STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of	)	
	)	Docket No.: 09-AFC-10
Application for Certification for the	)	
Rice Solar Energy Power	)	Dated: October 27, 2010
Plant Project	)	
	)	

IDENTIFICATION OF STAFF'S REBUTTAL TESTIMONY

On October 13, 2010, the Committee designated by the Energy Commission to conduct proceedings on the Application for Certification for the Rice Solar Energy Power Project issued a "Prehearing Conference and Evidentiary Hearing Order." That Order states that Parties are to file Rebuttal Testimony on or before October 27, 2010.

Staff's Rebuttal Testimony is comprised of the following additional testimony:

Testimony of Geoff Lesh – Revised Worker Safety Conditions of Certification and supporting declaration

Testimony of Kim Tremain – Revised Cultural Resources Conditions of Certification and supporting declaration

Testimony of Scott White – Revised Biological Resources section (pertaining to Western Power Administration's fiber optic study) and supporting declaration

Date: October 27, 2010

Respectfully Submitted,

/S/

DEBORAH R. DYER
Senior Staff Counsel
California Energy Commission
15169th St., MS-14
Sacramento, CA
Ph: (916) 654-3870
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Worker Safety and Fire Protection

DECLARATION OF
Geoffrey Lesh

I, **Geoffrey Lesh** declare as follows:

1. I am presently employed by the California Energy Commission in the **Engineering Office** of the Siting, Transmission and Environmental Protection Division as a **Mechanical Engineer.**

2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.

3. I helped prepare the rebuttal staff testimony on the **Worker Safety and Fire Protection Section** for the **Rice Solar Energy Project** based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.

4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.

5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: _____ Signed: 10/27/2010

At: Sacramento, California

Worker Safety and Fire Protection

The applicant's Revised Fire Needs Assessment (GB 2010) has proposed to provide on-site rescue team capability that could provide for some likely rescue situations. Staff has reviewed applicant's proposed mitigations and estimated the remaining impacts to the RCFD.

Although applicant has proposed to provide measures on-site through construction and operations that could help to reduce the frequency of responses that would potentially be required by RCFD, staff notes that applicant's on-site capabilities would not match the depth and magnitude of response capability for either emergency medical, fire, or rescue response that the RCFD must maintain in readiness if needed by RSEP. Staff believes that periodic review, inspection, and on-site training for potential emergencies would still be required by the RCFD.

Furthermore, Riverside County Emergency Medical Services Agency (RCEMS) has indicated in letters to Captain Jason Neumann of RCFD that the applicant's proposals to eliminate the need for emergency responses from RCFD may not be able to actually accomplish their intended effect (see Appendix B). Staff therefore does not agree with applicant's assertion that no mitigation is required for impacts to the RCFD, and that Conditions of Certification **WORKER SAFETY-7** and **-8** be eliminated**.** Although RSEP is located more remotely than the other three thermal solar plants (Blythe, Genesis, and Palen), it still draws upon fire stations and responders for emergency medical, fire, and rescue response from the same area as those other solar power plants. Thus it adds cumulatively to the impact to the public served by RCFD in the same response areas. The Emergency Response Matrix (see Appendix A) has been updated by staff to reflect staff's evaluation of the remaining impact that construction and operation of RSEP could have on the RCFD relative to the other three solar thermal power plants currently proposed for Riverside County. Conditions of Certification **WORKER SAFETY-7 (2)** and **-8** have been revised accordingly.

Staff's Proposed Edits to Conditions of Certification WORKER SAFETY-7 and -8:

Reflecting staff's changes to the Emergency Response Matrix after considering the applicant's Revised Fire Needs Assessment, staff proposes the following changes to Conditions of Certification **WORKER SAFETY-7** and **-8:**

WORKER SAFETY-7 The project owner shall either:

> (1) Reach an agreement, either individually or in conjunction with a power generation industry association or group that negotiates on behalf of its members, with the Riverside County Fire Department (RCFD) regarding funding of its project-related share of capital and operating costs to build and operate new fire protection/emergency response infrastructure and provide appropriate equipment as mitigation of project-related impacts on fire protection/emergency response services within the jurisdiction.
>
> **or**

(2) Shall fund its share of the RCFD capital costs in the amount of ~~$570,000~~ $590,000 and provide an annual payment of ~~$250,000~~ $260,000 to the RCFD for the support of new fire department staff, operations, and maintenance commencing with the start of construction and continuing annually thereafter on the anniversary of the payment until the final date of power plant decommissioning.

or

(3) The Project Owner shall fund a Fire Needs Assessment and Risk Assessment conducted by an independent contractor who shall be selected and approved by the Energy Commission Compliance Project Manager (CPM) and fulfill all mitigation identified in the independent fire needs assessment and a risk assessment. The Fire Needs Assessment would address emergency response and equipment/staffing/location needs while the Risk Assessment would be used to establish the risk (chances) of significant impacts occurring.

Should the applicant pursue option (3), above, the Fire Needs Assessment and Risk Assessment shall evaluate the following:

(a) Potential for impacts on the RCFD and the project allocated costs of new and/or enhanced fire protection/emergency response services (which shall include services for inspections, permitting, fire response, hazardous materials spill/leak response, rescue, and emergency medical services) necessary to mitigation of such impacts;

(b) The risk of impact on the local population that could result from potential unmitigated impacts on local fire protection and emergency services (i.e. “drawdown” of emergency response resources);

(c) The extent that the project’s exemption from local taxes will impact local fire protection and emergency response services; and

(d) Recommendation of an amount of funding that should be provided to mitigate any identified significant impacts on local fire protection and emergency response services.

Compliance Protocols for the Fire Needs Assessment and Risk Assessment shall be as follows:

(a) The Fire Needs Assessment and Risk Assessment shall be conducted by an independent consultant(s) selected and approved by the CPM;

(b) The Fire Needs Assessment and Risk Assessment shall be fully funded by the project owner. The independent consultant(s) preparing the Fire Needs Assessment and Risk Assessment shall work directly for the Energy Commission;

(c) The project owner shall provide the protocols for conducting the independent fire needs assessment for review and comment by the RCFD

and review and approval by the CPM prior to the independent consultant's commencement of the fire needs assessment;

(d) The CPM shall be copied in any correspondence including emails or letters and included in any conversations between the project owner and consultant; and

(e) The CPM shall verify that the Fire Needs Assessment and Risk Assessment are prepared consistent with the approved fire needs assessment protocols and a risk assessment protocols.

Verification: At least thirty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM:

(1) A copy of the individual agreement with the RCFD or, if the owner joins a power generation industry association, a copy of the group's bylaws and a copy of the group's agreement with the RCFD; and evidence in each January Monthly Compliance Report that the project owner is in full compliance with the terms of such bylaws and/or agreement.

or

(2) Documentation that the amount of ~~$570,000~~ $590,000 has been paid to the RCFD, documentation that the first annual payment of ~~$250,000~~ $260,000 has been made, and shall also provide evidence in each January Monthly Compliance Report during construction and the Annual Compliance Report during operation that subsequent annual payments have been made.

or

(3) A protocol, scope and schedule of work for the independent Fire Needs Assessment and Risk Assessment and the qualifications of proposed contractor(s) for review and approval by the CPM; a copy of the completed Fire Needs Assessment and Risk Assessment showing the precise amount the project owner shall pay for mitigation; and documentation that the amount has been paid.

Annually thereafter, the owner shall provide the CPM with verification of funding to the Riverside County Fire Department for required fire protection services mitigation pursuant to the agreement with the Fire Department or the CPM approved independent fire needs assessment.

WORKER SAFETY-8 In the event that the project owner does not reach an agreement with Riverside County Fire Department pursuant to WORKER SAFETY-7, the project owner shall provide documentation that a letter of credit in the amount of ~~$820,000~~ $850,000 has been provided to the Riverside County Fire Department prior to the start of construction and reach an agreement under WORKER SAFETY-7 within a year of site mobilization. This funding shall off-set any initial funding required by WORKER SAFETY-7 above, until the funds are exhausted or an agreement is reached

under WORKER SAFETY-7. This offset will be based on a full accounting by the Riverside County Fire Department regarding the use of these funds.

Verification: At least 30 days prior to site mobilization, if project owner has not reached an agreement with the Riverside Fire Department pursuant to **WORKER SAFETY-7**, the project owner shall provide documentation of the letter of credit described above to the Energy Commission CPM. The Energy Commission CPM shall adjust the payments initially required by **WORKER SAFETY-7** based upon the accounting provided by the Riverside County Fire Department.

Staff Does Not Agree With Applicant's Proposed Edits to Conditions of Certification WORKER SAFETY-10 and -11:

Regarding applicant's proposed changes to Conditions of Certification WORKER SAFETY-10 and -11, staff does not agree with the changes because the applicant's proposed changes removed the specificity needed regarding what services and provisions would be included in the proposed contracts for emergency service. Staff believes that the staff proposed Conditions of Certification WORKER SAFETY-10 and -11 would have permitted RSEP to contract for the specific described services, providing the certainty of services the fire district needs.

However, staff now proposes instead that Conditions of Certification **WORKER SAFETY-10** and **-11** be deleted, and all provisions and considerations for mitigating impacts to the RCFD be dealt with through Conditions of Certification **WORKER SAFETY-7** and **-8.** Staff believes the RCEMS has raised significant concerns (see Appendix B) regarding the efficacy (i.e., actually avoiding use of county EMS) of private parties working outside of the existing RCFD and emergency services and the coordination they provide.

Appendix A
Staff's Revised Emergency Response Matrix

	Staff's Emergency Response Matrix			
	Estimated Values for Riverside County			
A. Response Criteria		**points**	**weighting factor**	**Rice**
1. Inspections			0.10	
a.	minimal need	1		1
b.	average need	3		
c.	significant need	5		
			Net -->	*0.1*
2. Fire			0.50	
A. Quantity of liquid fuel/flammables or hydrogen gas stored on-site			0.20	
a.	<1,000 gal and <1000 lbs hydrogen gas	1		
b.	>1000 and <100,000 gal and <10,000 lbs hydrogen gas	2		2
c.	>100,000 gal or >10,000 lbs hydrogen gas	5		
			Net -->	*0.40*
B. Fire/Explosion off-site consequences			0.30	
a.	Limited to site	1		1
b.	Potential for smoke and/or fire and/or minor blast effects off-site	2		
c.	Potential for major fire/blast structure damage and/or injuries/fatalities off-site and/or major hwy disruption/closure	5		
			Net -->	*0.30*
3. HazMat			**0.10**	
A. Proximity to sensitive receptors			**0.05**	
a.	no sig quant of hazmats or no potential for off-site impacts within 1/2 mile	1	0.05	1
b.	<5 receptors within 1/2 mile	2	0.10	
c.	5-10 receptors within 1/2 mile	3	0.15	
d.	>10 within 1/2 mile	4	0.20	
e.	impacts major highway/interstate	5	0.25	
			Net -->	*0.05*
B. Hazmat response time			0.05	
a.	<30 minutes	1		1
b.	30 - 60 minutes	3		(no AHMs)
c.	>60 minutes	5		
			Net -->	*0.05*
4. Rescue			0.15	
a.	<30 minutes	1		
b.	30 - 60 minutes	3		3
c.	>60 minutes	5		
			Net -->	*0.45*
5. EMS				
EMS response time			0.15	
a.	in-house EMT or <5 minutes response time	1		
b.	5 - 10 minute resposne time	2		
c.	>10 and <15 minute response time	3		
d.	>15 and <30 minute response time	4		
e.	>30 minute response time	5		5
			Net -->	*0.75*
	Sum weighting factors		**1.00**	
TOTAL SCORE			======>	2.10
LOW Priority: additional resources and mitigation may be needed.		0.1 - 1.5		
MEDIUM Priority: additional resources and mitigation needed.		1.5 - 2.5		
HIGH Priority: very significant need for additional resources and mitigation.		2.5 - 3.5		17.4%
VERY HIGH Priority: urgent need for additional resources and mitigation.		>3.5		

Appendix B
Two Letters from Riverside County Emergency Medical Services Agency

RIVERSIDE COUNTY

EMS

COMMUNITY HEALTH AGENCY • DEPARTMENT OF PUBLIC HEALTH
EMERGENCY MEDICAL SERVICES AGENCY

October 26, 2010

Jason Neumann, Fire Captain
CAL FIRE / Riverside Unit/Strategic Planning Division
210 West San Jacinto Avenue
Perris, California 92570

Dear Captain Neumann,

Thank you for including us in the review of the Rice Solar Energy Project Fire (and EMS,) Needs Assessment. We have reviewed the document and find several areas of concern. The Needs Assessment does not fit within our policies, procedures or protocols. In the table below we outline our recommendations to meet the medical needs of the construction and operations phases.

As a point of clarification, due to the Exclusive Operating Areas in Riverside County and the recommendation of Advanced Life Support level of service within the Needs Assessment, Blythe Ambulance Company would be the ALS provider. If they are unable to provide the required service they would sub-contract to another Riverside County ALS GROUND permitted provider.
ALS non-transport level of service may be provided by our County Fire Department by virtue of an ALS First Responder.
Basic Life Support may be provided by any BLS permitted provider within the County.
First Aid may be provided by an RN, LVN, EMT, EMT-P or an individual trained in first aid. There must be employer policies to guide practices, the EMT-P may not be identified as such and the equipment and supplies must be limited to first aid.

Location within document	Response	Recommendation
Exec. Summary, p 8,Bullet point #1. Exec. Summary, p 9,Bullet point #4. 4.3, pg 4-6, Bullet point #1. 6.0, pg 6-2, Bullet point #1. 6.0, pg 6-4, 1st paragraph	Health and Safety Code 1797.178: No person or organization shall provide ALS or limited ALS unless that person is or organization is an authorized part of the EMS system of the local EMS agency.	On site medical aid to be addressed within one of the following: 1. EOA ALS provider to provide onsite services w/ transport. 2. EOA provider sub-contracts to another Riv Co. permitted provider for ALS w/ ground transport. 3. Riv Co permitted BLS provider with ground transport. 4. Fire Department ALS 1st responder w/o transport. 5. RN or First Aid personnel, (EMT-P not recognized) with limited 1st aid equipment and supplies.

4065 County Circle Drive, Riverside, CA 92503 • Mailing Address: P.O. Box 7600, Riverside, CA 92513-7600
Phone: 951.358.5029 • TDD 951.358.5124 • Fax 951.358.5160 • rivcoems.org

Location within document	Response	Recommendation
Exec Summary, pg 8, Bullet point #2 4.3, pg 4-7, Bullet point #1 6.0, pg 6-2, Bullet point #2	Air medical can only be requested & dispatched through the county dispatch system. Riverside EMS policy 5130:5.5. DISPATCH OF EMS AIRCRAFT In order to provide for a uniform system of dispatch of EMS aircraft, and to prevent potential problems with the dispatch of more than one EMS aircraft, the Riverside County Fire Department is designated as the Coordinating Agency for the dispatch of EMS aircraft. Requests for an air ambulance or rescue aircraft shall be made through the Emergency Command Center (ECC) of the Riverside County Fire Department located in Perris.	The onsite medical aid practitioner shall call 911 for a full EMS response for a critically ill or injured patient. The ECC is able to auto launch an air craft due to the rural/remote location of the project, with an anticipated ETA fly time of 35 minutes to the site.

Please feel free to contact us for any questions or comments at 951-358-5029.

Sincerely,

Cindi

Cindi Stoll, RN, BSN, CEN
Trauma/HEMS/EMS-C System Manger

RIVERSIDE COUNTY

EMS

COMMUNITY HEALTH AGENCY • DEPARTMENT OF PUBLIC HEALTH
EMERGENCY MEDICAL SERVICES AGENCY

October 27, 2010

Jason Neumann, Fire Captain
CAL FIRE / Riverside Unit/Strategic Planning Division
210 West San Jacinto Avenue
Perris, California 92570

Dear Captain Neumann,

Regarding the letter dated October 26, 2010, you requested clarification on the first two points of EOA ALS transport and EOA sub-contractor transport and the use of 9-1-1. Our position is that anytime a patient is transported from a scene the 9-1-1 system is activated. The only difference in this scenario is that ground transport is already on scene. Regardless if the transport is ALS ground or air, or BLS the 9-1-1 system will be activated. Once the patient is in route the ECC shall be notified by the transporting agency of the fact that there is no longer a patient on scene. It will then be the Fire Department's decision to proceed or cancel. This process maintains the integrity of the EMS system with the patient's needs at the forefront. It also allows for the notification to the Fire Department that the facility possibly has had a change in there onsite medical aid status.

I hope this answers your questions. Please feel free to contact me of any further questions or comments.

Thank you for your time and attention.

Cindi

Cindi Stoll, RN, BSN, CEN
Trauma/HEMS/EMS-C System Manager

4065 County Circle Drive, Riverside, CA 92503 • Mailing Address: P.O. Box 7600, Riverside, CA 92513-7600
Phone: 951.358.5029 • TDD 951.358.5124 • Fax 951.358.5160 • rivcoems.org

REFERENCES

GB 2010 – Galati Blek, LLP (tn: 58849). Rice Solar Energy, LLC's Revised Fire Needs Assessment, Dated 10/25/10. Submitted to CEC/ Docket Unit on 10/25/10.

Cultural Resources

DECLARATION OF KIM TREMAINE

I, Kim Tremaine, declare as follows:

1. I am presently employed by the California Energy Commission in the Facilities Siting Office of the Systems Assessments and Facilities Siting Division as a Cultural Resources Specialist.

2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.

3. I helped prepare the staff testimony and errata on the Cultural Section for the Rice Solar Energy Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.

4. It is my professional opinion that the prepared testimony and errata is valid and accurate with respect to the issue addressed therein.

5. I am personally familiar with the facts and conclusions related in the testimony and errata and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/26/10 Signed: Kim Tremaine

At: West Sacramento, California

Cultural Resources

The following edits to staff's proposed Cultural Resource Conditions of Certification represent a compilation of the following: 1) Staff's original SA/DEIS conditions; 2) Staff's updates as proposed in our October 21, 2010 Opening Testimony; and 3) Staff's response to the Applicant's Opening Testimony Set 2 dated October 22, 2010.

Staff has not proposed any changes to Conditions of Certification **CUL-1, -2, -3, -5,** and **-6** since publication of the SA/DEIS. All edits to the other Cultural Resources Conditions of Certification since publication of the SA/DEIS are shown in underline and strikeout and represent a compilation of staff's recommended changes since then. Notes explaining the nature of comments are presented in italics.

PROPOSED CONDITIONS OF CERTIFICATION

CUL-1 DESERT TRAINING CENTER CALIFORNIA-ARIZONA MANEUVER AREA CULTURAL LANDSCAPE (DTCCL) PROGRAM

The project owner shall contribute to a special fund set up by the Energy Commission and/or Western to finance the DTC/C-AMA Cultural Landscape Documentation and Possible NRHP Nomination Program (DTCCL Program) presented in the RSEP SA/DEIS.

