steel reinforced aluminum conductor (ACSR) on nine 85-foot to 115-foot high tubular steel poles."	The switchyard, substation bus, and transmission line will be at 220-kV. The current expected length of the transmission line is approximately 2,300 feet.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
233.	Section 5.5, Transmission System Engineering	Page 5.5-5, Switchyard and Interconnection Facilities, second paragraph, second sentence	"About 1,800 feet of the line would be outside of the CPV Sentinel plant Devers substation boundaries and this portion of the line would follow the right of way of existing SCE 230 kV and 115 kV lines."	The current expected length of the transmission line outside of the plant is approximately 2,300 feet. The existing transmission lines are at 220 kV.
234.	Section 5.5, Transmission System Engineering	Page 5.5-5, Switchyard and Interconnection Facilities, third paragraph	"To accommodate termination of the interconnecting line at the SCE Devers substation 230 kV bus, the existing Devers-Coachella 230 kV line and Devers-Vista #1 line outlets and their terminations would be relocated to adjacent switch bays with installation of five new 230 kV circuit breakers with 3,000-ampere continuous rating and 50 kA interrupting rating, and the new interconnection line from the CPV Sentinel switchyard would be terminated to the switch bay previously occupied by the Devers-Vista #1 230 kV line through a 3,000-ampere circuit breaker. SCE would build, own and operate the new 230 kV transmission tie line and interconnecting facilities between the CPV Sentinel switchyard and Devers substation . . . ."	The bus, transmission lines and circuit breakers will be at 220 kV.
235.	Section 5.5, Transmission System Engineering	Page 5.5-6, Scope of System Impact Study (SIS) and Facility Study (FS), first paragraph, first sentence	"The April 6, 2005 SCE SIS was prepared to evaluate the impact of the new 850 MW generation output from the CPV Sentinel plant to the Devers substation 230 kV bus."	The bus is at 220-kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
236.	Section 5.5, Transmission System Engineering	Page 5.5-7, Power Flow Study Results and Mitigation, first solid bullet	"Under certain contingencies and during 2008 summer peak and spring system conditions, the SIS identified the following overloads on the Devers-San Bernardino No. 1 230 kV line and corresponding mitigation measures: The Devers-San Bernardino No. 1 230 kV line is limited by its conductor ground clearance and therefore, does not have any emergency capacity available during contingency conditions."	The transmission lines are at 220-kV.
237.	Section 5.5, Transmission System Engineering	Page 5.5-7, Power Flow Study Results and Mitigation, second open bullet	"The line overloaded to 108 percent during 2008 spring system conditions due to Category C (N-2) contingency outages of the Devers-Vista #1 & 2 230 kV lines."	The transmission lines are at 220-kV.
238.	Section 5.5, Transmission System Engineering	Page 5.5-7, Power Flow Study Results and Mitigation, third open bullet	"The line overloaded to 114 percent during 2008 spring system conditions due to Category C (N-2) contingency outages of the Devers-Vista #1 and Devers-San Bernardino #2 230 kV lines."	The transmission lines are at 220-kV.
239.	Section 5.5, Transmission System Engineering	Page 5.5-7, Power Flow Study Results and Mitigation, third open bullet	"The line overloaded to 114 percent during 2008 spring system conditions due to Category C (N-2) contingency outages of the Devers-Vista # 2 and Devers-San Bernardino #2 230 kV lines."	The transmission lines are at 220-kV.
240.	Section 5.5, Transmission System Engineering	Page 5.5-7, Power Flow Study Results and Mitigation, second solid bullet ("Mitigation"), second sentence	"As part of the West of Devers 230 kV Rebuild project identified in the SCE/ California ISO 2008 Transmission Plan, SCE has proposed to upgrade the Devers-San Bernardino no. 1 230 kV line by 2012."	The transmission lines are at 220-kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
241.	Section 5.5, Transmission System Engineering	Page 5.5-7, Short Circuit Study Results and Mitigation, first sentence	"The Short Circuit Study results identified that the addition of the CPV Sentinel generation would increase the three-phase to ground short circuit duty by 0.1 kA or more at three 500 kV substation buses, twenty-three 230 kV substation buses and three 115 kV substation buses in the SCE system, where the breaker duty is in excess of 60 percent of the breaker name plate interrupting rating."	The buses are at 220-kV.
242.	Section 5.5, Transmission System Engineering	Page 5.5-8, Substation Evaluation	"The wave traps would be removed from the existing Devers-Coachella 230 kV line and Devers-Vista #1 230 kV line outlets, and the line terminations would be relocated to adjacent switch bays with five new 3,000-ampere circuit breakers. The interconnection 230 kV tie line from the CPV Sentinel switchyard would be terminated to the switch bay previously occupied by the Devers-Vista #1 230 kV line through a 3,000-ampere circuit breaker. The study also identified the need to install new relays and telecommunication equipment for the new tie line and the need replace relays for the existing 230 kV lines."	The transmission lines will be at 220-kV.
243.	Section 5.5, Transmission System Engineering	Page 5.5-8, California ISO Review, first paragraph	"The California ISO letter of August 8, 2007 addressed for (typo) the April 6, 2005 SIS and the January 6, 2006 FS reports for interconnection of the project with 2008 summer peak and spring system conditions based on May, 2008 on-line date inconsistent with the May, 2010 on-line date as stated in the Application For Certification (AFC). In their letter the California ISO stated that they would shortly complete a Large Generator Interconnection Agreement (LGIA) with the CPV Sentinel and pursuant to Section 12.2.4 of the Large Generator Interconnection Procedures (LGIP) in the California ISO Tariff. The	The underlined text is factually incorrect. The CAISO's analysis is not inconsistent with the on-line date. The CAISO provided its approval for the proposed project to interconnect to the grid subject to the Large Generator Interconnection Agreement, which requires an additional operational study. The underlined text should be corrected to state that "In its letter, the California ISO confirmed that it has provided its approval for the proposed project to interconnect to the grid. CPV Sentinel, LLC, SCE and the California ISO entered into a Large Generator Interconnection Agreement (LGIA) effective June 6, 2008. The LGIA requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE expects to conclude the operational study in early 2008."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
			applicant in their November 5, 2007 data response indicated they would provide the required information (LW 2007c; CPVS 2007b)."	
244.	Section 5.5, Transmission System Engineering	Page 5.5-9, Downstream Facilities, first sentence	"Besides the interconnection facilities which include the new CPV Sentinel switchyard and the proposed new single circuit 230 kV line between the CPV Sentinel 230 kV switchyard and the Devers 500/230/115 kV substation, accommodating the interconnection of the CPV Sentinel at the Devers substation 230 kV bus would require installation of five new 3,000-ampere 230 kV breakers and relocation of two existing 230 kV transmission line outlets and their terminations to adjacent switch bays."	The switchyards, transmission lines, substation, bus, breakers and outlets will be at 220 kV.
245.	Section 5.5, Transmission System Engineering	Page 5.5-9, Cumulative Impacts, first paragraph	"In view of the concentration of electrical generation and loads in the SCE Devers area including about 2200 MW import of power through the existing Devers-Palo Verde No. 1 (DPV1) 500 kV line from the Southwest, staff believes that the CPV Sentinel generation would create some cumulative effects in the area network especially on the west of Devers 230 kV and 115 kV lines. SCE has proposed reconductoring the west of Devers 230 kV lines as part of their proposed annual grid expansion process."	The west of Devers transmission lines are at 220 kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
246.	Section 5.5, Transmission System Engineering	Page 5.5-9, Alternative Transmission Routes	"The new CPV Sentinel 230 kV switchyard would be interconnected to the SCE Devers Substation 230 kV bus by building a new 3,250-foot long 230 kV single circuit overhead transmission line. About 1,450 feet of the line would be inside the fence lines of the Sentinel plant or Devers substation and the remaining 1,800 feet of the line would follow the shortest and economic route through the right of way of the existing SCE 230 kV …."	The switchyard, bus and transmission line will be at 220 kV. The current expected length of the transmission line is approximately 2,300 feet, of which approximately 450 feet would be located inside the fence lines of the Sentinel plant or Devers substation and the approximately 1,850 feet remaining would follow the shortest and most economic route through the right of way.
247.	Section 5.5, Transmission System Engineering	Page 5.5-10, Conformance with LORS and CEQA Review, first paragraph, last sentence	"The applicant's submission of a California ISO Operational Study report would ensure system reliability in the California ISO grid and conformance with the reliability LORS."	The underlined text should be deleted. CPV Sentinel, LLC, SCE and the California ISO entered into a Large Generator Interconnection Agreement effective June 6, 2008, which requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE does not expect to conclude the operational study until early 2008.
248.	Section 5.5, Transmission System Engineering	Page 5.5-10, Conformance with LORS and CEQA Review, second paragraph, first sentence	"The proposed new interconnecting facilities, the CPV Sentinel 230 kV switchyard, and the single circuit 230 kV line and its termination to the Devers substation, would be built according to the NESC standards and GO-95 Rules."	The switchyard and transmission line will be at 220-kV.
249.	Section 5.5, Transmission System Engineering	Page 5.5-10, Conformance with LORS and CEQA Review, third paragraph	"The SCE plan for building the new interconnection 230 kV tie line through the existing right of way and for facilities within the existing fence line of the Devers substation would have no significant or unmitigated environmental impact requiring any CEQA review. The follow-up reconductoring of the Devers-San Bernardino 230 kV line is planned by SCE as a part of their 2008 Transmission Plan. Since the reconductoring project is not a direct network upgrade requirement for interconnection of the CPV Sentinel, it is beyond the scope of this CEQA review."	The transmission line and Devers-San Bernardino line will be at 220 kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
250.	Section 5.5, Transmission System Engineering	Page 5.5-10, Conclusions and Recommendations, No. 1	"The proposed interconnecting facilities including the CPV Sentinel 230 kV switchyard, the single circuit 230 kV line to the Devers substation and its termination are adequate in accordance with good utility practices and acceptable to staff according to engineering LORS."	The switchyard and transmission line will be at 220-kV.
251.	Section 5.5, Transmission System Engineering	Pages 5.5-10 and 5.5-11, Conclusions and Recommendations, No. 2	"The current April 6, 2005 System Impact Study (SIS) and January 9, 2006 Facility Study (FS) were performed by the Southern California Edison (SCE) to evaluate the system impact of the 850 MW CPV Sentinel generation output with 2008 system conditions based on May, 2008 estimated commercial operation date (COD) of the project, which is inconsistent with the May, 2010 COD as stated in the AFC. The California ISO in their August 8 letter stated that they would shortly complete a Large Generator Interconnection Agreement (LGIA) with the CPV Sentinel pursuant to Section 12.2.4 of the Large Generator Interconnection Procedures (LGIP) in the California ISO Tariff. Prior to the execution of the LGIA the California ISO, would perform an Operational study examining the impacts of the proposed project on the grid based on the 2010 in-service date. The applicant indicated in their November 5, 2007 data response that they would provide the required information."	The underlined text is factually incorrect. The CAISO's analysis is not inconsistent with the on-line date. The CAISO provided its approval for the proposed project to interconnect to the grid subject to the Large Generator Interconnection Agreement, which requires an additional operational study. The underlined text should be corrected to state that "In its letter, the California ISO confirmed that it has provided its approval for the proposed project to interconnect to the grid. CPV Sentinel, LLC, SCE and the California ISO entered into a Large Generator Interconnection Agreement (LGIA) effective June 6, 2008. The LGIA requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE expects to conclude the operational study in early 2008."
252.	Section 5.5, Transmission System Engineering	Page 5.5-11, Conclusions and Recommendations, No. 3, first sentence	"The current SCE SIS and FS demonstrate that the addition of the CPV Sentinel would have an adverse overload impact on the Devers-San Bernardino No. 1 230 kV line under certain single and double contingencies."	The Devers-San Bernardino line is at 220 kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
253.	Section 5.5, Transmission System Engineering	Page 5.5-11, Conclusions and Recommendations, No. 3, last sentence	"The applicant's submission of a California ISO Operational Study report as stated in item 2 above would ensure compliance with the reliability LORS."	This text should be deleted. See comments on Conclusion and Recommendation No. 2, above.
254.	Section 5.5, Transmission System Engineering	Page 5.5-11, Conclusions and Recommendations, No. 4, first sentence	"The SCE plan for building the new interconnection 230 kV tie line through an existing right of way. The follow-up reconductoring of the Devers-San Bernardino No. 1 230 kV line is planned by SCE as a part of their 2008 Transmission Expansion Plan."	The transmission lines will be at 220-kV.
255.	Section 5.5, Transmission System Engineering	Page 5.5-11, Conclusions and Recommendations, No. 6, first sentence	"The CPV Sentinel has an existing long term Power Purchase Agreement with SCE for the five new generating units."	CPV Sentinel has existing long term Power Purchase Agreements with SCE for the new generating units.
256.	Section 5.5, Transmission System Engineering	Page 5.5-12, Conditions of Certification for Transmission System Engineering, TSE-1, first sentence	"The project owner shall furnish to the Compliance Project Manager (CPM) and to the Chief Building Official (CBO) a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "A schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List shall be submitted to the Compliance Project Manager (CPM) and to the Chief Building Official (CBO)."
257.	Section 5.5, Transmission System Engineering	Page 5.5-12, Conditions of Certification for Transmission System Engineering, TSE-1, last sentence	"To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "designated packages shall be provided to the CPM when requested."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
258.	Section 5.5, Transmission System Engineering	Page 5.5-12, Conditions of Certification for Transmission System Engineering, TSE-1, Verification, first sentence	"At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 60 days (or a lesser number of days mutually agreed to) prior to the start of construction, the schedule, a Master Drawing List, and a Master Specifications List shall be submitted to the CBO and to the CPM."
259.	Section 5.5, Transmission System Engineering	Page 5.5-12, Conditions of Certification for Transmission System Engineering, TSE-1, Verification, last sentence	"The project owner shall provide schedule updates in the Monthly Compliance Report."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be deleted.
260.	Section 5.5, Transmission System Engineering	Pages 5.5-12 and 5.5-13, Conditions of Certification for Transmission System Engineering, TSE-2, first paragraph, first sentence	"Prior to the start of construction the project owner shall assign an electrical engineer and at least one of each of the following to the project . . . ."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "Prior to the start of construction an electrical engineer and at least one of each of the following shall be assigned to the project . . . ."
261.	Section 5.5, Transmission System Engineering	Page 5.5-13, second paragraph	"The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all engineers assigned to the project. If any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "The names, qualifications and registration numbers of all engineers assigned to the project shall be submitted to the CBO for review and approval. If any one of the designated engineers is subsequently reassigned or replaced, the name, qualifications and registration number of the newly assigned engineer shall be submitted to the CBO for review and approval. The CPM shall be notified of the CBO's approval of the new engineer."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
262.	Section 5.5, Transmission System Engineering	Page 5.5-13, Conditions of Certification for Transmission System Engineering, Verification, first paragraph, first sentence	"At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 30 days (or a lesser number of days mutually agreed to) prior to the start of rough grading, the names, qualifications and registration numbers of all the responsible engineers assigned to the project shall be submitted to the CBO for review and approval, The CPM shall be notified of the CBO's approvals of the engineers within five days of the approval."
263.	Section 5.5, Transmission System Engineering	Page 5.5-13, Conditions of Certification for Transmission System Engineering, Verification, second paragraph	"If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.]"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "If the designated responsible engineer is subsequently reassigned or replaced, the name, qualifications, and registration number of the newly assigned engineer shall be submitted to the CBO for review and approval within five days. The CPM shall be notified of the CBO's approval of the new engineer within five days of the approval."
264.	Section 5.5, Transmission System Engineering	Page 5.5-13, Conditions of Certification for Transmission System Engineering, TSE-3, first paragraph, first sentence	"If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend corrective action."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the discrepancy shall be documented and corrective action shall be recommended."
265.	Section 5.5, Transmission System Engineering	Page 5.5-14, Conditions of Certification for Transmission System Engineering, TSE-3, Verification	"The project owner shall submit a copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action required to obtain the CBO's approval."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "A copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy shall be submitted to the CPM within 15 days of receipt. If disapproved, the CPM shall be advised, within five days, the reason for disapproval, and the revised corrective action required to obtain the CBO's approval."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
266.	Section 5.5, Transmission System Engineering	Page 5.5-14, Conditions of Certification for Transmission System Engineering, TSE-4, first sentence	"For the power plant switchyard, outlet line and termination, the project owner shall not begin any increment of construction until plans for that increment have been approved by the CBO."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "For the power plant switchyard, outlet line and termination, no increment of construction shall begin until plans for that increment have been approved by the CBO."
267.	Section 5.5, Transmission System Engineering	Page 5.5-14, Conditions of Certification for Transmission System Engineering, TSE-4, third sentence	"The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "The CBO shall be requested to inspect the installation to ensure compliance with the requirements of applicable LORS."
268.	Section 5.5, Transmission System Engineering	Page 5.5-14, Conditions of Certification for Transmission System Engineering, TSE-4, Verification	"At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS, and send the CPM a copy of the transmittal letter in the next Monthly Compliance Report."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 30 days (or a lesser number of days mutually agreed to) prior to the start of each increment of construction, the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS shall be submitted to the CBO for review and approval and a copy of the transmittal letter shall be sent to the CPM"
269.	Section 5.5, Transmission System Engineering	Page 5.5-14, Conditions of Certification for Transmission System Engineering, TSE-5	"The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to all applicable LORS, including the requirements listed below. The project owner shall submit the required number of copies of the design drawings and calculations to the CBO as determined by the CBO."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "the design, construction and operation of the proposed transmission facilities will conform to all applicable LORS, including the requirements listed below. The required number of copies of the design drawings and calculations shall be submitted to the CBO as determined by the CBO."

