

**DOCKETED**

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<b>Project Title:</b>	Compliance - LUZ SEGS IX and X Projects Application for Certification
<b>TN #:</b>	239942
<b>Document Title:</b>	Staff Analysis of Petition to Amend the Final Commission Decision
<b>Description:</b>	*** THIS DOCUMENT SUPERSEDES TN 239924 ***
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<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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<b>Docketed Date:</b>	10/1/2021



**DATE:** October 1, 2021  
**TO:** Interested Parties  
**FROM:** John Heiser, Compliance Project Manager

**SUBJECT: Solar Energy Generating Systems (SEGS) IX and X – Harper Dry Lake (89-AFC-01C)**

### **STAFF ANALYSIS OF PETITION TO AMEND THE FINAL COMMISSION DECISION**

On September 11, 2020, Luz Solar Partners IX Ltd., (project owner) filed a post-certification petition to amend (PTA) (TN# 234662) the Final Decision (Decision) for the Solar Energy Generating Systems (SEGS) IX and X – Harper Dry Lake (89-AFC-01C), requesting to remove SEGS X from the SEGS IX and X - Harper Lake Decision. This petition would modify the site boundary to exclude the area of SEGS X. Approval would effectively end the California Energy Commission's (CEC)'s jurisdiction over the SEGS X portion of the site. Staff recommends that the CEC approve the PTA requesting the removal of SEGS X from the Decision.

Staff has reviewed the PTA and concludes that the removal of SEGS X from the Decision would not have a significant effect on the environment or cause the project to not comply with applicable laws, ordinances, regulations, and standards (LORS). Staff's analysis identifies the conditions of certification in the SEGS IX and X Decision that would need to be modified to reflect that SEGS X would not be a part of the project.

### **BACKGROUND**

The 500-acre SEGS IX and X project site is located at 43880 Harper Lake Road, 7 miles northeast of Highway 58. SEGS IX is an 80-megawatt (MW) field of parabolic mirrors supplemented by natural gas to produce electricity. Heat from the mirrors is concentrated on tubes of heat transfer fluid (HTF), which is circulated to steam boilers to produce electricity for the Southern California Edison transmission grid. Construction of SEGS X was initiated but the facility was never built and did not become operational. Additional SEGS projects were planned in the immediate vicinity, but were cancelled for various reasons, including the lack of transmission capacity from the area.

### **AMENDMENT REVIEW PROCESS**

The purpose of the CEC's review process is to review and analyze whether the proposed amendment would cause a significant effect on the environment or the project to not

comply with applicable LORS. Staff has concluded that the requested amendment removing SEGS X's conditions of certification from the Decision would have less than significant effects on the environment and would comply with all applicable LORS with the continued implementation of the remaining SEGS IX existing conditions of certification.

For additional information, the CEC's [webpage](#) for this facility, <https://www.energy.ca.gov/powerplant/solar-thermal/segs-ix-x-harper-dry-lake> has a link to [SEGS IX and X Petition to Amend to Remove SEGS X from the Project](#) (TN 234662), accessible through the webpage in the box labeled "Compliance Proceeding." Click on the "[Documents for this Proceeding \(Docket Log\)](#)" option.

This staff analysis is being mailed to the CEC's list of interested persons who have requested service by mail, affected public agencies, and owners and occupants of property within 1,000 feet of the project site. It has also been sent electronically to the SEGS IX and X list serve in accordance with Title 20, California Code of Regulations, section 1209. The list serve is an automated system by which links to information about the facility are emailed to anyone who has subscribed. To subscribe, go to the CEC's webpage for the SEGS X project (linked above), scroll down the right side of the project webpage to the box labeled "Subscribe," and provide the requested contact information.

Staff intends to recommend approval of the SEGS IX and X PTA at the CEC's October 13, 2021, Business Meeting. At the business meeting, any person may present oral or written statements relevant to the proposed PTA.

Any person may comment on the Staff Analysis. Those who wish to comment are asked to submit their comments by 5:00 p.m. on Monday, October 11, 2021.

To use the CEC's electronic commenting feature, go to the CEC's webpage for SEGS IX and X (linked above), click on the "[Comment on this Proceeding](#)" or "Submit e-Comment" link, and follow the instructions in the online form. Be sure to include the facility name in your comments. Once the CEC's Docket Unit files your comments in the docket, you will receive an email with a link to them. Written comments may also be mailed to:

California Energy Commission  
Docket Unit, MS-4  
SEGS IX and X (89-AFC-01C)  
715 P Street  
Sacramento, CA 95814

All comments and materials filed with the Docket Unit will be added to the facility Docket Log and become publicly accessible on the CEC's webpage for the facility. To receive future filings related to this project, go to the CEC's webpage for this facility,

cited above, scroll down the right side of the project's webpage to the box labeled "Subscribe," and provide the requested contact information.

If you have questions about this notice, please contact John Heiser, Compliance Project Manager, at (916) 628-5566 or via email at [John.Heiser@energy.ca.gov](mailto:John.Heiser@energy.ca.gov).

For information on public participation, please contact the Public Advisor, at (916) 654-4489 or (800) 822-6228 (toll-free in California) or send your email to [publicadvisor@energy.ca.gov](mailto:publicadvisor@energy.ca.gov).

News media inquiries should be directed to the Media Office at (916) 654-4989, or by e-mail to [mediaoffice@energy.ca.gov](mailto:mediaoffice@energy.ca.gov).

Date: 10/1/2021

*Elizabeth Huber*

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List Serve: SEGS IX and X – Harper Dry Lake

# **STAFF ANALYSIS**

## **SOLAR ENERGY GENERATING SYSTEMS (SEGS) IX AND X - HARPER DRY LAKE (89-AFC-01C)**

### **PETITION TO AMEND**

## **INTRODUCTION**

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On September 11, 2020, LUZ Solar Partners IX Ltd., (project owner) filed a post-certification petition to amend (PTA) (TN# 234662) the Final Decision (Decision) for the Solar Energy Generating Systems (SEGS) IX and X – Harper Dry Lake (89-AFC-01C), requesting to remove SEGS X from the SEGS IX and X - Harper Lake Decision. This petition would modify the site boundary to exclude the area of SEGS X and remove all references to SEGS X in the conditions of certification in the Decision.

The 500-acre SEGS IX and SEGS X site is located at 43880 Harper Lake Road, 7 miles northeast of Highway 58 near Hinkley, California, in unincorporated San Bernardino County. SEGS X was licensed by the California Energy Commission (CEC) along with SEGS IX on February 14, 1990. Minimal construction was begun but never finished on SEGS X before construction was halted in 1991. SEGS IX was constructed and is an operating solar thermal power plant that uses parabolic mirrors to concentrate solar energy to heat fluid, which is used to create steam to generate up to 80 megawatts (MW) of solar thermal electricity for the Southern California Edison transmission grid. SEGS IX went online in October 1990.

## **DESCRIPTION OF PROPOSED PETITION**

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The proposed PTA of the SEGS IX and X Decision would be limited to the removal of the area of SEGS X from the project and modification of the conditions of certification in the Decision to remove all references to SEGS X. The project owner does not propose any demolition or equipment removal.

All existing equipment and facilities on the SEGS X site would remain in place for potential future use of the site. These include:

- Five (5) unfinished power block foundations,
- Concrete tracker foundations located on 100 acres of the southwest portion of the site,
- A few smaller unfinished concrete foundations,
- Miscellaneous construction debris including wooden crates, concrete forms, and rebar found in the power block area,
- Wood electrical poles (some carrying 34.5 kilovolt [kV] live conductors), and
- Site perimeter fencing and desert tortoise fencing.

## **NECESSITY FOR BOUNDARY CHANGE AND LICENSE AMENDMENT**

Sections 1769 (a)(1)(B) and 1769 (a)(1)(C) of the CEC Siting Regulations require a discussion of the necessity for the proposed project change and a description of any new information or change in circumstances that necessitated the change.

The proposed amendment is necessary to remove SEGS X from the CEC license since SEGS IX is currently operating under the CEC license, but construction of SEGS X was suspended in 1991 and the project owner does not intend to move forward with construction and operation of the solar thermal facility as licensed. Additionally, the removal of SEGS X from the license is necessary so that the site may be used in the future as a potential solar photovoltaic (PV) and battery storage project site. Future development of the site for this purpose would be under the authority of the County of San Bernardino.

### SEGS IX and X Project Location



### STAFF’S ANALYSIS OF THE PETITION TO AMEND

The SEGS X site will remain in an “as-is” condition until such time the site is permitted for future use as a solar PV project. No physical changes would occur as part of this petition. CEC staff concludes that removal of SEGS X from the project would not result in a significant effect on the environment or cause the project to not comply with applicable LORS.

Staff's conclusions for each technical or environmental area are shown in **Summary Table 1** on the following page and summarized below the table. **Summary Table 1**

Technical Areas Reviewed	Technical Area Not Affected	New Conditions of Certification (COCs) Proposed	Conforms with Applicable LORS	CEQA			
				Potentially Significant Impact	Less Than Significant Impact with New COCs	Less Than Significant Impact	No Impact
Air Quality and Greenhouse Gases	X		X				X
Biological Resources			X				X
Cultural and Tribal Cultural Resources			X				X
Efficiency and Reliability	X						X
Facility Design	X						X
Geology and Paleontological Resources			X				X
Hazardous Materials Management	X						X
Land Use			X				X
Noise	X						X
Public Health			X				X
Socioeconomics			X				X
Soil and Water Resources			X				X
Transportation			X				X
Transmission Line Safety and Nuisance			X				X
Transmission System Engineering	X						X
Visual Resources			X				X
Waste Management			X				X
Worker Safety and Fire Protection			X				X



**Air Quality, Greenhouse Gases (GHG), and Public Health.** There will not be demolition or equipment removal activities associated with the removal of SEGS X from the project license. All existing equipment and facilities on the SEGS X site will remain in place for potential future use. Site restoration is not needed. SEGS IX will continue to operate as licensed, and the removal of SEGS X will have no impact on SEGS IX operational activities. Therefore, the air quality, public health and GHG impacts from the removal of SEGS X would be less than significant and the project would continue to conform with the applicable LORS related to air quality, public health and GHG.

**Biological Resources.** The proposed amendment would have no significant impacts on biological resources and the project would remain in compliance with applicable LORS for biological resources. Permanent habitat impacts of 336 acres were previously mitigated through a purchase of 1,680 acres (5:1 ratio) of dedicated mitigation land for both Mojave ground squirrel and desert tortoise. The SEGS X chain link fence and associated tortoise exclusion fencing, which totals approximately 26,000 linear feet, was installed at the start of construction of SEGS X in the late 1980s (Terra-Gen 2021c). It was sporadically maintained and several openings were found along the fence, as well as several areas where the tortoise fencing was damaged, during inspections in 2020 (Terra-Gen 2021b). The contiguous SEGS VIII and IX tortoise exclusion fencing is regularly inspected and maintained as part of the approved Biological Resources Mitigation Implementation Plan.

The project owner provided the results of a focused desert tortoise survey of the SEGS X site completed in May 2020. Desert tortoise were determined to be absent on the project site based on results of the desert tortoise focused surveys (Terra-Gen 2021d). In the summer of 2020, following the negative results of the desert tortoise focused surveys, the chain link fence and desert tortoise exclusion fence were repaired and reinforced, as needed, to prevent desert tortoises from entering the fenced site in the future (Terra-Gen 2021b). There are currently no holes or gaps in the fencing around SEGS X nor around SEGS VIII & IX. (Terra-Gen 2021c).

