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08-AFC-9		
DATE		
RECD.	July 15 2011	



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – www.energy.ca.gov

APPLICATION FOR CERTIFICATION For the *PALMDALE HYBRID POWER PROJECT*

Docket No. 08-AFC-9

[DRAFT] ERRATA TO THE PRESIDING MEMBER'S PROPOSED DECISION

After reviewing the comments submitted by the parties on or before July 11, 2011, we incorporate the following changes to the June 16, 2011 Presiding Member's Proposed Decision (PMPD):

INTRODUCTION

1. Page 1-2, second full paragraph, Staff recommends the following change:

"If approved, commercial operation of the project is planned for the summer of 2013. The solar thermal input will provide approximately 10 percent of the peak power generated by the project during the daily periods of highest energy demand. The City of Palmdale proposes to initiate construction after the city has secured a developer for the project and secured a power purchase agreement."

ACCEPTED	REJECTED	MODIFIED

PROJECT DESCRIPTION

2. Page 2-1, third paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre.

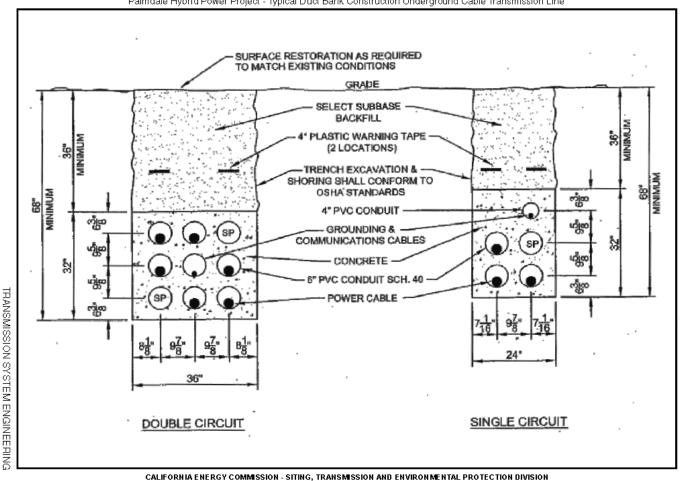
ACCEPTED	REJECTED	MODIFIED

TRANSMISSION SYSTEM ENGINEERING

3. Page 5.4-4. Alternatives Appendix A – Figure 1 "Diagram of a Typical Transmission Riser Structure - Palmdale Hybrid Power Plant" should be replaced with Project Description – Figure 1 "Palmdale Hybrid Power Plant - Typical Duct Bank Construction Underground Cable Transmission Line."

The discussion preceding the figure refers to the Duct Bank Underground Cable Line; however, because both figures were labeled Figure 1 there was apparently some confusion and the PMPD included a diagram of a typical transmission riser structure instead. To avoid any unnecessary confusion, Staff recommends replacing the figure with the correct Figure 1, as follows:

PROJECT DESCRIPTION - FIGURE 1 Palmdale Hybrid Power Project - Typical Duct Bank Construction Underground Cable Transmission Line



ACCEPTED	REJECTED	MODIFIED

TRANSMISSION LINE SAFETY AND NUISANCE

4. Page 5.5-8, Applicant recommends the following change:

TLSN-4 The project owner shall ensure that the rights-of-way of those portions of the transmission line that are under the Project owner's control 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."

ACCEPTED	REJECTED	MODIFIED

GREENHOUSE GAS EMISSIONS

5. Page 6.1-6, first full paragraph, Staff recommends the following change:

In Sentinel Avenal, the Energy Commission used a three-part test to aid in its analysis of a proposed gas-fired plant's ability to advance the goals and policies described above."

ACCEPTED	REJECTED	MODIFIED

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AIR QUALITY

6. Page 6.2-2, Air Quality Table 1, Staff recommends the following change:

Air Quality Table 1 Ambient Air Quality Standards

Ambient Air Quality Standards					
Pollutant	Averaging Time	California	Federal S	Federal Standards	
Poliularii	Averaging fille	Standards	Primary	Secondary	
Ozone(O ₃)	1-hour	0.09 ppm (180 μg/m³)	None	Same as primary	
020110(03)	8-hour	0.07 ppm (137 μg/m³)	0. 08 - <u>075</u> ppm (157 <u>147 µg</u> /m³)	Same as primary	
Particulate	Ann.Geo. Mean	20 μg/m ³			
Matter (PM10)	24-hour Ann.Arit.	50 μg/m ³	150 μg/m ³	Same as primary	
Fine Particulate	24-hour	No separate standard	35 μg/m ³	Same as primary	
Matter (PM2.5)	Ann.Arit. Mean	12 μg/m3	15 μg/m³		
Carbon	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)		
Monoxide (CO)	8-hour	9 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)		
Nitrogen Dioxide	1-hour	0.25 - <u>0.18</u> ppm (470 <u>339</u> μg/m³)	— <u>100 ppb (188</u> µg/m ^{3) а}	Sama aa nriman	
(NO ₂)	Ann.Arit. Mean	— <u>0.030 ppm (57</u> µg/m ³⁾	0.053 ppm (100 µg/m³)	- Same as primary	
Load (Db)	30-day	1.5 μg/m ³		Como oo primoru	
Lead (Pb)	Cal. Quarter		1.5 μg/m ³	Same as primary	
Sulfur	Ann.Arit. Mean24- hour	<u>0.04 ppm (105</u> μg/m³)	0.03 ppm (80 µg/m³)0.147 ppm (365 µg/m³)		
Dioxide (SO ₂)	3-hour			0.5 ppm (1300 µg/m³)	
	1-hour	0.25 ppm (655 μg/m³)	— <u>0.075 ppb (196</u> µg/m ³⁾		
Sulfates	24-hour	25 μg/m ³	No federal standard		
H ₂ S	1-hour	0.03 ppm (42 μg/m ³)	No federal standard		

Source: (Ex. 300, pp. 4.1-9 – 4.1-10.)

^a Based upon a 3-year average of the 98th percentile of daily maximum 1-hour values

ACCEPTED	REJECTED	MODIFIED

7. Page 6.2-3, first paragraph, Staff recommends the following change:

"The PHPP is located in the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD or District). This area is designated as non-attainment for both the state <u>ozone (1-hour and 8-hour)</u> and the federal ozone (1-hour and 8-hour) and the state 24-hour and annual PM10 standards. It is classified as attainment <u>or unclassified</u> for the state's CO, NO₂, SO₂, PM2.5, SO₄ and Lead (Pb) standards and <u>attainment or</u> unclassified for the federal PM2.5, CO, NO₂ and SO₂ standards. **Air Quality Table 2** summarizes the area's attainment status for various applicable state and federal standards. (Ex. 300, p. 4.1-8.)"

ACCEPTED	REJECTED	MODIFIED

8. Page 6.2-3, Air Quality Table 2, Staff recommends the following change:

Air Quality Table 2 Project Area Attainment Status

Pollutant	Averaging Time	California Status	Federal Status
Ozone (O3)	8 Hour	Non-attainment	Moderate Non-attainment
	1 Hour	Extreme Non-attainment	N/A
Carbon Monoxide (CO)	8 Hour	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Annual	Attainment	Attainment
(NOxNO ₂)	1 Hour	Attainment	Attainment <u></u>
Sulfur Dioxide	Annual	N/A	Unclassified
(SO2)	24 Hour	Attainment	Unclassified
	1 Hour	Attainment	N/A
PM10	Annual	Non-attainment	N/A
	24 Hour	Non-attainment	Unclassified
PM2.5	Annual	Unclassified/Attainment	Unclassified/Attainment
	24 Hour	N/A	Attainment

Notes:

N/A= no standard applies or not applicable

Source: Ex. 300, p. 4.1-10.

ACCEPTED	REJECTED	MODIFIED

^aNitrogen dioxide attainment status for the federal 1-hour NO₂ standard is scheduled to be determined by January 2012.



9. Page 6.2-4, first paragraph, Staff recommends the following change:

"The project will have a nominal electrical output of 570 MW. and commercial operation is planned for early 2013."

