

DOCKET

08-AFC-13

DATE JUL 29 2010

RECD. JUL 29 2010

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:) Docket No. 08-AFC-13
)
Application for Certification for the) July 29, 2010
Calico Solar Project (formerly known as)
SES Solar 1), SES Solar Three, LLC and)
SES Solar Six, LLC)

Staff's Rebuttal Testimony and Errata

CARYN J. HOLMES
STEPHEN ADAMS
Counsel for California
Energy Commission Staff
1516 9th St., MS-14
Sacramento, CA 95814
Ph: (916) 654-3951
Fax: (916) 654-3843

Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

This material updates mitigation cost estimates and regional raven control costs as presented in the Supplemental Staff Analysis (SSA) of July 2010. The Renewable Energy Action Team (REAT) Memorandum of Agreement (MOA) subteam consisting of representatives from the Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and Energy Commission have developed and have continued to refine a desert renewable energy biological compensation/mitigation cost table to reflect updated cost estimates mitigation for solar projects in the region. The latest updates to these cost estimates are reflected in changes to the SSA sections identified below and in Conditions of Certification **BIO-17**, Desert Tortoise Compensatory Mitigation and **BIO-18**, Raven Monitoring, Management, and Control Plan.

Revisions to the SSA and Conditions of Certification include the following five changes:

- 1) Biological Resources Table 5, Summary of Compensation Lands Costs, on pages C.2-46 through C.2-48 of the SSA has been revised to reflect updated estimates of the costs for acquiring habitat (see **Attachment A** to this rebuttal testimony);
- 2) Biological Resources Table 7, Desert Tortoise Compensation Cost Estimate, published on pages C.2-80 through C.2-81 of the SSA has been revised to reflect updated estimates of the costs for acquiring habitat (see **Attachment B** to this rebuttal testimony);
- 3) The regional raven control program description on page C.2-83 of the SSA has been revised to reflect updated cost estimates for the program (see **Attachment C** to this rebuttal testimony);
- 4) Condition of Certification **BIO-17**, Desert Tortoise Compensatory Mitigation, set forth on pages C.2-214 through C.2-223 of the SSA is revised as shown in **Attachment D**; and
- 5) Condition of Certification **BIO-18**, Raven Monitoring, Management, and Control Plan, set forth on pages C.2-223 through C.2-225 of the SSA is revised as shown in **Attachment E**.

ATTACHMENT A
to Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

Biological Resources Table 5
Summary of Compensation Lands Costs¹

	Desert tortoise compensation	Mojave fringe-toed lizard compensation	Rare plant compensation	Streambed compensation
Number of acres	14,365	207.5	undetermined	undetermined
Estimated number of parcels to be acquired, at 40 acres per parcel ²	360	6	n/a	n/a
Land cost at \$1000/acre ³	\$14,365,000.00	\$207,500.00	n/a	n/a
Level 1 Environmental Site Assessment at \$3000/parcel	\$1,080,000.00	\$18,000.00	n/a	n/a
Appraisal at no less than \$5,000/parcel	\$1,800,000.00	\$30,000.00	n/a	n/a
Initial site clean-up, restoration or enhancement, at \$250/acre ⁴	\$3,591,250.00	\$51,875.00	n/a	n/a
Closing and Escrow Cost at \$5000/parcel ⁵	\$1,800,000.00	\$30,000.00	n/a	n/a
Biological survey for determining mitigation value of land (habitat based with species specific augmentation) at \$5000/parcel	\$1,800,000.00	\$30,000.00	n/a	n/a
3rd Party Administrative Costs (Land Cost x 10%) ⁶	\$1,436,500.00	\$20,750.00	n/a	n/a
Agency cost to accept land ⁷ [(Land Cost x 15%) x 1.17] (17% of the 15% for overhead)	\$2,521,057.50	\$36,416.25	n/a	n/a
Subtotal - Acquisition and Initial Site Work	\$28,393,807.50	\$424,541.25	n/a	n/a
Long-term Management and Maintenance Fund (LTMM) fee at \$1450/acre⁸	\$20,829,250.00	\$300,875.00	n/a	n/a
NFWF Fees				
Establish Project Specific Account	\$12,000.00			
<u>Pre-proposal modified RFP or RFP processing⁹</u>	<u>\$30,000.00</u>			
NFWF Management fee	\$851,814.23	\$12,736.24	n/a	n/a