**Cultural and Tribal Cultural Resources.** The removal of SEGS X would have no impact on cultural or tribal cultural resources. Although four single-item archaeological finds have been recorded on the SEGS X project site, none of these qualifies as a historical resource or a unique archaeological resource for the purposes of California Environmental Quality Act (CEQA). A review of ethnographic literature failed to identify tribal cultural resources within the SEGS X project site (Bean and Smith 1978; Beattie 1953; Benedict 1924, 1926; Kroeber 1976, pp. 611, 614–615; Strong 1929, pp. 5–35). There is no ground disturbance associated with this PTA, and therefore no known or potentially buried, as-yet unknown cultural or tribal cultural resources would be impacted.

**Facility Design.** There would be no construction as the result of this amendment request, and thus, there would be no impact on Facility Design.

**Geology and Paleontological Resources.** The removal of SEGS X from the project would not result in any ground disturbing, therefore, staff concludes the proposed modification to the project would not result in significant paleontological resource impacts or cause the project to not comply with applicable LORS.

**Land Use.** The project property has a General Plan land use designation of RL, Rural Living, which is consistent with the Renewable Energy and Conservation Element (RECE) of the County of San Bernardino General Plan. The proposed removal of SEGS X from the Decision would not result in any impact to the land or a change to the land use designations associated with the project site. The project would remain in compliance with applicable LORS for land use.

CEC staff confirmed with San Bernardino County Land Use Services Department staff that as the SEGS X site is privately owned, the existing above and below ground foundations, structures, facilities, and utilities on the SEGS X site may remain in place as long as these features do not present a public nuisance, public health and safety hazard, or exhibit a recognized environmental condition requiring investigation or remediation. Maintenance and security of the property would continue to be the responsibility of the project owner.

**Socioeconomics.** The removal of SEGS X from the SEGS IX and X Decision would not require any construction contractors, new employees, or operations workers. Therefore, there would be no impacts to public facilities and services, schools, or housing needs as a result of the proposed change. The project would remain in compliance with applicable LORS for socioeconomics.

**Soil and Water Resources.** The removal of SEGS X from the project would not create any soil disturbance, therefore, staff concludes the proposed modification to the project would not result in significant impacts to soil or water resources, or cause the project to not comply with applicable LORS.

**Transportation.** The removal of SEGS X from the SEGS IX and X Decision would not generate any vehicle trips that could conflict with CEQA Guidelines section 15064.3, subdivision (b), with regards to vehicle miles traveled. Additionally, the removal of SEGS X from the Decision would not conflict with LORS addressing the circulation system, substantially increase hazards, or result in inadequate emergency access.

**Visual Resources.** With the proposed removal of SEGS X from the Decision, the SEGS X site would remain in its existing condition. Therefore, there would be no impact on a scenic vista or scenic resources, degradation of the existing visual character or quality of public views, or new source of light or glare. The project would remain in compliance with applicable LORS for visual resources.

**Waste Management.** The project owner proposes to leave the SEGS X portion of the site in an “as is” condition, thus there would be no physical decommissioning of the site. Thus, there would be no generation of nonhazardous wastes.

**Worker Safety and Fire Protection.** The removal of SEGS X from the project would not require any demolition since the existing above and below ground foundations, structures, facilities and utilities on the SEGS X site would remain in place for potential future use (LSA 2020). To ensure the features that will remain in place will not present any public health and safety concerns, the existing SEGS X site boundary fence will remain in place and will be inspected weekly by the project owner. Therefore, the removal of SEGS X would not have a significant impact on worker safety and the changes are administrative in nature.

**Environmental Justice.** The petition to amend would not result in physical changes to the environment, thus there would be no potential environmental or health and safety risks including from air quality emissions nor the potential to cause disproportionate impacts on an environmental justice community.

## **STAFF RECOMMENDATIONS AND CONCLUSIONS**

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Staff has reviewed the petition to amend and determined there are no significant impacts to the environment or the public’s health and safety. Therefore, staff recommends approval of this PTA to move the SEGS IX and X boundary allowing SEGS X to be taken off the original CEC-approved license.

## REFERENCES

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- CEC 1989 – California Energy Commission Final Staff Assessment for Luz Development & Finance Corporation's Solar Electric Generating Systems (SEGS) IX & X, Harper Lake San Bernardino County, California, November 1989, Docket No. 89-AFC-01.
- CEC 1990 – California Energy Commission Final Decision for Luz Development & Finance Corporation's Solar Electric Generating Systems (SEGS) IX & X, Harper Lake San Bernardino County, California, February 1990, Docket No. 89-AFC-01.
- Terra-Gen 2021a – Terra-Gen, Inc. / Amanda Johnson, Applicant Consultant (tn 234662). *SEGS IX-X Petition to Amend to Remove SEGS X from Project, dated, September 2020*. Submitted to CEC/Dockets on 09/11/2020.
- Terra-Gen 2021b – Terra-Gen, Inc. / Amanda Johnson, Applicant Consultant (tn 238969). *Record of Conversation regarding desert tortoise fencing SEGS IX-X Petition to Amend to Remove SEGS X from Project, dated, June 29, 2021*. Submitted to CEC/Dockets on 07/22/2021.
- Terra-Gen 2021c – Terra-Gen, Inc.(tn239181). Response to Data Request. *SEGS IX-X Petition to Amend to Remove SEGS X from Project, dated, November 18, 2020*. Submitted to CEC/Dockets on 08/04/2021.
- Terra-Gen 2021d – Terra-Gen, Inc. / Amanda Johnson, Applicant Consultant (tn 238183). *Record of Conversation regarding SEGS X desert tortoise survey results SEGS IX-X Petition to Amend to Remove SEGS X from Project, dated, July 12, 2021*. Submitted to CEC/Dockets on 08/04/2021.
- Bean and Smith 1978—Lowell J. Bean and Charles R. Smith, Serrano. In *California*, edited by Robert F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution, 1978.
- Beattie 1953—Helen P. Beattie, Indians of San Bernardino Valley and Vicinity. *The Historical Society of Southern California Quarterly* 35(3):239–264.
- Benedict 1924—Ruth F. Benedict, A Brief Sketch of Serrano Culture. *American Anthropologist* 26(3):366–392.
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CEC 1990—California Energy Commission, *Commission Decision, Application for Certification for LUZ Engineering Corporation LUZ SEGS IX & X Projects (Harper Lake)*. Sacramento, California. P800-90-002. February 1990.

Hampson 1988—R. Paul Hampson, *Cultural Resource Investigation: Solar Energy Generating System (SEGS) VIII-XII, Harper Lake Area, San Bernardino County, California*. Confidential report prepared for Luz Development and Finance Corporation, Los Angeles, CA. Prepared by Greenwood and Associates, Pacific Palisades, CA. December 1, 1988.

Hampson and Goodman 1988—R. P. Hampson and J. Goodman, Isolate Record for A208-14/IA2084-14 (LD-5). Confidential record prepared by Greenwood and Associates, Pacific Palisades, CA. September 9, 1988.

Hampson and Swanson 1989—R. Paul Hampson and Mark T. Swanson, *Cultural Resource Investigation: Five Sections West of Harper Lake, San Bernardino County*. Confidential report prepared for Luz Development and Finance Corporation, Los Angeles, CA. Prepared by Greenwood and Associates, Pacific Palisades, CA. August 1, 1989.

Kroeber 1976—A. L. Kroeber, *Handbook of the Indians of California*. Reprint. Original published in 1925 as Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. New York: Dover Publications, 1976.

Strong 1929—William D. Strong, Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26:1–358.

Swanson 1988—Mark T. Swanson, *History of the Harper Lake Community*. Confidential report prepared for Luz Development and Finance Corporation, Los Angeles, CA. Prepared by Greenwood and Associates, Pacific Palisades, CA. September 26, 1988.

## **AMENDED CONDITIONS OF CERTIFICATION**

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Based on the analysis above, CEC staff has modified the conditions of certification in the license for the SEGS IX and X to exclude all references to SEGS X – Harper Dry Lake Decision Decision) (Terra-Gen 2021a) in relation to the technical areas of air quality, public health and Greenhouse Gases, Biological Resources, Cultural, Resources, Paleontological Resources, Land Use, Socioeconomics, Soil and Water Resources, Transportation, Visual Resources, Waste Management, Worker Safety and Fire Protection. The purpose of this analysis is to determine whether the removal of SEGS X from the decision would avoid significant impacts on air quality, public health and Greenhouse Gases, Biological Resources, Cultural, Resources, Paleontological Resources, Land Use, Socioeconomics, Soil and Water Resources, Transportation, Visual Resources, Waste Management, Worker Safety and Fire Protection and comply with all applicable and current laws, ordinances, regulations, and standards (LORS), as required by the Decision.

The modifications to the conditions of certification are included below. **Bold underline** indicates new language. ~~Strikethrough~~ indicates deleted language.

### **AIR QUALITY, PUBLIC HEALTH AND GREENHOUSE GASES**

Removal of SEGS X from the license will result in the changes in the following conditions of certification (COCs): **AQ 1-5, AQ 1-6, AQ 1-8, AQ 1-11** (Verification Only), **AQ 1-12, AQ 1-16, AQ 1-17, AQ 1-18** (Verification Only), **AQ 1-20** (Verification Only), **AQ 1-21** (Verification Only), **AQ 1-26** (Verification Only), **AQ 1-30** (Verification Only), **AQ 1-32, AQ 1-34, AQ 1-35, AQ 1-36, AQ 1-38, AQ 1-40, AQ 1-41, PH-3** (Delete Condition), **PH-4**, and **PH-5**.

#### **Air Quality**

1-5 After particulate matter compliance testing of the SEGS IX and ~~X~~ heaters as required by Condition **1-28**, the California Energy **Commission** (CEC) **Compliance Project Manager** (CPM) may revise the **Particulate Matter** (PM) emission limit of the SEGS IX and ~~X~~ heaters in Condition **1-24** downward to a figure mutually agreed upon by ~~the~~ **project owner** and CEC staff.

**Verification:** Within 60 days of submittal of the compliance source testing results to the CPM, ~~the~~ **project owner** and the CEC Staff shall hold a workshop to agree upon a revised PM emission figure for Condition **1-24**.

1-6 a. Based on the original PM permit level contained in Condition **1-24** or a new lower figure described in Condition **1-5**, the fugitive dust suppression needed to fully mitigate the fine particle emission from the **heat transfer fluid** (HTF) heaters shall be obtained by treating additional unpaved road surfaces other than the road surfaces described

above in Condition **1-4**. The additional length of road treated with dust suppressant like that specified in Condition **1-4** shall be determined based on three **vehicle miles traveled** (VMT) per day for every pound per day permitted PM emissions for the SEGS Units IX & X HTF heaters. The first road for dust treatment under this condition shall be any remaining portion of Helendale Road from Highway 58 to Helendale that is not required to be treated in compliance with Condition **1-4**. Luz **Project owner**, with the concurrence of CEC staff, will determine the identity and length of any additional road necessary for fugitive dust treatment. In determining the length of road to be treated, new traffic generated by the Luz project, its employees, dependents and visitors shall not be counted.

b. The length of road will be treated within 30 days after Luz **project owner** and CEC staff has determined what length of road to be treated. Luz **Project owner** shall then follow the requirements of Condition 1-4b for the annual and regular maintenance of this section of road.

**Verification:** Within 30 days after a revised PM level for the heaters is incorporated into the Commission Decision, CEC Staff will notify Luz **project owner** of the length of unpaved Harper Lake area roads that will need to be treated.

For Condition **1-6b**, refer to Verification for Condition **1-4**.

**1-8** The SEGS IX and X cooling towers drift rate (determined by these compliance tests as defined below) shall not exceed 0.0005 percent based on a maximum design circulation rate of 56,100 gallons per minute (**GPM**).

A test procedure plan for particulate testing must be submitted to the San Bernardino County Air Pollution Control District (SBCAPCD) and the compliance project manager (CPM) for approval thirty (30) days prior to the scheduled tests.