ACCEPTED	REJECTED	MODIFIED

10. Page 6.2-8, first paragraph, Staff recommends the following change:

Maximum emissions associated with commissioning activities are shown in **Air Quality Table 4**. NO₂ <u>impacts</u> were found to be below the CAAQS prior to adding in the ambient background."

ACCEPTED	REJECTED	MODIFIED

11. Page 6.2-12, second paragraph, Staff recommends the following change:

The discussion references provisions that are no longer present in the most recent version of **AQ-SC19**.

"The applicant proposes to pave some local roadways to generate emission reduction credits to mitigate the project's PM10 and PM10 precursor (SOx) emission impacts. Pursuant to Condition of Certification AQ-SC19, the roads to be paved shall be identified at least a year prior to start of construction of the facility and the actual paving completed at least thirty (30) days before the start of construction of the facility. This is designed to ensure that emission reduction credits have been provided prior to starting construction of the project, and that road paving activities will not coincide with the construction of the facility."

ACCEPTED	REJECTED	MODIFIED

12. Page 6.2-33, the Committee adds the following language after the first paragraph:

The Department of the Air Force and the Plant 42 contractors (Boeing, Lockheed Martin, and Northrop Grumman) submitted an official statement on July 8, 2011 to the effect that they have not identified any issues or impacts to their programs and operations at Plant 42 from the PHPP.

The record reflects that the U.S. Air Force Plant 42 has been consulted and participated in the PHPP throughout the AFC process (i.e., Ex. 114). The issues arising from the PHPP's emissions of PM2.5 have been briefed by the parties and carefully considered in this Decision, above. The changes to the PSD rules relative to PM2.5 emissions in the area do not warrant a suspension of proceedings.

13. Page 6.2-42 to 43, Applicant recommends the following change:

AQ-SC11 The project owner shall establish an inspection and maintenance program to determine, repair, and log leaks in HTF piping network and expansion tanks. Inspection and maintenance program and documentation shall be available to District staff upon request.

- A. All pumps, compressors and pressure relief devices (pressure relief valves or rupture disks) shall be electronically, audio, or visually inspected once every operating period.
- B. The project owner shall maintain record of the amount of HTF replaced on a monthly basis for a period of five years. The Applicant may subtract quantifiable liquid losses from the 'replaced' total to determine the amount lost to atmosphere.

 Any HTF losses that cannot be quantified as liquid losses are presumed lost to atmosphere. Should HTF loss to the atmosphere exceed the Applicant's estimate of 0.2 tons per year, the project owner shall implement the following leak detection and repair measures:

ACCEPTED	REJECTED	MODIFIED

14. Page 6.2-43 to 44, Staff recommends the following change:

Modify **AQ-SC14** and **AQ-SC15** in accordance with the following versions presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)

AQ-SC14 Expansion tank roof appurtenances shall not exhibit emissions exceeding 10,000-ppmv as methane measured with an instrument calibrated with methane and conducted in accordance with U.S.EPA Method 21 or equivalent. All accessible valves, connectors, and PRV's (including rupture disks) shall be inspected quarterly using an AVAQMD approved leak detection device calibrated for methane.

<u>Verification:</u> The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-SC15 Each expansion tank shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21 or equivalent. All accessible valves, connectors, and PRV's (including rupture disks) shall be inspected quarterly using an AVAQMD approved leak detection device calibrated for methane.

<u>Verification:</u> The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

	ACCEPTED	REJECTED	MODIFIED
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15. Page 6.2-45, Staff recommends the following change:

AQ-SC19 should be replaced with the following version, which is the most recent iteration proposed by Staff, originally presented in Staff's Prehearing Conference Statement (Exh. 306) and slightly modified in Staff's Reply Brief (wherein Staff recommended removal of the option for obtaining these offsets through an interpollutant trade based on concerns expressed by CBD).

The project owner shall provide 137 tons per year of PM10 ERCs AQ-SC19 (128 tons per year for PM10 emissions and 9 tons per year for PM10-precursor SOx emissions) that are banked consistent with the Rules and Regulations of the AVAQMD. Once the District has adopted one or more rules to bank PM offsets from road paving, Should the project owner pursue road paving as the method to obtain the necessary PM10 ERCs, the project owner shall pave, with asphalt concrete that meets the current county road standards, unpaved local roads to provide emission reductions of 137 tons per year of PM10, prior to start of construction of the project. The project owner shall submit a road paving plan that includes a list and pictures of candidate roads to be paved, their actual daily average traffic count including classifications of vehicles (ADT), and daily vehicle miles travel (DVMT), their actual road dust silt content. and calculations showing the appropriate amount of emissions reductions due to paving of each road segment. Calculations of PM10 emission reduction credits shall be performed in accordance with Sections 13.2.1 and 13.2.2 of the U.S. EPA's AP-42 "Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources", Fifth Edition.

<u>Verification:</u> At least one year 30 days prior to start of construction, the project owner shall submit documentation showing that the project has obtained 137 tons of banked PM10 ERCs. If the project owner chooses to use road paving to obtain the necessary ERCs, the project owner shall submit to the CPM for review and approval, the road paving plan 30 days prior to submittal of the plan to the AVAQMD. plans and other documents to demonstrate compliance with this condition. Construction shall not begin until the CPM has approved all ERCSERCs. This approval shall be done in consultation with the District. Documents shall include a list and pictures of candidate roads to be paved, their actual daily average traffic count including classifications of vehicles (ADT), and daily vehicle miles travel (DVMT), their actual road dust silt content, and calculations showing the appropriate amount of emissions reductions due to paving of each road segment. All paving of roads done for PM-10 offset purposes shall be completed at least 15 days prior to start construction of the project.

ACCEPTED	REJECTED	MODIFIED

16. Page 6.2-46, Applicant recommends the following change:

AQT-2 This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.2 grains per 100 dscf on a rolling twelve month average basis, and shall be operated

and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles. Compliance with this limit shall be demonstrated by providing evidence of a contract, tariff sheet or other approved documentation that shows that the fuel meets the definition of pipeline quality gas.

<u>Verification</u>: The project owner shall complete <u>or obtain from the fuel supplier</u>, on a monthly basis, a laboratory analysis showing the sulfur content of natural gas being burned at the facility. The sulfur analysis reports shall be incorporated into the quarterly compliance reports.

17. Page 6.2-47, Applicant recommends the following change:

- AQT-5 Emissions of CO and NOx from this equipment shall only exceed the limits contained in Condition AQT-4 during startup and shutdown periods as follows:
 - a. Startup is defined as the period beginning with ignition and lasting until the equipment has reached operating permit limits, i.e., the applicable emission limits listed in Condition AQT-4. Cold startup is defined as a startup when the CTG has not been in operation during the preceding continuous 48 hours, although a startup after an aborted partial cold start is still considered a cold start (a cold start that does not reach 85% output). Other startup is defined as a startup that is not a cold startup. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.

ACCEPTED	REJECTED	MODIFIED

18. Page 6.2-48, Applicant recommends the following change:

AQT-7 Emissions from this facility, including the duct burner, auxiliary equipment, engines, cooling tower and fugitive dust for vehicle use in the solar field, shall not exceed the following emission limits, based on a rolling 12 month summary:

<u>Verification</u>: The project owner shall submit to the District and CPM the quarterly and annual compliance reports as required by AQT-17. <u>Note, the requirement for compliance tests applies only to the stationary sources and fugitive emissions will be verified according to a District-approved calculation protocol.</u>

ACCEPTED	REJECTED	MODIFIED

19. Page 6.2-49, Applicant recommends the following change:

AQT-12 Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR 75 Appendix A or a stack flow rate calculation method. The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan, and AVAQMD Rule 218, 40 CFR 60 and/or 40 CFR 75 as applicable, and they shall be installed prior to initial equipment startup after initial steam blows are completed. Two (2) months prior to installation the operator shall submit a monitoring plan for District review and approval. The o/o shall notify the APCO and the USEPA of the date of first fire and the date of initial commercial operation of each affected unit.

<u>Verification</u>: The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and <u>MDAQMDAVAQMD</u> Rule 218, and they shall be installed prior to initial equipment startup after initial steam blows are completed. Two (2) months prior to installation the operator shall submit a monitoring plan for District review and approval.