The amount of the contribution shall be $22 per acre that the project encloses or otherwise disturbs. Any additional contingency contribution is not to exceed an amount totaling 20% of the original contribution. The contribution to the special fund may be made in installments, with the approval of the Compliance Project Manager (CPM), with the first installment to constitute 1/3 of the total original contribution amount.
If a project is not certified, a project owner does not build the project, or for any reason deemed acceptable by the CPM, a project owner does not participate in funding the DTCCL Program, the other project owner(s) may consult with the CPM to adjust the scale of the DTCCL Program research activities to match available funding. A project owner that funds the DTCCL Program and then withdraws shall be able to receive a refund of their contributions on a prorated basis.

Verification: Within two weeks (14 days) of the receipt of an invoice from the Energy Commission or BLM, the project owner shall contribute the entire amount of the required contribution or the first of three installments, equal to one-third of the total contribution amount, to the established funding vehicle for the Program. The delivery dates for the remaining installments shall be determined by the CPM, based on program requirements.

The project owner shall provide a copy of the notice of successful transfer of funds for any payment or installment to the DTCCL fund to the CPM within 10 days of receipt.

CUL-2 CULTURAL RESOURCES PERSONNEL

Prior to the start of ground disturbance (includes preconstruction site mobilization and construction grading, boring, and trenching, as defined in the General Conditions for this project), the project owner shall obtain the services of a Cultural Resources Specialist (CRS) and one or more alternate CRSs, if alternates are needed. The CRS shall manage all monitoring, mitigation, curation, and reporting activities in accordance with the Conditions of

Certification (Conditions).

The CRS may obtain the services of Cultural Resources Monitors (CRMs), as needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS implements the cultural resources conditions providing for data recovery from known historical resources and makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner. No ground disturbance shall occur prior to Compliance Project Manager (CPM) approval of the CRS and alternates, unless such activities are specifically approved by the CPM. Approval of a CRS may be denied or revoked for reasons including, but not limited to, non-compliance on this or other Energy Commission projects.

Cultural Resources Specialist

The resumes for the CRS and alternate(s) shall include information demonstrating, to the satisfaction of the CPM, that their training and backgrounds conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the CRS shall have the following qualifications:

1. A background in anthropology and prehistoric archaeology;
2. At least 10 years of archaeological resource mitigation and field experience, with at least 3 of those years in California; and
3. At least 3 years of experience in a decision-making capacity on cultural resources projects, with at least 1 of those years in California, and the appropriate training and experience to knowledgably make recommendations regarding the significance of cultural resources.

The project owner shall ensure that the CRS obtains the services of a qualified historical archaeologist to conduct the research specified in **CUL-9**. The Project Historical Archaeologist's (PHA) training and background must meet the U.S. Secretary of Interior's Professional Qualifications Standards for historical archaeology, as published in Title 36, Code of Federal Regulations, part 61.

The resumes of the CRS, alternate CRS, and PHA shall include the names and telephone numbers of contacts familiar with the work of these persons on projects referenced in the resumes and demonstrate to the satisfaction of the CPM that these persons have the appropriate training and experience to undertake the required research. The project owner may name and hire the CRS, alternate CRS, and PHA prior to certification.

Field Crew Members and Cultural Resources Monitors

CRMs and field crew members, including the Special Interest Monitor (SIM)[1], shall have the following qualifications:

1. A B.S. or B.A. degree in anthropology, archaeology, historical archaeology,or a related field, and one year experience monitoring in California; or

2. An A.S. or A.A. degree in anthropology, archaeology, historical archaeology, or a related field, and four years experience monitoring in California; or

[1] The SIM may observe without meeting the qualifications identified in this subsection, but recommendations for the treatment of any unanticipated finds will be considered advisory only and will need approval from the CRS or alternate CRS to be implemented. SIMs without sufficient professional qualifications cannot act as or in place of a CRM.

3. Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and two years of monitoring experience in California.

Verification:

1. Preferably at least 120 days, but in any event no less than75 days prior to the start of ground disturbance, the project owner shall submit the resumes for the CRS, the alternate CRS(s) if desired, and the PHA to the CPM for review and approval.

2. At least 65 days prior to the start of data recovery on known archaeological sites, the project owner shall confirm in writing to the CPM that the approved CRS (or alternate CRS) and PHA will be available for on-site work and are prepared to implement the cultural resources conditions of certification.

3. At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval. At the same time, the project owner shall also provide the AFC and all cultural resources documents, field notes, photographs, and other cultural resources materials generated by the project to the proposed new CRS. If no alternate CRS is available to assume the duties of the CRS, a monitor may temporarily serve in place of a CRS, for a maximum of three days, to allow ground disturbance to continue uninterrupted. If cultural resources are discovered, ground disturbance shall be halted until there is a CRS or alternate CRS to make a recommendation regarding significance.

4. At least 20 days prior to data recovery on known archaeological sites, the CRS shall provide a letter to the CPM for review and approval, naming anticipated field crew members for the project, providing resumes or other proof of qualifications, and attesting that the identified field crew members meet the minimum qualifications for cultural resources data recovery required by this Condition.

5. At least 20 days prior to ground disturbance, the CRS shall provide a letter to the CPM for review and approval, naming anticipated CRMs for the project providing resumes or other proof of qualifications, and attesting that the identified CRMs meet the minimum qualifications for cultural resources monitoring required by this Condition.

6. At least 5 days prior to additional CRMs beginning on-site duties during the project, the CRS shall provide letters to the CPM for review and approval, identifying the new CRMs, providing resumes or other proof of qualifications, and attesting to their qualifications.

CUL-3 PROJECT DOCUMENTATION FOR CULTURAL RESOURCES PERSONNEL

Prior to the start of ground disturbance, the project owner shall provide the CRS and PHA with copies of the AFC, data responses, confidential cultural resources documents, Staff Assessment (SA), and any subsequent revised or supplemental SA. The project owner shall also provide the CRS, PHA, and CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate USGS quadrangles and maps at an appropriate scale (e.g., 1:2400 or 1” = 200’) for plotting cultural features or materials. If the CRS requests enlargements or strip maps for

linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review map submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. No ground disturbance shall occur prior to CPM approval of maps and drawings, unless such activities are specifically approved by the CPM.

If construction of the project would proceed in phases, maps and drawings not previously provided shall be provided to the CRS, PHA, and CPM prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

Until ground disturbance is completed, the project construction manager shall provide the CRS and CPM with a schedule of project activities for the following week, including the identification of area(s) where ground disturbance will occur. The project owner shall notify the CRS and CPM of any changes to the schedule of construction phases.

Verification:

1. Preferably at least 115 days, but in any event no less than 60 days prior to the start of ground disturbance, the project owner shall provide the CRS, PHA, and CPM with copies of the AFC, data responses, confidential cultural resources documents, the Staff Assessment (SA), and any revised or supplemental SAs. The project owner shall also provide the CRS, PHA, and CPM with the subject maps and drawings. Staff, in consultation with the CRS, and PHA, will review and approve maps and drawings as suitable for cultural resources monitoring and data recovery activities.

2. At least 15 days prior to the start of ground disturbance, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS, PHA, and CPM.

3. At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS, PHA, and CPM.

4. Weekly, during ground disturbance, a schedule of anticipated following week's project activity shall be provided to the CRS and CPM by letter, e-mail, or fax.

5. Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide written notice of the changes to the CRS and CPM.

CUL-4 CULTURAL RESOURCES MONITORING AND MITIGATION PLAN

Prior to the start of ground disturbance, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by or under the direction of the CRS, with the contributions of the PHA, to the CPM for review and approval. The authors' name(s) shall appear on the title page of the CRMMP. The CRMMP shall specify the impact mitigation protocols for all known cultural resources and identify general and specific measures to minimize potential impacts to all other cultural resources, including those discovered during construction. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate CRS, PHA, each CRM, and the project owner's on-site construction manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless such activities are specifically approved by the CPM. Prior to certification, the project owner may have the CRS, alternate CRS, and PHA complete and submit the CRMMP to the CPM for review and approval, except for those portions

to be contributed by the DTCCL programs.

The CRMMP shall include, but is not limited to, the elements and measures listed below.

1. The following statement shall be included in the Introduction: “Any discussion, summary, or paraphrasing of the Conditions of Certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A.”

2. The duties o the CRS shall be fully discussed, including coordination duties with respect to the completion of the Desert Training Center California-Arizona Maneuver Area Cultural Landscape (DTCCL) documentation and possible NRHP nomination oversight/management duties with respect to site evaluation, data collection, monitoring, and reporting at both known prehistoric and historic-period archaeological sites and any CRHR-eligible (as determined by the CPM) prehistoric and historic-period archaeological sites discovered during construction.

3. A general research design shall be developed that:

a. Charts a timeline of all research activities, including those coordinated under the DTCCL documentation and possible NRHP nomination program;

b. Recapitulates the existing historic contexts developed in the DTCCL historic context and adds to these the additional context of the non-military, historic- period occupation and use of the Rice Valley, to create a comprehensive historic context for the RSEP vicinity;

c. Poses archaeological research questions and testable hypotheses specifically applicable to the archaeological resource types known for Rice Valley, based on the research questions developed under the DTCCL research and on the archaeological and historical literature pertinent to Rice Valley; and

d. Clearly articulates why it is in the public interest to address the research questions that it poses.

4. Protocols, consistent with the guidance provided in **CUL-9**, shall be specified for the treatment of known and newly discovered prehistoric and historic-period archaeological resource types.

5. Artifact collection, retention/disposal, and curation policies shall be discussed, as related to the research questions formulated in the research design. These policies shall apply to cultural resources materials and documentation resulting from evaluation and data recovery at both known prehistoric and historic-period archaeological sites and any CRHR- or NRHP-eligible (as determined by the CPM) prehistoric and historic-period archaeological sites discovered during construction. A prescriptive treatment plan may be included in the CRMMP for limited data types.

6. The implementation sequence and the estimated time frames needed to accomplish all project-related tasks <u>prior to and</u> during the ground-disturbance and post-ground– disturbance analysis phases of the project shall be specified, <u>taking into consideration any pre-construction</u>

ground disturbances that may require biological monitoring.

7. Person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team shall be identified.

8. The manner in which Native American observers or monitors will be included, ~~in addition to their roles in the activities required under CUL-1~~; the procedures to be used to select them; and their roles and responsibilities shall be described.

9. All impact-avoidance measures (such a flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation shall be described. Any areas where these measures are to be implemented shall be identified. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related impacts.

10. The commitment to record on Department of Parks and Recreation (DPR) 523 forms, to map, and to photograph all encountered cultural resources over 50 years of age shall be stated. In addition, the commitment to curate all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery), in accordance with the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository or museum shall be stated.

11. The commitment of the project owner to pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project shall be stated. The project owner shall identify a curation facility that could accept cultural resources materials resulting from RSEP cultural resources investigations.

12. The CRS shall attest to having access to equipment and supplies necessary for site mapping, photography, and recovery of all cultural resource materials (that cannot be treated prescriptively) from known CRHR-eligible archaeological sites and from CRHR-eligible sites that are encountered during ground disturbance .

13. The contents, format, and review and approval process of the final Cultural Resource Report (CRR) shall be described.

Verification:

1. Preferably at least 90 days, but in any event no less than 30 days prior to the start of ~~ground disturbance~~ site mobilization, the project owner shall submit the CRMMP to the CPM for review and approval.

2. At least 20 days prior to the start of ~~ground disturbance~~ site mobilization, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).

3. At least 30 days prior to the initiation of ~~ground disturbance~~ site mobilization, the project owner shall provide to the CPM a copy of a letter from a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the

Curation of Archaeological Collections, stating the facility's willingness and ability to receive the materials generated by RSEP cultural resources activities and requiring curation. Any agreements concerning curation will be retained and available for audit for the life of the project.

CUL-5 CULTURAL RESOURCES REPORT (CRR)

The project owner shall submit the final Cultural Resources Report (CRR) to the CPM for review and approval and to Western's archaeologist for review and comment. The final CRR shall be written by or under the direction of the CRS. The final CRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, revised and final Department of Parks and Recreation (DPR) 523 forms, data recovery reports, and any additional research reports not previously submitted to the California Historical Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as appendices to the final CRR.

If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM and to Western's archaeologist for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification:

1. Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.

2. Within 180 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CRR to the CPM for review and approval and to the BLM Palm Springs archaeologist and Western's archaeologist for review and comment. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.

3. Within 10 days after the CPM and Western's archaeologist approve the CRR, the project owner shall provide documentation to the CPM confirming that copies of the final CRR have been provided to the SHPO, the CHRIS, the curating institution, if archaeological materials were collected, and to the Tribal Chairpersons of any Native American groups requesting copies of project-related reports.

CUL-6 WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all new workers within their first week of employment at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas. The training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended, but must be

resumed when ground disturbance, such as landscaping, resumes.

The training shall include:

1. A discussion of applicable laws and penalties under the law;

2. Samples or visuals of artifacts that might be found in the project vicinity;

3. A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed;

4. A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits;

5. Instruction that the CRS, alternate CRS, and CRMs have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;

6. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or CRM, and that redirection of work would be determined by the construction supervisor and the CRS;

7. An informational brochure that identifies reporting procedures in the event of a discovery;

8. An acknowledgement form signed by each worker indicating that they have received the training; and

9. A sticker that shall be placed on hardhats indicating that environmental training has been completed.

10. No ground disturbance shall occur prior to implementation of the WEAP program, unless such activities are specifically approved by the CPM.

Verification:

1. At least 30 days prior to the beginning of ground disturbance the CRS shall provide the training program draft text and graphics and the informational brochure to the CPM for review and approval.

2. At least 15 days prior to the beginning of ground disturbance, the CPM will provide the project owner with a WEAP Training Acknowledgement form for each WEAP trained worker to sign.

3. Monthly, until ground disturbance is completed, the project owner shall provide, in the Monthly Compliance Report (MCR), the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.

Staff's Response to Applicant's Proposed Changes to CUL-7

Staff does not accept Applicant's suggestion to eliminate the requirement of a Special Interest Monitor. This is a condition of approval by the County of Riverside for grading and building permits.

CUL-7 CONSTRUCTION MONITORING PROGRAM

The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor, full time, all ground disturbance, to prevent construction impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.

Consistent with the recommendations of the County of Riverside, a Special Interest Monitor (SIM), designated by the George S. Patton Memorial Museum, shall monitor all ground disturbance, consistent with the actions of a CRM, but shall only have the authority to halt construction or assume full responsibilities as a CRM if he/she meets the qualification requirements, as designated in **CUL-2**. Otherwise, any recommendations are advisory only and must be approved by the CRS or alternate CRS.

Full-time archaeological monitoring for this project shall include the archaeological monitoring of ground-disturbing activities by approved CRS or CPM in the areas specified, for as long as the activities are ongoing. Where excavation equipment is actively removing dirt and hauling the excavated material farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material. The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.

On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of noncompliance with the Conditions and/or applicable LORS. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM. In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e- mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring. The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.
Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these ~~Conditions~~ conditions of certification.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone

or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

Verification:

1. At least 30 days prior to the start of ground disturbance, the CPM shall provide to the CRS an electronic copy of a form to be used as a daily monitoring log.

2. Monthly, while monitoring is on-going, the project owner shall include, in each MCR, a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.

3. At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.

4. Daily, as long as no cultural resources are found, the CRS shall provide a statement that "no cultural resources over 50 years of age were discovered" to the CPM as an e-mail or in some other form of communication acceptable to the CPM.

5. At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for reducing or ending daily reporting.

6. No later than 30 days following the discovery of any Native American cultural materials, the project owner shall submit, to the CPM, copies of the information transmittal letters sent to the Chairpersons of the Native American tribes or groups who requested the information. Additionally, the project owner shall submit to the CPM copies of letters of transmittal for all subsequent responses to Native American requests for notification, consultation, and reports and records.

7. The project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information within 15 days of receipt.

CUL-8 AUTHORITY TO HALT CONSTRUCTION; TREATMENT OF DISCOVERIES

The project owner shall grant authority to halt ground disturbance to the CRS, alternate CRS, PHA, and the CRM's in the event of a discovery. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

<u>If human remains are found, the project owner shall follow the requirements of the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98(b). The Riverside County Coroner shall be notified and remains shall be left in place and free from disturbance until the final decision as to the treatment and their disposition has been made. If the remains</u>

are determined to be Native American, the Native American Heritage Commission (NAHC) shall be contacted within the period specified by law. Subsequently, the NAHC shall identify the "Most Likely Descendant." The Most Likely Descendant shall then make recommendations and engage in consultation concerning the treatment of the remains. Human remains from other ethnic/cultural groups with recognized historical associations to the project area shall also be subject to consultation among appropriate interested parties, CPM, Riverside County, and federal agency representatives (if the find occurs on federal public lands).

~~In the event that~~ For unanticipated finds, excluding human remains, if a cultural resource over 50 years of age is found (or if younger, determined exceptionally significant by the CPM), or impacts to such a resource can be anticipated, ground disturbance shall be halted within a minimum of 100 feet of the find or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. Monitoring and daily reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere. The halting or redirection of ground disturbance shall remain in effect until the CRS has visited the discovery, and all of the following have occurred:

1. The CRS has notified the project owner and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of CRHR eligibility, and recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.

2. If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.

3. The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary" form shall include a recommendation on the CRHR eligibility of the discovery. The project owner shall submit completed forms to the CPM.

4. The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery plan, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.

Verification:

1. At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, PHA, and CRMs have the authority to halt ground disturbance in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.

2. Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all Native American groups that expressed a desire to be notified in the event of such a discovery.

3. Unless the discovery can be treated prescriptively, as specified in the CRMMP, completed

DPR 523 forms for resources newly discovered during ground disturbance shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural resource.

Staff's Response to Applicant's Proposed Changes to CUL-9
Staff accepts Applicant's suggested changes with the following exception: Feature records shall be completed for any features that have not been previously prepared. Any feature records that HAVE been completed, shall be upgraded to reflect additional information that was not obtained during the initial recordation, as the initial recordation effort was very cursory. As a verification measure, feature records shall be submitted by the CRS to the CPM for review and approval prior to any ground disturbance. These edits are reflected below.

CUL-9 DATA RECOVERY FOR RICE ARMY AIR FIELD AND CAMP RICE FEATURES

Prior to the start of ground disturbance, the project owner shall ensure that ~~records~~ feature forms for all ~~298~~ historic-period features at Rice Army Airfield and Camp Rice are ~~be upgraded~~ completed to the satisfaction of the CPM. The focus of the recordation is to recover any additional data associated with these features before they are destroyed during construction. A plan shall specify in detail the location recordation equipment and methods to be used and describe any anticipated post-processing of the data. The project owner shall then ensure that the CRS, the PHA, and/or archaeological team members implement the plan, if allowed by the CPM, which shall include, but is not limited to the following tasks:

1. The project owner shall hire a PHA with the qualifications described in **CUL-2** to supervise the fieldwork.

2. The project owner shall ensure that, prior to beginning the fieldwork, the PHA and all field crew members are trained by the DTCCL Historical Archaeologist, or equivalent qualified person approved by the CPM and hired by the project owner should the DTCCL Historical Archaeologist not be available, ~~to identify the specific landform for each site~~; in the identification, analysis and interpretation of the artifacts, environmental modifications, and trash disposal patterns associated with the early phases of WWII land-based U.S. ~~army~~ Army activities, as researched and detailed by the DTCCL PI-Historian and the DTCCL Historical Archaeologist.