Within 60 days after achieving the initial startup of the heater assembly at both SEGS IX and X, Luz **project owner** shall conduct a compliance test in accordance with test procedures and protocols approved by the SBCAPCD and CEC CPM.

Luz **Project owner** shall furnish the SBCAPCD and the CEC CPM the written results of such compliance test within 45 days after testing.

Luz **Project owner** shall provide written notice of the compliance test to the SBCAPCD and CEC CPM 10 days prior to the test so that an observer(s) may be present.

The compliance test will include, but will not be limited to, a test of selected cells for:

- Drift rate, as percent of water circulation rate,
- Water quality, as **total dissolved solids** (TDS) in **parts per million by volume** (ppmv) and chemical analysis,
- Emission rates, in pounds/hour for PM and PM10.

✚ **Project owner** shall also conduct compliance tests every five years to verify the maintenance of the drift and emission rates.

**Verification:** ✚ **Project owner** shall comply with all requirements of the above condition and provide written results of such compliance source tests to the SBCAPCD and the CEC CPM within 45 days after testing.

**1-11** Applicable District Rules. ✚ **Project owner** is required to meet and comply with all applicable rules and regulations of the San Bernardino County Air Pollution Control District (SBCAPCD). Concurrent with filing a petition for a variance to the SBCAPCD Hearing Board, excluding petitions for variance per SBCAPCD Rule 430(c), ✚ **project owner** shall submit that petition for CPM review and approval.

**Verification:** In the Annual Compliance Report, ✚ **project owner** shall provide the CPM a statement attested to by the responsible ✚ **project owner** agent that the SEGS IX ~~and X~~ project is in compliance with all air quality terms and conditions of certification.

✚ **Project owner** shall also submit to the CPM a summary of all ✚ **project owner** SBCAPCD correspondence relative to any non-compliance or potential non-compliance if not otherwise provided.

✚ **Project owner** shall submit to the CPM all petitions for variances as prescribed by Condition **1-11**.

**1-12** Other Applicable Regulations. The **project owner** and operator of SEGS IX ~~and X~~ shall assure that the construction and operation of the proposed stationary source SEGS IX ~~and X~~ is in compliance with all applicable provisions of federal (specifically, but not limited to, 40 **Code of Federal Regulations** (CFR) Section 60.7, 40 CFR Section 60.8, 40 CFR Section 60.13, 40 CFR Section 60.47a, 40 CFR Section 60.48a and 40 CFR Section 60.49a) and state air quality regulations, as well as those of the SBCAPCD.

**Verification:** In the Annual Compliance Report, ✚ **project owner** shall provide the CPM status reports for the Code of Federal Regulation Requirements discussed



above.

1-16 ~~the~~ **Project owner** shall apply water as a dust palliative to the areas of ground in between the rows of solar arrays during the normal mirror washing activities.

**Verification:** ~~the~~ **Project owner** shall make the SEGS IX ~~and X~~ site available for inspection by the SBCAPCD, **California Air Resources Board** (CARB), and CEC staff.

1-17 Notification of Commencement of Construction and Startup. ~~the~~ **Project owner** must notify the SBCAPCD Executive Officer and the CPM in writing of the anticipated date of initial start-up (as defined in 40 CRF 60.2{o}) of each functional subsystem or facility at SEGS IX ~~and X~~ and the actual date of commencement of construction and start-up.

**Verification:** ~~the~~ **Project owner** shall submit copies in the Monthly Construction Reports of correspondence between ~~the~~ **project owner** and the SBCAPCD Executive Officer of the anticipated date of initial start-up not less than thirty (30) days prior to such date.

~~the~~ **Project owner** shall also notify the CPM in the Monthly Construction Reports of the actual dates of commencement of construction and start-up within fifteen (15) days after such dates.

1-18 Facilities Operation. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of the Commission Decision's ~~(Decision)~~ Conditions of Certification **(COCs)** shall, at all times, be maintained in good working order and operated as efficiently as possible consistent with minimum air pollutant emissions, and with the levels specified herein.

**Verification:** ~~the~~ **Project owner** shall make the SEGS IX ~~and X~~ site available for inspection by the SBCAPCD, CARB, and CEC staff.

1-20 Right to Entry. The Executive Officer of the SBCAPCD, the Executive Officer of the California Air Resources Board **(CARB)**, the Administrator of the Environmental Protection Agency **(EPA)**, and the Executive Officer of the California Energy Commission **(CEC)** and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

- a. To enter upon the premises where the source is located or any location where records are required to be kept under the terms and conditions of the Commission Decision's Conditions of Certification or Permit to Operate; and

- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of the Commission Decision's Conditions of Certification, or Permit to Operate; and
- c. To inspect any equipment, operation, or method required in the Commission Decision's Conditions of Certification, or Permit to Operate; and
- d. To test for or otherwise sample emissions from the source.

**Verification:** ~~LUZ~~ **Project owner** shall make the SEGS IX ~~and X~~ site and records available for inspection by the SBCAPCD, CARB, EPA and CEC during both construction and operation of the project.

**1-21** Transfer of Ownership. In the event of any changes in control or ownership of facilities to be constructed or modified, the Commission Decision/Permit to Operate shall be binding on all subsequent owners and operators. ~~LUZ~~ **Project owner** shall notify the succeeding owners and operators of the existence of the Commission Decision/Permit to Operate and its conditions by letter, with a copy forwarded to the SBCAPCD and the CPM.

**Verification:** If control or ownership of SEGS IX ~~and or SEGS X~~ is transferred to new owners or operators, ~~LUZ~~ **project owner** shall notify the CPM in writing within 10 days of that change of ownership or operation responsibility. ~~LUZ~~ **Project owner** shall forward copies of the notification to succeeding owners and include the appropriate Commission Decision/Permit to Operate correspondence to the SBCAPCD and the CPM.

**1-26** Opacity Limit. Prior to the date of startup and thereafter, individual pieces of fuel burning equipment shall not discharge, or cause the discharge into the atmosphere of any emissions which exhibit an opacity of 10 percent or greater for any period or periods aggregating more than six minutes in any one hour, or exhibit an opacity of 20 percent or greater for any period or periods aggregating more than three minutes in any one hour.

**Verification:** ~~LUZ~~ **Project owner** shall provide the SBCAPCD and the CEC staff access to the SEGS IX ~~and X~~ project site to verify/monitor visible emissions.

**1-30** Operating Logs. ~~LUZ~~ **Project owner** is required to maintain the appropriate daily operating logs and charts at the site, and retain them for a period of not less than one year, and to make available such records for inspection by the SBCAPCD, CARB and CEC staff on request. Logs shall provide all information as required by the monitoring plan of Condition **1-29**.

**Verification:** ~~LUZ~~ **Project owner** shall make the daily operating logs

available at the site of SEGS IX ~~and X~~ for inspection by the SBCAPCD, CARB, and CEC staff.

**1-32** The control of fugitive dust during construction and operation shall be in compliance with SBCAPCD Rules 401, 402 and 403 as required. ~~ŁŁŁ~~ **project owner** is required to submit a dust control plan for the construction and operational phases. This plan must be approved by the SBCAPCD's Executive Officer prior to the initiation of any construction or operation of SEGS IX ~~and X~~.

**Verification:** Refer to Condition **1-20**. ~~ŁŁŁ~~ **Project owner** shall submit the dust control plan described above to the SBCAPCD and CEC CPM and receive approval from the SBCAPCD prior to commencement of construction of SEGS IX ~~and X~~.

**1-34** Control of Unregulated Pollutants. Hexavalent chromium compounds, used as corrosion inhibitors, shall not be used in the cooling tower water circulating system. The heat transfer fluid (HTF) which is an eutectic mixture of biphenyl (26.5 percent) and diphenyl oxide (73.5 percent) may decompose to yield benzene, a listed Toxic Air Contaminant (TAC). Since leaks, spills and venting of the ullage HTF tank can release the HTF into the atmosphere, appropriate precautionary measures and prompt response, as required in the "Safety Plan" developed by ~~ŁŁŁ~~ **project owner** and approved by the SBCAPCD and the CPM, shall be strictly adhered to.

In addition, because the identification of toxic or hazardous substances is an ongoing process, new control strategies and regulations are being developed and implemented which may impact existing permitted facilities. Should such substances be identified as emissions from the SEGS IX ~~and X~~ facilities, the SBCAPCD may, and the CPM will require that ~~ŁŁŁ~~ **project owner** provide additional analysis, data, or demonstration of compliance with such applicable regulations.

**Verification:** For verification of cooling tower corrosion inhibitor compounds, refer to **Public Health Condition 6**.

For HTF containment, refer to **Public Health Conditions 1** and **2**. If current non-criteria substances become regulated as toxic or hazardous substances and are used or emitted by ~~ŁŁŁ~~ **project owner**, ~~ŁŁŁ~~ **project owner** shall submit to the CPM a plan demonstrating how compliance will be achieved and maintained with such regulations.

~~ŁŁŁ~~ **Project owner** shall submit this plan concurrent with the first required submission to any governmental agency and within the time specified in any new toxic substance control regulations. This plan is subject to SBCAPCD approval.

**1-35** Permit to Operate. Approval, denial, or modification of Permits to Operate for the SEGS IX ~~and X~~ equipment will be made after verification that installed equipment is the same or equivalent equipment to that which was evaluated and approved in the SBCAPCD **Determination of Compliance** (DOC) and the Commission Decision.

In addition, appropriate source testing is required to determine whether the approved installed equipment can be operated in compliance with the Rules and Regulations of the San Bernardino County Air Pollution Control District, and the General and Specific conditions specified in the SBCAPCD DOC.

**Verification:** ~~the~~ **Project owner** shall submit copies of the PTO for SEGS IX ~~and X~~ to the CPM within 15 days after receipt of the **Permit to Operate** (PTO) from the SBCAPCD.

**1-36** The **oxides of nitrogen** (NOx) emission controls of the Alzeta Pyrocore burners for SEGS IX ~~and the Coen burners and flue gas recirculation for SEGS X~~ shall be fully operational upon startup of the heaters and shall be enforced by conditions including, but not limited to, the emission limits of Condition **1-37**.

**Verification:** Refer to verification to Condition **1-23**.

**1-38** Missing CEM data. For any period during which the heaters at SEGS IX ~~and X~~ have combusted fuel, but for which the CEM system was not operative, NOx emissions shall be determined using the previous 24 hours of emissions data during which the heaters were operational to calculate an average emissions concentration (in pounds/million BTU). This average rate, and fuel use data for the period of missing data, shall be used to calculate the emissions for that period. The above section does not provide defense for any violations of the 40 CFR 60 requirements.

**Verification:** ~~the~~ **project owner** shall submit quarterly reports that include the data required above to the SBCAPCD, and copies of these quarterly reports in the Annual Compliance Report to the CPM.

**1-40** Prevention of Significant Deterioration (PSD) regulations. EPA has exempted the SEGS VIII, **and IX** ~~and X~~ projects based on information provided by ~~the~~ **project owner** and the Determination of Compliance issued by the SBCAPCD. Any change in equipment or conditions that increases the project's potential to emit above the applicable PSD threshold (100 tons per year) will require a full review of the source as though construction has not yet commenced on the source.

Should EPA determine, in the future, based on new or revised information,

that the SEGS VIII, **and** IX ~~and X~~ projects are a major source or major modification, then the owners of the SEGS IX ~~and X~~ project will have to immediately apply for a federal PSD permit. All requirements of the PSD regulations will have to be satisfied even though construction may be complete. In the event, for example, that vendor guaranteed emissions rates are not achieved, it will still be Luz **project owner** responsibility to comply with all PSD regulations or continued operation of SEGS IX ~~and X~~ prior to receiving a final PSD permit may subject the SEGS IX ~~and X~~ project to federal enforcement action pursuant to Section 113 of the Clean Air Act.