ACCEPTED	REJECTED	MODIFIED

20. Page 6.2-50, Applicant recommends the following change:

AQT-13 The o/o shall conduct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to the compliance/certification tests the operator shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days after testing.

<u>Verification</u>: The project owner shall notify the District and the CPM within ten (10) working days before the execution of the source tests required in this condition. Source test results shall be submitted to the District and to the CPM within 60 45 days of the date of the tests.

ACCEPTED	REJECTED	MODIFIED

21. Page 6.2-50, Applicant recommends the following change:

AQT-15 The o/o shall, at least as often as once every five years (commencing with the initial compliance test), include the following supplemental source tests in the annual compliance testing:

Verification: The project owner shall notify the District and the CPM within seven (7) ten (10) working days before the execution of the source tests required in this condition. Source test results shall be submitted to the District and to the CPM within 60 days of the date of the tests.

ACCEPTED	REJECTED	MODIFIED

22. Page 6.2-51, Staff recommends the following change:

Modify AQT-16 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)

AQT-16 Continuous monitoring systems shall meet the following acceptability testing requirements from 40 CFR 60 Appendix B (or otherwise District approved):

a. For NOx, Performance Specification 2.40 CFR 75.

Verification: At least 60 days prior to construction of the turbine stacks, the project owner shall provide the District and CPM, for approval, a detailed drawing and a plan on how the measurements and recordings, required by this condition, will be performed by the chosen monitoring system. The owner/operator shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and AVAQMD Rule 218, and they shall be installed prior to initial equipment startup after initial steam blows are completed. Sixty (60) days

prior to installation, the operator shall submit a monitoring plan for District review and approval and the CPM for review.

ACCEPTED	REJECTED	MODIFIED

23. Page 6.2-54, Applicant recommends the following change:

AQT-25 Within 60 days after achieving the maximum firing rate at which the facility will be operated, but not later than 180 days after initial startup, the operator shall perform an initial compliance test. This test shall demonstrate that this equipment is capable of operation at 100% load in compliance with the emission limits in Condition AQT-4.

<u>Verification</u>: No later than 30 working days before the commencement of the source tests, the project owner shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this condition. In addition, the source tests shall include a minimum of three start-up and three shutdown periods and shall include at least one cold start, and one hot or warm start. The project owner shall incorporate the District and CPM comments into the test plan. The project owner shall notify the District and the CPM at least seven (7) ten (10) working days prior to the planned source testing date. Source test results shall be submitted to the District and the CPM within 60 days of the source testing date.

ACCEPTED	REJECTED	MODIFIED

24. Page 6.2-60, Applicant recommends inserting the following language:

AQAB-8 A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed operating time.

<u>Verification:</u> The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

ACCEPTED	REJECTED	MODIFIED

25. Page 6.2-62, Applicant recommends the following change:

AQHH-6 The o/o shall perform the following annual compliance tests on this equipment in accordance with the AVAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required:

Verification: The project owner shall notify the District and the CPM within seven (7) ten (10) working days before the execution of the source tests required in this condition. Source test results shall be submitted to the District and to the CPM within 60 days of the date of the tests.

AQHH-7

AQHH-7 A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed operating time.

<u>Verification:</u> The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

ACCEPTED	REJECTED	MODIFIED

26. Page 6.2-63, Applicant recommends the following change:

AQEG-3 This unit shall be limited to use for emergency power, defined as when commercially available power has been interrupted. In addition, this unit may be operated as part of a testing program that does not exceed 50 hours of testing or maintenance per calendar year.

Furthermore, pursuant to District Rule 1110.2, this unit shall be operated less than 200 hours per calendar year. This requirement includes usage during emergencies.

ACCEPTED	REJECTED	MODIFIED
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27. Page 6.2-64, Applicant recommends the following change:

AQFS-3 This unit shall be limited to use for emergency fire fighting. In addition, this unit may be operated as part of a testing program that does not exceed 50 hours of testing or maintenance per calendar year.

Furthermore, pursuant to District Rule 1110.2, this unit shall be operated less than 200 hours per calendar year. This requirement includes usage during emergencies.

ACCEPTED	REJECTED	MODIFIED

HAZARDOUS MATERIALS MANAGEMENT

28. Page 6.5-11, Staff recommends the following change:

Modify HAZ-9 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)

HAZ-9The project owner shall prepare a site-specific Security Plan for the operational phase and shall submit it to the CPM for review and approval. The project owner shall implement site security measures addressing physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described as below (as per NERC 2002).

The Operation Security Plan shall include the following:

- 1. Permanent full perimeter fence or wall, at least eight feet high around the Power Block and Solar Field and meet the requirements specified in Condition of Certification **BIO-11**.
- 2. Main entrance security gate, either hand operable or motorized;
- 3. Evacuation procedures;
- 4. Protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
- Written standard procedures for employees, contractors and vendors when encountering suspicious objects or packages on-site or off-site;
- 6. a. A statement (refer to sample, attachment "A") signed by the

- project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to ascertain the accuracy of employee indentity and employment history, and shall be conducted in accordance with state and federal law regarding security and privacy;
- b. A statement(s) (refer to sample, attachment "B") signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner) that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractor personnel that visit the project site.
- 7. Site access controls for employees, contractors, vendors, and visitors;
- 8. A statement(s) (refer to sample, attachment "C") signed by the owners or authorized representative of Therminol, hydrogen, 93 percent sulfuric acid, and aqueous ammonia transport vendors certifying that they have prepared and implemented security plans in conformity with 49 CFR 172.802, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B;
- 9. Closed Circuit TV (CCTV) monitoring system able to pan, tilt, and zoom (PTZ), recordable, and viewable in the power plant control room and security station (if separate from the control room) providing a view of the main entrance gate, the entrance to the control room, and the ammonia storage tank but angled and physically restricted so as to not view or record any activity at Air Force Plant 42; and
- 10. Additional measures to ensure adequate perimeter security consisting of either:
 - Security guard(s) present 24 hours per day, seven days per week, or
 - b. Power plant personnel on-site 24 hours per day, seven days per week and:
 - The northern and <u>eastern</u>western sections of the perimeter fence around the solar array shall be viewable by the CCTV system; or
 - 2) have perimeter breach detectors or on-site motion detectors

for all fence lines. The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to the security plans. The CPM may authorize modifications to these measures, or may require additional measures, such as protective barriers for critical power plant components (e.g., transformers, gas lines, compressors, etc.) depending on circumstances unique to the facility or in response to industry-related standards, security concerns, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Council, after consultation with appropriate law enforcement agencies and the applicant.

<u>Verification:</u> At least 30 days prior to the initial receipt of hazardous materials on-site, the project owner shall notify the CPM that a site-specific Operations Site Security Plan is available for review and approval. In the Annual Compliance Report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and updated certification statements are appended to the Operations Security Plan. In the Annual Compliance Report, the project owner shall include a statement that the Operations Security Plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

ACCEPTED	REJECTED	MODIFIED

WASTE MANAGEMENT

- 29. Page 6.6-14. Applicant suggests modification of WASTE-2 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)
- WASTE-2 In areas where the land has been or is currently being farmed, and where excavation or significant ground disturbance will occur for the construction of the project transmission line, soil samples shall be collected and tested for herbicides, pesticides, and fumigants to determine the presence and extent of any material levels of contamination.

The sampling and testing plan shall be prepared in consultation with the appropriate Los Angeles County agency, conducted by an

appropriate California licensed professional, and sent to a California Certified laboratory for testing. Sampling and analysis shall be consistent with the DTSC's 'Interim Guidance for Sampling Agricultural Properties Fields for School Sites (Third Revision)' or equivalent. A report documenting the areas proposed for sampling, and the process used for sampling and testing shall be submitted to the Energy Commission for review and approval at least 90 days before transmission line construction occurs in the affected areas. Results of the laboratory testing and recommended resolutions for handling and excavation of material found to exceed regulatory requirements shall be submitted to the Energy Commission 60 days prior to transmission line construction occurs in the affected areas. Should sampling indicate additional remediation or mitigation is required, Conditions of Certification WASTE-3 and -4 would apply.