For Acquisition and Enhancement Actions (Subtotal x 3%)				
NFWF Management Fee for LTMM account (LTMM x 1%)	\$208,292.50	\$3,008.75	n/a	n/a
Subtotal of NFWF Fees	\$1,072,106.73 \$1,102,106.73	\$15,744.99	n/a	n/a
TOTAL Estimated cost for deposit in project specific REAT-NFWF Account	\$50,295,164.23 \$50,325,164.23	\$741,161.24	n/a	n/a

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.
2. For the purposes of determining costs, a parcel is defined at 40 acres, recognizing that some will be larger and some will be smaller, but that 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.**

ATTACHMENT B
to Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

Biological Resources Table 7
Desert Tortoise Compensation Cost Estimate¹

	Task	Cost
1.	Land Acquisition	\$1,000 per acre ²
2.	Level 1 Environmental Site Assessment	\$3,000 per parcel ³
3.	Appraisal	\$5,000 per parcel
4.	Initial site work - clean-up, enhancement , restoration	\$250 per acre ⁴
5.	Closing and Escrow Costs – 2 transactions at \$2,500 each; 4 transaction includes landowner to 3 rd party and 3 rd party to agency	\$5,000 per transaction parcel
6.	Biological survey for determining mitigation value of land (habitat based with species specific augmentation)	\$5,000 per parcel
7.	3 rd party administrative costs - 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 acres to acquire....	10% of land acquisition cost (#1)
8.	Agency costs to review and determine accepting land donation - includes 2 physical inspections; review and approval of the Level 1 ESA assessment; review of all title documents; drafting deed and deed restrictions; issue escrow instructions; mapping the parcels....	15% of land acquisition costs (#1) x 1.17 (17% of the 15% for overhead)
<i>SUBTOTAL - Acquisition & Initial Site Work</i>		\$28,393,807.50
9.	Long-term Management and Maintenance (LTMM) Fund - includes land management; enforcement and defense of easement or title [short and long term]; monitoring....	\$1,450 per acre ⁵
<i>SUBTOTAL - Acquisition, Initial Site Work, & LTMM</i>		\$49,223,057.50
NFWF Fees		
10.	Establish the project specific account	n/a (presumes establishment of desert tortoise account for project) \$12,000
11.	Pre-proposal Modified RFP or RFP processing⁶	\$30,000
12.	NFWF management fee for acquisition & initial site work	3% of SUBTOTAL
13.	NFWF Management fee for LTMM Fund	1% of LTMM Fund
<i>TOTAL for deposit in REAT-NFWF Project Specific Account</i>		\$50,295,164.23 \$50,325,164.23

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. Note: regardless of the estimates, the developer is responsible for providing adequate funding to implement the required mitigation.
2. 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, credible 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.
3. For the purposes of determining costs, a parcel is 40 acres (based on input from CDD).
4. Based on information from CDFG.
5. Estimate for purposes of calculating general costs. The actual long term management and maintenance costs will be determined using a Property Assessment Report (PAR) tailored to the specific acquisition.
- 6. 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.**