3. The project owner shall ensure that, prior to beginning the fieldwork, the field crew members are also trained in the consistent and accurate identification of the full range of late nineteenth and early-to-mid-twentieth-century can, bottle, and ceramic diagnostic traits.

4. The project owner shall ensure that the original site map shall be updated to include at minimum: landform features such as small drainages, any man-made features, the limits of any artifact concentrations and features (previously known and newly found in the ~~metal detector~~ geophysical survey), using geographic positioning system recordation equipment ~~that has the latest technology~~ with sub-meter accuracy capable of recording locational data in a standard geo-reference grid coordinate system (such as UTM 11 North or California Teale Albers).

5. The project owner shall ensure that a detailed in-field analysis of ~~all~~ a representative sample of diagnostic artifacts shall be completed, documenting the measurements and the types of seams and closures for each bottle, and the measurements, seams, closure, and opening method for all cans. Photographs shall be taken of maker's marks on bottles, any text or

designs on bottles and cans, and of decorative patterns and maker's marks on ceramics. Artifacts shall not be collected.

6. The project owner shall ensure a systematic ~~metal detector~~ geophysical survey of portions of the airfield is ~~be~~ completed with inclusive coverage of the northern end of the site, where most of the military activities occurred, to identify and map the distribution of near-surface and buried materials/features. ~~at each site, and that each "hit" is investigated. All artifacts and features thus found must be mapped, measured, photographed, and fully described in writing.~~ This survey shall be conducted with a mobile electromagnetic instrument and high-resolution GPS unit, measuring both conductivity and magnetic susceptibility (metal detection).

7. The project owner shall ensure that ~~all structures are mapped, measured, photographed, and fully described in writing, and that all associated~~ features having subsurface elements, including those identified in the geophysical survey, are excavated by a qualified historical archaeologist. All features and contents must be mapped, measured, photographed, and fully described in writing.

8. The project owner shall ensure that the details of what is found at each ~~site~~ Rice Army Airfield feature or new site shall be presented in a letter report from the CRS or PHA which shall serve as a preliminary report, that details what was found at each ~~site~~ feature, as follows:

a. Letter reports may address one ~~site~~ feature or multiple ~~sites~~ features depending on the needs of the CRS; and

b. The letter report shall be a concise document ~~the~~ that provides a description of the schedule and methods used in the field effort, a preliminary tally of the numbers and types of features and deposits that were found, a discussion of the potential range of error for that tally, and a map showing the location of collection and/or excavation units, including topographic contours and the ~~site~~ feature landforms.

c. The letter report shall make a recommendation on whether each ~~site~~ feature is a contributor to the DTTCL.

9. The project owner shall ensure that the data collected from the fieldwork shall be provided to the DTCCL Historical Archaeologist to assist in the determination of which, if any, of the historic-period sites are contributing elements to the DTCCL.

10. The project owner shall ensure that the PHA analyzes all recovered data and writes or supervisors the writing of a comprehensive final report. This report shall be included in the CRR (**CUL-5**). Relevant portions of the information gathered ~~shall~~ may be included in the possible NRHP nomination for the DTCCL (funded by **CUL-1).**

Verification:

1. At least 90 days prior to ground disturbance, the project owner shall notify the CPM that mapping and upgraded in-field artifact analysis has ensued.

2. At least 60 days prior to ground disturbance, ~~Within one week of completing data recovery at a site,~~ the project owner shall submit to the CPM for review and approval feature records and ~~to the CPM for review and approval~~ a letter report written by the CRS, evidencing that the field portion of data recovery at each ~~site~~ particular feature has been completed and evaluating

whether the feature contributes to the overall eligibility of the property consistent with the requirements of the CRMMP. When the CPM approves the letter report, ground disturbance may begin at the ~~site~~ feature location(s) that are the subject of the letter report.

CUL-10 COMPLIANCE COORDINATION WITH FEDERAL SECTION 106 MOA

If stipulations in the RSEP Section 106 Memorandum of Agreement (MOA), should such a document be prepared and executed, conflict in a mutually exclusive manner with or precisely duplicate the conditions of certification in the Energy Commission Decision, the MOA provisions shall take precedence. Where provisions for the implementation of historic preservation treatments in the conditions of certification are in addition to or exceed such provisions in the MOA, the applicant shall implement treatment in a manner that fulfills both the provisions of the MOA and the conditions of certification. Where the applicant believes that a mutually exclusive conflict exists between these conditions and the provisions in the MOA, or that the said conditions and provisions appear to require a precisely duplicative effort, the applicant shall submit, for the review and approval of the CPM, formal correspondence that states the applicant's determination that such a conflict or effort exists and provides evidentiary support for that determination. Where provisions in the conditions of compliance appear to augment or exceed the provisions in the MOA, the project owner shall coordinate historic preservation treatment with the CPM. Such coordination may, at the discretion of the ~~applicant~~ project owner, be on a formal or informal basis. However, the CPM shall make the final determination of the consistency of project activities with Energy Commission conditions of compliance.

Verification:

Prior to the implementation of any historic preservation treatments in these conditions that may conflict in a mutually exclusive manner with any analogous treatments that a Federal MOA may provide or that may precisely duplicate such analogous treatments, the project owner shall consult with the CPM concerning any such conflicts and provide, for the review and approval of the CPM, formal correspondence that relates the outcome of said consultation, states the ~~applicant~~ project owner's determination that a mutually exclusive conflict or precisely duplicative effort exists, and provides evidentiary support for that determination. The ~~applicant~~ project owner shall not proceed with the implementation of any historic preservation treatments that are subject to consultation under this condition until the CPM approves the applicant's determination thereon.

CUL-11: ~~PUBLIC ACCESS TO HISTORIC FEATURES~~ HISTORIC INTERPRETIVE ROADSIDE STOP

Prior to the start of construction, the project owner shall provide conceptual plans for the Historic Interpretive Roadside Stop (HIRS or roadside stop) ~~Area~~ to the CPM for review and approval. ~~The plans shall also identify existing historic features of Rice AAF and Camp Rice that would be protected from disturbance during construction and preserved in accordance with the MOA.~~ Prior to commercial operation of RSEP, the project owner shall provide the final plans for the ~~Historic Interpretive Area~~ roadside stop to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval, ~~that would illustrate and interpret Rice AAF and Camp Rice as components of the larger DTC/C-AMA~~. Construction of the roadside stop ~~Historic Interpretive Area~~ shall be complete prior to the start of commercial operations. The project owner's plans for the ~~Historic Interpretive Area~~ may roadside stop shall be coordinated with Caltrans and Riverside County, and shall be developed in a manner that does not

compromise site or public safety or security.

The ~~Historic Interpretive Area~~ Roadside Stop shall include and make accessible to the public the following features:

1. An encroachment off SR 62 ~~(proposed Fire Access road encroachment)~~ to the ~~Historic Interpretive Area~~ roadside stop and vehicle parking area, consistent with Caltrans, Riverside County, and the Americans with Disabilities Act (ADA) access and requirements parking requirements;. The vehicle parking area shall include:

a. Four (4) parking spaces, including one van-accessible ADA-compliant parking space.

b. The parking spaces and encroachment shall provide a level, all-weather surface, preferably of compacted rock, decomposed granite, or similar permeable material, or as required by Caltrans.

2. An interpretive kiosk, protected by a shade structure, that displays a minimum of five (5) panels of text and graphics ~~illustrations~~ ~~(e.g. photographs, maps, and diagrams)~~ that illustrate and interpret Rice AAF and Camp Rice as individual historic ~~features~~ properties and as components of the larger DTC/C-AMA. Access to the kiosk shall be handicap-accessible, over a level, all-weather surface, preferably of compacted rock, decomposed granite, or similar permeable material, or paved with asphalt concrete, consistent with Riverside County paving requirements and Caltrans encroachment requirements.

~~3. Identification of existing historic features of Rice AAF, adjacent to the kiosk, with signage and interpretive information along an ADA-accessible walking trail;~~

~~4. A shade-covered area, with minimum of two picnic tables and benches;~~

3. Self-closing, wildlife-resistant trashcans;

~~6. A two-stall, ADA-accessible, contained restroom facility; and~~

~~7. A drinking fountain.~~

Verification:

1. At least 30 days prior to the start of construction, the project owner shall submit conceptual plans for the ~~Historic Interpretive Area~~ Roadside Stop to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval. ~~The plan shall identify existing historic features of Rice AAF and Camp Rice that would be protected from disturbance during construction and preserved in accordance with the MOA.~~

2. No later than one year following ~~commencement of RSEP~~ start of construction, the project owner shall submit final plans for the roadside stop ~~Historic Interpretive Area~~ to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval.

3. At least 30 days prior to ~~RSEP~~ the start of commercial operation, the project owner shall complete construction of the ~~Historic Interpretive Area and obtain approval from~~ roadside stop and submit photographic proof of completion to the CPM ~~that the Historic Interpretive Area meets the requirements of this condition~~ for review and approval. The ~~Historic Interpretive Area~~

~~shall be open~~ roadside stop shall be made accessible to the public within 10 days from the start of commercial operations and shall be maintained by the project owner for the life of the project.

4. In each Annual Compliance Report, the project owner shall provide a summary of the following:

a. Estimated public visitation to the ~~Historic Interpretive Area~~ roadside stop;

b. Any issues associated with operating and maintenance;

c. Proposed maintenance and improvements, and a schedule for completion;

d. A log of all completed maintenance and improvements to the ~~Historic Interpretive Area~~ roadside stop from the start of RSEP commercial operation to the present day.

Staff's Response to Applicant's Proposed Changes to CUL-12
Staff accepts Applicant's previous suggested changes and proposes an additional clarification to note that work along Western's Parker-Blythe Transmission Line No. 2 would only be required if the telecommunication option for installation of the fiber optical cable is implemented.

CUL-12 FLAG AND AVOID
Resources ~~within the Warren-Alquist Public Use Area (in~~ just outside the northwestern ~~corner~~ portion of the main facility circular footprint ~~will~~ would be preserved through avoidance. Previously recorded resources along Western's Parker Dam-Blythe Transmission Line No. 2, subject to possible project impacts associated with installation of the fiber optical cable (if this telecommunication option is implemented), shall be revisited prior to construction. In the event that new resources are discovered during construction or previously recorded resources would be additionally affected, where impacts can be reduced or avoided, the project owner shall:

1. Ensure that a CRS, alternate CRS or CRM re-establish the boundary of each site, add a 10-meter-wide buffer around the periphery of each site boundary, and flag the resulting space in a conspicuous manner;

2. Ensure that a CRM enforces avoidance of the flagged areas during RSEP construction; and

3. Ensure, after completion of construction, boundary markings around each site and buffer are removed so as not to attract vandals.

4. Site records for previously documented resources shall be updated.

Verification:

Within 90 days of transmission line construction, the project owner shall submit for CPM review and approval, site record updates of resources subject to possible impacts.
Within 90 days of the completion of plant construction, the project owner shall submit for CPM review and approval a letter, with photograph and maps, evidencing the removal of boundary markings.

CUL-13 DOCUMENTARY (DTC/C-AMA SKY TOUR)

The project owner shall ensure the production of a high-definition, broadcast quality documentary of the Rice Army Airfield (Rice AAF), Camp Rice, and the surrounding DTC/C-AMA cultural landscape, focusing on the integration and contributions of the Rice AAF, Camp Rice, and other airfields and support facilities to the DTC/C-AMA WWII military training mission, from an aviation perspective.

1. Prior to the start of filming, the project owner shall provide the qualifications of the proposed production company to the Executive Director of the George S. Patton Museum for review and comment, and to the CPM for review and approval. The production company shall have experience in the creation of historic documentary-style videos, consistent with History Channel, Discovery Channel, and PBS production values, and shall provide evidence of the successful completion of at least three full-length videos from project development to release. A copy of any contract related to the production of the documentary shall be submitted to the CPM within 10 days of execution.

2. Prior to the start of filming, the project owner shall also submit the resume of a proposed production advisor to the CPM for review and approval. The production advisor, shall be a qualified historian, with training and experience consistent with the requirements of the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the advisor must have experience researching and documenting historic military resources, preferably within the DTC/C-AMA. The production advisor shall provide direction during production and post-production to ensure historical accuracy and to provide assistance obtaining historic WWII documentation (e.g., military film and training footage, news clips, still photos, audio and written transcripts of interviews) and the most recent information on Camp Rice and the Rice AAF in particular, and the DTC/C-AMA in general.

3. Prior to the start of site mobilization, the production company shall take the initial aerial footage of the remains of the Rice AAF and Camp Rice facilities and features and training fields surrounding the camp. In addition, aerial footage shall be taken of the remains of other facilities and features that are integral or contributing to the DTC/C-AMA cultural landscape, including airfields, camps, bombing ranges, and the King's Throne (where Patton sat to observe maneuvers) as soon as feasible, preferably prior to significant surface disturbance at the Blythe, Palen, and Genesis solar power project sites or other locations slated for development in the near future. Historic film; still photos; re-creations; interview footage and audio tracks; and compatible, high-quality video footage of the subject areas taken prior to current filming may also be integrated into the final product. The original acquisition format shall be high definition, 16X9, 1080p digital format, using broadcast-level cameras and lenses. The aerial documentation shall be photographed using a television motion picture, industry-accepted camera stabilization system, mounted to a helicopter.

4. Prior to the start of production editing, the project owner shall submit a first draft script, storyboard, and description of other related project elements, including proposed finished length of the documentary (minimum 45 minutes of edited footage for the full-length version and 10 minutes for the abbreviated (excerpt) version), to the DTCCL PI-Historian, production advisor, and Executive Director of the George S. Patton Museum for review and comment, and to the

CPM for review and approval.

5. Prior to the start of commercial plant operations, the project owner shall submit the final cut, with voice-over and background music track, along with packaging proofs, including sample cover, disk label, and packaging materials, to the DTCCL PI- Historian, production advisor, and Executive Director of the George S. Patton Museum for review and comment, and to the CPM for review and approval.

6. Concurrent with the start of commercial plant operations, the project owner shall provide the final approved full-length documentary to the George S. Patton Museum in a high definition format, suitable for mass market duplication, along with 500 DVD copies and 100 BluRay copies of the full-length packaged documentary, suitable for resale. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the BLM Palm Springs-South Coast Field Office, Western, and the CPM. The 10-minute excerpt shall be provided to all parties in a digital format compatible with display requirements of the Museum and webcasting requirements of BLM, Western, and the Energy Commission.

7. In conjunction with delivery of the final approved documentary in the designated format, the project owner shall provide a letter to the George S. Patton Museum confirming that the Museum is assigned and shall exclusively retain all DVD, BluRay, and video reproduction and sales rights, and broadcast television distribution rights of the production, both foreign and domestic, excepting use of excerpts from the documentary [including the 10-minute excerpt (short)] on any Bureau of Land Management, Western, or Energy Commission website related to DTC/C-AMA, southern California Desert history, or renewable energy projects within former DTC/C-AMA areas. The letter shall also confirm that the production company may retain copies of the production specifically for promotional and demonstration purposes only. Copies of the letter shall be sent to the CPM, BLM, Western, and the production company representative.

8. The project owner shall ensure that all raw footage acquired during the production of the documentary is submitted to the DTCCL PI-Historian for use in the DTCCL study. Use of the footage for research purposes shall not be restricted. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the DTCCL PI-Historian.

Verification:

1. At least 15 days prior to the start of filming, the project owner shall provide the qualifications of the proposed production company to the Executive Director of the George S. Patton Museum for review and comment, and to the CPM for review and approval. A copy of any contract related to the production of the documentary shall be submitted to the CPM within 10 days of execution.

2. At least 15 days prior to the start of filming, the project owner shall also submit the resume of a proposed production advisor to the CPM for review and approval. The production advisor, shall be a qualified historian, with training and experience consistent with the requirements of the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the advisor must have experience researching and documenting historic military resources, preferably within the DTC/C-AMA.

3. Prior to the start of site mobilization, the production company shall take the initial aerial footage of the remains of the Rice AAF and Camp Rice facilities and features and training fields surrounding the camp. In addition, aerial footage shall be taken of the remains of other facilities

and features that are integral or contributing to the DTC/C-AMA cultural landscape as soon as feasible, preferably prior to significant surface disturbance at the Blythe, Palen, and Genesis solar power project sites or other locations slated for development in the near future. The original acquisition format shall be high definition, 16X9, 1080p digital format, using broadcast-level cameras and lenses. The aerial documentation shall be photographed using a television motion picture, industry-accepted camera stabilization system, mounted to a helicopter.

4. At least 30 days prior to the start of production editing, the project owner shall submit a first draft script, storyboard, and description of other related project elements, including proposed finished length of the documentary (minimum 45 minutes of edited footage), to the DTCCL PI-Historian, production advisor, and Executive Director of the George S. Patton Museum for review and comment, and to the CPM for review and approval.

5. At least 90 days prior to the start of commercial plant operations, the project owner shall submit the final cut, with voice-over and background music track, along with packaging proofs, including sample cover, disk label, and packaging materials, to the DTCCL PI-Historian, production advisor, and Executive Director of the George S. Patton Museum for review and comment, and to the CPM for review and approval.

6. Concurrent with the start of commercial plant operations, the project owner shall provide the final approved documentary to the George S. Patton Museum in a high definition format, suitable for mass market duplication, along with 500 DVD copies and 100 BluRay copies of the full-length packaged documentary, suitable for resale. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the BLM Palm Springs-South Coast Field Office, Western, and the CPM.

7. In conjunction with delivery of the final approved documentary in the designated format, the project owner shall provide a letter to the Executive Director of the George S. Patton Museum confirming that the Museum is assigned and shall exclusively retain all DVD, BluRay, and video reproduction and sales rights, and broadcast television distribution rights of the production, both foreign and domestic, excepting use of excerpts from the documentary (including the 10- minute short referenced in CUL-14) on any Bureau of Land Management, Western, or Energy Commission website related to DTC/C-AMA, military history, or energy projects in the southern California desert. The letter shall also confirm that the production company may retain copies of the production specifically for promotional and demonstration purposes only. Copies of the letter shall be sent to the CPM, BLM, Western, and the production company representative.

8. Within 30 days from the start of construction, the project owner shall ensure that all raw footage acquired during the production of the documentary is submitted to the DTCCL PI-Historian for use in the DTCCL study. Use of the footage for research purposes shall not be restricted. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the DTCCL PI-Historian.

Staff's Proposed Changes to CUL-14

*Staff has added one provision to **CUL-14** to address that If a new Museum is not constructed within 5 years of RSEP commercial operation, the interpretive display shall be planned and installed in the existing George S. Patton Museum within 6 years of RSEP commercial operation.*

CUL-14 INTERPRETIVE MATERIALS

1. The project owner shall provide the design of at least one tri-fold brochure and one bi-fold pamphlet and an initial production run of both documents of at least 2,500 copies to the George S. Patton Museum for public distribution, interpreting the significance of Rice AAF and Camp Rice as individual historical features and as contributing features within the DTC/C-AMA cultural landscape.