Excavated materials containing elevated levels of pesticide or herbicide require special handling and disposal according to procedures established by the regulatory agencies. Effective dust suppression procedures shall be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the State of California and Los Angeles County shall be contacted by Applicant or its contractor to plan handling, treatment, and/or disposal options.

<u>Verification:</u> The project owner shall identify the current/previous land use for the project transmission tower locations and associated laydown and staging areas for construction of the transmission line. The project owner shall submit a report documenting the areas proposed for sampling, and the process used for sampling and testing to the CPM for approval at least 90 days before transmission line construction occurs in the affected areas. Results of the laboratory testing and recommended mitigation or remediation plan for handling and excavation of material found to exceed regulatory requirements shall be submitted to the CPM for review and approval 60 days prior to transmission line construction.

ACCEPTED	REJECTED	MODIFIED
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BIOLOGICAL RESOURCES

30. Page 7.1-4. Staff recommends the following edits to the paragraph to reflect a more accurate description of the species specific habitat use and their association with different vegetation. The deletion of text is recommended in this paragraph to avoid confusion regarding the

potential for arroyo toad to occur in the project area. Recommended changes are described below:

ACCEPTED	REJECTED	MODIFIED

31. Page 7.1-10. Staff recommends additions to this paragraph to clarify that the salvage of Joshua trees alone would not be considered adequate mitigation for this community type. Recommended changes are highlighted below.

"The Applicant proposed measures to avoid impacts to special-status habitat and restore temporarily disturbed areas. Where avoidance is not feasible, the Applicant proposed to salvage Joshua trees and cacti for inclusion in landscaping and buffer areas. However the salvage and transplantation of Joshua trees would not be considered a mitigation strategy for this species. To mitigate project impacts on native vegetation Conditions of Certification BIO-1 through BIO-8 require the project owner to designate a qualified biologist to oversee construction and monitor sensitive resource areas, provide worker training, develop a Biological Resources Mitigation Implementation and Monitoring Plan, and implement best management practices, including avoidance and minimization measures. The permanent loss of sensitive vegetation, including Joshua tree woodland, would be offset through the acquisition of mitigation lands for the Mohave ground squirrel identified in staff's proposed Condition of Certification BIO-20. (Ex. 300, pp. 4.2-37 - 4.2-38.)"

ACCEPTED	REJECTED	MODIFIED

32. Page 7.1-13. Additional surveys not recorded in the record were conducted for this species by Staff in the spring and summer of 2011. The recommended additions identified below clarify that this species is expected to have a low potential to occur on the project site.

"The Applicant's surveys conducted in 2009 did not identify arroyo toads in the project area and the potential for this species to occur is low based on supplemental surveys conducted by Staff in 2011. However, this species may persist in variable stream systems if they have access to suitable pools. Considering the federal status of this species, we find that preconstruction clearance surveys and monitoring are warranted. To avoid and/or minimize the possible incidental take of arroyo toads along the transmission line corridor at Little Rock Creek, avoidance and minimization measures regarding the arroyo toad have been incorporated in Condition of Certification BIO-12. We find that implementation of Conditions of Certification BIO-1 through BIO-9 and BIO-12 will help prevent take of arroyo toads and reduce impacts to less-than-significant levels. (Ex. 300, pp. 4.2-44 and 4.2-45.)"

ACCEPTED	REJECTED	MODIFIED

33. Page 7.1-15. Staff has provided the recommended edits below to clarify that the CDFG biologist observed the Swainson's hawk on the power plant site.

"Swainson's Hawk. In 2009, Applicant conducted protocol surveys for the Swainson's hawk (state-listed Threatened) within a one-mile radius of the power plant site and 0.5-mile radius of linear facilities. Swainson's hawks were not observed during these surveys or at historic nest sites visited during the surveys. However, the CDFG considers a nest site to be active if it was used at least once during the past five years. In addition, the evidence includes information on observations of Swainson's hawks nesting within 14 miles of the PHPP site, a nest site approximately 10 miles east of the PHPP site and 5 miles east of the transmission line corridor. An adult Swainson's hawk was observed by the CDFG at the PHPP power plant site

and one juvenile bird <u>waswere</u> observed perching in a tree along transmission line Segment 1 in September 2009. (Ex. 300, pp. 4.2-51 and 4.2-52.)"

ACCEPTED	REJECTED	MODIFIED

34. Page 7.1-20. Staff noted a small grammatical error in the FSA and recommends the following change to clarify the statement below.

"Pallid San Diego Pocket Mouse and Southern Grasshopper Mouse.

The Pallid San Diego pocket mouse and southern grasshopper mouse have the potential to occur in the project area, including the project site and associated linear facilities. If present, these species are likely distributed across the site in low densities but removal of vegetation would harm any of these species present onsite. The Applicant proposed biological monitoring, the salvaging of individuals uncovered during construction, and restoration of disturbed areas following construction. These measures were incorporated in Conditions of Certification BIO-1 through BIO-9. In addition, Condition of Certification BIO-20 requires the acquisition of lands to mitigate for impacts to Mohave ground squirrel and this would be sufficient to mitigate for the loss of mouse habitat since the mouse species are likely <u>to</u> co-occur in some of the acquired Mohave ground squirrel habitat. (Ex. 300, p. 4.2-64 and 4.2-65.)"

ACCEPTED	REJECTED	MODIFIED
	<u> </u>	

34. Page 7.1-22. Staff recommends the following edits to clarify the locations of State jurisdictional waters on the project site and transmission line.

d. Impacts to Waters of State

"Construction at the <u>power plant</u> site would not result in permanent impacts to state or federal jurisdictional waters because such jurisdictional features are not present on the site. While state jurisdictional waters occur on the transmission line route the towers have been sited to avoid these <u>features</u>. to nor along transmission line footings. Vehicle passage and maintenance of the access roads will result in temporary impacts to 0.08

acres of state jurisdictional waters but long-term impacts will be avoided. (Ex. 300 p. 4.2-67.)"

ACCEPTED	REJECTED	MODIFIED

35. Pages 7.1-26, Finding of Fact No. 4, the Committee makes the following changes:

To avoid sensitive habitat and drainage areas, Applicant has revised the list of proposed roads for paving as identified in Rebuttal Table-1 and limited the paving proposal to road numbers 2, 4, 6, 7, and 8. (Ex. 146.) Applicant's consultants conducted surveys on these road segments in early March 2011 to confirm the nature and location of the roads and to review potential environmental impacts. According to Applicant's witness: "the roadbeds are already disturbed through maintenance grading of unpaved roadways" and "[w]e did confirm our previous views that the paving of the road segment would not result in unmitigated adverse impacts, that there was (sic) no potential impacts to biological resources, jurisdictional waters, and no cultural resources were found in this fairly cursory survey of the five miles of roads proposed for paving." (3/2/11 RT 221-222.)

ACCEPTED	REJECTED	MODIFIED

36. Pages 7.1-33, Finding of Fact No. 4, Applicant suggests:

Biological Resources Finding of Fact No. 4 indicates that the mitigation plan for Swainson's hawk habitat must account for 10.22 acres of farmland. The changes agreed to by Staff and the Applicant in BIO-17 (as discussed above) no longer reference the 10.22 acres, as follows:

The Swainson's hawk habitat mitigation plan requiring acquisition of 610 acres, including a minimum of 366.3 acres of Joshua tree woodland (loss of site habitat) plus 10.22 acres (loss of farmland habitat) is adequate to compensate for the permanent loss of habitat in the event that the Mohave ground squirrel mitigation strategy does not provide sufficient Swainson's hawk habitat.

ACCEPTED	REJECTED	MODIFIED

37. Page 7.1-33, Finding of Fact No. 9

Applicant proposes the following changes to Biological Resources Finding of Fact No. 9:

9. Alternative Route 4, the partially undergrounded 12.8-mile transmission line described in the record, is the preferred alternative of the alternative transmission line routes considered by Staff, because it would substantially reduce impacts to biological resources, the loss of habitat, and the mitigation costs associated with the proposed 35-mile Segment 1 and 2 transmission line alignments.