ATTACHMENT C
to Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

Regional Approach to Raven Control

The USFWS, in cooperation with CDFG and BLM, has developed a comprehensive, regional raven management and monitoring program in the California Desert Conservation Area to address the regional, significant threat that increased numbers of common ravens pose to desert tortoise recovery efforts (USFWS 2010b). The Regional Raven Management Program will implement recommendations in the USFWS *Environmental Assessment to Implement a Desert Tortoise Recovery Plan Task: Reduce Common Raven Predation on the Desert Tortoise* (USFWS 2008b). To mitigate the Calico Solar Project's contribution to cumulative and indirect impacts on desert tortoise from raven predation, staff proposes that the applicant contribute toward implementation of the Regional Raven Management Program (USFWS 2010b), as described in staff's proposed Condition of Certification **BIO-18**. To mitigate for the regional effects of ravens on desert tortoise, the applicant shall provide a onetime fee in the amount of \$105.00 per acre **and a 2% fund management fee** to the REAT Account held by the National Fish and Wildlife Foundation (NFWF), for 6,215 acres of desert tortoise habitat disturbed by the project. This payment of ~~\$652,575~~ **\$665,626.50** would support the regional raven management plan activities focused within the Mojave Desert Recovery Unit, which would be adversely affected by increases in raven subsidies attributable to the proposed project. The fees contributed by the applicant would fund staff who would implement the raven removal actions, education and outreach efforts, and surveying and monitoring activities identified in the federal Environmental Assessment (USFWS 2008b). Staff has concluded that that implementation of these actions would be an effective means of reducing the project's cumulative contributions to desert tortoise predation from increased raven numbers; would reduce the impacts below a level of significance; and would satisfy the requirements of the CDFG for full mitigation pursuant to CESA.

ATTACHMENT D
to Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

DESERT TORTOISE COMPENSATORY MITIGATION

BIO-17 To fully mitigate for habitat loss and potential take of desert tortoise, the project owner shall provide compensatory mitigation acreage of 14,365 acres of desert tortoise habitat lands, adjusted to reflect the final project footprint, as specified in this condition. This figure was calculated as follows: a ratio of 1:1 for the entire project area (6,215 acres) and an additional 2:1 ratio for 4,075 acres of the project area north of the BNSF railroad tracks (i.e., a total ratio of 1:1 on 2,140 acres and a total ratio of 3:1 on 4,075 acres). See **Biological Resources Table 18**, below. 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 Calico Solar 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.

Biological Resources Table 18
Desert Tortoise Compensation Acreage Summary

Location	Project Impact Acreage	Mitigation Ratio	Compensation Acreage
South of BNSF RR	2,140 acres	1:1	2,140 acres
North of BNSF RR	4,075 acres	3:1	12,225 acres
Total	6,215 acres		14,365 acres

To satisfy this condition, the project owner shall acquire, protect, and transfer no fewer than 14,365 acres of desert tortoise habitat lands (adjusted to reflect the final Project footprint), and shall also provide funding for the initial improvement and long-term maintenance and management of the acquired lands, and comply with other related requirements of this condition, although a portion of the lands requirement may be satisfied with mitigation provided to BLM, as provided below. Costs of these requirements are estimated to be \$49,223,057.50 based on the acquisition of 14,365 acres (see **Biological Resources Tables 5** and **7** for a complete breakdown of costs and acreage).

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., below. If the Project owner elects to use the REAT Account, then the total estimated cost of fulfilling this condition to ~~\$50,295,164.23~~ **\$50,325,164.23**.

Funds that the Project owner provides to satisfy BLM's mitigation requirements for the Project will also partially satisfy the requirements of this condition, up to a maximum of 6,215 acres of the 14,365-acre requirement, adjusted to reflect the final project footprint. Mitigation to BLM is expected to be in the form of payment in the amount of staff's estimated cost for the purchase, protection initial improvement, maintenance, and management of 6,215 acres of desert tortoise habitat, which BLM will use to implement habitat enhancement measures and other activities it identifies. The remainder of the mitigation requirement, at least 8,150 acres based on an additional 2:1 compensation ratio for the 4,075 project site acres north of the BNSF railroad tracks (adjusted to reflect the final project footprint), shall be acquired, protected, improved, maintained and managed as specified in this condition.