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
270.	Section 5.5, Transmission System Engineering	Page 5.5-15, Conditions of Certification for Transmission System Engineering, TSE-5 (f)	"The project owner shall provide to the CPM:"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "The CPM shall be provided:"
271.	Section 5.5, Transmission System Engineering	Page 5.5-15, Conditions of Certification for Transmission System Engineering, TSE-5 (f)(i)	"A line route drawing after selecting one of the alternate route options for the generator interconnection 230 kV tie line."	The tie-line will be at 220-kV.
272.	Section 5.5, Transmission System Engineering	Page 5.5-15, Conditions of Certification for Transmission System Engineering, TSE-5 (f)(v)	"The Operational study report based on 2010 system conditions (including operational mitigation measures) from the California ISO and/or SCE,"	The LGIA requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE expects to conclude the operational study in early 2008. Therefore, this condition should be modified to state that the Operational study report will be provided when it is available.
273.	Section 5.5, Transmission System Engineering	Page 5.5-15, Conditions of Certification for Transmission System Engineering, Verification	"At least 60 days prior to the start of construction of transmission facilities (or a lesser number of days mutually agree to by the project owner and CBO, the project owner shall submit to the CBO for approval:"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 60 days prior to the start of construction of transmission facilities (or a lesser number of days mutually agreed to), the following shall be submitted to the CBO for approval:"
274.	Section 5.5, Transmission System Engineering	Page 5.5-16, Conditions of Certification for Transmission System Engineering, Verification (d)	"A line route drawing after selecting one of the alternate route options for the generator 230 kV interconnection tie line."	The tie-line will be at 220-kV.