ACCEPTED	REJECTED	MODIFIED

38. Page 7.1-34. FINDINGS OF FACT No. 3. Staff recommends the following edits to clarify that land acquisition is not required to mitigate impacts that may occur to the arroyo toad.

3. The habitat mitigation strategy of 2:1 ratio for the power plant site and 3:1 ratio for the linear facilities, requiring the acquisition and maintenance of at least 665 acres, is adequate to compensate for the permanent loss of habitat for Swainson's hawk, desert tortoise, arroyo toad, and Mohave ground squirrel caused by construction and operation of the project.

ACCEPTED	REJECTED	MODIFIED

39. Page 7.1-59. Applicant recommends modification of BIO-13 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)

DESERT TORTOISE CLEARANCE SURVEYS AND EXCLUSION FENCING

- BIO-13 The project owner shall undertake appropriate measures to manage construction at the plant site and linear facilities in a manner to avoid impacts to desert tortoise. Methods for clearance surveys, fence installation, and other procedures shall be consistent with those described in the *Guidelines for Handling Desert Tortoise During Construction Projects* (Desert Tortoise Council 1999) or more current guidance provided by CDFG and USFWS. These measures include, but are not limited to, the following:
 - 1. Fence Installation. Prior to ground disturbance, the entire plant site shall be fenced with permanent desert tortoise-exclusion fence. To avoid impacts to desert tortoise during fence construction, the proposed fence alignment shall be flagged and the alignment surveyed within 24 hours prior to fence construction. Surveys shall be conducted by the Designated Biologist using techniques approved by the USFWS and CDFG. Biological Monitors may assist the Designated Biologist under his or her supervision. These surveys shall provide 100 percent coverage of all areas to be disturbed during fence construction and an additional transect along both sides of the proposed fence line. This fence line transect shall cover an area approximately 90 feet wide centered on the fence alignment. Transects shall be no greater than 30 feet apart. All desert tortoise burrows, and burrows constructed by other species that might be used by desert tortoises, shall be examined to assess occupancy of each burrow by desert tortoises and handled in accordance with USFWS-approved protocol.
 - a. <u>Timing, Supervision of Fence Installation.</u> The exclusion fencing shall be installed prior to the onset of site clearing and grubbing. The fence installation shall be supervised by the Designated Biologist and monitored by the Biological Monitors to ensure the safety of any tortoise present.
 - b. <u>Fence Material and Installation</u>. The permanent tortoise exclusionary fencing shall <u>be constructed in compliance with current USFWS guidelines</u>. <u>consist of galvanized hard wire cloth 1 by 2 inch mesh sunk 12 inches into the ground, and 24 inches above ground (USFWS 2008b, Appendix D).</u>
 - c. <u>Security Gates</u>. Security gates shall be designed with minimal ground clearance to deter ingress by tortoises, including gates that would exclude public access to the PHPP site.
 - d. <u>Tower Fencing.</u> If tortoises are discovered during clearance surveys of the linear routes, the tower locations shall be temporarily fenced with tortoise exclusion fencing to prevent desert tortoise entry during construction. Temporary fencing

- must follow <u>current USFWS</u> guidelines for permanent fencing and supporting stakes shall be sufficiently spaced to maintain fence integrity.
- e. Fence Inspections. Following installation of the desert tortoise exclusion fencing for both the permanent site fencing and temporary fencing in the utility corridors, the fencing shall be regularly inspected. Permanent fencing shall be inspected monthly and during/following all major rainfall events. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within two days of observing damage. Inspections of permanent site fencing shall occur for the life of the project. Temporary fencing must be inspected weekly and, where drainages intersect the fencing, during and immediately following major rainfall events. All temporary fencing shall be repaired immediately upon discovery and, if the fence may have permitted tortoise entry while damaged, the Designated Biologist shall inspect the utility corridor or tower site for tortoise.
- 2. Desert Tortoise Clearance Surveys. Following construction of the tortoise exclusionary fencing around the Plant Site, all fenced areas shall be cleared of tortoises by the Designated Biologist, who may be assisted by Biological Monitors. A minimum of two clearance surveys, with negative results, must be completed, and these must coincide with heightened desert tortoise activity from late March through May and during October. To facilitate seeing the ground from different angles, the second clearance survey shall be walked at 90 degrees to the orientation of the first clearance survey.
- 3. Relocation for Desert Tortoise. If desert tortoises are detected on the PHPP plant site during clearance or other activities, the owner shall halt ground disturbing activities within 500 feet of the tortoise, prepare a Desert Tortoise Translocation Plan, and coordinate with the USFWS, CDFG, and CPM regarding the disposition of the animals. If located during clearance surveys within the transmission line project-project route, the tortoise would be allowed to continue unimpeded out of harm's way. impact area. Only in the event that a tortoise required relocation to prevent injury the Designated Biologist shall move the tortoise the shortest possible distance, keeping it out of harm's way but still within its home range. Desert tortoise encountered during construction of any of the utility corridors shall be similarly treated in accordance with the techniques described in the Guidelines for Handling Desert Tortoise during Construction Projects (Desert Tortoise Council 1999) or more current guidance on the USFWS website. Any person handling tortoise must be trained and approved by the USFWS and

CDFG and be on site during ground disturbance or construction. If a desert tortoise is discovered on the PHPP power plant site the project owner shall prepare a Desert Tortoise Translocation Plan. The Translocation Plan shall follow the most current USFWS guidelines for the translocation of desert tortoise and shall be submitted to the USFWS, CDFG, and CPM for approval. Desert tortoise shall not be moved pending the approval of the Plan. Prior to initiating further ground disturbance at the project site the project owner shall conduct additional clearance surveys of the power plant site. A site where tortoises will be moved must be pre-approved, and acquired prior to ground disturbing activities. The health of any tortoise to be translocated must be assessed prior to moving; a quarantine site located for any ill tortoise must be designated. The host population of tortoise surveyed prior to any translocated tortoise being moved, and a study to determine the efficacy of the translocation and impact to host population be conducted for a minimum of 5 years.

- 4. <u>Burrow Inspection.</u> All potential desert tortoise burrows within the fenced area shall be searched for presence. In some cases, a fiber optic scope may be needed to determine presence or absence within a deep burrow. To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined. Tortoises excavated from burrows shall be translocated to unoccupied natural or artificial burrows immediately following excavation in an area approved by the Designated Biologist if environmental conditions warrant immediate relocation.
- 5. <u>Burrow Excavation.</u> Burrows inhabited by tortoises shall be excavated by the Designated Biologist <u>or other USFWS/CDFG/CPM approved handler,</u> using hand tools, and then collapsed or blocked to prevent re-occupation. If excavated during May through July, the Designated Biologist shall search for desert tortoise nests/eggs. All desert tortoise handling and removal, and burrow excavations, including nests, shall be conducted by the Designated Biologist <u>or other USFWS/CDFG/CPM approved handler (See Paragraph 3 above)</u> in accordance with the USFWS-approved protocol (Desert Tortoise Council 1999) or more current guidance on the USFWS website.
- 6. Monitoring During Clearing. Following construction of the desert tortoise exclusion fencing and clearance surveys desert tortoise clearance removal from the plant site and translocation to a new site, heavy equipment shall be allowed to enter the project site to perform earth work such as clearing, grubbing, leveling, and trenching. A Biological Monitor shall be onsite during initial clearing

and grading activities. Should a tortoise be discovered, the measures outlined in Paragraph 3 shall be followed, it shall be translocated as described above in accordance with the Desert Tortoise Translocation Plan.

7. Reporting. The Designated Biologist shall record the following information for any desert tortoises observed or handled: a) the locations (narrative and maps) and dates of observation; b) general condition and health, including injuries, state of healing and whether desert tortoise voided their bladders; c) location moved from and location moved to (using GPS technology); d) gender, carapace length, and diagnostic markings (i.e., identification numbers or marked lateral scutes); e) ambient temperature when handled and released; and f) digital photograph of each handled desert tortoise as described in the paragraph below. Desert tortoise moved from within project areas shall be marked for future identification as described in *Guidelines for Handling Desert* Tortoise during Construction Projects (Desert Tortoise Council 1999) or more current guidance on the USFWS website. Digital photographs of the carapace, plastron, and fourth costal scute shall be taken. Scutes shall not be notched for identification. Any desert tortoises observed within the project area or adjacent habitat shall be reported to the USFWS, CDFG, and CPM by written and electronic correspondence within 24 hours.