The actual costs to comply with this condition will vary depending on the final footprint of the Project, 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 Property Analysis Report (PAR, 3. d., below). The 14,365-acre habitat requirement, and associated funding requirements based on that acreage, will be adjusted up or down if there are changes in the final footprint of the project. Regardless of actual cost, the project owner shall be responsible for implementing all aspects of this condition.

The requirements for the acquisition, initial improvement, protection, and long term management of the 14,365 acres of compensation lands shall include the following:

1. Selection Criteria for Compensation Lands. The 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:
 - a. be within the Western Mojave 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.

2. 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 CDFG, BLM and the USFWS before deciding whether to approve or disapprove the proposed acquisition.
3. 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 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 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. Initial Habitat Improvement Fund. The Project owner shall fund activities that the CPM, in consultation with the 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 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 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.
- 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, in consultation with CDFG, 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 establish an account with a non-wasting capital that will be used 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 either provide initial payment of \$20,829,250 calculated at \$1,450 an acre for 14,365 acres or the Project owner shall include \$20,829,250 to reflect this amount in the security that is provided to the Energy Commission under section 3.h. of this condition. 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 CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds. The CPM, in consultation with CDFG, may designate another 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.
- 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 title and document review costs, expenses incurred from other state agency reviews, and 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. Management Plan. The project owner shall prepare a Management Plan for the compensation lands in consultation with the entity that will be managing the 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 CDFG, BLM and USFWS.
- h. Mitigation Security. The Project owner shall provide financial assurances 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. 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. 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.

Security for the requirements of this condition shall be provided in the amount of \$49,223,057.50 ~~(or (\$50,295,164.23~~ **\$50,325,164.23** if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 3.h.i. of this condition, below). The Security is calculated in part, from the items that follow but adjusted as specified below (consult **Biological Resources Tables 5 and 7** 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 \$1,000/acre;
 - ii. Site assessments, appraisals, biological surveys, transaction closing and escrow costs, calculated as \$18,000 total per parcel (presuming 40-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;
 - 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.
- i. 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, or 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.

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.

Verification: 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 the CPM and CDFG with an approved Security 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 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, 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, and shall obtain approval from the CPM, in consultation with 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, 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 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. The project owner shall fully fund the required amount for long-term maintenance and

management of the compensation lands 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, 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 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, CDFG, BLM and USFWS with a management plan for the compensation lands within 180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with 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. This shall be the basis for the final number of acres required to be acquired.

ATTACHMENT E
to Staff's Rebuttal Testimony and Errata
Calico Solar Power Project
July 29, 2010
Biological Resources
Chris Huntley, Scott D. White, and Carolyn Chainey-Davis

RAVEN MONITORING, MANAGEMENT, AND CONTROL PLAN

BIO-18 The project owner shall design and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that is consistent with the most current USFWS-approved raven management guidelines and that meets the approval of the USFWS, CDFG, and the CPM. Any subsequent modifications to the approved Raven Plan shall be made only with approval of the CPM in consultation with USFWS and CDFG. The Raven Plan shall include but not be limited to a program to monitor increased raven presence in the Project vicinity and to implement raven control measures as needed based on that monitoring. The purpose of the plan is to avoid any Project-related increases in raven numbers during construction, operation, and decommissioning. The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring to be proposed in the Raven Plan. Regardless of raven monitoring results, the project owner shall be responsible for all other aspects of the Raven Plan, including avoidance and minimization of project-related trash, water sources, or perch/roost sites that could contribute to increased raven numbers. 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. Prepare and Implement a Raven Management Plan that includes the following:
 - a. Identify conditions 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. Describe control practices for ravens;
 - d. Address monitoring and nest removal during construction and for the life of the Project, and;
 - e. Discuss reporting requirements.
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 permanent disturbance **and a 2% fund management fee** (~~\$652,175~~ **totaling \$665,626.50**).

Verification: 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 Plan. All modifications to the approved Raven Plan shall be made only with approval of the CPM in consultation with 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 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.