**Verification:** In the event that there is alteration of any equipment at SEGS IX ~~and X~~ with the potential to result in changes in air emission rates, refer to verification to Condition **1-13**. If Luz **project owner** fails to meet the 100 tons per year PSD limit, Luz **project owner** shall notify the EPA, SBCAPCD and CEC CPM within 30 days after the rolling annual average period applicable to the 100 ton limit.

**1-41** Luz **Project owner** shall not fire or operate the SEGS Units IX ~~or X~~ HTF heaters until the cause of the SEGS Unit VIII January 10, 1990 accident has been determined and design deficiencies, if any, have been corrected. LUZ must obtain in writing concurrence from the San Bernardino County Fire Department and the CEC CPM that design deficiencies, if any, have been corrected and that the burners meet all safety standards. Luz **Project owner** then must request in writing and receive in writing permission from the SBCAPCD prior to any operation or firing of the heaters.

**Verification:** In the weekly activity reports, Luz **project owner** shall submit all documentation between Luz **project owner** and the San Bernardino County Fire Department and between Luz **project owner** and the SBCAPCD concerning the SEGS Unit VIII fire, design changes (if any), and the operational status of the SEGS Unit IX ~~and X~~ heaters.

## **Public Health**

**PH-3. Delete.** ~~Luz shall use redundant design for the following SEGS X critical safety systems, including redundant sensors, PLCs, and actuated devices, and Luz shall incorporate any CEC staff recommendations for firing rate/HTF flow control system modifications based on CEC staff's review:~~

~~Pilot Gas Pressure Purpose: Prevention of low pilot gas pressure possible failed "light off".~~

~~Instruments: Pressure switch low, connected to the PLC.~~

~~Location: Pilot gas header.~~

~~Set point: Trip at 2 psig.~~

~~Operation: Close gas valves.~~

Flame Detector Purpose: Detection of burner "flame-out".

Instruments: Two flame detectors per burner for a total of eight per heater, connected to the PLC.

Location: On the side walls of the fire box.

Set point: Both flame detectors sense loss of flame.

Operation: Close the gas valves.

Smoke Detector Purpose: Detection of smoke in air preheater ductwork.

Instruments: One smoke detector per heater, connected to the PLC. Location: In flue gas duct, at the outlet of the air preheater.

Set point: "Smoke".

Operation: Close the gas valves. Stop the air fans and close respective dampers. Closes the main inlet HTF valve.

Box Temperature Purpose: Prevention of high fire box temperature.

Instruments: Temperature transmitter at each fire boxes top section, two per heater, connected to the PLC.

Location: On fire box top section.

Set point: 1300 F (1)

Operation: Close the gas valves.

Combustibles in Flue Gas Purpose: Prevention of pilot gas ignition if combustibles are in the flue gas.

Instruments: Combustion analyzers in the flue gas duct at each of the 4 heaters connected to the respective PLC's.

Location: Flue gas duct prior to the ID fan.

Set point: 0 ppm

Operation: Close the gas valves

Firing Rate Limitation (Gas Valve Limitation) Purpose: Determines the maximum gas pressure for any given HTF flow. This limits the fuel to the burner and prevents a condition where the HTF might overheat.

Instruments: Pressure (on gas header) and flow transmitters (on HTF header), connected to DCS. Fuel gas control valve connected to the DCS.

Location: ON the gas header to the burners and on the HTF inlet header.

Set point: From 0.5 to 10 Psig corresponding with an HTF flow of 10 to 100 percent.

Operation: Based on the HTF flow, the DCS calculates the maximum allowable gas pressure.

Low Flow Purpose: Detection of low HTF flow.

Instruments: Redundant flow sensors connected to redundant PLCs.

Location: At heater outlet.

Set point: 30% HTF flow.

Operation: Close gas supply valve.

**Verification:** ~~Luz shall inform the CEC CPM when final P and ID diagrams are available for the proposed heaters. These shall be available for CEC staff review and comment no later than 90 days prior to heater operation.~~

**PH-4.** Sixty days prior to operation of SEGS IX ~~and X~~ Luz **project owner** shall develop and implement a personal protective equipment program and a respiratory protection plan for the operation of the SEGS IX ~~and X~~ facility, which contains sufficient detail for review by **California Division of Occupational Safety and Health** (Cal/OSHA) and the CEC CPM. ~~Luz~~ **Project owner** shall revise these plans as necessary based on comments made by Cal/OSHA and the CEC CPM and shall submit the revised plan for approval by the CEC CPM, ~~Luz~~ **project owner** shall also purchase and install all required equipment and conduct all required training of personnel.

**Verification:** Sixty days prior to commencement of operation at SEGS IX ~~and X~~, ~~Luz~~ **project owner** shall:

1. Provide a copy of a detailed personnel protective equipment program and a respiratory protection plan, applicable to the operation of SEGS IX ~~and X~~, to the CEC CPM and Cal/OSHA;
2. forward a copy of comments made by Cal/OSHA to the CEC CPM; and,
3. submit modified plans to the CEC CPM which reflect all CEC and Cal/OSHA comments.

**PH-5.** ~~Luz~~ **Project owner** shall, at all times, ensure that protective equipment and procedures described in the personnel protective equipment program and the respiratory protection plan, or recommended in material safety data sheets, be followed when handling materials listed in **Tables 7-1** and **7-2** of the Safety Plan for the Harper Lake facilities. All procedures and equipment necessary to comply with vendor recommendations shall be in place prior to construction of SEGS IX ~~and X~~.

**Verification:** ~~Luz~~ **Project owner** shall provide to the CEC CPM a list of equipment purchased, and specific procedures that will be used in handling of all the materials listed in **Tables 7-1** and **7-2** of the Safety Plan, prior to construction of SEGS IX ~~and X~~.

~~Luz~~ **Project owner** shall notify the CEC CPM in the Weekly Activity Report when installed equipment is ready for inspection.

## **Biological Resources**

- 1 ~~Luz~~ **Project owner** shall enter into an agreement with the California Department of Fish and Game **Wildlife** (CDFW) in which ~~Luz~~ **project owner** will provide for the purchase, enhancement, and management of suitable

Mohave ground squirrel habitat to compensate for that eliminated or subject to long-term disturbance as a result of construction of SEGS IX & X and any ancillary facilities. Such compensatory lands are to be at least equivalent to that originally found on the SEGS sites in their ability to support Mohave ground squirrel populations and are to be acquired at a ratio of 5 acres for each acre permanently lost and 2 acres for each acre temporarily disturbed on non-cultivated land. Habitat shall be dedicated for this purpose in perpetuity. Funds to purchase habitat shall include sufficient funds to undertake enhancement measures deemed appropriate to the site by the ~~CDFG~~ **CDFW** (such as fencing, trash removal, reseeding) and to provide for continued management (e.g., patrolling) and maintenance activities (e.g., fence mending) in perpetuity. Such management and maintenance shall be provided for by means of an endowment of principal in an amount sufficient to generate annual income at reasonably achievable interest rates or yields sufficient to provide for these activities.

~~Łuz~~ **Project owner** shall also provide for the purchase, enhancement, and management of off-site habitat for desert tortoises at a ratio of 5 acres for each acre permanently lost, 2 acres for each acre temporarily disturbed on non-cultivated land (see above discussion for the Mohave ground squirrel). This habitat shall be dedicated for this purpose in perpetuity.

Staff estimates there will be 336 acres of permanent habitat loss. Temporary habitat loss for both the Mohave ground squirrel and the desert tortoise shall be monitored throughout project construction and assessed at an appropriate time that will be determined by the CEC Compliance Program Manager (CPM) in consultation with the ~~CDFG~~ **CDFW**. Staff believes it will be feasible to identify habitats for compensation which will satisfy requirements for both the Mohave ground squirrel and the desert tortoise. In cases where habitat is to satisfy the needs of both species, the amount shall be based on the animal with the greatest need as specified by the ~~CDFG~~ **CDFW** and provided for in the agreement between the ~~CDFG~~ **CDFW** and ~~Łuz~~ **project owner**, but subject to Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service (USFWS) concurrence.

The habitat shall be dedicated to the purpose of supporting Mohave ground squirrel, desert tortoise and other native wildlife and plants in perpetuity and the title of ownership of all suitable habitat parcels shall be transferred to the ~~CDFG~~ **CDFW** according to the schedule adopted in the agreement. ~~Łuz~~ **Project owner** shall set aside funds for the enhancement, management, and maintenance of the habitat purchased.

Management and maintenance funding is to be guaranteed in perpetuity.



In determining the necessary amount of funding, the following costs shall include, but not be limited to:

1. the cost of identification and purchase of appropriate parcels if not purchased by ~~the~~ **project owner**;
2. the cost of perimeter fencing to exclude sheep and other domestic livestock;
3. the cost of posting the property;
4. the cost of enhancements to the habitat (debris removal, restoration of disturbed sites);
5. the cost of maintaining improvements (e.g., fence repair); and
6. the cost of periodic patrols to exclude trespassers and to monitor the integrity of the fencing and other conditions.

The estimated management and maintenance cost per acre shall be provided through initial funding of an endowment.

~~The~~ **Project owner** shall notify the CEC CPM when proposed compensation parcels are presented to the CDFG **CDFW** for title transfer and identify the location of each parcel.

~~The~~ **Project owner** shall notify the CEC CPM each time a parcel is identified, reviewed by the CDFG **CDFW**, the BLM, the USFWS, and jointly approved for transfer of title to the CDFG **CDFW**.

**Verification:** Within 30 days after the CEC Decision on the SEGS IX & X project, ~~the~~ **project owner** shall enter into an agreement with the CDFG **CDFW**. Within five (5) days after all parties have signed the agreement, but no later than 35 days after the CEC Decision on the SEGS IX & X project, ~~the~~ **Project owner** shall provide the CEC CPM a signed copy of the agreement with the CDFG **CDFW**. ~~The~~ **Project owner** will notify the CEC CPM each time a parcel is identified, reviewed by the CDFG **CDFW**, the BLM, the USFWS, and jointly approved for transfer of title to the CDFG **CDFW**.

- 2 ~~The~~ **Project owner** shall not begin site preparation until a qualified biologist has been designated to advise on the implementation of these conditions of certification, and to supervise or conduct mitigation, monitoring, and other biology compliance efforts.

The designated biologist shall be responsible for providing the project construction engineer with advice regarding biological resource mitigation implications of any surface disturbing action to be carried out for this project. Until an action, which shall conform to the certified project design, is reviewed and approved by the designated biologist, work cannot proceed. Any such approvals shall be documented in writing.

ŁŁz **Project owner** shall assure that the designated biologist meet the following minimum qualifications:

1. a bachelor's degree in biological science, zoology, botany, ecology, or a closely related field and
2. current certification of a nationally recognized biological society, such as the Ecological Society of America or the Wildlife Society or a minimum of three years experience in field biology.

The biologist must demonstrate to the satisfaction of the staff appropriate education and experience for the biological tasks. The supervising construction or operation engineer will act on the advice of the biologist to ensure conformance with the Biological Resources Mitigation Implementation Plan (BRMIP) and the terms and conditions of CEC certification.

At least 30 days before starting site preparation, ŁŁz **project owner** shall provide to the CEC CPM for review and approval, the name, qualifications, address, and telephone number of the designated biologist. If there is to be a subsequent change in who the designated biologist will be, ŁŁz **project owner** shall obtain approval of the new biologist by submitting to the CEC CPM the name, qualifications, address, and telephone number of the proposed replacement. An interview by the CEC CPM may be required.