<u>Verification:</u> No less than 60 days prior to start of any site mobilization or disturbance activities, the applicant shall submit to Energy Commission Staff, USFWS and CDFG a draft Desert Tortoise Translocation Plan. At least 60 days prior to start of any project-related ground disturbance activities, the project owner shall provide the CPM with the final version of a Translocation Plan that has been approved by Energy Commission staff in consultation with USFWS and CDFG. The CPM will determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved Desert Tortoise Translocation Plan must be made only after approval by the Energy Commission staff in consultation with USFWS and CDFG. The project owner shall notify the CPM no fewer than 5 working days before implementing any CPM-approved modifications to the Translocation Plan.

Within 30 days after initiation of translocation activities, the Designated Biologist shall provide to the CPM for review and approval, a written report identifying which items of the Translocation Plan have been completed, and a summary of all modifications to measures made during implementation.

Within 30 days of completion of desert tortoise clearance surveys the Designated Biologist shall submit a report to the CPM, USFWS, and CDFG describing how each of the mitigation measures described above has been satisfied. The report shall include the desert tortoise survey results, capture and release locations of

any relocated desert tortoises, and any other information needed to demonstrate compliance with the measures described above.

If a desert tortoise is located on the power plant site the project owner shall submit to Energy Commission staff, USFWS and CDFG a draft Desert Tortoise Translocation Plan. The CPM will review the Plan and provide comments within 30 days receipt of the draft plan. All modifications to the Desert Tortoise Translocation Plan must be made only after approval by the Energy Commission staff in consultation with USFWS and CDFG. The project owner shall notify the CPM no fewer than five working days before implementing any CPM-approved modifications to the Translocation Plan.

Within 30 days after initiation of translocation activities, the Designated Biologist shall provide to the CPM for review and approval, a written report identifying which items of the Translocation Plan have been completed, and a summary of all modifications to measures made during implementation.

ACCEPTED	REJECTED	MODIFIED

40 Page 7.1-69, bullet at the bottom of the page. One minor change from the Joint Stipulation of Energy Commission Staff and Applicant Regarding Changes to Final Staff Assessment (Ex. 307) was inadvertently left out of the PMPD. BIO-17 should be modified as follows:

 A minimum of 610 acres of <u>suitable foraging</u> habitat including a minimum of 366.3 acres of Joshua tree woodland are present.

ACCEPTED	REJECTED	MODIFIED

41. Page 7.1-79. Modify BIO-18 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306.)

BURROWING OWL IMPACT AVOIDANCE, MINIMIZATION, AND COMPENSATION MEASURES

BIO-18 The project owner shall implement the following measures to avoid and offset impacts to burrowing owls:

- Pre-Construction Surveys. Concurrent with desert tortoise clearance surveys the Designated Biologist shall conduct pre-construction surveys for burrowing owls within the project site and along all linear facilities in accordance with CDFG guidelines (CBOC 1993). Pre-construction surveys for burrowing owls shall occur no more than 30 days prior to initiation of ground disturbance or site mobilization activities. The survey area shall include the Project Disturbance Area and surrounding 500 foot survey buffer where access is legally available.
- 2. <u>Implement Avoidance Measures.</u> If an active burrowing owl burrow is detected within 500 feet from the Project Disturbance Area the following avoidance and minimization measures shall be implemented:
 - a. <u>Establish Non-Disturbance Buffer.</u> Fencing shall be installed at a 250-foot radius from the occupied burrow to create a non-disturbance buffer around the burrow. The non-disturbance buffer and fence line may be reduced to 160 feet if all Project-related activities that might disturb burrowing owls would be conducted during the non-breeding season (September 1st through January 31st). Signs shall be posted in English and Spanish at the fence line indicating no entry or disturbance is permitted within the fenced buffer.
 - b. Monitoring: If construction activities would occur within 500 feet of the occupied burrow during the nesting season (February 1 August 31st) the Designated Biologist or Biological Monitor shall monitor to determine if these activities have potential to adversely affect nesting efforts, and shall implement measures to minimize or avoid such disturbance.
- 3. Passive Relocation of Burrowing Owls. If pre-construction surveys indicate the presence of burrowing owls within the Project Disturbance Area (the Project Disturbance Area means all lands disturbed in the construction and operation of the PHPP Project), the Project owner shall prepare and implement a Burrowing Owl Relocation and Mitigation Plan, in addition to the avoidance measures described above. The final Burrowing Owl Relocation and Mitigation Plan shall be approved by the CPM, in consultation with USFWS and CDFG, and shall:
 - a. Identify and describe suitable relocation sites on the project site or within 1 mile of the Project Disturbance Area, and describe measures to ensure that burrow installation or improvements would not affect sensitive species habitat or existing burrowing owl colonies in the relocation area;

- Provide guidelines for creation or enhancement of at least two natural or artificial burrows per relocated owl, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFG guidelines (CDFG 1995) and shall be approved by the CPM in consultation with CDFG and USFWS;
- c. Passive relocation sites shall be in areas of suitable habitat for burrowing owl nesting, and be characterized by minimal human disturbance and access. Relative cover of non-native plants within the proposed relocation sites shall not exceed the relative cover of non-native plants in the adjacent habitats;
- d. Provide detailed methods and guidance for passive relocation of burrowing owls occurring within the Project Disturbance Area; and
- 4. Acquire Compensatory Mitigation Lands for Burrowing Owls. The following measures for compensatory mitigation shall apply only if burrowing owls are detected within the Project Disturbance Area. The Project owner shall acquire, in fee or in easement, 19.5 acres of land for each burrowing owl that is displaced by construction of the Project. This compensation acreage of 19.5 acres per single bird or pair of nesting owls assumes that there is no evidence that the compensation lands are occupied by burrowing owls. If burrowing owls are observed to occupy the compensation lands, then only 9.75 acres per single bird or pair is required, per CDFG (1995) guidelines. If the compensation lands are contiguous to currently occupied habitat, then the replacement ratio will be 13.0 acres per pair or single bird. The Project owner shall provide funding for the enhancement and long-term management of these compensation lands. The acquisition and management of the compensation lands may be delegated by written agreement to CDFG or to a third party, such as a non-governmental organization dedicated to habitat conservation, subject to approval by the CPM, in consultation with CDFG and USFWS prior to land acquisition or management activities. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described in Section 3.i. of Condition of Certification BIO-20.

- Criteria for Burrowing Owl Mitigation Lands. The terms and a. conditions of this acquisition or easement shall be as described in Paragraph 1 of **BIO-20** [Mohave ground squirrel Compensatory Mitigation], with the additional criteria to include: 1) the mitigation land must provide suitable habitat for burrowing owls, and 2) the acquisition lands must either currently support burrowing owls or be within dispersal distance from areas occupied by burrowing owls from an active burrowing owl nesting territory (generally approximately 5 miles). The burrowing owl mitigation lands may be included with the Mohave ground squirrel mitigation lands ONLY if these two burrowing owl criteria are met. If the burrowing owl mitigation land is separate from the acquisition required for Mohave ground squirrel compensation lands, the Project owner shall fulfill the requirements described below in this condition.
- Security. If burrowing owl mitigation land is separate from b. the acreage required for Mohave ground squirrel compensation lands the Project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating ground-disturbing Project activities. Alternatively, financial assurance can be provided by the Project owner to the CPM with copies of the document(s) to CDFG and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation measure described in this condition. These funds shall be used solely for implementation of the measures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") prior to initiating ground-disturbing Project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with CDFG and the USFWS to ensure funding. The estimated costs of enhancement and endowment (see subsection, Mohave ground squirrel, for a discussion of the assumptions used in calculating the Security, which are based on an estimate of \$15,169 per acre to fund acquisition, enhancement, and long-term management). The final amount due will be determined by the PAR analysis conducted pursuant to **BIO-17**.