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
275.	Section 5.5, Transmission System Engineering	Page 5.5-16, Conditions of Certification for Transmission System Engineering, Verification (h)	"The Operational study report based on 2010 system conditions (including operational mitigation measures) from the California SO and/or SCE."	The LGIA requires SCE to complete an operational study examining the impact of adding the proposed project as of the in-service date. SCE does not expect to conclude the operational study until early 2008. Therefore, this condition should be deleted.
276.	Section 5.5, Transmission System Engineering	Page 5.5-16, Conditions of Certification for Transmission System Engineering, TSE-6, first sentence	"The project owner shall inform the CPM and CBO of any impending changes, which may not conform to the requirements TSE-5 a) through f),and have not received CPM and CBO approval, and request approval to implement such changes."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "the CPM and CBO shall be informed of any impending changes, which may not conform to the requirements TSE-5 a) through f),and have not received CPM and CBO approval, shall be requested to approve such changes."
277.	Section 5.5, Transmission System Engineering	Page 5.5-16, Conditions of Certification for Transmission System Engineering, TSE-6, Verification	"At least 60 days prior to the construction of transmission facilities, the project owner shall inform the CBO and the CPM of any impending changes which may not conform to requirements of TSE-5 and request approval to implement such changes."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "At least 60 days prior to the construction of transmission facilities, the CBO and the CPM shall be informed of any impending changes which may not conform to requirements of TSE-5 and shall be requested to approve such changes."
278.	Section 5.5, Transmission System Engineering	Page 5.5-17, Conditions of Certification for Transmission System Engineering, TSE-8, first sentence	"The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 . . . ."	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "the transmission facilities shall be inspected during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 . . . ."
279.	Section 5.5, Transmission System Engineering	Page 5.5-17, Conditions of Certification for Transmission System Engineering, TSE-8, Verification	"Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM and CBO:"	SCE will be responsible for final design, engineering, construction, operation, and maintenance of the transmission line. Therefore, this condition should be modified to state that "Within 60 days after first synchronization of the project, the following shall be transmitted to the CPM and CBO:"