Prior to the final phase of plant construction, the project owner shall submit draft design proofs of the brochure and pamphlet to the Executive Director of the Museum for review and comment, and to the CPM for review and approval.

Prior to the start of commercial plant operations, the project owner shall submit final design proofs of the brochure and pamphlet to the Executive Director of the Museum for review and comment, and to the CPM for review and approval.

Prior to, or concurrent with the start of commercial plant operations, the project owner shall submit a digital/electronic template of the brochure and pamphlet designs, along with 2,500 copies each of the brochure and pamphlet, suitable for public distribution, to the Executive Director of the Museum. The project owner shall also submit the final digital/electronic template of the brochure and pamphlet to the CPM, BLM Palm Springs-South Coast Field Office, and Western. The project owner, Museum, Energy Commission, BLM, and Western shall have authorized use of the initial (and any revised) templates for future production runs for distribution to the public or display on any of the parties' informational websites.

2. According to the Executive Director of the George S. Patton Museum (Museum), a new museum will be built within the next five to six years. Following completion of construction and opening of the new facility to the public, the project owner shall provide and install an interpretive display, related to the Rice AAF, Camp Rice, and the DTC/C-AMA, at the George S. Patton Museum. The display shall be designed consistent with interpretive displays existing at the time of installation and shall incorporate the documentary information on the Rice AAF and Camp Rice, in the context of the DTC/C-AMA military training operations in the California Desert (including the 10-minute sky tour documentary excerpt).

Prior to the preliminary approval of the new Museum construction plans, the project owner shall consult with the Executive Director of the George S. Patton Museum and DTCCL PI-Historian (or Energy Commission Cultural Staff, if the DTCCL study is no longer in existence) regarding design parameters, content, and construction requirements of the interpretive display.

Prior to the final approval of new Museum construction plans, the project owner shall submit the draft exhibit design plans to the Executive Director of the Museum and DTCCL PI-Historian for review and comment, and the CPM for review and approval.

Prior to the start of new Museum construction, the project owner shall submit the final exhibit design and construction plans to the Executive Director of the Museum and DTCCL PI-Historian for review and comment, and the CPM for review and approval.

Prior to the completion of construction, the project owner shall ensure that the approved interpretive display is constructed and installed as an integral part of the new Museum public

display area.

If a new Museum is not constructed within 5 years of RSEP commercial operation, the interpretive display shall be planned and installed in the existing George S. Patton Museum in accordance with the steps outlined above including consultation with the Executive Director of the Museum, and review and approval by the CPM, and completed within 6 years of RSEP commercial operation.

Annually, for each year following the installation of the display, and for the life of the project, the project owner shall contribute $10,000 to the Museum to offset the cost of the exhibit space; maintenance and upgrades to the display; curation of the display during times when it is being updated or is not on display; and to incorporate the information about Camp Rice, Rice AAF, and the DTC/C-AMA provided in the sky tour documentary, brochure, pamphlet, interpretive display, and on-going DTCCL research (see **CUL-1**) into teachers' Internet resources and Museum- sponsored podcast facilities for interactive learning.

Verification:

1. (a) At least 90 days prior to the completion of construction, the project owner shall submit draft design proofs of the brochure and pamphlet to the Executive Director of the Museum for review and comment, and to the CPM for review and approval.

(b) At least 30 days prior to the start of commercial plant operations, the project owner shall submit final design proofs of the brochure and pamphlet to the Executive Director of the Museum for review and comment, and to the CPM for review and approval.

(c) Within 30 days from the start of commercial plant operations, the project owner shall submit the final digital/electronic template of the brochure and pamphlet designs, along with 2,500 copies each of the brochure and pamphlet, suitable for public distribution, to the Executive Director of the Museum. The project owner shall also submit the final digital/electronic template of the brochure and pamphlet to the CPM, BLM Palm Springs-South Coast Field Office, and Western.

2. (a) At least one year prior to the preliminary approval of the new Museum construction plans, the project owner shall consult with the Executive Director of the George S. Patton Museum and DTCCL PI-Historian, production advisor identified in **CUL-13**, or qualified Energy Commission Cultural Staff, regarding design parameters, content, and construction requirements of the interpretive display.

(b) At least 120 days prior to the final approval of new Museum construction plans, the project owner shall submit the draft exhibit design plans to the Executive Director of the Museum and DTCCL PI-Historian for review and comment, and the CPM for review and approval.

(c) At least 90 days prior to the start of new Museum construction, the project owner shall submit the final exhibit design and construction plans to the Executive Director of the Museum and DTCCL PI-Historian or production advisor identified in **CUL-13** for review and comment, and the CPM for review and approval.

(d) At least 30 days prior to the completion of Museum construction, the project owner shall ensure that the approved interpretive display is constructed and installed as an integral part of the new Museum public display area.

(e) If a new Museum is not constructed within 5 years of RSEP commercial operation, the interpretive display shall be planned and installed in the existing George S. Patton Museum in accordance with the steps outlined above including consultation with the Executive Director of the Museum, and review and approval by the CPM, and completed within 6 years of RSEP commercial operation.

~~(e)~~(f) Prior to January 15 of each year following the installation of the display, and extending for the life of the project, the project owner shall contribute $10,000 to the Museum. The project owner shall provide a copy of a receipt or letter from the Museum acknowledging the contribution to the CPM within 10 days of receipt.

Biology

DECLARATION
Testimony of Scott D. White

I, **Scott D. White,** declare as follows:

1. I am presently employed by Aspen Environmental Group, a contractor to the California Energy Commission's Siting, Transmission and Environmental Protection Division, as a senior associate in botany.

2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.

3. I helped prepare the staff testimony on **Biological Resources** for the **Rice Solar Energy Project** based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.

4. I also prepared the attached revised testimony relating to Biological Resources for the on **Biological Resources** for the **Rice Solar Energy Project** based on additional data from reliable documents and sources, and my review of the Rice Solar Energy LLC's Opening Testimony, Part 2 (Biological Resources, Cultural Resources, & Worker Safety-Fire Protection) dated October 22, 2010.

5. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.

6. I am personally familiar with the facts and conclusions related in the attached testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: October 27, 2010 Signed: Scott D. White

At: Upland, California

STAFF'S PROPOSED REVISIONS TO CONDITIONS OF CERTIFICATION/ MITIGATION MEASURES

The following Mitigation Measures/Conditions of Certification meet the Energy Commission's responsibility to comply with CEQA and serve as recommendations for the Energy Commission to consider in its decision to avoid or reduce the severity of impacts to less than significant and assure conformance with applicable laws, ordinances, regulations and standards (LORS). The identification of relevant and reasonable mitigation measures also conforms to National Environmental Policy Act (NEPA) requirements for BLM's and Western's analysis that can be considered in its Record of Decision. With implementation of staff's proposed conditions of certification, construction and operation of the RSEP would comply with all federal, State, and local laws, ordinances, regulations, and standards relating to biological resources. Staff recommends adoption of the following conditions of certification to mitigate potential impacts to sensitive biological resources. As described ~~above~~ in the SA/DEIS (**C.2.5.2 Assessment of Impacts and Discussion of Mitigation**) staff concludes that these measures would reduce the project's impacts to less than significant levels under CEQA.

CONDITIONS OF CERTIFICATION BIO-1 THROUGH BIO-5: No changes.

WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

BIO-6 The project owner shall prepare and implement a Project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM in consultation with Western, CDFG, BLM, and USFWS. The WEAP shall be administered to all onsite personnel at the solar generator site, interconnector substation site, and on ~~both~~ the transmission line alignment~~s~~. The WEAP shall be administered to all surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site preconstruction, construction, operation, and closure. The WEAP shall:

1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants;

2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, and explain the reasons for protecting these resources; provide information to participants that no snakes other reptiles, bats, or any other wildlife shall be harmed or harassed;

3. Place special emphasis on desert tortoise, burrowing owl, golden eagle, nesting birds, desert kit fox, and American badger, including information

on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures~~; for construction work on the existing 161-kB transmission line, the WEAP also shall place special emphasis on bats which may be roosting on transmission line structures~~;

4. Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;

5. Describe the temporary and permanent habitat protection measures to be implemented at the project site;

6. Identify whom to contact if there are further comments and questions about the material discussed in the program;

7. Include printed training materials, including photographs and brief descriptions of desert tortoises, burrowing owls, golden eagles, nesting birds, desert kit fox, roosting bats, and American badger, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;

8. Prominently display posters and descriptions in offices, conference rooms, employee break rooms, and other areas where employees may congregate, of desert tortoises, burrowing owls, golden eagles, nesting birds, desert kit fox, roosting bats, and American badger, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;

9. Direct all WEAP trainees to report all observations of listed species and their sign to the Designated Biologist for inclusion in the monthly compliance report; and

10. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

At least 30 days prior to start of construction-related ground disturbance the Project owner shall provide to the CPM a copy of the WEAP for review and approval in consultation with Western, CDFG, BLM, and the USFWS. The Project owner also shall submit copies of all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. At least 10 days prior to construction-

related ground disturbance activities the project owner shall submit two copies of the approved final WEAP.

Throughout the life of the project, the WEAP shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction, maintenance, or operations personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the CPM upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training. Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least 6 months after the start of commercial operation.

During project operation, signed statements for operational personnel shall be kept on file for 6 months following the termination of an individual's employment.

CONDITIONS OF CERTIFICATION BIO-7 THROUGH BIO-9: No changes.

REVEGETATION PLAN AND COMPENSATION FOR IMPACTS TO NATIVE VEGETATION COMMUNITIES

BIO-10 The project owner shall provide restoration/compensation for impacts to native vegetation communities and develop and implement a Revegetation Plan for all areas subject to temporary (albeit long-term) project disturbance, including but not limited to linear features and berms of detention or debris basins, to the extent permitted by stormwater control requirements (see above, **Construction Impacts to Vegetation**). Upon completion of construction, all temporarily disturbed areas, including the logistics/lay down areas; all generator tie-line ~~and existing 161-kV Parker-Blythe #2 transmission line~~ tower sites, pull sites, and similar areas shall be restored to pre-project grade and revegetated to minimize soil erosion and vulnerability to weed invasion ~~conditions~~. Other temporarily disturbed areas within the project area shall include, but shall not be limited to: all areas where underground infrastructure was installed, temporary access roads, construction work temporary lay-down areas, and construction equipment staging areas. The following measures shall be implemented for the revegetation effort areas not subject to the facility Landscape Plan. These measures will include:

1. Plan Details. The revegetation plan shall include at minimum: (a) locations and details for top soil storage; (b) methods to salvage and replant cacti, yucca, or other species described in BIO-12 Section E, or to plant out nursery stock of these species onto revegetation sites; (c) seed collection guidelines; (d) a schematic depicting the mitigation area; (e) time of year

that the planting will occur and the methodology of the planting; (f) a description of the irrigation methodology if used; (g) measures to control exotic vegetation on site; (h) success criteria relating to soil condtions and weed abundance; and (i) a detailed monitoring program. All habitats dominated by non-native species prior to project disturbance shall be revegetated using appropriate native species. This plan shall also contain contingency measures for failed restoration efforts (efforts not meeting success criteria).

2. Topsoil Salvage. Topsoil shall be stockpiled from the project site for use in revegetation of the disturbed soils. The topsoil excavated shall be segregated, kept intact, and protected, under conditions shown to sustain seed bank viability. The upper 1 inch of topsoil which contains the seed bank shall be scraped and stockpiled for use as the top-dressing for the revegetation area. An additional 6 to 8 inches of soil below the top 1 inch of soil shall also be scraped and separately stockpiled for use in revegetation areas. Topsoil shall be replaced in its original vertical orientation following ground disturbance, ensuring the integrity of the top one inch in particular. All other elements of soil stockpiling shall be conducted as described on pages 39-40 of *Rehabilitation of Disturbed Lands in California* (Newton and Claassen 2003).

3. Seed and Nursery Stock. Only seed or potted nursery stock of locally occurring native species shall be used for revegetation. Seeds shall contain a mix of short-lived early pioneer species such as native annuals and perennials and subshrubs. Seeding and planting shall be conducted as described in Chapter 5 of *Rehabilitation of Disturbed Lands in California* (Newton and Claassen 2003). A list of plant species suitable for Colorado Desert region revegetation projects, including recommended seed treatments, are included in Appendix A-9 of the same report. The list of plants observed during the special-status plant surveys of the project area can also be used as a guide to site-specific plant selection for revegetation. In conformance with BLM policy, the project owner shall include salvaged or nursery stock yucca (all species), and cacti (excluding cholla species, genus *Cylindropuntia*), in revegetation plans and implementation affecting BLM lands, as described in **BIO-12** ~~Section E~~.

4. Monitoring Requirement and Success Criteria. Post-seeding and planting monitoring will be yearly and shall continue for a period of no less than two ~~10~~ years or until the defined success criteria are achieved. If the ~~survival and cover requirements~~ success criteria have not been met, the project owner is responsible for replacement planting to achieve these requirements or other remedial action as agreed to by the CPM in consultation with BLM and Western. Replacement seeding or plantings shall be monitored and evaluated by the same criteria ~~with the same survival and growth requirements~~ as required for original revegetation plantings. Remediation activities (e.g., additional planting, removal of non-

native invasive species, or erosion control) shall be taken during the two ~~10~~-year period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria after the the two ~~10~~-year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the the two ~~10~~-year period until the criteria are met or unless otherwise specified by the CPM in consultation with BLM and Western. The following performance standards must be met by the end of monitoring year two:

- At least 80% of the species observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; and
- ~~Relative~~ Cover and density of non-native plant species within the temporarily disturbed areas shall be no greater than in comparable surrounding lands that have not been disturbed by the project ~~equal at least 60%.~~

5. Replacement. If a fire occurs in a revegetation area within the the two ~~10~~-year monitoring period, the owner shall be responsible for a one-time replacement. If a second fire occurs, no replanting is required, unless the fire is caused by the owner's activity (e.g., as determined by BLM or other firefighting agency investigation).

All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented.

Within 90 days after completion of each year of project construction, the project owner shall provide to the CPM verification of the total vegetation acreage subject to temporary and permanent disturbance and a written report identifying which items of the Revegetation Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which items are still outstanding. To monitor and evaluate the success of the revegetation, the project owner shall submit annual reports of the revegetation including the status of the site, percent cover of native and exotics, and any remedial actions conducted by the owner to the CPM and BLM.

On January 31st of each year following construction until the completion of the revegetation monitoring specified in the Revegetation Plan, the Designated Biologist shall provide a report to the CPM that includes: a summary of revegetation activities for the year, a discussion of whether revegetation performance standards for the year were met, and recommendations for revegetation remedial action, if warranted, that are planned for the upcoming year.

CONDITION OF CERTIFICATION BIO-11: No changes.

SPECIAL-STATUS PLANT IMPACT AVOIDANCE, MINIMIZATION AND COMPENSATORY MITIGATION

BIO-12 This condition contains the following five sections:

- **Section A: Avoidance and Minimization Measures** describes measures to avoid and protect Harwood's milk-vetch locations on the generator tie-line alignment within 250 feet of project activities (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure.
- ~~**Section B: Conduct Further Botanical Surveys** describes guidelines for conducting summer-fall 2010 surveys to detect special-status plants that may have been missed during spring surveys on the solar generator site and generator tie-line alignment; describes guidelines for summer-fall and pre-construction spring surveys on the existing Western 161-kV Parker-Blythe transmission line alignment.~~
- ~~**Section C: Mitigation Requirements for Special-Status Plants Detected** outlines the level of avoidance required for plants detected during the further surveys (Section B), based on the species' rarity and status codes. Avoidance is based on extent of local occurrences in the Project disturbance Area and, as applicable, extending onto contiguous public land.~~
- ~~**Section D: Off-Site Compensatory Mitigation for Special-Status Plants** describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/enhancement, or a combination of acquisition and restoration/enhancement.~~
- **Section B ~~E~~: Conformance with BLM Plant Protection Policies** describes measures to salvage and transplant certain cacti, yucca, and other species in conformance with BLM policies.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the solar generator site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation. Nothing in this condition requires the project owner to conduct botanical surveys on private lands adjacent to the project site when the project owner has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission

The Project owner shall implement the following measures in Section A, B, C, D and E to avoid, minimize, and compensate for impacts to special-status plant species:

Section A: Special Status Plant Impact Avoidance and Minimization Measures

To protect Harwood's milk-vetch or other CNPS List 1 or List 2 plants (excluding chaparral sand-verbena) located within the project area or within 250 feet of its boundaries (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

1. Designated Botanist. An experienced botanist ~~who meets the qualifications described in Section **B-2** below~~ shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction, operation, and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work. The Designated Botanist shall be a qualified botanist knowledgeable in the complex biology of the local flora and consistent with CDFG (2009) and BLM (2009b) protocols.

2. Special Status Plant Impact Avoidance and Minimization Plan. The Project owner shall prepare and implement a Special Status Plant Impact Avoidance and Minimization Plan and shall incorporate the Plan into the BRMIMP (**BIO-7**). The Plan shall be designed to prevent direct or indirect effects of project construction and operation to CNPS List 1 and List 2 plants (excluding chaparral sand-verbena) within or within 250 feet of the project disturbance area,. The Plan shall include the following elements:

   a. Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears, as follows: limit the width of the work area; adjust the location of staging areas, lay downs, spur roads and poles or towers; drive and crush vegetation as an alternative to blading temporary roads to preserve soil integrity and seed banks, and adjust the alignments of roads and access points within the constraints of the ROW. These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP.

   b. Designate Environmentally Sensitive Areas (ESAs). Before construction, designate ESAs to protect all known CNPS List 1 or List 2 plant locations (excluding chaparral sand-verbena) within the project disturbance area or within 250 feet of disturbance area. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall provide a minimum of 250 feet buffer area between plant locations and any ground-disturbing project activity. The ESAs shall be clearly delineated in the field with fencing and signs prohibiting movement of the fence

under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be marked (with signage or other markers) to ensure that avoided plants are not inadvertently harmed during construction.

c. Special-Status Plant Worker Environmental Awareness Program (WEAP). The WEAP **(BIO-6)** shall include training components specific to protection of special-status plants as outlined in this condition.

d. Herbicide and Soil Stabilizer Drift Control Measures. **S**pecial-status plant occurrences within 250 feet of the Project Disturbance Area shall be protected from any potential herbicide and soil stabilizer drift. The Weed Control Program (**BIO-11**) shall include measures to avoid chemical drift or residual toxicity to special-status plants consistent with guidelines such as those provided by Hillmer and Liedtke (2003) and Kegley et al. (2010).

e. Erosion and Sediment Control Measures. Erosion and sediment control measures shall avoid adverse impacts to ESAs and shall not use invasive or non-native plants in seed mixes, introduce pest plants through contaminated seed or straw, etc. These measures shall be incorporated in the Drainage, Erosion, and Sedimentation Control Plan required under **SOIL&WATER-1**.

f. Avoid Special-Status Plant Occurrences. Areas for spoils, equipment, vehicles, and materials storage areas; parking; equipment and vehicle maintenance areas, and wash areas shall be placed at least 100 feet from the boundaries of any ESAs.

g. Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction and decommissioning activities.