**Verification:** At least 30 days prior to site preparation, ŁŁz **project owner** will submit to the CEC CPM the name, qualifications, address, and telephone number of the individual selected as the designated biologist. If there is to be a change in who the designated biologist will be, ŁŁz **project owner** will submit the name, qualifications, address, and telephone number of the proposed replacement.

- 3** Prior to any surface disturbance on SEGS Unit IX & X or on areas where ancillary project facilities exist, the designated biologist shall conduct or supervise the designation of off-limit areas where surface disturbance is to be avoided. Such areas shall be defined by temporary taping or flagging in conjunction with posting signs prohibiting entrance of construction crews.

Surface disturbance of any native habitats shall be strictly controlled so as to minimize impacts. Parking areas and temporary construction yards shall be sited on previously disturbed habitat to the maximum extent feasible.

Any surface disturbance to be carried out for this project that is not reflected in the certified project design and has not previously been reviewed for biological resource implications and approved by the designated biologist in consultation with the CEC CPM, shall not proceed until said biologist determines that the disturbance will cause no significant impacts and, in consultation with the CEC CPM approves the action to be taken.

All such approvals shall be documented in writing by the designated biologist who, in turn, shall notify the CEC CPM through weekly activity reports when such approved actions are rescheduled to take place.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, ~~the~~ **project owner** will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 4** Off-road travel by ~~the~~ **project owner** personnel, contractors, and subcontractors, shall be prohibited in all native habitats considered sensitive biological areas associated with the project during construction and operation. Such areas shall be posted prior to initiation of construction. Limitation of off-road travel and reasons for restrictions shall also be discussed in the employee environmental awareness program.

Off-road travel restrictions shall apply to native habitats adjacent to the SEGS Unit IX & X project site and to native habitats on all other ~~the~~ **project owner** property. Restrictions shall also be extended to the area of the Harper Lake wetlands.

Notwithstanding the above restrictions governing off-road travel, the designated biologist and/or personnel under his or her supervision, in carrying out appropriate duties, may travel off-road as is necessary to successfully complete assigned tasks.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, ~~the~~ **project owner** will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 5** Desert tortoise salvage and relocation shall be conducted within all areas with appropriate habitat that are to be disturbed for drainage system construction.

Prior to tortoise salvage and relocation, the designated biologist shall have obtained a Memorandum of Understanding from the ~~CEFG~~ **CDFW** along with federal approval through a Section 7 Consultation or other appropriate federal authorization and all actions necessary for implementing this requirement shall be subject to all limitations and guidelines set forth in the aforementioned approvals.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, ~~the~~ **project owner** will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 6** A permanent tortoise-proof fence shall be constructed around the project facility. The design and installation of the fence shall be reviewed and approved by the CEC CPM in consultation with the ~~CEFG~~ **CDFW**, the BLM, and the USFWS.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, LUZ project owner will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 7 Speed limits on and near SEGS Unit IX & X shall be posted and limits shall be developed with consideration for potential wildlife mortalities. Speed limits shall vary depending on the type of road and the degree of visibility. Speed limits shall be set in consultation with the CDFG **CDFW**. Speed bumps or other effective speed control devices should be considered for long-term control.

Speed limits shall be established for SEGS Unit IX & X and for all LUZ project owner - owned property in the Harper Lake area.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, LUZ project owner will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 8 LUZ Project owner shall develop an employee environmental awareness program to provide construction and operation employees with information to encourage awareness and preservation of the desert ecosystem and the key species and resources found at the LUZ project owner facilities and in the western Mojave Desert.

In addition to LUZ project owner's proposed employee environmental awareness program, LUZ project owner shall have each of its own employees, as well as employees of contractors and subcontractors, who participate in the environmental awareness program sign an affidavit declaring that the individual understands and will adhere to the guidelines set forth in the program material. These records shall be maintained by LUZ project owner for each employee as long as the individual employee works on the SEGS IX & X project, and be made available for review by the CEC CPM.

LUZ Project owner shall continue using the reporting form it developed for observations of sensitive species by employees on the job. This form is the same form developed for the SEGS VIII project. These completed observation forms shall be maintained by LUZ project owner for the life of the project and be made available for review by the CEC CPM.

**Verification:** LUZ Project owner will maintain and make available copies of affidavits signed by all its employees, its contractor's employees and its subcontractor's employees for as long as the employees work on the SEGS IX & X project. Copies of the reporting forms for observation of sensitive species will also be maintained and made available for review.

- 9** LEUZ project owner shall develop a strict trash and litter control program. Trash control is expected to increase a sense of responsibility in the work area and foster environmental awareness among employees. A litter control program shall consist of supplying an adequate number of covered trash and litter receptacles in all appropriate locations (including the water truck, water stations, and site exits) and encouraging employee use through the environmental awareness program, posters, and other means. Trash and litter disposal shall be in covered dumpsters or buried to avoid attracting ravens and thereby increasing the potential for raven predation on young tortoises.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, LEUZ project owner will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 10** Lands that have been temporarily disturbed during project construction activities shall be restored and revegetated at an appropriate time that will be determined by the CEC CPM. Restoration seed mixes and methods shall be keyed to the type of habitat where the disturbance has occurred. The seed mixture designated for planting at any given time of the year shall be purchased and taken delivery of no later than 60 days prior to planting time in the year it is scheduled to be planted. Each aspect of project construction involving temporary habitat disturbance shall have habitat restoration work begun as soon as possible after completion of that particular phase of work.

Native desert habitats disturbed by project related actions shall be reclaimed to provide native plant species, including shrubs, that are valuable for wildlife utilizing those habitats.

Temporary disturbances to the abandoned farmlands shall be restored by planting dryland grasses, including the annual species which are presently found in the area. Any disturbances to other habitats shall be restored accordingly. Full details of reclamation planning, monitoring to determine success, and potential remedial action in case of failure, shall be finalized once specific temporary disturbance areas are identified, but activities shall follow good reclamation practice including the following steps:

- any construction debris or other waste materials shall be disposed of in an appropriate manner;
- soil shall be ripped to relieve compaction, then dished and leveled if necessary, to prepare a seedbed;
- a seed mixture consisting of plants adapted to the area and useful to wildlife species present shall be drill planted or broadcast. Fertilization will be used as appropriate; and

- the seed mixture designated for planting at any given time of the year, shall be purchased and taken delivery of no later than 60 days prior to planting time in the year it is scheduled to be planted.

**Verification:** Prior to initiating actions necessary for implementing this condition of certification, ~~the~~ **project owner** will notify the CEC CPM via a Weekly Activity Report as required through the Compliance General Provisions.

- 11** To minimize potential wildlife impacts associated with the evaporation ponds, ~~the~~ **project owner** shall implement the following design and operational criteria:
- construct evaporation ponds as small as possible;
  - construct evaporation ponds with interior bank slopes at a 2.5:1 ratio;
  - construct and operate the evaporation ponds so that 3 feet of water depth is attainable while allowing for the required freeboard expected to be incorporated in the Regional Water Quality Control Board's waste discharge permit;
  - operate the evaporation ponds so that the water surface does not fall below the point where the interior slope meets the bottom of the pond;
  - build the perimeter fence with the bottom flush with the ground surface;
  - maintain the fenced area around the evaporation ponds free of all vegetation;
  - if selenium concentration in aquatic invertebrates in habiting the evaporation ponds, as determined by a certified laboratory's analysis of annual samples collected in August by ~~the~~ **project owner**, exceeds 4 parts per million (dry weight) (or any other alternative level required by the ~~the~~ **CDFG CDFW**), immediately notify the CEC CPM and the ~~the~~ **CDFG CDFW**, and if recommended by the ~~the~~ **CDFG CDFW**, begin a program of hazing (frightening) birds off the ponds utilizing methods acceptable to the ~~the~~ **CDFG CDFW**;
  - take actions recommended by the CEC CPM in consultation with the ~~the~~ **CDFG CDFW**, if for any reason, conditions at the evaporation ponds are considered to be detrimental to wildlife;
  - monitor the evaporation ponds for the general level of waterfowl and shorebird use, wildlife mortalities, and perimeter fence integrity by visual inspection on a weekly basis and maintain, and make available upon request by the CEC CPM or the ~~the~~ **CDFG CDFW**, orderly and accurate written records of inspection results;
  - monitor the evaporation ponds on a quarterly basis for two consecutive days each quarter to quantify the number, species, and condition of birds

using the ponds and report the findings within two weeks of the end of each quarter to the CDFG **CDFW**; and

- k. The project owner shall, in cooperation with the SEGS VIII project owner, allow the Bureau of Land Management (BLM) to pump up to 75-acre feet of water per year, as described in the Harper Lake Water Agreement (Agreement), which was finalized on April 12, 2005. The water will be used for maintenance of the Harper Lake wetlands. The project owner has provided \$60,000 to the BLM to construct a water well and water conveyance system as specified in the Agreement.

**Verification:** No later than December 16, 2005, the project owner shall provide photo-documentation of the BLM well along with its latitude and longitude, the well number as assigned by the Watermaster's local designation and state well number designation, and submit this information in writing to the CPM. At the same time it reports its annual water usage to the Mojave River Basin Watermaster, the project owner shall submit to the CPM the annual record of water pumped by BLM.

- 12** ~~Las~~ **Project owner** shall submit a detailed BRMIP to the CEC CPM for review and approval before initiating any clearing, earth moving, or other construction activities on SEGS IX & X. The BRMIP shall include details for designing and implementing Biology Conditions of Certification **3** through **11**.

**Verification:** At least 60 days prior to commencing site preparation activities, ~~Las~~ **project owner** will submit the draft BRMIP to the CEC CPM for review and approval in consultation with the CDFG **CDFW**. Site preparation will not begin until the final BRMIP is approved.

- 13** ~~Las~~ **Project owner** shall implement the monitoring and mitigation measures contained in the approved BRMIP and Commission Decision.

**Verification:** The approved BRMIP will be submitted to the CEC CPM prior to site preparation on SEGS IX & X.

In a monthly compliance status report, ~~Las~~ **project owner** will notify the CEC CPM, in writing, of successfully satisfying each condition in the BRMIP.

If any conditions of the plan are not successfully satisfied, ~~Las~~ **project owner** will submit proposed corrective actions within 30 days to the CEC CPM for comment and approval.

The ~~Las~~ **project owner** designated biologist will include comprehensive statements in the Annual Compliance Report verifying activities conducted in compliance with the approved BRMIP and portions of the CEC decision pertinent to biological resources.

~~Las~~ **Project owner** will report any adverse impacts on rare, threatened, or endangered species by telephone **or by email** to the CEC CPM within two working days during the normal work week or by the end of the next working day following a weekend or

holiday and shall submit a follow-up written report within 10 days after contact with CEC CPM.

- 14 ~~Luz~~ **project owner** shall, in a timely manner, arrange for access by the CEC CPM or designated representative to inspect or monitor conditions of biological resources, impacts, mitigation measures, and study areas prior to and during preconstruction, construction and operation activities on the SEGS Unit IX ~~& X~~ site and adjacent areas. The access shall be provided upon request and at the times necessary to conduct biological field observations.

**Verification:** ~~Luz~~ **Project owner** shall provide to the CEC CPM a letter of authorization to conduct site visits as specified above.

## **Land Use**

- 1 ~~Luz~~ **Project owner** shall simultaneously submit a copy to the CEC CPM of any letter initiating a change in San Bernardino County land use plans, permits, or ordinances, and describe the reasons for requesting said action(s). ~~Luz~~ **Project owner** shall maintain a copy of any approved change in its compliance files.

**Verification:** In its next Monthly or Annual Compliance Report, whichever occurs first, ~~Luz~~ **project owner** shall reference and verify that a letter containing the above information was sent to the CEC CPM.