Comment Number	PSA Section	Page Number	PSA Statement	Comments to CEC
Section 6, Alternatives				
280.	Section 6.2, Alternatives	Page 6.2, first paragraph, fifth sentence	"The 3,200-foot-long connection to the substation would require a new overhead single-circuit 220-kV line."	The current expected length of the transmission line is approximately 2,300 feet.
281.	Section 6.6, Alternatives	Page 6.6, Alternatives Table 1, Transmission Line Length Row	CPV Sentinel Site Column: 3,250 feet	The current expected length of the transmission line is approximately 2,300 feet.

Attachment A

Minor Modification of Transmission Line Route

Attachment A

Minor Modification of Transmission Line Route

August 21, 2008

On July 31, 2008, the California Energy Commission (CEC) issued the Preliminary Staff Assessment (PSA) for the Competitive Power Ventures (CPV) Sentinel Energy Project (CPVS). This attachment to CPV's PSA comments describes a minor modification to the transmission line route and connection to the rack in the project switchyard that was presented in the AFC.

This minor modification of the transmission line has been identified through more detailed design by Southern California Edison (SCE). The proposed rack would be relocated to the southwest corner of the project switchyard, further south than presented in the AFC. The revised transmission line will exit the 37-acre project site at the southwest corner, in the same location as previously presented in the AFC. However, the transmission line will be located approximately 270 feet north of the previous alignment proposed in the AFC as it continues west adjacent to Powerline Roads North and South to the Devers Substation. This modification would reduce the length of the transmission line from 3,250 feet to approximately 2,300 feet; of which, 1,850 feet would be located outside of the project site. The minor modifications to the proposed transmission line and location of the rack and are shown in revised Figure 2.3-1, Site Plan and Figure 2.4-1, Plot Plan (attached). These figures replace PSA Figure 2, Local Setting and PSA Figure 3, General Arrangement of Project.

The minor modification would not result in any changes to construction staffing, costs, or equipment from those identified in the AFC. The route's relocation is not expected to result in any unidentified or new environmental impacts from those discussed in the AFC. Following is a more detailed discussion of potential environmental impacts associated with the modification to the proposed transmission line route.

Air Quality

The minor modification of the transmission line route would not increase construction emissions (including construction equipment and vehicle exhaust emissions or fugitive dust emissions) or operational emissions described in AFC Section 7.1, and are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.1.4.

Biological Resources

The relocated transmission line route falls between Powerline Roads North and South. A biological resource field survey of the new transmission line route was conducted in July 2008, by Dave Silverman of Xeric Specialties Consulting (résumé previously provided). No threatened or endangered plant or wildlife species were observed during this field survey. Based on all surveys conducted to date, and the location of the new transmission line route between two unpaved roads, no listed species are expected to be affected by the construction or operation of the revised transmission line. Therefore, the minor modification of the revised transmission line would not change the analysis of potential impacts to biological resources described in AFC Section 7.2. Impacts to biological resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.2.4.

Cultural Resources

The results of the previously conducted California Historical Resources Information System (CHRIS) rapid response records search conducted on February 16, 2007 (RS #3914) is included in AFC Appendix K. The CHRIS rapid response records search encompassed the revised transmission line route and ¼ mile around this linear feature. The records search revealed 6 previously conducted surveys within

the project components, however, these studies did not identify any known archaeological resources along the revised transmission line route. A supplemental pedestrian survey was conducted by URS Archaeologist Mr. Leroy Laurie on July 19, 2008 to encompass the new transmission line route and a surrounding 50-foot-wide buffer radius on both sides of the new transmission line route. No archaeological resources were identified within the supplemental survey area. Therefore, the minor modification of the revised transmission line would not change the analysis of potential impacts to archaeological resources described in AFC Section 7.3. Impacts to cultural resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.3.4.