<u>Verification:</u> If pre-construction surveys detect burrowing owls within 500 feet of proposed construction activities, the Designated Biologist shall provide to the CPM, CDFG and USFWS documentation indicating that non-disturbance buffer fencing has been installed at least 10 days prior to the start of any construction-

related ground disturbance activities. The Project owner shall report monthly to the CPM, CDFG, and USFWS for the duration of construction on the implementation of burrowing owl avoidance and minimization measures.

Within 30 days after completion of construction the Project owner shall provide to the CPM, CDFG and USFWS a written construction termination report identifying how mitigation measures described in the plan have been completed.

If pre-construction surveys detect burrowing owls within the Project Disturbance Area, the Project owner shall notify the CPM, CDFG and USFWS no less than 10 days of completing the surveys that a relocation of owls is necessary. The Project owner shall do all of the following if relocation of one or more burrowing owls is required:

- Within 30 days of completion of the burrowing owl pre-construction surveys, submit to the CPM, CDFG and USFWS a Burrowing Owl Relocation and Mitigation Plan.
- b. No less than 90 days prior to acquisition of the burrowing owl compensation lands, the Project owner, or an approved third party, shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS describing the parcel intended for purchase. At the same time the Project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, CDFG and USFWS.
- c. Within 90 days of the land or easement purchase, as determined by the date on the title, the Project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG and USFWS, for the compensation lands and associated fund
- d. No later than 30 days prior to the start of construction-related ground disturbing activities, the Project owner shall provide written verification of Security in accordance with this condition of certification.
- e. No later than 18 months after the start of construction-related ground disturbance activities, the Project owner shall provide written verification to the CPM, CDFG and USFWS that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient.
- f. On January 31st of each year following construction for a period of five years, the Designated Biologist shall provide a report to the CPM, USFWS, and CDFG that describes the results of monitoring and management of the burrowing owl relocation area. The annual report shall provide an assessment of the status of the relocation area with respect to burrow function and weed infestation, and shall include recommendations for actions the following year for maintaining the burrows as functional burrowing owl nesting sites and minimizing the occurrence of weeds.

ACCEPTED	REJECTED	MODIFIED

42. Page 7.1-104, Applicant recommends the following change:

- BIO-25 The project owner shall implement and incorporate into the facility closure plan measures to address the local biological resources related to facility closure. A funding mechanism shall be developed in consultation with the Energy Commission staff to ensure sufficient funds are available for revegetation, reclamation, and decommissioning if the project site will not be re-powered or developed. The facility closure plan shall address biological resources-related mitigation measures. In addition to these measures, the plan shall include the following:
- 1. Removal of transmission conductors when they are no longer used and useful;
- 2. Removal of all above-ground and subsurface power plant site facilities and related facilities;
- 3. Methods for restoring wildlife habitat and promoting the re-establishment of native plant and wildlife species;
- 4. Revegetation of the project site and other disturbed areas utilizing appropriate methods for establishing native vegetation if the site will not be repowered or developed; and
- 5. A cost estimate to complete closure-related activities.

In addition, the project owner shall secure funding to ensure implementation of the plan and provide to the CPM written evidence of the dedicated funding mechanism(s).

<u>Verification</u>: Prior to initiating ground-disturbing project activities, the project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding will be available to implement decommissioning and closure activities described above. The financial assurances may be in the form of an irrevocable letter of credit, a performance bond, a pledged savings account, or another equivalent form of security, as approved by the CPM.

At least 12 months prior to commencement of planned closure activities, the project owner shall address all biological resources-related issues associated with facility closure, and provide final measures, in a Biological Resources Element. The draft planned permanent or unplanned closure measures shall be submitted to the CPM for comment by staff, CDFG, and USFWS. After revision, final measures shall comprise the Biological Resources Element, which shall include the items listed above as well as written evidence of the dedicated funding mechanism(s) for these measures. The final Biological Resources Element shall become part of the facility closure plan, which is submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan (see Compliance Conditions of Certification).

Upon facility closure, the project owner shall implement measures in the Biological Resources Element and provide written status updates on all closure activities to the CPM at a frequency determined by the CPM.

ACCEPTED	REJECTED	MODIFIED

SOIL AND WATER RESOURCES

43. Page 7.2-25. Applicant seeks to add the following two conditions proposed in Staff's Rebuttal Testimony to address potential impacts from the roadway construction. Minor changes have been included to correct inaccuracies and improve comprehension.

SOIL&WATER-10: Construction General Permit

The project owner shall fulfill the requirements contained in State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWG, NPDES No. CAS000002 ("Construction General Permit") and all subsequent revisions and amendments. The project owner shall develop

and implement a construction Storm Water Pollution Prevention Plan (SWPPP) for the construction of the paved roadways.

<u>Verification</u>: No later than thirty (30) days prior to construction of city/county roadway pavement work, the project owner shall submit to the CPM documentation from the <u>Lahontan Regional Water Quality State Water Resources</u> Control Board showing approval to perform work under the Construction General Permit (or documentation that this permit is not required). If an approved construction SWPPP is required, a copy of it shall be kept accessible onsite at all times.

SOIL&WATER-11: Compliance with Local Requirements

The project owner shall comply with the City of Palmdale Municipal Code and the Los Angeles County Code of Ordinances, as applicable, regarding roadway construction.

<u>Verification</u>: The project owner shall ensure compliance with applicable local requirements regarding roadway construction.

- Pre-Construction: The project owner shall submit a construction packet in accordance with City of Palmdale and Los Angeles County, as applicable, containing the documentation, plans, and fees normally required for roadway construction. No later than thirty (30) days prior to <u>roadway</u> construction, the project owner shall submit to the CPM documentation from City of Palmdale and/or Los Angeles County showing approval to start construction.
- 2. Post-Construction: No later than sixty (60) days after roadway construction is complete, the project owner shall provide to the CPM documentation from City of Palmdale and/or Los Angeles County that roadway construction has been properly completed. The project owner shall also provide documentation showing the City of Palmdale and/or Los Angeles County will take ownership of the paved roadways and operate and maintain them in accordance with the intent of the mitigation program.

ACCEPTED	REJECTED	MODIFIED

CULTURAL RESOURCES

44. **Page** 7.3-17, fourth paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre".

ACCEPTED	REJECTED	MODIFIED

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

45. Page 7.4-1. Second to last sentence in the first paragraph.

"The analysis in the record also examines <u>geological and</u> paleontological resources which could be affected by the project including whether minerals, fossilized remains, or trace remnants of prehistoric plants or animals are present."

ACCEPTED	REJECTED	MODIFIED

46. Page 7.4-4, first full paragraph.

"The evidence includes analysis of project risks due to faulting and seismicity, noting that the project site is located within Seismic Zone 4an active seismic area."

ACCEPTED	REJECTED	MODIFIED

47. Page 7.4-10, Findings of Fact #2.

2. The project is located in Seismic Zone 4a seismically active area.

ACCEPTED	REJECTED	MODIFIED

48. **Page** 7.4-15-16, Applicant recommends the following change:

PAL-4 Prior to ground disturbance and for the duration of construction activities involving ground disturbance, the project owner and the PRS shall prepare and

conduct weekly CPM-approved training for the following workers: project managers, construction supervisors, foremen, and general workers involved with or who operate ground-disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of a CPM-approved video or in-person presentation training based on a CPM-approved video script or other presentation materials. Following initial training, a CPM-approved video, other approved training presentation, or in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. No ground disturbance shall occur prior to CPM approval of the Worker Environmental Awareness Program (WEAP), unless specifically approved by the CPM.

. . .

<u>Verification</u>: At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow.

At least 30 days prior to ground disturbance, the project owner shall submit the <u>training program presentation/materials</u> script and final video to the CPM for approval if the project owner is planning to use <u>a presentation format other than a video for a video</u> for interim training <u>or a script if a video is to be used for training</u>.

If the owner requests an alternate paleontological trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct training prior to CPM authorization.