- 2 ~~Luz~~ **Project owner** shall notify the CEC CPM of any claim against the Department of Defense (DOD), which exceeds the \$12,000 property damage limit contained within the Avigation Easement.

**Verification:** In its next Monthly or Annual Compliance Report, whichever occurs first, ~~Luz~~ **project owner** shall include a copy of the claim filed against the DOD.

## **Paleontology Resources**

1. Prior to the start of construction (defined as any construction-related vegetation clearance, ground disturbance and preparation, and site excavation activities) ~~on each of the Luz SEGS Unit IX and X projects,~~ ~~Luz~~ **project owner** shall provide the California Energy Commission (CEC) Compliance Project Manager (CPM) with the following information: the name, telephone number, resume, and indication of availability for its designated paleontologic resources specialist.

The resume shall include the qualifications of their designated specialist (e.g., someone with a graduate degree in geology or paleontology and paleontological field experience).



The CEC CPM will review the qualifications of, and must approve in writing, Luz **project owner** designated paleontologic resources specialist prior to the start of construction on each of the Luz SEGS Unit IX and X projects. After CEC CPM approval, the paleontologic specialist shall be available to prepare a monitoring and mitigation plan described below. The designated specialist shall also be available to conduct pre-construction mitigation and provide monitoring and mitigation, as needed, during all construction activities associated with the Luz SEGS Unit IX and X projects.

**Verification:** Prior to the start of construction on each of the Luz SEGS Unit IX and X projects, Luz **project owner** shall submit to the CEC CPM for review and written approval, the name, resume, telephone number, and indication of availability for its designated paleontologic resources specialist.

2. Prior to the start of construction, the designated paleontologic resources specialist shall prepare and implement a monitoring and mitigation plan to minimize potential impacts to paleontologic resources. The plan shall be submitted to the CEC CPM for review and written approval prior to the start of construction on each project.

The plan shall include, but not be limited to, the following elements:

- a. A provision that if, during monitoring of construction activities, the designated paleontologic specialist determines the likelihood of encountering fossil resources is slight, monitoring can be discontinued in that locality;
- b. A discussion of specific measures proposed to mitigate impacts to particular types of paleontologic resources which may be discovered during earth moving activities;
- c. A provision that construction will not begin until the designated paleontologic resources specialist has completed the construction management/resource specialist sign-off procedure, certifying that all necessary mitigation of impacts to known paleontologic resources has been completed in those areas which will be directly affected by the construction and operation of each SEGS project;
- d. A provision that the designated paleontological resource specialist shall have the certified authority to halt or redirect construction at any time necessary to protect known or previously unknown paleontological resources and their locational context. The halting or redirection of construction shall remain in effect until the designated paleontological resources specialist has met with Luz construction managers, determined how the resources will be protected when construction resumes, and has

completed the construction management/resource specialist sign-off procedures;

- e. A provision that if fossil resources are encountered during construction activities, work in the immediate vicinity of the find shall be halted until the designated paleontologic specialist can determine the significance and sensitivity of the find. The designated paleontologic specialist shall act in accordance with the procedures set forth in the monitoring and mitigation plan; ~~Luz~~ **project owner**, or its designated representative, shall inform the CEC CPM within one working day of the discovery of any potentially significant resources and discuss the specific measure(s) proposed to mitigate potential impacts to the resources. The designated paleontologic resources specialist, representatives of ~~Luz~~ **project owner**, and the CEC CPM shall meet within five working days of the notification of the CEC CPM, if necessary, to discuss the disposition of any finds and any mitigation measures already implemented or to be implemented. All necessary and required data recovery and mitigation shall be completed within ten days after discovery of the previously unknown paleontological resources;
- f. A provision that all vertebrate fossil remains will be collected and any invertebrate fossil remains will be sampled. All fossil materials found shall be mapped, prepared, identified, and removed for analysis and duration in the retrievable storage collection at the San Bernardino County Museum in Redlands, California;
- g. A provision that the CEC CPM and staff shall have unrestricted and unannounced access to the Luz SEGS Unit IX ~~and X~~ sites and the SEGS unit VIII-XII project areas, at any time during preconstruction and construction activities, to observe paleontologic resources monitoring and data recovery activities;
- h. A provision that the CEC CPM and staff shall have unrestricted access to and open communication with the designated paleontologic resources specialist(s) any time;
- i. A provision ensuring completion of the necessary analysis of paleontologic resource materials found during surveys, data recovery, and mitigation activities for the SEGS Unit IX ~~and X~~ projects;
- j. A provision ensuring the preparation of a final paleontologic resources report;

- k. A provision that original and/or original-quality copies of the final paleontological resources report will be filed with the appropriate museums, paleontological information repository(ies), and CEC CPM; and,
- l. A provision for curation of all paleontological resource materials collected during survey, data recovery, and mitigation for the SEGS projects.

**Verification:** Prior to the start of construction on each of the Luz SEGS Unit IX and X-projects, Luz **project owner** shall submit a monitoring and mitigation plan for paleontological resources to the CEC CPM for review and written approval.

- 3. In the monthly Compliance Report Luz **project owner** shall provide the CEC CPM with information copies of any communications initiated or received by Luz **project owner**, related to paleontologic monitoring or paleontologic mitigation work being conducted at the Luz SEGS Units IX or X site or in the SEGS Units IX project area. Such communications may include oral or written contacts with the designated paleontologic specialists, San Bernardino County representatives, staff of the San Bernardino County Museum, Luz **project owner** contractors or sub-contractors, and/or other parties interested in the monitoring and mitigation work.

**Verification:** In the Monthly Compliance Report Luz **project owner** shall provide the CEC CPM with information copies of all communications initiated or received by Luz **project owner** related to any paleontologic resources monitoring or mitigation work being conducted at the Luz SEGS Unit IX and X sites or the SEGS Units VIII-XII project area.

- 4. Luz **Project owner** will have the designated paleontologic specialist available to monitor construction activities at the SEGS Unit IX and X sites or in the SEGS Units VIII-XII project area, on an as-needed basis, as defined in the CEC-approved monitoring and mitigation Plan for paleontological resources.

**Verification:** After CEC approval of the designated specialist, Luz **project owner** shall maintain copies of its contract(s) with the designated paleontologic resources specialist(s) in its compliance files.

- 5. Luz **Project owner** shall ensure the recovery, preparation for analysis, and analysis of all collected paleontologic resource materials encountered during surveys, data recovery, and mitigation activities at the Luz SEGS Unit IX and X sites and in the SEGS Unit VIII-XII project area.

**Verification:** Luz **Project owner** shall maintain in its compliance files copies of signed contracts or agreements with the museum(s), university(ies), or other appropriate research specialists which will ensure the necessary recovery, preparation for analysis, and analysis of paleontologic resource materials collected during surveys, data recovery, and mitigation for the SEGS Unit IX and X project.

6. ~~ŁŁŁ~~ **Project owner** shall ensure preparation of a final paleontological resources report by the designated paleontological resources specialist. ~~ŁŁŁ~~ **project owner** shall submit the draft final report to the CEC CPM for review, comment, and approval within 90 days following completion of the data recovery and mitigation work. The final report shall include (but not be limited to) the survey report(s), methodology, and recommendations; site records and maps; determinations of sensitivity and significance; data recovery and other mitigation activities; results and findings of any special analyses conducted on recovered resource materials and data; and research questions answered or raised by the data from the SEGS Unit IX ~~and~~ X projects.

**Verification:** A copy of the draft final paleontological resources report shall be submitted to the CEC CPM for review and approval within 90 days following completion of the data recovery and mitigation work by the designated paleontological resources specialist for the SEGS Unit IX ~~and~~ X projects.

7. ~~ŁŁŁ~~ **Project owner** shall submit an original or an original-quality copy of the approved final paleontological resources report to the appropriate paleontological information repository(ies) and one copy of the original to the CEC CPM.

The report copy sent to the information repository shall include the following:

- clean and reproducible original copies of all text;
- originals of any topographic maps showing site and resource locations;
- original or clear copies of drawings of paleontological resource materials found during surveys, data recovery, or mitigation; and
- photographs (including a set of negatives, if possible) of paleontological resource materials found and evaluated during the SEGS Unit IX ~~and~~ X projects.

**Verification:** ~~ŁŁŁ~~ **Project owner** shall maintain in its compliance files, copies of all documentation related to the filing of the original materials and final paleontological resources report with the appropriate paleontological information repository(ies).

8. ~~ŁŁŁ~~ **Project owner** shall ensure the duration of all significant paleontological resource materials collected during surveys, data recovery, and mitigation for the SEGS Unit IX ~~and~~ X projects.

**Verification:** ~~ŁŁŁ~~ **Project owner** shall maintain in its compliance files, copies of signed contracts or agreements with the museum(s), university(ies), or other appropriate public repository(ies) by which ~~ŁŁŁ~~ **project owner** has provided for curation for paleontologic resource materials collected during surveys, data recovery, and mitigation for the SEGS Unit IX ~~and~~ X projects.

## **Socioeconomics**

~~1~~ — In the event that Luz does not employ union construction and/or operations workers for SEGS Unit X, Luz shall institute a program to maximize the use of the existing labor pool in the local area. Luz shall not recruit out of the local area or outside California until all elements of the local hiring program have been fully implemented. Luz shall submit a detailed plan to implement the program to the California Energy Commission (CEC) Compliance Project Manager (CPM) for review and approval prior to implementing the program.

**Verification:** — Within 15 days after certification of SEGS Unit X, or a date mutually agreeable to Luz and the CEC CPM, Luz shall submit the detailed plan to the CEC CPM.

**21** Luz **Project owner** shall use its best efforts to have the labor unions obtain complete entry and exit questionnaires for each SEGS Unit IX worker represented by a union. The questionnaires shall be similar to the questionnaires approved by the CEC CPM for use on the SEGS Unit VIII project. Luz **Project owner** shall label each questionnaire such that it can be identified by the CEC CPM. Luz **Project owner** shall provide the CEC CPM with copies of all questionnaires. Every time a Luz **project owner** employee or union worker is rehired, the information on that person shall be updated.

Luz **Project owner** shall prepare an electronic data base that is compatible with dBASE IV of all the employee surveys similar to the data base maintained for SEGS Unit VIII.

Luz **Project owner** shall provide to the CEC CPM for review and approval a copy of the entry and exit questionnaires that it intends to have its employees and the union workers complete. Luz **Project owner** shall not have its employees or the union workers complete the forms until the forms have been approved by the CEC CPM.

Luz **Project owner** shall provide copies of any newly completed or revised worker surveys and the updated electronic data base to the CEC CPM when it provides each Monthly Compliance Report, but not as part of that report.

**Verification:** Within 15 days after certification, Luz **project owner** shall provide to the CEC CPM for review and approval a copy of the entry and exit questionnaires that it intends to have its employees or the union workers complete. Luz **Project owner** shall not have its employees or the union workers complete the forms until Luz **project owner** has received notification that the forms have been approved by the CEC CPM.

**32** In the event that the SEGS construction and/or operations workers are unionized under agreements between Luz **project owner** and various Labor organizations, including District Council 16 of the Plumbers and Pipefitters Union, Luz **project owner** shall provide the data regarding schools from the Luz **project owner** employee and union worker questionnaires to each

affected school district. For districts which wish to conduct their own surveys, ~~Luz~~ **project owner** shall provide the names of the contractors and subcontractors for the SEGS Unit by September 1 of each year that the project is under construction or in operation, until construction of the last SEGS unit in the Harper Lake area is completed. If a school district desires an updated list of contractors and subcontractors after September 1, ~~Luz~~ **project owner** Luz shall provide it.