The revised transmission line route will be located approximately 270 feet north of the previous alignment proposed in the AFC. This is within the area of potential effects (APE) for historic and architectural (built environment) resources studied for the AFC. None of the buildings in the APE appeared to be significant historic properties subject to Section 106, nor did they appear to be historical resources for the purposes of CEQA. Therefore, the minor modification of the transmission line route would not change the analysis of potential impacts to historic and architectural (built environmental) resources described in AFC Section 7.3. Impacts to cultural resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.3.4.

Land Use

The relocated transmission line route would be located approximately 270 feet north of the transmission line proposed in the AFC. This minor change of the transmission line route would not alter the analysis of potential impacts to land use resources presented in AFC Section 7.4, which found that the proposed project: would not disrupt or divide an established community; would not conflict with the established uses of the area; would be consistent with existing zoning, applicable land use plans, policies and regulations; and would not affect farmlands. Therefore, as described in AFC Section 7.4, potential impacts to land use resources are expected to be less-than-significant.

Noise

An analysis of construction noise modeling is presented in AFC Section 7.5.3.7. The revised transmission line would not increase the predicted construction noise levels at the nearest noise-sensitive receptors. Estimated noise levels associated with operational noise would not change as a result of modification to the transmission line route. Therefore, the minor modification of the revised transmission line would not change the analysis of potential noise impacts described in AFC Section 7.5. Noise impacts are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.5.5.

Public Health

The minor modification of the transmission line would not increase project construction or operational emissions or require changes to safe work practices during construction. Therefore, the minor modification of the transmission line route would not change the analysis of potential public health impacts described in AFC Section 7.6. Impacts to public health are expected to be less-than-significant with implementation of the air quality mitigation measures presented in AFC Section 7.1.4.

Worker Safety and Health

The minor modification of the transmission line would not change the anticipated workplace hazards or require changes to the safety programs presented in AFC Section 7.7.

Socioeconomics

The minor modification of the proposed transmission line route, which primarily involves relocating the line 270 feet north of the transmission line proposed in the AFC, would not alter the analysis of potential socioeconomic impacts presented in AFC Section 7.8. As presented in the AFC, the proposed project would not: induce substantial growth or concentration of population; induce substantial increases in demand for public service and utilities; displace a large number of people; disrupt or divide an established community; or result in disproportionate adverse effects on minority or low-income populations. Therefore, as described in AFC Section 7.8, potential socioeconomics impacts are expected to be less-than-significant.

Soils

The minor modification of the proposed transmission line route, which primarily involves relocating the line 270 feet north of the transmission line proposed in the AFC, would not result in increased soil erosion or loss of topsoil. AFC Section 7.9 presents project design measures that will be implemented during construction and operation of the CPVS to reduce soil impacts. Therefore, as described in AFC Section 7.9, potential impacts to soil resources are expected to be less-than-significant.

Traffic and Transportation

The minor modification of the proposed transmission line route would not alter the analysis of potential traffic and transportation impacts presented in AFC Section 7.10, including roadway and intersection levels of service during project construction and operation, and potential impacts to transportation networks. Therefore, as described in AFC Section 7.10, potential traffic and transportation impacts are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.10.4.

Visual Resources

The minor modification of the proposed transmission line route, which primarily involves relocating the line 270 feet north of the transmission line proposed in the AFC, would not alter the analysis of construction or operations impacts on visual resources. The revised transmission line will be visible from Key Observation Point (KOP) 3. However, the visual impact would be consistent with the analysis presented in AFC Section 7.11.2.3, which indicates that the transmission towers would not be distinct from KOP 3 in the context of the existing towers and Devers substation. AFC Section 7.11.4 presents project design measures that will be implemented to reduce visual impacts. Therefore, as described in AFC Section 7.11, potential impacts to visual resources are expected to be less-than-significant.

Hazardous Materials Handling

The minor modification of the proposed transmission line route would not result in changes to the hazardous materials that would be used during construction or operation of the CPVS. Therefore, as described in AFC Section 7.12, potential hazardous materials handling impacts are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.12.4.

Waste Management

The minor modification of the proposed transmission line route would not increase nonhazardous or hazardous wastes associated with construction or operation of the CPVS. AFC Section 7.13.4 presents best management practices that will be implemented during construction and operation of the CPVS to manage and minimize the amount of waste generated. Therefore, as described in AFC Section 7.13, potential waste management impacts are expected to be less-than-significant.

Water Resources

The minor modification of the proposed transmission line route would not result in changes to the analysis of water supply, water quality, or flood hazards presented in AFC Section 7.14. Therefore, as described in AFC Section 7.14, impacts to water resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.14.4.

Geologic Hazards and Resources

The minor modification of the proposed transmission line route, which primarily involves relocating the line 270 feet north of the transmission line proposed in the AFC, would not result in changes to the analysis of geologic hazards or result in significant adverse impacts to the geologic environment. Therefore, as described in AFC Section 7.15, impacts to geologic hazards and resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.15.4.

Paleontological Resources

AFC Section 7.16 identified potential impacts on paleontological resources that could occur as a result of project construction. The minor modification of the proposed transmission line route, which primarily involves relocating the line 270 feet north of the transmission line proposed in the AFC, would not result in changes to the analysis of impacts to paleontological resources. Therefore, as described in AFC Section 7.16, impacts to paleontological resources are expected to be less-than-significant with implementation of the mitigation measures presented in AFC Section 7.16.4.