~~Section B: Conduct Further Botanical Surveys~~

~~The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants throughout the Project Disturbance Area, and shall conduct pre-construction spring surveys along the existing Western 161-kV Parker-Blythe transmission line as described below:~~

~~1. Survey Timing. To the extent feasible, surveys shall be timed to detect all special status species. Spring surveys shall be scheduled according to known flowering seasons of special-status plants of the area. To the extent feasible, late-season surveys shall be timed to detect: a) summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October), and b) fall-blooming perennials that respond to the cooler, later season storms that originate in the Pacific northwest (typically beginning in September or~~

~~October). The survey dates shall be based on plant phenology and the timing of a significant storm (i.e., a 10 mm or greater rain or storm event, as measured at or within 1 mile of the Project site) if an event is recorded. Surveys for summer annuals shall be timed to occur approximately 4 to 7 weeks following a warm, tropical storm. Re-surveys shall occur as many times as necessary to ensure that surveys are conducted during the appropriate identification period for the target taxa, which may be blooms, fruit, seed characteristics, or vegetative characteristics, depending on the taxon. However, due to the undependable nature and scattered patterns of summer and early fall rainfall, it is possible that no suitable rain event will be documented in the area. Nevertheless, the project owner shall be responsible for conducting late-season botanical surveys along washes and other lowland areas on-site due to the possibility that rainstorms in the Cady Mountains may go undetected, but may initiate summer or fall blooms.~~

2. ~~Surveyor Qualifications and Training. Surveys shall be conducted by qualified botanists knowledgeable in the complex biology of the local flora and consistent with CDFG (2009) and BLM (2009b) protocols. The botanical survey crew shall be prepared to mobilize quickly to conduct appropriately timed surveys. Each field botanist shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit target species reference sites (where available) and/or review herbarium specimens to obtain a search image.~~

3. ~~Target Species. Field surveys shall be designed and scheduled to locate target species, defined as all BLM Sensitive plants, CNPS List 1 or 2 (Nature Serve rank S1 and S2) or proposed List 1 or 2 taxa, and any new reported or documented taxa, Because the potential for range extensions is unknown, the list of potentially occurring special-status plants shall include all special-status taxa known from comparable habitats within the eastern portion of the Colorado Desert in California. Determination of flowering season shall be based upon field visits to reference populations and data available online from the Consortium of California Herbaria and California Native Plant Society. The list of late-season target species shall also include taxa with bloom seasons that begin in fall and extend into the early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.~~

4. ~~Survey Coverage. At a minimum, the Applicant shall conduct comprehensive surveys (i.e., 100 percent visual coverage) of the washes, dune swales, and other lowlands within the project disturbance area. In the intervening uplands (e.g., bajadas and rock outcrops) surveys shall be conducted to ensure a 25 percent visual coverage. Other special or unique habitats associated with rare plants (such as dunes, washes, and~~

~~chenopod scrubs) shall also be surveyed at 100 percent visual coverage. Transects shall be "intuitive controlled" (per BLM 2009b) to ensure a focus on habitat most likely to support rare plants (such as desert washes or dunes), rather than on pre-defined, evenly-spaced survey grids.~~

5. ~~Documenting Occurrences. If a special-status plant is detected, the full extent of the population on-site shall be assessed using GPS in accordance with BLM survey protocols. Additionally, the extent and density of contiguous occupied habitat within one mile of project boundaries may be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the occurrence affected by the project. For occurrences that are very dense or very large, the plant numbers may be estimated by simple sampling techniques and the survey report must provide qualitative or quantitative data describing the density and roughly mapping the extent on a topographic map. All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; small populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the progress reports and final botanical report shall be prepared to ensure consistency with mapping protocol and definitions of occurrences in CNDDB: occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence.' The Project Owner shall also submit the raw GPS shape files and metadata, and completed CNDDB forms to CNDDB for each occurrence as defined by CNDDB.~~

   ~~Reporting. Raw GPS data, metadata, CNDDB field forms shall be provided to the CPM within two weeks of completion of each survey. If field surveys take place during two or more phases (e.g., late summer and fall 2010; spring 2011), then a summary letter shall be submitted following each survey.~~

   ~~The Final Botanical Survey Report shall be prepared consistent with CDFG guidelines (CDFG 2009), and BLM guidelines (2009b) and shall include the following components:~~

   a. ~~the BLM designation, NatureServe Global and State Rank of each species or taxon found (or proposed rank, or CNPS List);~~

   b. ~~the number or percent of the occurrence that will be directly affected, and indirectly affected by changes in drainage patterns or altered geomorphic processes;~~

   c. ~~the habitat or plant community that supports the occurrence and the total acres of that habitat or community type that occurs in the Project Disturbance Area;~~

d. ~~an indication of whether the occurrence has any local or regional significance (e.g., if it exhibits any unusual morphology, occurs at the periphery of its range in California, represents a significant range extension or disjunct occurrence, or occurs in an atypical habitat or substrate);~~

e. ~~a completed CNDDB field form for every occurrence, and;~~

f. ~~two maps: one that depicts the raw GPS data (as collected in the field) on a topographic base map with Project features; and a second map that follows the CNDDB protocol for occurrence mapping, which lumps two or more occurrences of the same species within one-quarter mile or less of each other into one occurrence.~~

~~Section C: Mitigation Requirements for Special-Status Plants Detected~~

~~The Project owner shall apply the following avoidance standards to special-status plants that might be detected during the surveys described above. Avoidance and/or mitigation measures described in Section D below would reduce impacts to special-status plant species to less than significant levels.~~

~~***Mitigation for CNDDB Rank S1 and S2 Plants:*** If species with a CNDDB rank of S1 or S2 (CDFG 2010b), excluding chaparral sand-verbena, are detected within the Project Disturbance Area or otherwise would be directly impacted by project activities, the Project owner shall implement avoidance measures to protect at least 75 percent of the local occurrence(s) of the species. For perennial species, the local occurrence(s) shall be measured by the number of individual plants located on the Project Disturbance Area or on contiguous public or applicant-owned lands. For annual species, the occurrence(s) shall be measured as areal extent of contiguous occupied habitat on the Project Disturbance Area and on contiguous public or applicant-owned lands. Avoidance shall include protection of the ecosystem processes essential for maintenance of the protected plant occurrence. Plants located within the ESAs established pursuant to Section A above shall be considered to be "avoided" to the extent that direct impacts on the plants are avoided and that these processes would be maintained. If special status plant occurrences are isolated by the Project from natural fluvial, aeolian, or other processes known to be necessary for their persistence or reproduction, these occurrences shall not be considered "avoided." This evaluation shall be made by the project Botanist and CPM, in consultation with CDFG and BLM, on a case by case basis, dependent on the species and its location on the site. The Project owner shall provide compensatory mitigation as described below in Section D for Project impacts to CNDDB Rank S1 and S2 plants that are not avoided. If the project Botanist, CPM, CDFG, and BLM agree that on-site avoidance would not allow for long-term viability of the plant occurrence(s),~~

~~then compensatory mitigation may be substituted for avoidance for up to 100% of impacts to Rank S1 and S2 plants, as described below in Section D.~~

~~***Mitigation for CNDDB Rank S3 Plants:*** If species with a CNDDB rank of 3 are detected within the Project Disturbance Area, no onsite avoidance or compensatory mitigation shall be required unless the occurrence has local or regional significance, in which case the plant occurrence shall be treated as a CNDDB S2 ranked plant. A plant occurrence would be considered to have local or regional significance if:~~

~~a. It occurs at the outermost periphery of its range in California;~~

~~b. It occurs in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;~~

~~c. It exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or sub-species.~~

~~Should CNDDB Rank S3 plant locations meeting any of the three criteria above be found on the project site during summer or fall field surveys, mitigation requirements for those species shall be as described above for CNDDB Rank S1 and S2 species.~~

- ~~***Pre-Construction Notification for State- or Federal-Listed Species, or BLM Sensitive Species.*** If a state or federal-listed species or BLM Sensitive species is detected, the Project owner shall immediately notify the CDFG, USFWS, BLM, and the CPM.~~
- ~~***Preservation of the Germplasm of Affected Special-Status Plants.*** For all impacts to CNPS List 1 or List 2 plants, excluding chaparral sand-verbena, mitigation shall include seed collection from the affected special-status plants on-site prior to construction to conserve the germplasm and provide a seed source for restoration efforts. Where construction schedules or seed availability prevents seed collection from plant locations to be impacted during a given season, seed must be collected from another portion of the project site or, as approved by the CPM in consultation with BLM's State Botanist, from public or applicant-owned lands off-site. Seed collection on public land must only be done under permit from the BLM; the project owner shall be responsible for obtaining and complying with applicable permit(s). The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden. The costs associated with the long-term storage of the seed shall be the responsibility of the Project owner. Any efforts to propagate and reintroduce special-status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plan approved by the CPM.~~

~~Section D: Off-Site Compensatory Mitigation for Special-Status Plants~~

~~Where compensatory mitigation is required under the terms of Section C, above, the Project owner shall mitigate Project impacts to CNPS List 1 or List 2 plants (excluding chaparral sand-verbena) with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, restoration/enhancement of populations of the target species, or a combination of acquisition and restoration/enhancement as provided within this Condition. Compensatory mitigation shall be at a 3:1 ratio. For annual species, compensation shall provide three acres of habitat acquired or restored/enhanced for every acre of special-status plant habitat disturbed by the Project Disturbance Area. For perennial species, compensation lands shall supporting three living plants of the same species for each plant disturbed within the project area. The Project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) or PAR-like analysis, and other transactional costs related to the use of compensatory mitigation.~~

~~The Project owner shall comply with other related requirements in this condition:~~

~~**I. Compensatory Mitigation by Acquisition**: The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands include all of the following:~~

~~Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:~~

1. ~~Occupied Habitat, No Habitat Threats: The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction).~~

2. ~~Occupied Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may also be acquired as long as the population could be reasonably expected to recover with minor restoration (e.g., OHV or grazing exclusion, pest plant removal) and is accompanied by a Habitat Enhancement/Restoration Plan as described in Section D.II, below.~~

3. ~~Unoccupied but Adjacent. The Project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the~~

~~defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat.~~

~~Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above, and must be approved by the CPM.~~

~~Management Plan. The Project owner or approved third party shall prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan shall be to support and enhance the long-term viability of the target special-status plant occurrences. The Management Plan shall be submitted for review and approval to the CPM.~~

~~Integrating Special-Status Plant Mitigation with Other Mitigation lands. If all or any portion of the acquired Desert Tortoise, Waters of the State, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation.~~

~~Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, has approved the proposed compensation lands:~~

~~a. Preliminary Report. The Project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.~~

~~b. Title/Conveyance. The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the~~

~~conservation easement. The Project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.~~

~~c. Initial Protection and Habitat Improvement. The Project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be $750 per acre ($250 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a 3:1 ratio, but actual costs will vary depending on the measures that are required for the compensation lands). A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.~~

~~d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.~~

~~e. Long-term Maintenance and Management Funding. The Project owner shall provide money to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. Until an approved PAR or PAR-like analysis is conducted for the compensation lands, the amount of required funding is initially estimated to be $4,350 for every acre of compensation lands, using as the best available proxy the estimated cost of $1,450 per acre for Desert Tortoise compensatory mitigation, at a 3:1 ratio. This amount may be revised up or down by the CPM in consultation with DFG, BLM and USFWS, based on further analysis of long-term management and maintenance costs. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall either: (i) provide initial payment equal to the amount of $4,350 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the Energy Commission under subsection~~

~~(g), "Mitigation Security," below, in an amount equal to $4,350 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project Disturbance Area as described above. If an initial payment is made based on the estimated per-acre costs, the Project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $4,350 per acquired acre (at a 3:1 ratio) will be required for long-term maintenance and management, the excess paid will be returned to the Project owner. The Project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the Project's long-term maintenance and management funds.~~

~~The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:~~

~~i. Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands.~~

~~ii. Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.~~

~~iii. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar funds that it holds from other projects for long-term maintenance and management of compensation lands for special-status plants. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM.~~

~~f. Other Expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead~~

~~related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.~~

~~g. Mitigation Security. The Project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The amount of the Security shall be based upon staff's estimate of per-acre acquisition, transaction, and management costs as described in Condition of Certification **BIO-16** for each acre of occupied habitat impacted, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a 3:1 ratio; see **Biological Resources Tables 6** and **9**) for every acre of habitat supporting the target special-status plant species which is significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the Project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.~~

~~h. The Project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the Project owner, the Project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, and the long-term funding~~

~~requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the Project owner.~~

~~i. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.~~

~~**II. Compensatory Mitigation by Habitat Enhancement/Restoration**: As an alternative or adjunct to land acquisition for compensatory mitigation the Project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio, with improvements applied to three acres of habitat for every acre special-status plant habitat directly or indirectly disturbed by the Project Disturbance Area. Examples of suitable enhancement projects include but are not limited to the following: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control weeds that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows, removing obstructions to the wind sand transport corridor above an occurrence, or increasing groundwater availability for dependent species.~~

~~If the Project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the following performance standards: The proposed enhancement project shall achieve rescue of an off-site occurrence that is currently assessed, based on the NatureServe threat ranking system (Master et al. 2009; Morse et al. 2004) with one of the following threat ranks: a) long-term decline >30%; b) an immediate threat that affects >30% of the population, or c) has an overall threat impact that is High to Very High. "Rescue" would be considered successful if it achieves an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").~~

~~If the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat Enhancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for implementation and monitoring of the Plan. The amount of the Security shall be based upon staff's estimate of per-acre acquisition, transaction, and management costs as described in Condition of Certification **BIO-16** for each acre of occupied habitat impacted by the Project, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy,~~

~~at a 3:1 ratio (see **Biological Resources Tables 6** and **9**). The amount of the security shall be adjusted based on the actual costs of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the enhancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by the CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:~~

1. ~~Goals and Objectives. Define the goals of the restoration or enhancement project and a measurable course of action developed to achieve those goals. The objective of the proposed habitat enhancement plan shall include restoration of a target special-status plant occurrence that is currently threatened with a long-term decline. The proposed enhancement plan shall achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").~~

2. ~~Historical Conditions. Provide a description of the pre-impact or historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.~~

3. ~~Site Characteristics. Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species.~~

4. ~~Ecological Factors. Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.~~

5. ~~Methods. Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the enhancement must be completed within five years.~~

6. ~~Budget. Provide a detailed budget and time-line, develop clear, measurable, objective-driven annual success criteria.~~

7. ~~Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall include a minimum of five years of quarterly monitoring, and then annual monitoring for the remainder of the enhancement project, or until the performance standards for rescue of a threatened occurrence are met, whichever comes first. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the enhancement project success criteria, detailed description of remedial actions taken or proposed, and contact information for the responsible parties.~~

8. ~~Reporting Program. The Plan shall ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.~~

9. ~~Contingency Plan. Describe the contingency plan for failure to meet annual goals.~~

10. ~~Long-term Protection. Include proof of long-term protection for the restoration site. For private lands this would include conservations easements or other deed restrictions; projects on public lands must be contained in a Desert Wildlife Management Area, Wildlife Habitat Management Area, or other land use protections that will protect the mitigation site and target species.~~

Section B ~~E~~: Conformance with BLM Plant Protection Policies

It is BLM policy to salvage yucca and cactus plants (excluding cholla species, genus *Cylindropuntia*) and transplant them to undisturbed sites within project Rights of Way. Staff recommends conformance with policy, as follows:

The project owner shall inventory all plants subject to BLM policies on all NLM lands within the Project Disturbance Area that would be removed or damaged by proposed project construction.

The project owner shall prepare a Protected Plant Salvage Plan in conformance with BLM standards for review and approval by the CPM in consultation with BLM. The plan shall include detailed descriptions of proposed methods to salvage plants; transport them; store them temporarily (as needed); maintain them in temporary storage (i.e., irrigation, shade protection, etc.); proposed transplantation locations and methods for permanent relocation; proposed irrigation and maintenance methods at transplantation sites; and a monitoring plan to verify survivorship and establishment of translocated plants for a minimum of five years.

Prior to initiating any ground-disturbing activities on the project site, the project owner shall implement the Protected Plant Replacement measures as approved by the CPM, in consultation with BLM's State Botanist.

The Special-Status Plant Impact Avoidance and Minimization Measures shall be incorporated into the BRMIMP as required under Condition of Certification **BIO-7**.

Implementation of the special-status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the

CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year.

Section A. No less than 30 days prior to the start of ground-disturbing activities the Project owner shall submit grading plans and construction drawings depicting the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize boundaries of the ESAs.

No less than 30 days prior to the start of ground-disturbing activities the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, the name and resume of the project's Designated Botanist. If a Designated Botanist needs to be replaced, the specified information of the proposed replacement must be submitted to BLM's Wildlife Biologist and the CPM as soon as possible prior to the termination or release of the Designated Biologist. In an emergency, the project owner shall immediately notify the BLM's Wildlife Biologist and the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Botanist is proposed to BLM's Wildlife Biologist and the CPM and for consideration.

No less than 30 days prior to ground-disturbing activities the Project owner shall submit a Special Status Plant Impact Avoidance and Minimization Plan to the CPM for review and approval, in consultation with the BLM State Botanist. Implementation of the impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all ESAs to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year. The project owner shall coordinate with the CPM and BLM to revise and finalize monitoring reports and all reports described in this section, and shall specifically report any difficulties in meeting the protection goals and cooperatively develop adaptive measures as needed.