**Verification:** By September 1 of each year that the SEGS Unit is under construction or in operation, ~~Luz~~ **project owner** shall provide the names of the contractors and subcontractors for the project to each school district, with a copy of the submittal to the CEC CPM. If a school district requests an updated list of contractors and subcontractors, ~~Luz~~ **Project owner** shall provide this list to the district, with a copy of the submittal to the CEC CPM, within 15 days of ~~Luz~~ **project owner** receipt of the district's request. ~~Luz~~ **Project owner** shall provide survey information to any affected school district upon request.

**3** ~~Luz~~ **Project owner** shall make payments to school districts for all non-reimbursable costs due to any student enrolled who has a parent who immigrated to the local area to work on a SEGS project and works on the construction or operation of SEGS Unit IX ~~and X~~.

For school districts that already have signed mitigation agreements with ~~Luz~~ **project owner**, ~~Luz~~ **project owner** shall pay the districts according to the terms of the agreement. For any other districts that ~~Luz~~ **project owner**' employee surveys for SEGS VIII (at peak construction labor force for construction workers and after commercial operation for operations workers) show to have students of such workers enrolled, ~~Luz~~ **project owner** shall enter into an agreement to compensate the district for any non-reimbursable costs. ~~Luz~~ **Project owner** shall make one-time payments for construction and operations workers. The payments for construction workers shall be for the school year in which the construction work force peaks. The payments for operations workers shall be for the school year in which commercial operation begins.

For construction workers, ~~Luz~~ **project owner** shall submit calculations of the number of impact students per district to the CEC CPM for review and approval within 30 days of the peak of the construction work force. For agreements in which mitigation payments are calculated on a per student basis, the amount of compensation shall be determined by multiplying the number of impact students by the non-reimbursable costs per student for the specific district. The distribution of impact students between school districts shall be determined from ~~Luz~~ **project owner**' surveys of the workers for SEGS Unit VIII. The number of impact students per district shall be the same as for SEGS Unit VIII unless the peak construction force for SEGS IX ~~and X~~ is

higher than for SEGS VIII. In that case, the project owner' mitigation payments to the school districts shall be proportionally higher. The construction workers to be used as a basis of calculations shall consist of all construction workers who immigrated to the local area to work on any SEGS project (Units I-VIII) and are working on SEGS Unit VIII. Within 30 days after the project owner receives notification from the CEC CPM that the calculations have been approved, the project owner shall submit to the CEC CPM for review and verification photocopies of the checks that the project owner has sent to any affected districts and copies of the cover letters for the checks. Project owner shall also provide copies of any signed agreements that the project owner has reached with each affected school district with which the project owner has not previously signed a mitigation agreement.

For mitigation payments for children of operations workers for SEGS Unit IX ~~or X~~, the project owner shall submit calculations of the number of impact students per district to the CEC CPM for review and approval within 30 days after the start of commercial operation of SEGS Unit VIII. Within 30 days after the project owner receives notification from the CEC CPM that the calculations have been approved, the project owner shall submit to the CEC CPM for review and verification photocopies of the checks that the project owner has sent to any affected districts and copies of the cover letters for the checks. Project owner shall also provide copies of any signed agreements that the project owner has reached with each affected school district with which the project owner has not previously signed a mitigation agreement. The operations workers for SEGS Unit VIII shall be assumed to be representative of the operations workers for SEGS Unit IX ~~or X~~. The number and district enrollment of immigrating children of operations workers for SEGS Unit IX ~~or X~~ shall be assumed to be the same as for SEGS Unit VIII.

**Verification:** Within thirty days after the peak of the construction work force for SEGS Unit VIII, the project owner shall provide to the CEC CPM for review and verification the required calculations. Within 30 days after the project owner receives notification from the CEC CPM that the calculations have been approved, the project owner shall submit to the CEC CPM for review and approval the required photocopies of checks, copies of the cover letters for the checks, and copies of any new agreements with school districts.

For operations workers, the project owner shall submit the required calculations to the CEC CPM for review and approval within 30 days after the start of commercial operation of SEGS Unit VIII. Within 30 days after the project owner receives notification from the CEC CPM that the calculations have been approved, the project owner shall submit to the CEC CPM for review and verification the required photocopies of checks and copies of the cover letters for the checks.

In each Monthly Compliance Report to the CEC CPM, ~~the~~ **project owner** shall describe the status of mitigation payments to each affected district until construction of the last SEGS unit in the study area is completed.

**54** ~~the~~ **Project owner** shall develop and implement a program for SEGS Unit IX and X to encourage construction employees and their families to reside in communities which can readily accommodate them and their families. The program shall include providing real estate listings and car-pooling information regarding these communities, and transportation incentives for non-local workers who reside in such communities. ~~the~~ **Project owner** shall submit a detailed plan to implement the program to the CEC CPM for review and approval. ~~the~~ **Project owner** shall not implement the program until ~~the~~ **project owner** receives approval of the plan from the CEC CPM. In the event that ~~the~~ **project owner** continues to employ a non-union labor force and therefore does not conduct employee surveys as specified in Condition 2 above, ~~the~~ **project owner** shall provide to the CEC CPM for review and approval information as to the residential location of all construction workers for SEGS Unit IX and X. Commission staff will use this information in evaluating the effectiveness of the program required by this condition.

**Verification:** Within 15 days after CEC certification, ~~the~~ **project owner** shall submit the detailed plan to the CEC CPM for review and approval.

~~the~~ **Project owner** shall provide updates of the information regarding employees' residential location in the monthly compliance reports.

**65** ~~the~~ **Project owner** shall offer the health insurance benefit program developed in compliance with Socioeconomic Condition 4 of the Commission Decision on SEGS Unit VIII to ~~the~~ **project owner**' employees and SEGS Units IX & X workers who are not members of a labor organization.

**Verification:** ~~the~~ **Project owner** shall provide to the CEC CPM in each Monthly Compliance Report a status report listing changes in employees' enrollment in the health insurance plan.

**76** ~~the~~ **Project owner** shall use its best efforts to ensure that each ~~the~~ **project owner** and union worker employee on SEGS Unit IX and X who has not previously received drug awareness training as part of the implementation of the law enforcement program for SEGS Unit VIII which ~~the~~ **project owner** developed in compliance with Condition 5 of the Commission Decision on SEGS Unit VIII attends drug awareness training by the Barstow Police Department unless the CEC CPM determines that the union workers have received equivalent training through their union.

**Verification:** Within 15 days following the Commission Decision, ~~the~~ **project owner** shall provide to the CEC CPM for review and approval information regarding the



drug awareness training provided by the unions to their workers and a schedule for any training required.

In each Monthly Compliance Report, ~~the~~ **project owner** shall specify the number of ~~the~~ **project owner** employees and union workers who have been trained and the number who remain to be trained.

**87** Prior to the start-up, operation, or testing of the SEGS Unit IX, ~~the~~ **project owner** shall enter into an agreement with San Bernardino County Forestry and Fire Warden Department for fire protection services related to the operation of SEGS Units IX & X.

**Verification:** Within 30 days of certification, ~~the~~ **project owner** shall submit to the CEC CPM a statement that they are participating in discussions with the above mentioned fire department.

Prior to the start-up, operation, or testing of SEGS Unit IX, ~~the~~ **project owner** shall submit to the CEC CPM a signed agreement between ~~the~~ **project owner** and the above mentioned fire department for fire protection services. If ~~the~~ **project owner** and the fire department cannot reach an agreement, the dispute will be referred to the CEC CPM for resolution.

## **Soil and Water Resources**

**1** For each well that ~~the~~ **project owner** drills, develops or uses for extracting water from the Harper Valley Basin, ~~the~~ **project owner** shall place in the project files the following:

- driller's well log, if available.
- drawdown-discharge curve and recovery test.
- a map depicting the location of the well.

**Verification:** ~~the~~ **Project owner** shall notify the CEC CPM, via the weekly Compliance Activity Report, of the initiation of well drilling and via the Monthly Compliance Report of the completion of well drilling.

Within 60 days after completion or initiation of use of a well intended to supply SEGS Unit IX ~~or X~~, ~~the~~ **project owner** shall maintain at the site the required information and notify the CPM that the records are available for inspection.

**2** For each ~~the~~ **project owner** well extracting groundwater from the Harper Valley Basin for operation of SEGS Unit IX ~~or X~~, ~~the~~ **project owner** shall provide in each annual Compliance Report the following:

- pre-and-post pumping standing water levels,
- pumping rates in gallons per minute, and

- total annual extractions in acre-feet.

**Verification:** ~~the~~ **Project owner** shall forward via the Annual Compliance Report a copy of the records specified above to the CEC CPM.

- 4** ~~the~~ **Project owner** shall limit extractions from the Harper Valley groundwater basin to 950 AFY for the operation of each of SEGS Unit IX and X.

**Verification:** In each Annual Compliance Report ~~the~~ **project owner** shall provide groundwater pumping records for each project which shall indicate compliance with these limits.

- 7** ~~the~~ **Project owner** shall apply for and obtain waste discharge requirements from the **Lahontan Water Quality Control Board** (LRWQCB) for cooling tower blowdown wastes discharged from the SEGS Unit IX and X. ~~the~~ **Project owner** shall maintain the waste discharges requirements in the project compliance file.

**Verification:** Prior to beginning commercial operation of SEGS Unit IX ~~or X,~~ respectively, ~~the~~ **project owner** shall provide written notification to the CEC CPM in the Monthly Compliance Report that said discharge requirements have been issued and that they are available for inspection.

- 8** For liquid wastes discharged from SEGS Unit IX and X, ~~the~~ **project owner** shall notify the CEC CPM of any change in the waste discharge requirements issued by the LRWQCB.

**Verification:** In its annual compliance report to the CEC CPM, ~~the~~ **project owner** shall indicate the status of the current waste discharge requirements and attach the quarterly reports required by the LRWQCB for SEGS Unit IX and X.

- ~~**11** To protect SEGS Unit X site from flood flows along its western and northern boundaries Luz shall design, construct and maintain the following facilities:~~

- ~~• A dike capable of withstanding and diverting combined flows from tributary areas B, C, and D, shown in the attached Figure 1, generated by a storm with a 1 in 100 year recurrence interval.~~

## **Traffic and Transportation**

- 1** ~~the~~ **Project owner** shall comply with the San Bernardino County and **California Department of Transportation** (Caltrans) restrictions on oversize or overweight limit vehicles. ~~the~~ **Project owner** shall obtain necessary transportation permits from the County and Caltrans. ~~the~~ **Project owner** shall maintain copies of these permits in its compliance file for a period of six months after the start of commercial operations.

**Verification:** In its Monthly Compliance Reports, ~~Luz~~ **Project owner** shall notify the CEC CPM of any transportation permits obtained during the reporting period.

- 2 ~~Luz~~ **Project owner** shall comply with San Bernardino County and Caltrans requirements for encroachment on a public right-of-way. ~~Luz~~ **Project owner** shall obtain necessary encroachment permits from the County and Caltrans. ~~Luz~~ **Project owner** shall maintain copies of these permits in its compliance file for a period of six months after the start of commercial operations.

**Verification:** In its Monthly Compliance Reports, ~~Luz~~ **Project owner** shall notify the CEC CPM of any encroachment permits obtained during the reporting period.