LEGEND

- Palm Springs City Limits
- Proposed Project Site
- Transmission Line
- Gas Transmission Corridor (75-feet wide)
- Gas Transmission/ Potable Water Line/ Access Road Corridor (200-feet wide)
- Construction Laydown Area

Note: Buried Pipe Depth: 7' to top of 24' Pipe

Source: project boundaries and proposed transmission line, referenced from graphics and digitized by URS, December 2006;; orthophoto, USDA FSA aerial photography field office: county image mosaic for Riverside, CA (2005); city imits, Riverside County, 2001-2006

Diablo Rd

Devers Substation

Wind Farm

Powerline Road North
Powerline Road South

16th Ave

Proposed Transmission Line

Proposed Construction Laydown Area

Wind Farm

Wind Farm

Dillon Rd. (existing paved road)

RIVERSIDE COUNTY
CITY OF PALM SPRINGS

Diablo Rd

Karen Ave

(existing unpaved road)

Wind Farm

18th Ave

19th Ave

Indigo Energy Facility

N

0 250 500 1,000
FEET

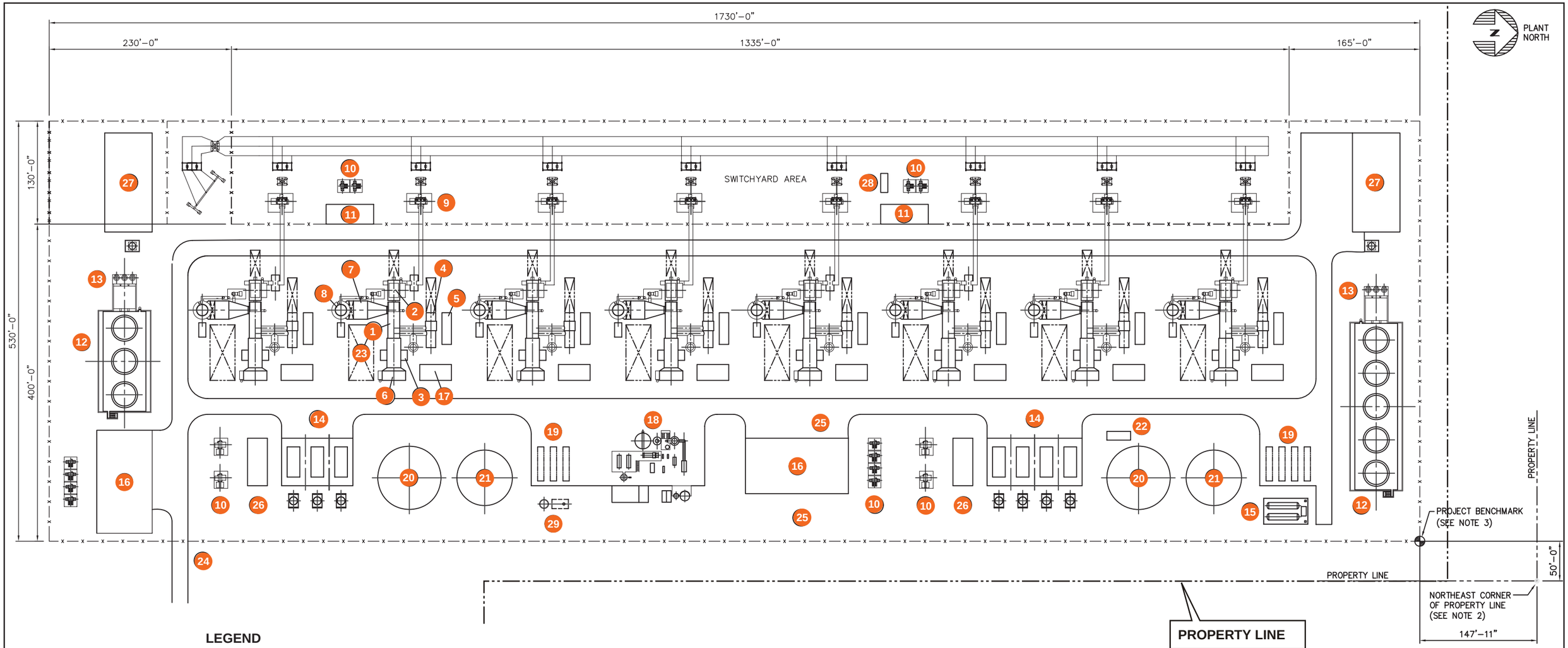
Map Document: (U:\GIS\Ocotillo_28067168\Projects\figure2.2-1_plotplan_rev08-20-08.mxd) 8/20/2008 -- 11:49:09 AM KLawrence

SITE PLAN

CPV Sentinel Energy Project
August 2008 — CPV Sentinel, LLC
28067168 — Riverside County, CA

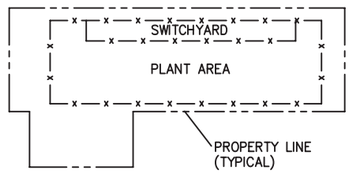
URS

FIGURE 2.3-1 (REVISED)



LEGEND

1	COMBUSTION TURBINE	11	SWITCHGEAR BUILDING	21	TREATED WATER STORAGE TANKS
2	COMBUSTION TURBINE GENERATOR	12	COOLING TOWER	22	FIRE PROTECTION PUMP SKID
3	CTG AUXILIARY SKID	13	CIRCULATING WATER PUMPS	23	MAINTENANCE AREA (TYP)
4	CTG INTERCOOLER	14	GAS COMPRESSOR AREA	24	PLANT ENTRANCE
5	CTG PUMP SKID	15	AMMONIA STORAGE TANK	25	PLANT PARKING
6	CTG INLET AIR FILTER	16	OPERATIONS BUILDING	26	MCC BUILDING
7	SCR	17	UNIT CONTROL/ELECTRICAL ROOM	27	COOLING TOWER BUILDING/WAREHOUSE
8	EXHAUST STACK	18	WATER & WASTE WATER TREATMENT AREA	28	BLACK START GENERATOR
9	GSU TRANSFORMER	19	WATER TREATMENT TRAILER PARKING	29	OILY WATER SEPERATOR & DRAIN SUMP
10	AUXILIARY POWER TRANSFORMERS	20	RAW WATER STORAGE TANKS		



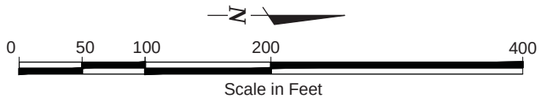
SITE PLAN

NOTES:

1. EQUIPMENT ARRANGEMENT IS BASED ON PRELIMINARY INFORMATION AND SHALL BE VERIFIED DURING FINAL DESIGN.
2. SEE PROJECT SURVEY & GRADING DRAWINGS FOR PROPERTY LINE COORDINATE, MONUMENT & BENCHMARK DETAILS.
3. HORIZONTAL PROJECT BENCHMARK (N.2000'–0", E. 2000'–0") IS DEFINED AS THE NORTHEAST FENCE INTERSECTION LOCATED FROM PRPERTY LINES AS NOTED.