~~**Section B**. Raw GPS data, metadata, and CNDDB field forms shall be submitted to the CPM within two weeks of the completion of each survey. A preliminary summary of results for the late summer/fall botanical surveys shall also be submitted to the CPM and BLM's State Botanist within two weeks following the completion of the surveys. If surveys are split into more than one period, then a summary letter shall be submitted~~

~~following each survey period. The Final Summer-Fall Botanical Survey Report, GIS shape files and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground-disturbing activities. The Final Report shall include a detailed accounting of the acreage of Project impacts to special-status plant occurrences.~~

~~**Section C.** The Project owner shall immediately provide written notification to the CPM, CDFG, USFWS, and BLM if it detects a State- or Federal-Listed Species, or BLM Sensitive Species at any time during its late summer/fall botanical surveys or at any time thereafter through the life of the Project, including conclusion of Project decommissioning.~~

~~Prior to construction, the project owner shall provide written verification that seed of any special status plants in the Project Disturbance Area have collected and conveyed to a facility (as described in this measure) and that suitable long-term funding has been provided by the project owner.~~

~~**Section D.** If compensatory mitigation is required (based upon field survey results and mitigation strategy adopted by the project owner, as described in Sections C and D), no less than 30 days prior to the start of ground-disturbing activities, the Project owner shall submit to the CPM Security adequate to acquire compensatory mitigation lands and/or undertake habitat enhancement or restoration activities, as described in this condition.~~

~~No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit a formal acquisition proposal and draft Management Plan for the proposed lands to the CPM, with copies to CDFG, USFWS, and BLM, describing the parcels intended for purchase and shall obtain approval from the CPM prior to the acquisition. No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit to the CPM and obtain CPM approval of any agreements to delegate land acquisition to an approved third party, or to manage compensation lands; such agreement shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.~~

~~The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM of such completion no later than 18 months after the start of Project ground-disturbing activities. If NFWF or another approved third party is being used for the acquisition, the Project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline. If habitat enhancement is proposed, no later than six months following the start of ground-disturbing activities, the Project owner shall obtain CPM approval of the final Habitat Enhancement/Restoration Plan, prepared in accordance with Section D, and submit to the CPM or a third party approved by the CPM Security adequate for long-term implementation and monitoring of the Habitat Enhancement/Restoration Plan.~~

~~Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the enhancement project shall be completed within five years of initiation. Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the Project's progress in meeting the enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.~~

~~Within 18 months of ground-disturbing activities, the Project owner shall transfer to the CPM or an approved third party the difference between the Security paid and the actual costs of (1) acquiring compensatory mitigation lands, completing initial protection and habitat improvement , and funding the long-term maintenance and management of compensatory mitigation lands; and/or (2) implementing and providing for the long-term protection and monitoring of habitat enhancement or restoration activities.~~

Section B ~~E.~~ The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize all plans and reports named in this section. Verification and reporting shall be as described in BIO-10 and shall be included in reports described therein. Within 90 days after completion of each year of project construction, the project owner shall provide to the CPM verification of the numbers or acreage of plants covered in this Condition (i.e., species named in BLM and County policies) which have been removed or salvaged over the course of the year. Annual revegetation reports described in BIO-10 verification shall include summaries of salvage and planting operations and monitoring results. Compliance reports shall include summaries of written and photographic records of the plan implementation described above. Compliance reports shall be submitted annually for a period not less than 5 years to document irrigation, maintenance, and monitoring results, including plant survival.

CONDITIONS OF CERTIFICATION BIO-13 THROUGH BIO-15: No changes.

DESERT TORTOISE COMPENSATORY MITIGATION

BIO-16 The project owner shall provide compensatory mitigation acreage of ~~1,988~~ 1,522 acres of desert tortoise habitat lands, adjusted to reflect the final project footprint, as specified in this condition. All or a portion of this compensation land may consist of land currently held by the project owner, pending analysis of its suitability (see Selection Criteria, below), as discussed in the analysis of impacts to desert tortoise, in the SA/DEIS ~~above~~. In addition, the project owner shall provide funding for initial improvement and long-term maintenance, enhancement, and management of the ~~acquired~~ compensation lands for protection and enhancement of desert tortoise populations, and comply with other related requirements of this condition. This acreage was calculated as follows: Impacts to the solar generator site ~~and existing 161-kV Parker-Blythe transmission line~~ shall be compensated at a 1:1 ratio. Impacts

along the generator tie-line and at the interconnector substation shall be compensated at a 3:1 ratio (see ~~**Biological Resources Table 8**~~ Applicant's Opening Testimony, Part 2, October 22 2010). These impact acreages are to be adjusted to reflect the final project footprint. For purposes of this condition, the Project footprint means all lands disturbed in the construction and operation of the Project, including all linear project components, as well as undeveloped areas inside the Project's boundaries that will no longer provide viable long-term habitat for the desert tortoise.

Costs of these requirements are estimated to be $3,888,055.50 ~~$5,076,447.00~~ based on the acquisition of 1,522 ~~1,988~~ acres (see **Biological Resources Table~~s~~ 6** ~~and **9**~~ in the SA/DEIS for a list of acquisition and management ~~complete breakdown~~ ~~of~~ costs and **Revised Biological Resources Table 10**, below, for calculations of total estimated habitat compensation costs ~~acreage~~).

As many as 37 ~~99~~ acres (based on staff's estimate of generator tie-line and interconnector substation acreage on public land) of the compensation lands requirement~~, plus unspecified acreage along the existing 161-kV Parker-Blythe #2 transmission line alignment,~~ may be satisfied by applicant's compliance with the desert tortoise habitat acquisition or enhancement requirements of BLM, to be calculated as an acre-for-acre offset in the Energy Commission requirement for mitigation provided to satisfy BLM's requirements. For purposes of this paragraph, credit will be given for BLM-required mitigation without regard to whether BLM uses the mitigation funds for habitat acquisition or for enhancement projects to benefit the species.

The project owner shall provide financial assurances as described below in the amount of $3,888,055.50 ~~$5,076,447~~. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into a Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described below. If the Project owner elects to establish a REAT NFWF Account and have NFWF and the agencies complete the required habitat compensation, then the total estimated cost of complying with this condition is $4,002,559.17 ~~$5,213,088.41~~. The amount of security or NFWF deposit shall be adjusted up or down to reflect any revised cost estimates recommended by REAT.

The actual costs to comply with this condition will vary depending on the final footprint of the Project, the costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a Property Analysis Report or similar analysis (below). The 1,522 ~~1,988~~ acre habitat requirement, and associated funding requirements based on that acreage, shall be adjusted up or down if there are changes in the final footprint of the project or the associated costs of evaluation, acquisition, management, and other factors listed in **Biological**

Resources Tables~~s~~ 6 in the SA/DEIS and **Revised Biological Resources Table 10** (below). Regardless of actual cost, the project owner shall be responsible for funding all requirements of this condition.

COMPENSATORY MITIGATION LAND ACQUISITION

1. Method of Acquisition. Compensation lands shall be acquired by either of the two options listed below. Regardless of the method of acquisition, the transaction shall be complete only upon completion of all terms and conditions described in this Condition of Certification.

   a. The project owner shall transfer title and/or conservation easement of compensation lands to a state or federal land management agency or to a third-party non-profit land management organization, as approved by the CPM in consultation with BLM, CDFG, and USFWS; staff recommends transfer in fee title to the lands to CDFG under terms approved by CDFG. Alternatively, a CDFG-approved non-profit organization qualified pursuant to California Government Code Section 65965 may hold the fee title or a conservation easement over the lands. In the event an approved non-profit holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG; in the event an approved non-profit holds a conservation easement over the lands, CDFG shall be named third party beneficiary; or

   b. The Project owner shall deposit funds into a project-specific subaccount within the REAT Account established with the NFWF, in the amount as indicated in **Biological Resources Tables~~s~~ 6** in the SA/DEIS and **Revised Biological Resources Table 10** (below). (adjusted to reflect final project footprint and any applicable REAT adjustments to costs).

2. Selection Criteria for Compensation Lands. Pending a review of the selection criteria below, staff has tentatively determined, in consultation with Western, CDFG, BLM, and USFWS, that applicant-owned land contiguous to the solar generator site would meet criteria as mitigation lands to partially satisfy this Condition of Certification (see discussion of "location of acquired habitat compensation lands" under Desert Tortoise, in the Assessment of Impacts and Discussion of Mitigation section of the SA/ DEIS~~, above~~). Any additional or alternate compensation lands selected for acquisition to meet Energy Commission and CESA requirements shall be equal to or better than the quality and function of the habitat impacted and shall:

   a. be within the Colorado Desert Recovery Unit, with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands;

b. provide habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed;

c. be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;

d. be contiguous and biologically connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover;

e. not have a history of intensive recreational use or other disturbance that might cause future erosional damage or other habitat damage, and make habitat recovery and restoration infeasible;

f. not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration; and

g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and

h. have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights.

3. Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above and must be approved by the CPM. The CPM will share the proposal with and consult with Western, CDFG, BLM and the USFWS before deciding whether to approve or disapprove the proposed acquisition.

4. Compensation Lands Acquisition Conditions: The project owner shall comply with the following conditions relating to acquisition of the compensation lands after the CPM, in consultation with Western, CDFG, BLM and the USFWS, have approved the proposed compensation lands:

   a. Preliminary Report: The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with Western, CDFG, BLM and the USFWS. For

conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission, and the Wildlife Conservation Board.

b. Title/Conveyance: The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM, in consultation with CDFG, of the terms of any transfer of fee title or conservation easement to the compensation lands.

c. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.

5. Compensation Lands Acquisition Costs: The Project owner shall pay all other costs related to acquisition of compensation lands and conservation easements. In addition to actual land costs, these acquisition costs shall include but shall not be limited to the items listed below. Management costs including site cleanup measures are described separately, in the following section.

a. Level 1 Environmental Site Assessment;

b. Appraisal;

c. Title and document review costs;

d. Expenses incurred from other state, federal, or local agency reviews;

e. Closing and escrow costs;

f. Overhead costs related to providing compensation lands to CDFG or an approved third party;

g. Biological survey(s) to determine mitigation value of the land; and

h. Agency costs to accept the land (e.g., writing and recording of conservation easements; title transfer).

COMPENSATORY MITIGATION LAND IMPROVEMENT

1. Land Improvement Requirements: The Project owner shall fund activities that the CPM, in consultation with Western, CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include surveys of boundaries and property lines, installation of signs, trash removal and other site cleanup measures, construction and repair of fences, invasive plant removal, removal of roads, and similar measures to protect habitat and improve habitat quality on the compensation lands.

   The costs of these activities are estimated at $250 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

COMPENSATORY MITIGATION LAND LONG-TERM MANAGEMENT

1. Long-term Management Requirements: Long-term management is required to ensure that the compensation lands are managed and maintained to protect and enhance habitat for desert tortoise. Management activities may include maintenance of signs, fences, removal of invasive weeds, monitoring, security and enforcement, and control or elimination of unauthorized use.

2. Long-term Management Plan. The project owner shall pay for the preparation of a Management Plan for the compensation lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be submitted for approval of the CPM, in consultation with Western, CDFG, BLM and USFWS.

3. Long-Term Maintenance and Management Funding. The Project owner shall provide money to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. The amount of required funding is initially estimated to be $1,450 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall provide initial payment of $2,206,900.00 ~~$2,882,600.00~~, calculated at $1,450 an acre for ~~1,988~~ 1,522 acres, into an account for long-term maintenance and management of compensation lands. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project footprint as described above. If an initial payment is made based on the estimated per-acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $1,450 an acre will be required for long-term maintenance and management, the excess paid will be returned to the Project owner.

   The project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with the project owner and CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds on any lands. The CPM, in consultation with the project owner and CDFG, may designate another state agency or non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

   If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.

   The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fee holder/manager to ensure the following conditions:

   i. Interest. Interest generated from the initial capital shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and

any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.

ii. Withdrawal of Principal. The long-term maintenance and management fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or the approved third-party long-term maintenance and management fee manager to ensure the continued viability of the species on the compensation lands. If CDFG takes fee title to the compensation lands, monies received by CDFG pursuant to this provision shall be deposited in a special deposit fund established solely for the purpose to manage lands in perpetuity unless CDFG designates NFWF or another entity to manage the long-term maintenance and management fee for CDFG.

iii. Pooling Funds. A CPM- approved non-profit organization qualified to hold long-term maintenance and management fees solely for the purpose to manage lands in perpetuity, may pool the fund with other funds for the operation, management, and protection of the compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management fee fund must be tracked and reported individually to the CDFG and CPM.

iv. Reimbursement Fund. The project owner shall provide reimbursement to CDFG or an approved third party for reasonable expenses incurred during title, easement, and documentation review; expenses incurred from other State or State-approved federal agency reviews; and overhead related to providing compensation lands.

COMPENSATORY MITIGATION LAND SECURITY

1. Compensation Mitigation Security: The project owner shall provide security sufficient for funding acquisition, improvement, and long-term management of desert tortoise compensation land. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security.

   The security amount shall be based on the estimates provided in **Biological Resources Table~~s~~ 6** in the SA/DEIS and **Revised Biological Resources Table 10 ~~9~~** (below). This amount shall be updated and verified prior to payment and shall be adjusted to reflect actual costs or more current estimates as agreed upon by the REAT agencies.

   The Project owner shall provide verification that financial assurances have been established to the CPM with copies of the document(s) to BLM,

CDFG and the USFWS, to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing activities described in Section A of this condition.

In the event that the project owner defaults on the Security, the CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition. Any amount of the Security that is not used to carry out mitigation shall be returned to the Project owner upon successful completion of the associated requirements in this condition.

Security for the requirements of this condition shall be provided in the amount of $3,888,055.50 ~~$5,076,447.00~~ (or $4,002,559.17 ~~$5,213,088.41~~ if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 2 of this condition, below). The Security is calculated in part from the items that follow but adjusted as specified below (consult **Biological Resources Table~~s~~ 6** in the SA/DEIS and **Revised Biological Resources Table 10 ~~9~~** (below) for the complete breakdown of estimated costs). However, regardless of the amount of the security or actual cost of implementation, the project owner shall be responsible for implementing all aspects of this condition.

i. land acquisition costs for compensation land, calculated at $500/acre;

ii. Site assessments, appraisals, biological surveys, transaction closing and escrow costs, calculated as $18,000 total per parcel (presuming 160 acres per parcel);

iii. Initial site clean-up, restoration, or enhancement, calculated at $250/acre;

iv. Third-party and agency administrative transaction costs and overhead, calculated as percentages of land cost;

v. Long-term management and maintenance fund, calculated at $1,450 per acre; and

vi. NFWF fees to establish a project-specific account; manage the sub-account for acquisition and initial site work; and manage the sub-account for long term management and maintenance.

2. The project owner may elect to comply with some or all of the requirements in this condition by providing funds to implement the requirements into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the

REAT Account in an amount equal to the estimated costs of implementing the requirement (as set forth in the Security section of this condition, paragraph 1, above). If the actual cost of the acquisition, initial protection and habitat improvements, long-term funding or other cost is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, the long-term funding requirements as established in an approved PAR or PAR-like analysis, or the other actual costs that are estimated in the table. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.

3. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project.

5. The project owner may request the CPM to provide it with all available information about any funds held by the Energy Commission, CDFG, or NFWF as project security, or funds held in a NFWF sub-account for this project, or other project-specific account held by a third party. The CPM shall also fully cooperate with any independent audit that the project owner may choose to perform on any of these funds.

The project owner shall provide the CPM with written notice of intent to start ground disturbance at least 30 days prior to the start of ground-disturbing activities on the project site.

If the mitigation actions required under this condition are not completed at least 30 days prior to the start of ground-disturbing activities, the Project owner shall provide verification to the CPM and CDFG that an approved Security has been established in accordance with this condition of certification no later than 30 days prior to beginning Project ground-disturbing activities. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with Western, CDFG, BLM and the USFWS, of the form of the Security. The project owner, or an approved third party, shall complete and provide written verification to the CPM, Western, CDFG, BLM and USFWS of the compensation lands acquisition and transfer within 18 months of the start of Project ground-disturbing activities.

No later than 12 months after the start of ground-disturbing project activities, the project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase or transfer, and shall obtain approval from the CPM, in consultation with Western, CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM, Western, CDFG, BLM and USFWS of such completion, no later than 18 months after the issuance of the Energy Commission Decision. If NFWF or another approved third party is being used for all or part of the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition associated with any phase of construction. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands for that phase of construction no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands for any phase of construction, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands for that phase of construction shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

The project owner, or an approved third party, shall provide the CPM, Western, CDFG, BLM and USFWS with a management plan for the compensation lands within180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with Western, CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.

Within 90 days after completion of all project related ground disturbance, the project owner shall provide to the CPM, CDFG, BLM and USFWS an analysis, based on aerial photography, with the final accounting of the amount of habitat disturbed during Project construction. If this analysis shows that more lands were disturbed than was anticipated in this condition, the project owner shall provide the Energy Commission with additional compensation lands and funding commensurate with the added impacts and applicable mitigation ratios set forth in this condition. A final analysis of all project related ground disturbance may not result in a reduction of compensation requirements if the deadlines

established under this condition for transfer of compensation lands and funding have passed prior to completion of the analysis.

RAVEN MONITORING, MANAGEMENT, AND CONTROL PLAN

BIO-17 The project owner shall prepare and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that shall be consistent with the most current USFWS-approved raven management guidelines and that meets the approval of the CPM in consultation with Western, BLM, USFWS, and CDFG. The draft Raven Plan submitted by the applicant (Appendix B of CH2MHill 2010c) shall provide the basis for the final plan, subject to review, revisions and approval from the CPM in consultation with Western, BLM, USFWS, and CDFG. The purpose of the plan shall be to avoid any Project-related increases in raven numbers or activity during construction, operation, and decommissioning. The Plan shall address all project components and their potential effects on raven numbers and activity, including but not limited to the solar generator site, temporary logistics and lay down areas, generator tie-line alignment, and distribution line~~, and fiber optic OPGW installation on the Parker-Blythe #2 transmission line~~. The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring to be implemented pursuant to the Plan. Regardless of raven monitoring results, the project owner shall be responsible for all other aspects of raven management described in the Plan, including avoidance and minimization of project-related trash, water sources, or perch/roost sites that could contribute to increased raven numbers, throughout the life of the project. In addition, to offset the cumulative contributions of the Project to desert tortoise from increased raven numbers, the Project owner shall also contribute to the USFWS Regional Raven Management Program. The Project owner shall do all of the following:

1. <u>Prepare and Implement a Raven Management Plan</u> that shall include, but shall not be limited to the following components:

    a. Identify conditions potentially associated with the Project that might provide raven subsidies or attractants;

    b. Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities;

    c. Specify a program to monitor raven presence in the Project vicinity and detect any increase in numbers or activity;

    d. Specify raven activity thresholds for implementation of control measures;

    e. Describe control practices for ravens to be implemented as needed based on that monitoring results;

f. Address monitoring and nest removal during construction and for the life of the Project; and

g. Describe reporting schedules and requirements; for the first year of reporting the project owner shall provide quarterly reports describing implementation of the Plan; thereafter the reports shall be submitted annually for the life of the project.

2. Contribute to the USFWS Regional Raven Management Program. The project owner shall submit payment to the project sub-account of the REAT Account held by the National Fish and Wildlife Foundation (NFWF) to support the USFWS Regional Raven Management Program. The amount shall be a one-time payment of $105 per acre of long-term or permanent disturbance (totaling $152,040.00 ~~$185,850.00~~ for disturbance area of 1,448 ~~1,770~~ acres, to be adjusted according to final project footprint).

No later than 30 days prior to the start of construction, the project owner shall provide written verification to the CPM that NFWF has received and accepted payment into the project's sub-account of the REAT Account to support the USFWS Regional Raven Management Program.

No later than 30 days prior to any construction-related ground disturbance activities, the Project owner shall provide the CPM, USFWS, and CDFG with the final version of a Raven Management Plan. All modifications to the approved Raven Management Plan shall be made only with approval of the CPM in consultation with Western, BLM, USFWS and CDFG.

Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval, a written report identifying which items of the Raven Management Plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding.

On January 31st of each year following construction the Designated Biologist shall provide a report to the CPM that includes: a summary of the results of raven management and control activities for the year; a discussion of whether raven control and management goals for the year were met; and recommendations for raven management activities for the upcoming year.