In the monthly compliance report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (in-person or <u>other approved presentation</u> <u>format video</u>) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

ACCEPTED	REJECTED	MODIFIED

LAND USE

49. Page 8.1-1, third paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre".

ACCEPTED	REJECTED	MODIFIED

TRAFFIC AND TRANSPORTATION

50. Page 8.2-25. Staff inadvertently left off a provision in TRANS-4 requiring the installation of obstruction lighting. The provision is discussed in the body of Staff's analysis and in the PMPD (p. 8.2-20), but is not reflected in any condition of certification. Staff recommends this provision be added to Trans-4 as follows.

Proposed new bullet e) for **TRANS-4**:

e) Install one, non-blinking red aviation obstruction light on each of the project's two, 145-foot tall HRSG stacks, both ends of the 48-foot tall cooling tower, and at each corner of the power block area.

ACCEPTED	REJECTED	MODIFIED

- 51. Page 8.2-27. Modify TRANS-8 in accordance with the following most recent version presented in Energy Commission Staff's Prehearing Conference Statement. (Ex. 306)
- TRANS-8 Prior to the start of construction, the project owner shall provide a plan to the CPM and the Air Force Plant 42 Commander identifying all reasonable measures the project owner will take to minimize the creation of glint and glare on Air Force Plant 42 airfield traffic including, but not limited to, the following:
 - 1. Ensure the mirrors are (1) brought out of stowage before sunrise and are aligned to catch the first rays of the morning sun; and (2) returned to stow position after sunset. Ensure mirrors are continuously monitored for malfunctions and remain properly aligned with the sun.-Acquire appropriate equipment and establish procedures-to-cover inoperative or malfunctioning mirrors immediately after malfunctions are discovered to prevent the escape of errant reflections. for a timely repositioning of inoperative or malfunctioning mirrors to minimize the probability of glint or glare exposure. Procedures

shall address the mirror trajectory path to a stowage position, or in the event that stowage is not possible, an alternate trajectory to a neutral positioning with respect to glare. Mirror repositioning due to a mirror alignment malfunction shall be accomplished as soon as practical to minimize glint or glare exposure.

- 2. Minimize reflections from bellows shields by using a nonreflective or diffuse material or coating (for example, paint) for the shields.
- 3. Ensure PHPP operator establishes and maintains a communication link with Air Force Plant 42 control tower to ensure that when necessary mirrors are positioned so as not to interfere with critical flight operations.
- 4. Establish procedures to avoid glare when intentionally moving individual collectors off-axis to "dump" power incident on the heat collection elements during periods of high insulation.

If the plant operator needs to dump power and rotate several modules off-axis, the operator shall start with the modules at the north-most and west-most parts of the collector field, which is furthest from the Air Force Plant 42 to the southeast. For each module that is rotated off-axis, the operator shall consider the nearest flight pattern; if it is to the east, then the module shall be rotated to the west, and vice-versa. This rotating shall be done in a manner that minimizes the impact of glare on aircraft (for example, rotating modules furthest from the airport in a direction that is away from flight patterns). The plant operator shall develop and implement a plan to address events in which mirror modules need to be rotated off-axis, such as an event in which it is necessary to dump power. The mirrors' rotational trajectory and final positioning shall ensure the safe movement and positioning of the mirror modules with respect to operational flight patterns to minimize the occurrence and impact of glint or glare events.

In addition, this plan shall include specific provisions for tracking and compiling data involving any and all mirror malfunctions. This data shall include the (1) date, time and location of offending mirror or mirrors; (2) specific adjustments made to correct each mirror or mirrors; (3) date and time specific adjustments were evaluated for effectiveness; and (4) effectiveness of each adjustment. That information shall be included in the monthly compliance reports during construction and in the semi-annual compliance reports during operation. This information will be used to ensure that the offending mirrors are quickly adjusted, thereby having a minimum impact on flight operations. In addition, this information will provide

data for the plant operator to use in monitoring mirror operations and preventing malfunctions.

<u>Verification:</u> Within 30 days prior to the start of construction, the project owner shall submit the required plan to the Air Force Plant 42 Commander for comment and to the CPM for review and approval. The project owner shall also notify the CPM when the required modifications have been made and are available for inspection.

In addition, the project owner shall include in the monthly compliance reports all data concerning malfunctions of any mirrors during construction and initial start-up operation of the plant and in the semi-annual compliance reports during regular operation.

ACCEPTED	REJECTED	MODIFIED

52 Page 8.2-28, bottom of the page, Applicant recommends the following change:

TRANS-9 Throughout the construction and operation of the project, the project owner shall work with the Air Force Plant 42 Commander or his or her designated representative to develop and implement a process for documenting, investigating, evaluating, and resolving all project-related glare complaints.

The project owner or authorized agent shall:

3. If glint or glare is project-related, project owner shall take all feasible measures to reduce glint and glare at its source within 24 hours, or will notify the Commander as soon as possible when such measures can be completed.

ACCEPTED	REJECTED	MODIFIED

SOCIOECONOMICS

53. Page 8.3-1, second paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre.

ACCEPTED	REJECTED	MODIFIED
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54. Page 8.3-4, second paragraph.

"Applicant has proposed to pave roads in the vicinity of the PHPP to generate PM10 emission reduction credits (ERCs) to mitigate impacts to air quality and satisfy state and federal air quality requirements. The Applicant hasoriginally identified ten existing unpaved road segments, totaling approximately 22 miles. Four or five road segments will need to be paved in order to obtain the quantity of offsets needed for air quality purposes. The Applicant has not specified which of the ten existing unpaved road segments would be selected. Condition of Certification AQ-SC19 requires that an Antelope Valley Air Quality Management District (AVAQMD) rule be in place before the project could use PM10 emission reduction credits generated from road paving. (Ex. 301, p. 25.) Due to concerns expressed by the intervenors, Applicant has revised the list of proposed roads for paving as identified in Rebuttal Table-1 and limited the paving proposal to road numbers 2, 4, 6, 7, and 8. (Ex. 146.)"

ACCEPTED	REJECTED	MODIFIED

NOISE AND VIBRATION

55. Page 8.4-1, second paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre.

ACCEPTED	REJECTED	MODIFIED

VISUAL RESOURCES

56. Page 8.5 -1, third paragraph, Applicant recommends the following change:

Strike "377-acre" and insert "333-acre.

ACCEPTED REJECTED MODIFIED

57. Page 8.5-10, first paragraph, Staff recommends

"Visual Resources Figure 4A depicts the view from KOP 2, which is located 12 miles southeast of the project on the north side of Pearlblossom Highway (State Route 138). This view represents the view motorists would see when using the highway. which is located about 2.25 miles northeast of the PHPP on the west side of 30th Street. The view represents the view south-bound motorists would see when using this street."

ACCEPTED	REJECTED	MODIFIED

58. Page 8.5-19. The first sentence under the heading Alternate Route 4 – Partial Underground Transmission Line.

"Alternative Route 4 would consist of 6.75 miles of underground transmission line that would parallel East Avenue \underline{M} to the west from the PHPP to the intersection with Sierra Highway."

ACCEPTED	REJECTED	MODIFIED

59. Page 8.5-25, Findings of Fact #3.

3. The power plant site does not use or have frontage on a segment of road designated as a State Scenic Highway. However, the transmission line will cross Pearlblossom Pearblossom Highway, which is a designated Scenic Highway by the city of Palmdale.

ACCEPTED	REJECTED	MODIFIED

60. Page 8.5 -27, third paragraph, Applicant recommends the following change:

VIS-2 – (E) In the event that color treatments or textures differ substantially from what was proposed by the Applicant in the AFC or in subsequent submittals, oOne set of 11" x 17" color photo simulations at life size scale of the

proposed treatment for project structures, including structures treated during manufacture, from the Key Observation Points; ...

ACCEPTED	REJECTED	MODIFIED

Dated: July ___ 2011at Sacramento, California.

KAREN DOUGLAS
Commissioner and Presiding Member
Member

Palmdale Hybrid AFC Committee

JAMES D. BOYD Vice Chair and Associate

Palmdale Hybrid AFC Committee

Mailed to Lists: 7317, 7318, 7319, 7320