   PLANT COORDINATE SYSTEM SHALL BE ALIGNED WITH EAST PROPERTY LINE.

Source:
Spectrum Energy, Inc.
Equipment Arrangement Plan (CPV_M_EA_002), Rev. C 5/17/07



PLOT PLAN
CPV Sentinel Energy Project
CPV Sentinel, LLC
Riverside County, California
August 2008
28067168
URS
FIGURE 2.4-1 (REVISED)

8/21/08 vsa ..T:\CPV Sentinel 2008\Graphics\PSA Comment\2.4-1_plotplan_REVISED.ai

Attachment B

Comments on CEC Condition of Certification NOISE-7

Attachment B

Comments on CEC Condition of Certification NOISE-7

August 21, 2008

On July 31, 2008, the California Energy Commission (CEC) included seven proposed Conditions of Certification regarding noise exposure in the Preliminary Staff Assessment (PSA) for the Competitive Power Ventures (CPV) Sentinel Energy Project (07-AFC-3). The Applicant concurs with proposed Noise Conditions of Certification NOISE -1 through NOISE-6. This report supplements the Applicant's table of comments on the PSA, particularly on proposed Noise Condition of Certification NOISE-7.

Proposed condition NOISE-7 relates to concerns expressed regarding plant operational noise levels at nearby residential structures (specifically with regard to compliance with Riverside County nighttime noise restrictions) as determined in the Application for Certification (AFC). NOISE-7 requires the Applicant to purchase these two nearby residential properties prior to the first fire of the first gas turbine generator unit (identified as Residence C and Residence D in the AFC and PSA). The proposed condition reads as follows:

NOISE-7 *The project owner shall acquire control of the dwellings east of the project site identified as Residence C and Residence D on NOISE and VIBRATION Figure 1, and shall make necessary arrangements to relocate the occupants.*

Verification: *Prior to first fire of the first gas turbine generator unit, the project owner shall provide the CPM documentation, signed by the project owner's Project Manager, verifying that these two properties are under the project owner's control and that the residents have been relocated.*

Residence C is located 1,000 feet east of the proposed project. Residence D is located 1,300 feet east of the proposed project (see Figure 7.5-1 of the AFC or Figure 1 of the PSA). Residences C and D are compatible land uses that are surrounded by existing wind turbine farms.

Table 1 presents a summary of projected noise levels at nearby residences and compliance with local laws, ordinances, regulations, and standards (LORS) for plant operating conditions. As shown in Table 1, the proposed project complies with all local LORS with the exception of the 45 dBA L_{eq} nighttime restriction presented in the Riverside County General Plan Noise Element, and the 45 dBA L_{max} restriction required by the Riverside County Code at Residence C and Residence D. These represent the most restrictive conditions. The Applicant concurs with the PSA in that, for purposes of assessing steady-state stationary noise sources, L_{eq} and L_{max} are essentially equivalent.

Ambient noise levels measured at locations in the vicinity of the proposed project are shown in Table 2. Details of the measurement equipment and techniques are provided in the AFC. As shown in Table 2, the measured ambient noise levels at Residence C are 55.4 dBA L_{eq} during the daytime and 55.7 dBA L_{eq} during the nighttime. At Residence D, the daytime L_{eq} is 50.0 dBA. Nighttime measurements were not conducted at Residence D. The data shown in Table 2 indicates that noise levels at LT-1 (Residence C) were relatively constant between daytime and nighttime conditions throughout the 25-hour measurement period. Residence D is located approximately 300 feet from Residence C. Given the close proximity to Residence C and the nature of the noise sources (natural sources such as wind and rustling leaves), it is reasonable to conclude that the noise levels at Residence D are also relatively constant throughout the 25-hour period. This suggests that the nighttime L_{eq} at Residence D is approximately 50 dBA. Based on this, the existing ambient noise levels at Residences C and D exceed the nighttime thresholds of 45 dBA L_{eq} and 45 dBA L_{max} provided in the Riverside County General Plan Noise Element and Riverside County Code.

Table 1 **LORS Compliance Summary**				
LORS	**LORS Noise Limit**	**Receptor**	**Projected Noise Level**	**Complies**
Riverside County General Plan Noise Element Table N-1	65 dBA CNEL (58 dBA L_{eq})	**Residence C** (LT-1) (1,000 feet E)	56 dBA L_{eq}	Yes
		ST-2 (2,450 feet SW)	45 dBA L_{eq}	Yes
		Residence D (ST-3) (1,300 feet E)	53 dBA L_{eq}	Yes
Riverside County General Plan Noise Element Table N-2	65 dBA L_{eq} Day 45 dBA L_{eq} Night	**Residence C** (LT-1) (1,000 feet E)	56 dBA L_{eq}	No, due to 45 dBA L_{eq} night restriction
		ST-2 (2,450 feet SW)	45 dBA L_{eq}	Yes
		Residence D (ST-3) (1,300 feet E)	53 dBA L_{eq}	No, due to 45 dBA L_{eq} night restriction
Riverside County Code, Table 1	65 dBA L_{max} Day 45 dBA L_{max}Night	**Residence C** (LT-1) (1,000 feet E)	56 dBA L_{eq}	No, due to 45 dBA L_{max} night restriction
		ST-2 (2,450 feet SW)	45 dBA L_{eq}	Yes
		Residence D (ST-3) (1,300 feet E)	53 dBA L_{eq}	No, due to 45 dBA L_{max} night restriction
Source: CPVS 2007a PSA Table 5				

Table 3 provides measured noise levels and projected noise levels from plant operations. The projected operational noise levels are very conservative estimates of the actual expected noise exposure and are used to ensure that the actual operational noise levels meet or exceed the designed noise standards approved for the project. In context, they are representative of "worst-case" conditions.