- 3 ~~Luz~~ **Project owner** shall not start any construction on each of the SEGS Unit IX ~~and X~~ projects prior to receiving CEC CPM approval of their Transportation System Management (TSM) plan, which will be based on its TSM program originally submitted for SEGS Unit VIII. The SEGS Unit IX TSM plan will describe specific implementation of the TSM program and shall include:
- a. Baseline, and quarterly, measurement of traffic on SR 58 to establish whether it is necessary to stagger shifts. The first measurements shall be taken prior to the start of construction of SEGS Unit IX. At least one of the quarterly measurements shall be taken early during the period of peak employment when construction-related traffic will be at its maximum. Quarterly measurements shall continue during construction. Luz shall, if necessary, schedule shift changes for operations and construction employees at SEGS Units III-VII and operations employees at SEGS Unit VIII and IX so as not to coincide with arrivals and departures for construction employees at SEGS Unit IX and shall schedule all types of arrivals and departures so as not to coincide with morning and evening peak traffic hours on SR 58, based on the measuring.
  - b. The TSM plan shall consist of individual elements which contain discussions of the specific measures proposed to be used to effectively carry out that element, and a description of those measures which will be used to evaluate the effectiveness of the element. Elements shall include, but not be limited to, carpooling, vanpooling, and staggering of work hours.
  - c. The goal of the TSM plan will be to reduce the total number of vehicles traveling the same section of SR 58 at a given time, and as a part of the plan, Luz will establish a goal for the amount of traffic reduction it will achieve.
  - d. ~~Luz~~ **Project owner** shall maintain copies of the TSM plan on site in its compliance files for a period of six months after the start of commercial operations.

**Verification:** Luz **Project owner** shall submit a copy of its SEGS Unit IX TSM plan to the CEC CPM a minimum of 30 days prior to the start of construction. Within 15 days of receipt, the CEC CPM shall respond to Luz regarding the adequacy of the TSM plan.

In its Monthly Compliance Reports, Luz **Project owner** shall notify the CEC CPM of:

- a. the ongoing effectiveness of the TSM program and plan, including whether its goal for traffic reduction has been achieved;
- b. of any additional measures needed to more effectively implement the TSM plan; and
- c. of changes to the shift schedule(s) which are necessary or have been implemented.

Luz shall notify the CEC CPM of the scheduled date(s) for quarterly traffic measurements in its Weekly Activities Report.

**4** Luz **Project owner** shall notify Caltrans in writing, 60 days prior to beginning construction of each of the SEGS Unit IX and X projects, of the expected traffic volumes on-SR 58. During the period in which SR58 reconstruction is underway, Luz **Project owner** shall coordinate its construction traffic, particularly heavy truck traffic, with the Caltrans Resident Engineer in order to minimize conflicts with SR58 reconstruction activities.

**Verification:** Luz **Project owner** shall submit a copy of the written notification to Caltrans to the CEC CPM.

In its Monthly Compliance Reports, Luz **project owner** shall notify the CEC CPM of the results of its meetings with Caltrans, including any contacts with the Caltrans Resident Engineer.

**5** No later than 60 days after the Commission Decision on SEGS Unit IX, Luz **project owner** shall sign an agreement with the San Bernardino County Transportation and Flood Control Department, Traffic Division, for the reconstruction of Harper Lake Road, and the mitigation of project related traffic and transportation impacts (including necessary maintenance) on Santa Fe Avenue and all other San Bernardino County roads in the SEGS Harper Lake projects vicinity. Luz **Project owner** shall maintain a copy of the agreement in its compliance file.

**Verification:** No later than 60 days after the Commission Decision on SEGS Unit IX, or in its first Monthly Compliance Report, whichever comes first, Luz **Project owner** shall notify the CEC CPM of the status of the agreement with San Bernardino County, and in its subsequent Monthly Compliance Reports shall notify the CEC CPM of the progress toward signing of the agreement.

**6** Luz **Project owner** shall monitor the occurrence of accidents on Harper Lake, Hoffman, and Lockhart Roads, and Santa Fe Avenue serving the SEGS Unit IX and X projects. If the results of the monitoring indicate that further mitigation measures on these roads may be necessary, Luz **project owner**

shall consult with San Bernardino County and the CEC CPM to determine the extent of any additional measures that may be required. ~~the~~ **Project owner** shall maintain the results of the monitoring in its compliance files.

**Verification:** In its Monthly or Annual Compliance Report, ~~the~~ **project owner** shall report the results of its monitoring to the CEC CPM and shall separately report to the San Bernardino County Flood Control and Transportation Department, Traffic Division. ~~the~~ **Project owner** shall report to the CEC CPM in Monthly or Annual Compliance Reports the current status of any consultations or agreed upon mitigation measures.

**7** Prior to the start of construction on the SEGS Unit IX project, ~~the~~ **Project owner** shall adopt, and implement, for the SEGS Unit IX ~~and X~~ projects, the comprehensive plan developed for the transport of hazardous materials to and from the SEGS VIII project. The plan shall be updated as appropriate.

**Verification:** In its first Monthly Compliance Report ~~the~~ **Project owner** shall certify such adoption and implementation to the CEC CPM.

~~the~~ **Project owner** shall submit updates to the plan in subsequent Compliance reports.

## **Waste Management**

**WASTE - 1** Non-hazardous construction wastes from SEGS Unit IX and X shall be disposed of by ~~the~~ **project owner** or its contractors at Barstow area landfills or at facilities approved by the Lahontan Regional Water Quality Control Board (LRWQCB), the San Bernardino County Department of Environmental Health Services (DEHS), or other appropriate agencies in counties where alternate disposal facilities may be located.

Hazardous wastes generated during construction and operation shall be disposed of at the Kettleman Hills facility or a California Department of Health Services (CDHS) approved facility, if not treated on-site following CDHS approval of the treatment process.

**Verification:** ~~the~~ **Project owner** shall obtain and keep on file at the project site for 3 years copies of the following documents which shall be available for CEC Staff review:

1. contracts and agreements ~~the~~ **project owner** or its contractors have entered into with waste hauling companies and treatment, storage, recycling or disposal facility operators for the collection, treatment, recycling storage, or disposal of non-hazardous and hazardous liquid or solid wastes;
2. any applicable permits to operate received by companies listed in part (1) above;
3. all receipts obtained by ~~the~~ **project owner** or its contractors from the above companies for wastes delivered for treatment, storage, disposal, or recycling including hazardous waste manifests.

ŁŁŁ **Project owner** shall inform the CEC CPM via monthly or annual compliance reports when any of the above information is obtained and provide a listing of such information for 1 and 2 above.

**WASTE - 6** ŁŁŁ **Project owner** shall notify the CEC of any waste management-related enforcement action or proposed action taken against ŁŁŁ **project owner**, and any action against the waste hauler or disposal facilities used by ŁŁŁ **project owner** or its contractors (that ŁŁŁ **project owner** has knowledge of) during the construction and operation of the proposed project.

**Verification:** ŁŁŁ **Project owner** shall notify the CEC CPM by letter within 10 days of learning of any such impending enforcement action.

### **Worker Safety and Fire Protection**

**1** ŁŁŁ **Project owner** shall submit a SEGS Unit IX ~~and X~~ Safety Plan to the San Bernardino County Environmental Health Services Department and to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) for review and comment regarding compliance of the Plan with County requirements and with the provisions of Title 8, CCR, Section 1509 (Construction Safety Orders, Accident Prevention Program) and Section 3203 (General Industry Safety Orders, Accident Prevention Program) and Title 29, CFR 1910 respectively. Any and all comments by the County and Cal-OSHA shall be incorporated into the Plan. ŁŁŁ **Project owner** shall implement the Safety Plan consistent with comments and requirements of San Bernardino County and Cal-OSHA.

**Verification:** At least 10 days prior to beginning any construction, ŁŁŁ **project owner** shall submit to the CEC CPM a letter containing San Bernardino County's and Cal-OSHA's comments regarding the compliance of the Safety plan with County requirements and with Title 8, CCR, sections 1509 and 3203 respectively, and a statement verifying that any and all comments or recommendations by the County and Cal-OSHA have been incorporated into the SEGS Unit IX Safety Plan. The CEC CPM shall be accorded access to the project area, facilities, and all safety records at any reasonable time during construction and operation of the facility to verify implementation of the plan.

**4** ŁŁŁ **Project owner** shall submit a report on its emergency response to the SEGS Unit VIII January 10, 1990 heat transfer fluid (HTF) heater fire to the San Bernardino County Environmental Health Services Department, San Bernardino County Fire Department, California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) and the California Energy Commission (CEC) Compliance Project Manager (CPM) for review and comment. Comments on the report will be incorporated in the SEGS Units IX & X Safety Plan/Emergency Response Plan.

**Verification:** Thirty (30) days after certification, ~~the~~ **Project owner** shall submit to the above mentioned agencies a copy of the emergency response report. Prior to delivery of HTF or natural gas to the facilities, ~~the~~ **Project owner** shall submit to the CEC CPM a letter containing the agencies comments regarding the emergency response report and a statement verifying that any and all comments or recommendations by the agencies have been incorporated into the SEGS Unit IX ~~and~~ Safety Plan. The CEC CPM shall be accorded access to the project area, facilities, and all safety records at any reasonable time during construction and operation of the facility to verify implementation of the Plan.

## **Visual Resources**

- 1** ~~the~~ **Project owner** shall color project structures visible to the public to minimize the contrast with the surrounding natural environment and harmonize with the color scheme used at the adjacent SEGS Unit VIII project. ~~the~~ **Project owner** shall develop and submit a color plan to the CEC CPM for review and approval. The color plan shall specify and provide samples of the colors proposed for use on project structures, including structures colored during manufacture (such as cooling towers).

For any structures such as cooling towers which are colored during manufacture, ~~the~~ **project owner** shall not specify the color of such structures to the vendors until ~~the~~ **project owner** receives notification of approval of the color plan by the CEC CPM. ~~the~~ **Project owner** shall not paint the final coat on any structures until ~~the~~ **project owner** receives notification of approval of the color plan from the CEC CPM. ~~the~~ **Project owner** shall notify the CEC CPM when all precolored structures have been erected and all structures to be painted in the field have been painted and the structures are ready for inspection. ~~the~~ **Project owner** shall not begin operating SEGS Unit IX until ~~the~~ **project owner** has received notice from the CEC CPM that the condition has been satisfied.

**Verification:** Within sixty days after the Commission Decision, ~~the~~ **project owner** shall submit the color plan for SEGS Unit IX to the CEC CPM for approval. At least ninety days prior to the scheduled start of operation of each unit, ~~the~~ **project owner** shall notify the CEC CPM that structures colored during manufacture and all structures to be painted in the field are ready for inspection.

- 2** ~~the~~ **Project owner** shall design and install all lighting at SEGS Unit IX ~~and~~ such that it is directed toward project facilities and is shielded to minimize visibility from local residences and to minimize illumination of the surrounding terrain and the nighttime sky. ~~the~~ **Project owner** shall not begin operating SEGS Unit IX ~~and~~ until ~~the~~ **project owner** has received notice from the CEC CPM that the condition has been satisfied.

**Verification:** The **Project owner** shall notify the CEC CPM at least ninety days prior to the scheduled start of operation of each SEGS unit that the lighting is installed and is ready for inspection.

**3** The **Project owner** shall screen the SEGS Unit IX site, the SEGS Unit VIII site, and the common area between SEGS Unit IX and SEGS Unit VII from public view, particularly from the residences south of SEGS Unit IX along Harper Lake Road. The **Project owner** shall develop such a screening plan in consultation with the affected residents and submit the plan to the CEC CPM for review and approval. The **Project owner** shall not install the screening until the **project owner** has received approval of the screening plan from the CEC CPM. The **project owner** shall notify the CEC CPM when the approved screening has been installed and is ready for inspection. The **Project owner** shall not begin operating SEGS Unit IX until the **project owner** has received notification from the CEC CPM that the condition has been satisfied.

**Verification:** Within sixty days after the Commission Decision on SEGS Unit IX, the **project owner** shall submit the screening plan for SEGS Unit IX to the CEC CPM for approval. At least ninety days prior to the scheduled start of operation of SEGS Unit IX the **project owner** shall notify the CEC CPM that the screening is has been installed and is ready for inspection.