GOLDEN EAGLE PRE-CONSTRUCTION SURVEYS

BIO-18 The Project owner shall implement the following measures to avoid or minimize Project-related construction impacts to golden eagles.

1. Annual Inventory During Construction. For each year during which construction will occur an inventory shall be conducted to determine if golden eagle territories occur in the area surrounding ~~within ten miles of~~ the solar generator site and generator tie-line alignment ~~and within two~~

~~miles of the existing Parker-Blythe #2 transmission line alignment~~. Specific distances from the project facilities to be covered during field surveys shall be no less than one mile and shall be determined in consultation among the CPM, USFWS, CDFG, BLM and Western and stated in the Avian and Bat Protection Plan (see **Condition of Certification BIO-25**). Survey methods for the inventory shall be as described in the *Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations* (Pagel et al. 2010) or more current guidance from the USFWS.

2. Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.

3. Determination of Unoccupied Territory Status: A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles only after completing at least two full aerial surveys in a single breeding season. In circumstances where ground observation occurs rather than aerial surveys, at least two ground observation periods lasting at least four hours are necessary to designate an inventoried habitat or territory as unoccupied as long as all potential nest sites and alternate nests are visible and monitored. These observation periods shall be at least 30 days apart for an inventory, and at least 30 days apart for monitoring of known territories.

4. Monitoring and Adaptive Management Plan: If an occupied nest (as defined by Pagel et al. 2010) is detected in the area surrounding ~~within 10 miles of~~ the solar generator site or generator tie-line alignment, ~~or within two miles the Parker-Blythe #2 transmission line alignment,~~ the Project owner shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that Project construction activities do not result in injury or disturbance to golden eagles. The monitoring methods shall be consistent with those described in the *Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations* (Pagel et al. 2010) or more current guidance from the USFWS. The Monitoring and Management Plan shall be prepared in consultation with the USFWS. Triggers for adaptive management shall include any evidence of Project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the Designated Biologist to be the source of golden eagle disturbance.

No fewer than 30 days from completion of the golden eagle inventory the Project owner shall submit a report to the CPM, Western, CDFG, BLM, and USFWS documenting the results of the inventory.

If an occupied nest is detected in the area surrounding ~~within 10 miles of~~ the solar generator site or generator tie-line alignment, ~~or within two miles of the existing Parker-Blythe #2 transmission line alignment,~~ then at least 30 days prior to the start of any pre-construction site mobilization the project owner shall provide the CPM, Western, BLM, CDFG, and USFWS with the final version of the golden eagle monitoring and management plan. This final plan shall have been reviewed and approved by the CPM, USFWS, and Western in consultation with BLM, and CDFG. If no occupied nests are detected during the inventory and a plan is not warranted, a letter from USFWS documenting this determination shall be submitted to the CPM and Western at least 10 days prior to the start of any pre-construction site mobilization.

BURROWING OWL IMPACT AVOIDANCE, MINIMIZATION, AND COMPENSATION MEASURES

BIO-19 The project owner shall implement the following measures to avoid and offset impacts to burrowing owls. Nothing in this condition requires the project owner to conduct burrowing owl surveys by entering private lands adjacent to the project site when the project owner has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission. In this situation only, the project owner may substitute binocular surveys for protocol field surveys.

1. Pre-Construction Surveys. Concurrent with desert tortoise clearance surveys, the Designated Biologist shall conduct pre-construction surveys for burrowing owls no more than 30 days prior to the start of ground disturbing activities in any part of the project area. Surveys shall be conducted within the project site and along all linear facilities in accordance with CDFG guidelines (CBOC 1993). Surveys shall also be completed within 500 feet of all project disturbances.

2. Implement Avoidance Measures. If an active burrowing owl burrow is detected within 500 feet from the Project Disturbance Area the following avoidance and minimization measures shall be implemented:

   a. Establish Non-Disturbance Buffer. Fencing shall be installed at a 250-foot radius from the occupied burrow to create a non-disturbance buffer around the burrow. The non-disturbance buffer and fence line may be reduced to 160 feet if all Project-related activities that might disturb burrowing owls would be conducted during the non-breeding season (September 1st through January 31st). Signs shall be posted in English and Spanish at the fence line indicating no entry or disturbance is permitted within the fenced buffer.

   b. Monitoring: If construction activities would occur within 500 feet of the occupied burrow during the nesting season (February 1 – August 31st)

the Designated Biologist or Biological Monitor shall monitor to determine if these activities have potential to adversely affect nesting efforts, and shall implement measures to minimize or avoid such disturbance.

3. Passive Relocation of Burrowing Owls. If active burrowing owl burrows are detected within the Project Area, the Project owner shall prepare and implement a Burrowing Owl Relocation and Mitigation Plan, in addition to the avoidance measures described above. The final Burrowing Owl Relocation and Mitigation Plan shall be based on the applicant's draft plan (CH2MHill 2010h) revised to incorporate pending review and recommendations by the CPM in consultation with Western ,USFWS, BLM and CDFG, and shall:

   a. Identify and describe suitable burrow replacement sites within 1 mile of the Project Disturbance Area, and describe measures to ensure that burrow installation or improvements would not affect sensitive species habitat or any burrowing owls already present in the relocation area; burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting, and be characterized by minimal human disturbance and access. Relative cover of non-native plants within the proposed relocation sites shall not exceed the relative cover of non-native plants in the adjacent habitats;

   b. Provide guidelines for creation or enhancement of at least two natural or artificial burrows for each active burrow within the project disturbance area, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFG guidelines (CDFG 1995) and shall be approved by the CPM in consultation with Western, CDFG, BLM and USFWS; if artificial burrows are required, they shall be located on applicant-owned lands outside of the project boundary where construction/ development would not occur, and at sufficient distance from the project site to minimize noise and other disturbance;

   c. Provide detailed methods and guidance for passive relocation of burrowing owls occurring during non-breeding season within the Project Disturbance Area. Occupied burrows may not be disturbed during the nesting season (February 1 to August 31) to avoid "take" under the MBTA and Fish and Game codes; and

   d. Describe monitoring and management of the replacement burrow site(s), and provide a reporting plan. The objective shall be to manage the relocation area for the benefit of burrowing owls, with the specific goals of:

      i. maintaining the functionality of the burrows for a minimum of two years; and

ii. Minimizing the occurrence of weeds (species considered "moderate" or "high" threat to California wildlands as defined by CAL-IPC [2006] and noxious weeds rated "A" or "B" by the California Department of Food and Agriculture and any federal-rated pest plants [CDFA 2009]) at less than 10 percent cover of the shrub and herb layers.

4. Surveys of Relocation Area. The Designated Biologist shall survey the relocation area(s) containing the artificial burrows installed in accordance with Item 3 above during the nesting and wintering seasons to assess use of the artificial burrows, using methods consistent with Phase II and Phase III California Burrowing Owl Consortium Guideline protocols (CBOC 1993). Surveys shall start upon completion of artificial burrow construction and shall continue for a period of five years. If survey results indicate burrowing owls are not using the relocation area, remedial actions shall be developed and implemented in consultation with the CPM, Western, BLM, CDFG, and USFWS to correct conditions at the site that might be preventing owls from using it. A report describing survey results and remedial actions taken shall be submitted to the CPM, Western, BLM, CDFG, and USFWS no later than January 31st of each year for five years.

5. Acquisition and protection of compensatory mitigation lands for burrowing owls. The Project owner shall provide, in fee or in easement, for the management and protection in perpetuity of 19.5 acres of land for each single burrowing owl or breeding pair or burrowing owls that is displaced by construction of the Project. This compensation acreage of 19.5 acres per single bird or pair of nesting owls assumes that there is no evidence that the compensation lands are occupied by burrowing owls. If burrowing owls are observed to occupy the compensation lands, then only 9.75 acres per single bird or pair is required, per CDFG (1995) guidelines. If the compensation lands are contiguous to currently occupied habitat, then the replacement ratio will be 13.0 acres per pair or single bird.

   Compensation land acreage and cost estimates described here are based on the applicant's report that as many as five single burrowing owls or breeding pairs may occur on the solar generator site and one or two single owls or breeding pairs may occur along the generator tie-line alignment. ~~No estimates of burrowing owl numbers on the 161-kV Parker-Blythe transmission line are available.~~ At 19.5 acres of compensation land per single owl or nesting pair, the project owner shall be responsible for dedicating and protecting 136.5 acres of burrowing owl habitat. This estimated acreage shall be adjusted based upon pre-construction survey data and the occurrence of burrowing owls on proposed compensation lands (above).

   The project owner shall transfer fee title or a conservation easement on the compensation lands to CDFG under terms approved by CDFG.

Alternatively, a non-profit organization qualified to manage compensation lands (pursuant to California Government Code section 65965) and approved by CDFG and the CPM may hold fee title or a conservation easement over the habitat mitigation lands. If the approved non-profit organization holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG. If the approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If a Security is provided, the project owner or an approved third party shall complete the proposed compensation lands acquisition within 18 months of the start of project ground-disturbing activities. Acquisition funding shall be based on the adjusted land values at the time of construction. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described in Section 3.i. of Condition of Certification **BIO-16**.

In addition, the Project owner shall provide funding for the enhancement and long-term management of these compensation lands. The acquisition or easement and subsequent management of the compensation lands may be delegated by written agreement to CDFG or to a third party, such as a non-governmental organization dedicated to habitat conservation, subject to approval by the CPM, in consultation with CDFG, Western, BLM, and USFWS prior to land acquisition or management activities. Management funding shall be based on the adjusted transaction and management expenses at the time of construction to acquire and manage habitat.

a. Criteria for Burrowing Owl Compensation Lands. The terms and conditions of this acquisition or easement shall be as described in Paragraph 1 of **BIO-16** (Desert Tortoise Compensatory Mitigation), with the additional criteria to include: 1) the burrowing owl compensation land must provide suitable habitat for burrowing owls, and 2) the compensation lands must either currently support burrowing owls or be within dispersal distance from areas occupied by burrowing owls (generally approximately 5 miles). The burrowing owl compensation lands may be included with the desert tortoise compensation lands only if these two burrowing owl criteria are met. If the burrowing owl compensation land is separate from the acquisition required for desert tortoise compensation lands, the Project owner shall fulfill the requirements described below in this condition.

b. Security. If the burrowing owl habitat compensation land is separate from the acreage required for desert tortoise compensation lands, then the Project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating ground-disturbing Project activities. Alternatively, financial assurance can be

provided by the Project owner to the CPM with copies of the document(s) to Western, CDFG, BLM and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation measure described in this condition. These funds shall be used solely for implementation of the measures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") prior to initiating ground-disturbing Project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with Western, CDFG, BLM and the USFWS to ensure funding. As of the publication of the SA/DEIS, this amount is $358,701.17 but this amount may change based on land costs or adjustments to the estimated costs of enhancement and endowment (see **Biological Resources Table 6** and Compensatory Mitigation Land Security in **BIO-16** for a discussion of the assumptions used in calculating the Security, which are based on an estimate of $2,622 per acre to fund acquisition, enhancement, and long-term management). The final amount due will be determined by the PAR or PAR-like analysis conducted pursuant to **BIO-16**.

If pre-construction surveys detect burrowing owls or active burrows outside the project disturbance area but within 500 feet of proposed construction activities, the Designated Biologist shall provide to the CPM, CDFG, USFWS, BLM, and Western a Burrowing Owl Monitoring and Mitigation Plan at least 10 days prior to the start of any project-related site disturbance activities. The project owner shall report monthly to the CPM, CDFG, USFWS, BLM, and Western for the duration of construction on the implementation of burrowing owl avoidance and minimization measures described in the Burrowing Owl Monitoring and Mitigation Plan. Within 30 days after completion of construction the project owner shall provide to the CPM, CDFG, USFWS, BLM, and Western a written construction termination report identifying how mitigation measures described in the plan have been completed.

If pre-construction surveys detect burrowing owls within 500 feet of proposed construction activities, the Designated Biologist shall provide to the CPM, Western, BLM, CDFG and USFWS documentation indicating that non-disturbance buffer fencing has been installed at least 10 days prior to the start of any construction-related ground disturbance activities. The Project owner shall report monthly to the CPM, Western, CDFG, BLM and USFWS for the duration of construction on the implementation of burrowing owl avoidance and minimization measures. Within 30 days after completion of construction the Project owner shall provide to the CPM, Western, BLM, CDFG and USFWS a written construction termination report identifying how mitigation measures described in the plan have been completed.

If pre-construction surveys detect burrowing owls within the Project Disturbance Area, the Project owner shall notify the CPM, Western, BLM, CDFG and USFWS no less than 10 days of completing the surveys that a relocation of owls is necessary. The Project

owner shall do all of the following if relocation of one or more burrowing owls is required:

a. Within 30 days of completion of the burrowing owl pre-construction surveys, submit to the CPM, Western, CDFG and USFWS a Draft Burrowing Owl Relocation and Mitigation Plan.

b. No less than 90 days prior to purchase or dedication of the burrowing owl compensation lands, the Project owner, or an approved third party, shall submit a formal acquisition proposal to the CPM, Western, CDFG, and USFWS describing the parcel intended for purchase or dedication. At the same time the Project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, CDFG and USFWS.

c. Within 90 days of the purchase or dedication, as determined by the date on the title, the Project owner shall provide the CPM with a management plan for review and approval, in consultation with Western, CDFG, BLM and USFWS, for the compensation lands and associated funds.

d. No later than 30 days prior to the start of construction-related ground disturbing activities, the Project owner shall provide written verification of Security in accordance with this condition of certification.

e. No later than 18 months after the start of construction-related ground disturbance activities, the Project owner shall provide written verification to the CPM, Western, BLM, CDFG and USFWS that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient.

f. On January 31st of each year following construction for a period of five years, the Designated Biologist shall provide a report to the CPM, USFWS, BLM and CDFG that describes the results of monitoring and management of the replacement burrow area. The annual report shall provide an assessment of the status of the replacement burrow area with respect to burrow function and weed infestation, and shall include recommendations for actions the following year for maintaining the burrows as functional burrowing owl nesting sites and minimizing the occurrence of weeds.

CONDITIONS OF CERTIFICATION BIO-20 AND BIO-21: No changes.

STREAMBED IMPACT MINIMIZATION AND COMPENSATION MEASURES

BIO-22 The project owner shall implement the following measures to avoid, minimize and mitigate for direct and indirect impacts to waters of the State and to satisfy requirements of California Fish and Game Code sections 1600 and 1607.

1. Eliminate Proposed Storm Water Detention Basins: The project owner shall eliminate the proposed detention basins from the project design. The owner shall design and construct the perimeter road at existing grade in the southern portion of the project site to allow runoff to cross the road freely, as shown in the applicant's Response to CEC Staff Workshop Query 12 (SR 2010a). The project owner may adopt the road design as submitted (SR 2010a) or provide an alternate design to minimize potential for road damage during heavy rains (e.g., the owner may elect to pave the road or install periodic low-water crossings that would not impede runoff).

2. Finalize Acreages of Impacts to State Waters: Staff estimates that 82.8 acres of state-jurisdictional waters would be directly or indirectly impacted by the project ~~(excluding impacts during construction of the OHGW on the existing Western Parker-Blythe 161 kV transmission line)~~. Upon completion of final engineering, the project owner shall review and quantify the project's permanent and long-term impacts to state-jurisdictional waters. The calculated acreage of permanent and long-term impacts shall include all ephemeral drainages impacted by construction within or adjacent to the fenced boundary of the solar field site, including the proposed logistics and lay-down areas and diversion channels, as well as impacts to drainages resulting from the construction or widening of access for new or existing transmission line access road; transmission line tower access; logistics, staging, and lay-down areas; road turnouts; pull sites; interconnection substation; and any other project-related disturbance to jurisdictional waters.

3. Acquire Off-Site State Waters: Permanent and long-term impacts to waters of the State shall be mitigated by compensation at a 1:1 ratio. The project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes at least the same acreage of State jurisdictional waters as would be impacted by construction of the project, as determined in Item 1 above. The parcel or parcels comprising the off-site State waters shall include similar vegetation and habitat types as those mapped in the project footprint. The terms and conditions of this acquisition or easement shall be as described in Condition of Certification **BIO-16**. Mitigation for impacts to State waters shall occur within the surrounding watersheds, as close to the project site as possible. State waters occurring on desert tortoise compensation lands (Condition of Certification **BIO-16**) may be used to fulfill the requirements of this condition. Additional off-site State waters shall be acquired if desert tortoise compensation lands do not contain the minimum acreage of State waters as required for compliance with this Condition of Certification.

4. Preparation and Implementation of Habitat Management Plan for Off-site Compensation Land: The project owner shall prepare and implement a Management Plan that describes site-specific enhancement measures for the acquired compensation lands, as described in Condition of

Certification **BIO-16**. The Management Plan, as developed for Condition of Certification **BIO-16**, shall include site-specific enhancement measures for all drainages on compensation lands that will be used to fulfill the requirements of this Condition of Certification. Any additional lands beyond those required for compliance with Condition of Certification **BIO-16** that may be required for compliance with this Condition of Certification shall also be included in the Management Plan. The management plan shall be submitted for the CPM'S review in consultation with CDFG, Western, and BLM.

5. Code of Regulations: The project owner shall provide a copy of the Streambed Impact Minimization and Compensation Measures from the Energy Commission Decision and Western and BLM Records of Decision to all contractors, subcontractors, and the project owner's project supervisors. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any CDFG personnel or personnel from another agency upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the project owner and the CPM, if the CPM in consultation with CDFG determines that the project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:

   a. The information provided by the project owner regarding streambed alteration is incomplete or inaccurate;

   b. New information becomes available that was not known to it in preparing the terms and conditions; or

   c. The project or project activities as described in future environmental documentation or in decision documents prepared by the Energy Commission, Western or BLM have changed.

6. Best Management Practices: The project owner shall also comply with the following conditions to protect drainages near the Project Disturbance Area:

   a. The project owner shall not operate vehicles or equipment in ponded or flowing water except as described in this condition.

   b. With the exception of the detention basin(s) and drainage control system installed for the project, the installation of bridges, culverts, or other structures shall be such that water flow (velocity and low flow channel width) is not impaired. Bottoms of temporary culverts shall be placed at or below stream channel grade.

c. When any activity requires moving of equipment across a flowing drainage, such operations shall be conducted without substantially increasing stream turbidity.

d. Vehicles driven across ephemeral drainages when water is present shall be completely clean of petroleum residue and water levels shall be below the vehicles' axles.

e. The project owner shall minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible for all project components both within and outside the perimeter fence.

f. The project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter off-site state-jurisdictional waters or be placed in locations that may be subjected to high storm flows.

g. The project owner shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the project owner to ensure compliance.

h. Spoil sites shall be located and protected as necessary to prevent spoils from eroding into any off-site state-jurisdictional waters. No spoils shall be placed in locations that may be subjected to high storm flows, where spoils might be washed back into drainages.

i. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering off-site state-jurisdictional waters. These materials, <u>if</u> placed within or where they may enter a drainage by the project owner or any party working under contract or with the permission of the project owner, shall be removed immediately.

j. No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, off-site state-jurisdictional waters .

k. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within

150 feet of the high water mark of any category 3, 4, or 5 streambed or any streambed greater~~d~~ than 10 feet wide.

l. No equipment maintenance shall occur within 150 feet of any category 3, 4, or 5 streambed or any streambed greated than 10 feet wide and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.

m. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to a drainage, shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as booms, absorbent pads, and skimmers shall be on site prior to the start of construction.

n. The cleanup of all spills shall begin immediately. The CPM, Western, CDFG, and BLM shall be notified immediately by the project owner of any spills and shall be consulted regarding clean-up procedures.