The sound levels provided in Table 3 are calculated based on 3-Sigma Sound Power Level (L_w) data provided by equipment manufactures. The use of these data is common practice in assessing noise levels from power plant operations. 3-Sigma data refers to empirical noise level data that is three standard deviations greater than the mean measured sound level. 3-Sigma data is used to ensure that the actual measured noise levels will comply with the projected operational noise levels presented in the AFC. These conservative estimates account for such factors as measurement uncertainty, the variability due to equipment placement, operating conditions, ambient conditions, variability between "identical" pieces of equipment, and limitations of the acoustical prediction methods.

Table 2
Summary of Measured Ambient Noise Levels

Measurement Location	Measured Noise Levels (dBA)		
	L_{eq} Day	L_{eq} Night	L_{90}
LT-1: Near Residence C, 1,000 feet E*	55.4[1]	55.7[2]	49.3[3]
ST-1: Near Residence C, 1,000 feet E*	49.0	-	46.5[4]
ST-2: Near residences 2,450 feet SW	43.0	-	40.0[4]
ST-3: Near Residence D, 1,300 feet E	50.0	-	48.0[4]

Source: CPVS 2007a PSA Table 2

Notes:

[1] CEC Staff Calculations of 15 daytime hours (7:00 a.m. – 10:00 p.m.)
[2] CEC Staff Calculations of 9 nighttime hours (10:00 p.m. – 7:00 a.m.)
[3] CEC Staff Calculations of average of four consecutive hours of the nighttime
[4] Daytime
- Noise measurements not conducted at this location during the period
* Represents nearest sensitive receptor

Table 3
Measured Ambient Noise Levels and Projected Operational Noise Levels

Measurement Location	Measured Noise Levels (L_{eq} dBA)		
	Day	Night	Projected Operational Noise Level
LT-1: Near Residence C, 1,000 feet E*	55.4[1]	55.7[2]	56.0
ST-2: Near residences 2,450 feet SW	43.0	-	45.0
ST-3: Near Residence D, 1,300 feet E	50.0	-	53.0

Source: CPVS 2007a AFC and PSA

Notes:

[1] CEC Staff Calculations of 15 daytime hours (7:00 a.m. – 10:00 p.m.)
[2] CEC Staff Calculations of 9 nighttime hours (10:00 p.m.– 7:00 a.m.)
- Noise measurements not conducted at this location during the period
* Represents nearest sensitive receptor

In statistical terms, the use of 3-Sigma data ensures that there is a greater than 99 percent probability that the actual noise levels from individual equipment components will be quieter than the individual component levels used to calculate the projected far field operational noise levels from the plant. Precise statistical data, other than 3-Sigma data, is not provided by the manufacturers. Without these data it is impossible to assess the actual decibel level associated with one standard deviation for a give piece of equipment. Sample standard deviation data have been published[1] and provide a useful reference for determining the variability of sound levels from various components. Example noise level data in terms of decibels and standard deviation for major power plant equipment components are shown in Table 4.

Table 4
Example Power Plant Component Sound Power Level Variations

Equipment	1σ (dBA)	2σ (dBA)	3σ (dBA)
Exhaust Stack Exit	2.4	4.8	7.2
Exhaust Stack Walls	1.8	3.6	5.4
Inlet Filter Face	1.3	2.6	3.9
Inlet Duct Walls	1.5	3.0	4.5
Generator	1.3	2.6	3.9
Turbine Enclosure	0.9	1.8	2.7
Lube Oil Coolers	0.8	1.6	2.4
Mechanical Equipment	0.9	1.8	2.7
Exhaust Expansion Joint	4.4	8.8	13.2
Transformers	3.8	7.6	11.4
Source: 1σ data – see Reference 1. 2σ and 3σ data calculated by URS Corporation			

Based on statistical probabilities assuming a normal distribution, there is an 85 percent probability that actual noise levels will be below one standard deviation, a 98 percent probability that actual noise levels will be below two standard deviations, and a 99 percent probability that actual noise levels will be below three standard deviations.

Based on the modeling analysis described in the AFC, the facility's single loudest contributor to the noise levels predicted at Residence C and Residence D is exhaust stack exit noise. Because of the logarithmic nature of decibel calculations, the loudest contributor is, by far, the most important determinant of noise levels at a given location. The data presented in Table 3 indicate that the 3-Sigma data for exhaust stack exit noise is 7.2 dBA above the mean sound power level. Although these data are generalized example data and were not obtained from the specific exhaust stack model proposed for use at the project site, they are valuable as a reference for estimating the variability of exhaust stack exit noise levels. Based on these data, it is reasonable to conclude that the exhaust stack noise from the facility is a very conservative

[1] Parzych, D.J. and Putnam, R.A.. *Modeling Uncertainty Creep Due to Variability In Model Constituents*, presented at Inter-Noise 2006, Honolulu, HI

estimate and the use of 3-Sigma data overestimates the mean noise exposure from the exhaust stack exits by approximately 7 dBA.

In compliance with standard practice and Riverside County criterion, the analysis presented in this response is in terms of exterior noise levels. Interior noise levels, even in the case of "windows open" conditions at Residence C and Residence D, will be approximately 12 dBA below the noise levels presented in this analysis[2].

Residence C and Residence D are included in the Riverside County's W-2 zoning district, which is a "Controlled Development Area" that provides for a broad range of diverse uses. Uses permitted within the W-2 zoning district include one-family dwellings; field crops; domestic animals such as horses, miniature pigs, cattle, sheep, goats, and crowing fowl; meat cutting and packaging plants; airport or landing field (with conditional use permit); mining (with conditional use permit); rifle ranges (with conditional use permit); and a wide range of other activities.

Based on the measured ambient data (which indicate that the ambient noise levels exceed Riverside County noise level criteria), the diverse nature of the existing noise environment and Riverside County's zoning, and the highly conservative nature of the noise predictions for operational noise levels, the Applicant feels that proposed condition NOISE-7 is unnecessary and will not provide any real benefit to surrounding areas or the project. Based on the statistical data and the ambient conditions, it is very likely that operational plant noise levels will be well below (greater than 3 dBA below) ambient conditions. In terms of human response, these values indicate that there will be essentially no change to the existing noise environment at Residences C and D.

[2] 12 dBA is an "average" for windows open conditions. Federal Highway Administration Guidelines (FHWA Traffic Noise Policies) allow 10 dBA outdoor to indoor attenuation for all building types under "windows open" conditions. URS Corporation calculations for common residential building types and window sizes indicate that the average outdoor to indoor attenuation is approximately 12 dBA.