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

APPLICATION FOR CERTIFICATION

For the CALICO SOLAR (Formerly SES Solar One)

Docket No. 08-AFC-13

PROOF OF SERVICE

(Revised 7/12/10)

APPLICANT

Felicia Bellows
Vice President of Development &
Project Manager
Tessera Solar
4800 North Scottsdale Road,
#5500
Scottsdale, AZ 85251
felicia.bellows@tesserasolar.com

CONSULTANT

Angela Leiba
AFC Project Manager
URS Corporation
1615 Murray Canyon Rd., #1000
San Diego, CA 92108
angela_leiba@URSCorp.com

APPLICANT'S COUNSEL

Allan J. Thompson
Attorney at Law
21 C Orinda Way #314
Orinda, CA 94563
allanori@comcast.net

Ella Foley Gannon, Partner
Bingham McCutchen, LLP
Three Embarcadero Center
San Francisco, CA 94111
ella.gannon@bingham.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

Jim Stobaugh
BLM – Nevada State Office
P.O. Box 12000
Reno, NV 89520
jim_stobaugh@blm.gov

Rich Rotte, Project Manager
Bureau of Land Management
Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
richard_rotte@blm.gov

Becky Jones
California Department of
Fish & Game
36431 41st Street East
Palmdale, CA 93552
dfqpalm@adelphia.net

INTERVENORS

County of San Bernardino
Ruth E. Stringer, County Counsel
Bart W. Brizzee, Deputy County Counsel
385 N. Arrowhead Avenue, 4th Floor
San Bernardino, CA 92415-0140
bbrizzee@cc.sbcounty.gov

California Unions for Reliable Energy
(CURE)
c/o: Loulena A. Miles, Marc D. Joseph
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Ste. 1000
South San Francisco, CA 94080
lmiles@adamsbroadwell.com

Defenders of Wildlife
Joshua Basofin
1303 J Street, Suite 270
Sacramento, California 95814
e-mail service preferred
jbasofin@defenders.org

Society for the Conservation of
Bighorn Sheep
Bob Burke & Gary Thomas
P.O. Box 1407
Yermo, CA 92398
cameracoordinator@sheepsociety.com

Basin and Range Watch
Laura Cunningham & Kevin Emmerich
P.O. Box 70
Beatty, NV 89003
atomicloadbranch@netzero.net

Patrick C. Jackson
600 N. Darwood Avenue
San Dimas, CA 91773
e-mail service preferred
ochsjack@earthlink.net

Gloria D. Smith, Senior Attorney
Sierra Club
85 Second Street, Second floor
San Francisco, CA 94105
gloria.smith@sierraclub.org

*Newberry Community Service District
Wayne W. Weierbach
P.O. Box 206
Newberry Springs, CA 92365
newberryCSD@gmail.com

ENERGY COMMISSION

ANTHONY EGGERT
Commissioner and Presiding Member
aeggert@energy.state.ca.us

JEFFREY D. BYRON
Commissioner and Associate Member
jbyron@energy.state.ca.us

Paul Kramer
Hearing Officer
pkramer@energy.state.ca.us

Lorraine White, Adviser to
Commissioner Eggert
e-mail service preferred
lwhite@energy.state.ca.us

Kristy Chew, Adviser to
Commissioner Byron
e-mail service preferred
kchew@energy.state.ca.us

Caryn Holmes
Staff Counsel
cholmes@energy.state.ca.us

Steve Adams
Co-Staff Counsel
sadams@energy.state.ca.us

Christopher Meyer
Project Manager
cmeyer@energy.state.ca.us

Jennifer Jennings
Public Adviser
publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, Lynn Tien-Tran, declare that on July 29, 2010, I served and filed copies of the attached **Staff's Rebuttal Testimony and Errata**, dated July 29, 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: **[www.energy.ca.gov/sitingcases/solarone]**.

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:

- sent electronically to all email addresses on the Proof of Service list;
- by personal delivery;
- 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:

- 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. 08-AFC-13
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.