7. Non-Native Vegetation Removal. The project owner shall remove any non-native vegetation (Consistent with the Weed Management Plan, Condition of Certification **BIO-11**) from any drainage on the project site that requires the placement of a bridge, culvert, or other structure. Removal shall be done at least twice annually (Spring/Summer) throughout the life of the project.

8. Reporting of Special-Status Species: Consistent with Condition of Certification **BIO-2**, if any special-status species are observed on or in proximity to the project site, or during project surveys, the project owner shall submit California Natural Diversity Data Base (CNDDB) forms and maps to the CNDDB within five working days of the sightings and provide the regional CDFG office with copies of the CNDDB forms and survey maps. The CNDDB form is available online at: www.dfg.ca.gov/whdab/pdfs/natspec.pdf. This information shall be mailed within five days to: California Department of Fish and Game, Natural Diversity Data Base, 1807 13th Street, Suite 202, Sacramento, CA 95814, (916) 324-3812. A copy of this information shall also be mailed within five days to the CPM, Western, USFWS, CDFG, and BLM.

9. Avoidance (North of Desert Center Alternative): If the North of Desert Center Alternative is selected, project design and implementation shall avoid direct or indirect impacts to the primary wash on the site and a 100-foot buffer area surrounding the wash, including associated native vegetation.

10. Notification: The project owner shall notify the CPM, Western, BLM, and CDFG, in writing, at least five days prior to initiation of project activities in jurisdictional areas and at least five days prior to completion of project activities in jurisdictional areas. The project owner shall notify the CPM, Western, BLM, and CDFG of any change of conditions to the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of the proposed project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed project. The notifying report shall be provided to the CPM, Western, BLM, and CDFG no later than 7 days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project, as described below. A copy of the notifying change of conditions report shall be included in the annual reports.

    a. Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

    b. Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.

    c. Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

Within 30 days of the completion of final engineering, the project owner shall notify the CPM, Western, BLM, and CDFG of the total acreage of impacts to jurisdictional waters. No fewer than 30 days prior to the start of any site or related facilities mobilization activities, the project owner shall implement the construction-related mitigation measures described above, shall verify that appropriate compensation lands have been identified, and shall submit a draft Habitat Management Plan for the identified compensation lands. No fewer than 30 days prior to the start of work potentially affecting waters of the State, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM, Western, BLM, and CDFG that the

above best management practices will be implemented and provide a discussion of planned work in waters of the State in Compliance Reports for the duration of the project.

Within 30 days after completion of the first year of project construction, the project owner shall provide to the CPM, Western, BLM, and CDFG for review and approval a report identifying that appropriate compensatory mitigation lands have been obtained, that the Habitat Management Plan has been reviewed and approved by all responsible agencies, that implementation as specified in the Plan has been initiated, verification of ongoing enhancement techniques, and a summary of all modifications made to the existing channels.

Verification of non-native vegetation removal from drainages on-site, and reporting of special-status species shall be included in monthly and annual compliance reports (Condition of Certification **BIO-2**). Verification of implementation and completion of the compensation land Habitat Management Plan shall be as specified in that Plan.

COUCH'S SPADEFOOT SURVEYS AND BREEDING HABITAT AVOIDANCE

BIO-23 The Project Owner shall implement focused surveys to delineate any potential Couch's spadefoot breeding habitat along the length~~s~~ of the generator tie-line alignment ~~and the existing 161-kV Parker-Blythe #2 transmission line alignment~~ and delineate these areas for avoidance in consultation with Western, CDFG, and BLM. These surveys shall be conducted prior to the initiation of ground disturbance for transmission line construction work and shall be conducted by a biologist knowledgeable with Couch's spadefoot biology and habitat. No disturbance shall take place within suitable breeding ponds while water is present. If suitable breeding ponds, adult spadefoots, eggs, or larvae/tadpoles are found, a 200 foot buffer shall be placed around these areas and shall remain in place until the larva/tadpoles complete metamorphosis and retreat to upland areas or until the pools are completely dry.

Impacts to all potential breeding habitat for Couch's spadefoot shall be avoided to the extent feasible. If work within this habitat cannot be avoided, work shall be conducted only while any potential breeding pools are completely dry.

No less than 30 days prior to initiating ground disturbing activities along either transmission line alignment, the project biologist shall provide a written report detailing the survey results and compliance with avoidance measures to the CPM for review in consultation with Western, CDFG, and BLM.

CONDITION OF CERTIFICATION BIO-24: No changes**.**

AVIAN AND BAT PROTECTION PLAN / MONITORING OPERATIONAL IMPACTS OF SOLAR COLLECTION FACILITY ON BIRDS AND BATS

BIO-25 Avian and Bat Protection Plan: The project owner shall prepare and implement an Avian and Bat Protection Plan adopting all applicable guidelines recommended by the USFWS (2010e) in coordination with the Heliostat Positioning Plan (Condition of Certification **TRANS-5**) to minimize death and injury of birds or bats from (1) collisions with facility features including the heliostat structures, central tower, and generator tie-line towers or transmission lines and (2) focused light and heat at and near the central tower or at "standby points" while the heliostats are focused away from the tower. The Avian and Bat Protection Plan shall include modifications to proposed plant operation to avoid or minimize focusing heliostats at standby points and, instead, move heliostats into a stowed position or another alternative configuration when the power plant is in standby mode. The Avian and Bat Protection Plan shall identify additional adaptive management measures to minimize collisions and incinerations. The Avian and Bat Protection Plan shall also provide documentation that the project is in compliance with the Bald and Golden Eagle Protection Act (Title 16, United States Code, Section 668) and shall provide specific construction activity and scheduling guidelines ~~for installation of the overhead fiber-optic ground wire along Western's existing 161-kV Parker-Blythe #2 transmission line~~ to avoid disturbance to golden eagle nesting territories (see **Condition of Certification BIO-18**). The Avian and Bat Protection Plan shall provide a reporting schedule for all actions taken during project construction or operation. Upon USFWS approval, it shall be reviewed and approved by the CPM in consultation with Western, CDFG, and BLM. Upon review and approval, it shall be incorporated into the project's BRMIMP and implemented.

Bird and Bat Monitoring Study: The project owner shall prepare and implement a Bird and Bat Monitoring Study to monitor the death and injury of birds and bats from collisions with project facilities including heliostats and solar receiver tower, and burning caused by flying through focused sunlight around the solar receiver tower or standby points. The study design shall be approved by the CPM in consultation with Western, CDFG and USFWS, and shall be incorporated into the project's BRMIMP and implemented by the Designated Biologist in coordination with the project owner, CPM, Western, CDFG, BLM, and USFWS. The Bird and Bat Monitoring Study shall include detailed specifications on data and carcass collection protocol, to include identification of each carcass to species whever possible and a proposed schedule of carcass searches to be based upon a valid sampling rationale. All bird or bat carcasses shall be retained in a freezer on-site, with all collection data written on an attached data form, pending disposition to CDFG or a certified museum (e.g., San Bernardino County Museum; Western Foundation of Vertebrate Zoology or California Academy of Sciences) pending recommendation of the wildlife agencies. For any special-status

species carcasses, the Biological Monitor shall contact CDFG and USFWS (for golden eagle or any federally-listed species) within one working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in Conditions of Certification **BIO-2, BIO-7,** and **BIO-22**.

. The study shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias.

Adaptive management and mitigation strategies that may be implemented in the event that the Bird and Bat Monitoring Study identifies the need for additional mitigation could include the use of visual or auditory deterrents, or the acquisition and conservation of offsite habitat of similar type and quality as was present at the RSEP site prior to project development.

No more than 60 days following the docketing of the Energy Commission Final Decision or publication of Western's Record of Decision, whichever comes first, the project owner shall submit for approval by the CPM, in consultation with Western, BLM, and CDFG a final Avian and Bat Protection Plan which has already been reviewed and approved by USFWS. The Plan shall include documentation that the project is in compliance with the Bald and Golden Eagle Protection Act (Title 16, United States Code Section 668). This documentation shall include a written or electronic transmittal from the USFWS indicating its approval of the Avian and Bat Protection Plan, the status of any permit that may be required, and any follow-up actions required by the applicant. Modifications to the Avian and Bat Protection Plan shall be made only after approval from the CPM, in consultation with Western, BLM, USFWS, and CDFG.

Implementation and results of the Avian and Bat Protection Plan shall be described in periodic reports, scheduled according to the reporting schedule set forth in the approved Plan. The project owner shall submit reports to the CPM for review and approval, in consultation with Western, CDFG, BLM, and USFWS.

No more than 30 days following the publication of the Energy Commission Decision, the project owner shall submit to the CPM, Western, USFWS, and CDFG a draft Bird and Bat Monitoring Study. At least 60 days prior to start of any project-related ground disturbance activities, the project owner shall provide the CPM with the final version of the Bird and Bat Monitoring Study, as reviewed and approved by the CPM in consultation with Western, CDFG and USFWS. Modifications to the Bird and Bat Monitoring Study shall be made only with the approval of the CPM in consultation with Western, CDFG and USFWS.

For at least two years following the beginning of operation the project owner shall submit quarterly reports to the CPM, Western, CDFG, and USFWS describing the dates, durations, and results of monitoring. The quarterly reports shall provide detailed descriptions of any project-related bird or wildlife deaths or injuries detected during the monitoring study or at any other time.

Following the completion of the fourth quarter of monitoring each year, the Designated Biologist shall prepare an Annual Report that summarizes the year's data, analyzes any project-related bird and/or bat fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive management actions needed. The Annual Report shall be provided to the CPM, Western, CDFG, and USFWS.

Quarterly reporting shall continue until the CPM, in consultation with Western, CDFG and USFWS determine whether further monitoring is needed, and whether mitigation (e.g., development and/or implementation of bird deterrent technology, etc.) and/or adaptive management measures are necessary. After the Bird and Bat Monitoring Study is determined by the CPM to be complete, the project owner or contractor shall prepare a paper that describes the study design and monitoring results to be submitted to a peer-reviewed scientific journal. A copy of the manuscript and proof of submittal shall be provided to the CPM within one year of concluding the monitoring study.

CONDITION OF CERTIFICATION BIO-26: No changes.

REVISED CONCLUSIONS

With implementation of staff's proposed conditions of certification, construction and operation of the proposed RSEP solar generator, generator tie-line and interconnector substation would comply with all federal, State, and local laws, ordinances, regulations, and standards relating to biological resources. ~~Staff's generally does not reach conclusions with regard to the proposed OPGW on Western's existing 161-kV Parker-Bythe #2 transmission line, pending availability of additional information on biological resources and delineation of state and federally jurisdictional streambeds, on the alignment. For this project component, significance of potential impacts to biological resources and compliance with LORS remain uncertain. The assessment of RSEP's effects to Biological resources associated with the telecommunications option to attach a fiber optic cable on the Parker-Blythe #2 Transmission Line will be updated for the CEC's record and the FEIS when additional information is received from the applicant.~~ A more complete summary of staff's conclusions is provided in the first section of this chapter.

~~Four~~ Three of staff's recommended Conditions of Certification would require the Project owner to acquire compensation lands to mitigate the Project's impacts to biological resources. The most significant of these is **BIO-16** (Desert Tortoise Compensatory Mitigation).The others are Conditions of Certification ~~**BIO-12**~~, **BIO-19**, and **BIO-22**. ~~**BIO-12** (Special-Status Plant Impact Avoidance and Minimization) provides the option of mitigating impacts to rare plants that may be discovered on the site during late-season botanical surveys through habitat compensation.~~ **BIO-19** (Burrowing Owl Impact Avoidance, Minimization, and Compensation Measures) would require compensation for project impacts to this animal. **BIO-22** (Streambed Impact Minimization and Compensation Measures) would require compensation for jurisdictional streambed acreage impacted by the project. In each of these conditions, staff recommends a

financial security to ensure adequate funding to acquire and manage the compensation lands. Staff recommends that this security should be equal to staff's estimated costs for habitat compensation and management. Staff recognizes that some potential compensation lands may support more than one of these resources, and staff recommends that, wherever applicable, the project owner should seek compensation lands meeting selection criteria for more than one of these resources, as described in these Conditions of Certification, below. However, pending acquisition of compensation lands, staff recommends separate securities for each resource.

Staff has calculated the acreage and estimated costs for desert tortoise compensation lands, as described in Condition of Certification **BIO-16**. Staff provides estimates of acreage and costs for burrowing owl compensation in **BIO-19**. ~~Any potential compensation acreage for rare plants, pursuant to **BIO-12**, would be determined upon completion of late-season field surveys and cannot be estimated at this time.~~ Staff anticipates that all compensation lands for state jurisdictional streambeds as required under **BIO-22** would be "nested" within desert tortoise compensation lands, avoiding necessity for additional compensation lands. However, as described in **BIO-22**, further compensation lands may be required dependent upon the extent of state jurisdictional waters on the desert tortoise compensation lands. For streambed compensation, available private land parcels would rarely if ever be made up only of suitable streambed habitat. However, staff bases its estimated cost for compensation of streambed impacts (and recommended security) on the acreage of state-jurisdictional streambed habitat as provided by the applicant. **Revised Biological Resources Table 10,** below, provides staff's cost estimates and recommended security for each of these recommended conditions of certification.

Revised Biological Resources Table 10
Summary of Compensation Lands Costs[1]

	Desert tortoise compensation	Burrowing owl compensation	~~Rare plant compensation~~	Streambed compensation
Number of acres	~~1988~~ 1,522	136.5	~~Undetermined (pending further surveys)~~	89
Estimated number of parcels to be acquired, at 160 acres per parcel[2]	~~13~~ 10	1	~~n/a~~	1
Land cost at $500/acre[3]	~~$994,000.00~~ $761,000.00	$68,250.00	~~n/a~~	$44,500.00
Level 1 Environmental Site Assessment at $3000/parcel	~~$39,000.00~~ $30,000.00	$3,000.00	~~n/a~~	$3,000.00
Appraisal at no less than $5,000/parcel	~~$65,000.00~~ $50,000	$5,000.00	~~n/a~~	$5,000.00
Initial site clean-up, restoration or enhancement, at $250/acre[4]	~~$497,000.00~~ $380,500.00	$34,125.00	~~n/a~~	$22,250.00
Closing and Escrow Cost at $5000/parcel[5]	~~$65,000.00~~ $50,000.00	$5,000.00	~~n/a~~	$5,000.00
Biological survey for determining mitigation value of land (habitat based with species specific augmentation) at $20,000/parcel	~~$260,000.00~~ $200,000.00	$20,000.00	~~n/a~~	$20,000.00
3rd Party Administrative Costs (Land Cost x 10%)[6]	~~$99,400.00~~ $76,100.00	$6,825.00	~~n/a~~	$4,450.00
Agency cost to accept land[7] [(Land Cost x 15%) x 1.17] (17% of the 15% for overhead)	~~$174,447.00~~ $133,555.50	$11,977.88	~~n/a~~	$7,809.75
Subtotal - Acquisition and Initial Site Work	~~$2,193,847.00~~ $1,681,155.50	$154,177.88	~~n/a~~	$112,009.75
Long-term Management and Maintenance Fund (LTMM) fee at $1450/acre[8]	~~$2,882,600.00~~ $2,206,900.00	$197,925.00	~~n/a~~	$129,050.00
NFWF Fees				
Establish Project Specific Account	$12,000.00	n/a	~~n/a~~	n/a
Pre-proposal modified RFP or RFP processing[9]	$30,000	n/a	~~n/a~~	n/a
NFWF Management fee For Acquisition and Enhancement Actions (Subtotal x 3%)	~~$65,815.41~~ $50,434.67	$4,625.34	~~n/a~~	$3,360.30
NWFW Management Fee	~~$28,826.00~~	$1,972.95	~~n/a~~	$1,290.50

for LTMM account (LTMM x 1%)	$22,069.00			
Subtotal of NFWF Fees	~~$136,641.41~~ $114,503.67	$6,598.29	~~n/a~~	$4,650.80
TOTAL Estimated cost for deposit in project specific REAT-NFWF Account	**~~$5,213,088.41~~ $4,002,559.17**	**$358,701.17**	~~n/a~~	**$245,710.55**

1. Estimates prepared in consultation with CDFG, USFWS, and BLM. All costs are best estimates as of summer 2010. Actual costs will be determined at the time of the transactions and may change the funding needed to implement the required mitigation obligation. All acreages are staff's estimates based on available data; final acreages to be adjusted.
2. For the purposes of determining costs, a parcel is defined at 160 ~~40~~ acres, recognizing that some will be larger and some will be smaller, but that 160 ~~40~~ acres provides a good estimate for the number of transactions anticipated (based on input from CDD).
3. Generalized estimate taking into consideration a likely jump in land costs due to demand, and an 18-24 month window to acquire the land after agency decisions are made. If the agencies, developer, or 3rd party has better information on land costs in the specific area where project-specific mitigation lands are likely to be purchased, that data overrides this general estimate. Note: regardless of the estimates, the developer is responsible for providing adequate funding to implement the required mitigation.
4. Based on information from CDFG.
5. Two transactions: landowner to 3rd party; 3rd party to agency.
6. Includes staff time to work with agencies and landowners; develop management plan; oversee land transaction; organizational reporting and due diligence; review of acquisition documents; assembling acquisition acreage, and related tasks
7. This amount covers the estimate of BLM's cost to accept the land into the public management system and costs associated with tracking/managing the costs associated with the donation acceptance, includes two physical inspections; review and approval of the Level 1 ESA assessment; review of all title documents; drafting deed restrictions; issue escrow instructions; mapping the parcels, and related tasks.
8. Estimate for purposes of calculating general costs. The actual long term management costs will be determined using a PAR (Property Assessment Report) or PAR-like analysis tailored to the specific acquisition. Includes land management; enforcement and defense of easement or title [short and long term]; and monitoring.
9. If determined necessary by the REAT agencies if multiple 3rd parties have expressed interest; for transparency and objective selection of 3rd party to carry out acquisition.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION FOR THE *RICE SOLAR ENERGY POWER PLANT PROJECT*

Docket No. 09-AFC-10

PROOF OF SERVICE
(Revised 8/5/2010)

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DECLARATION OF SERVICE

I, Chester Hong, declare that on October 27, 2010, I served and filed copies of the attached:

Identification of Staff's Rebuttal Testimony

dated October 27, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/ricesolar].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

FOR SERVICE TO ALL OTHER PARTIES:

__x___ sent electronically to all email addresses on the Proof of Service list;

_____ by personal delivery;

__x___ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

__x___sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 09-AFC-10
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

_____/s/_____
CHESTER HONG
Chief Counsel's Office

*indicates change