

Memorandum

Date: September 3, 2010
Telephone: (916) 654-4679

To: Commissioner Jeffrey Byron, Presiding Member
Commissioner James D. Boyd, Associate Member

From: California Energy Commission – John Kessler, Project Manager
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: **ENERGY COMMISSION STAFF'S SUGGESTED EDITS TO THE PRESIDING MEMBER'S PROPOSED DECISION – SET 2
IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-5)**

DOCKET	
07-AFC-5	
DATE	09/03/10
RECD.	09/03/10

This memo contains staff's final comments on the Ivanpah Presiding Member's Proposed Decision, as well as revised Conditions of Certification **BIO-17** (Desert Tortoise Compensatory Mitigation), **BIO-18** (Special-Status Plant Impact Avoidance and Minimization) and **BIO-20** (Streambed Impact Minimization and Compensation Measures), and new Condition of Certification **BIO- 22** (Project Construction and Compensation Phasing Plan). The revisions to these conditions are based on information discussed in this memo as well as revised tables attached to this memo indicating the appropriate amount of Biological Resources mitigation security required for the Ivanpah project. Staff believes that the evidentiary record will need to be re-opened at the adoption hearing in order to take in the evidence in this filing, as well as evidence that the applicant has provided in its filing yesterday regarding phasing.

Security Amounts - With respect to the amount of security identified in **BIO-17**, staff is proposing to identify the required security under two options: the use of NFWF to provide compensatory mitigation for impacts to habitat loss and potential take of desert tortoise, and the provision of mitigation for these impacts by the project owner. The amounts are based on the REAT Table in Attachment 2 of Exhibit 316, but with the following changes:

- 1) Parcel size is assumed to be 160 acres, rather than 40 acres. This is based on communications with the BLM agency staff in mid-August indicating BLM would be using the 160 acres/parcel assumption to estimate the number of transactions in their Record of Decision. This information has been provided in the other ARRA cases, and is reflected in the conditions of certification for those cases.
- 2) The amounts for all categories must be increased to reflect the acquisition of 10,746 acres rather than 7,164 acres, as described above. Staff believes that the California Endangered Species Act (CESA) requires security for *all* mitigation, and staff was recently informed by BLM that it would not be requiring security for the mitigation it is requiring, which is part of the basis for staff's conclusions that the project is fully mitigated as required by CESA.

PROOF OF SERVICE (REVISED 3/11/10) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 9/3/10

MS

Phasing of Security - Staff is proposing a new Condition of Certification **BIO-22**, to accommodate the applicant's request for conducting construction in two phases and phasing of the payment of security. Similar phasing conditions are being added to other AARA projects, including Blythe, Calico and Palen. The specific terms of the condition are based on information that the applicant has provided about its phasing proposal, as summarized in its filing of PMPD comments.

Staff has updated the total security estimates according to the latest information as shown in Biological Resources Table 1 and to accommodate two phases of construction as shown in Biological Resources Tables 2 and 3. Other edits to Condition of Certification BIO-17 relate to correcting some minor errors (for example, 7,164 acres represents twice 3,582 acres rather than two-thirds) and clarifying the role of CDFG in the review and approval process described in the condition. Staff has also added BLM as a reviewing party for some of the submittals included in this condition. In addition, staff revised the requirement in the verification that 60 days after initiation of construction the project owner provide a Property Analysis Report (PAR) analysis of costs associated with maintaining the required roadway fencing and route restorations. The locations of the fencing and route restorations have not yet been identified by BLM and other parties, and staff considered six months after the Energy Commission Decision to be a more feasible deadline for fulfilling this requirement.

Desert Tortoise Relocation/Translocation – During the August 24, 2010 Committee Conference and Evidentiary Hearing, staff reported that there were two options being considered by the REAT agencies for desert tortoise relocation and translocation. These consisted of moving all tortoises west and north of the ISEGS on adjacent BLM land or moving some tortoises to adjacent land and some to the Mojave National Preserve. Following the hearing, staff received information from National Park Service that they were not able to overcome the hurdles required to allow for the translocation into the Mojave National Preserve. Staff has coordinated with the REAT agencies and has confirmed that all agencies support plans to move the tortoises west and north of the ISEGS on adjacent BLM land in accordance with the latest USFWS guidelines. This is consistent with Staff's assessment in the FSA-DEIS.

Updates to Staff's Recommended Condition of Certification **REC-1** – Staff and applicant have agreed to revisions to this condition as reflected in Attachment 2 of the applicant's PMPD comments dated September 2, 2010.

Docket (07-AFC-5)
Webworks
POS

BIOLOGICAL RESOURCES

Biological Resources – Table 1 – Estimate of Total Security

Ivanpah (07-AFC-5)			9/3/2010
CEC's Bio. Res. Mitigation/Compensation Cost Estimate - <u>Owner Acquisiton & NFWF Options</u>			
<u>Construction Not Phased Security Estimate for 3,582 acre Project Disturbance and 3:1 Mitigation</u>			
Item	Desert Tortoise Compensation	Rare Plant Compensation	Streambed Compensation
Phase 1 Number of Acres	3,582	30	175
Phase 1 Mitigation Number of Acres (3:1 for Desert Tortoise, 1:1 for Plants and Streams)	10,746	10	58
Estimated number of parcels to be acquired, at 160 acres per parcel ²	67	1	0
Land cost at \$1000/acre ³	\$10,746,000	\$10,000	\$58,000
Level 1 Environmental Site Assessment at \$3000/parcel	\$201,488	\$3,000	\$1,088
Appraisal at no less than \$5,000/parcel	\$335,813	\$5,000	\$1,813
Initial site work - clean-up, restoration or enhancement, at \$250/acre ⁴	\$2,686,500	\$2,500	\$14,500
Closing and Escrow Cost at \$5000 for 2 transactions ⁵	\$335,813	\$5,000	\$1,813
Biological survey for determining mitigation value of land (habitat based with species specific augmentation) at \$5000/parcel	\$335,813	\$5,000	\$1,813
3rd Party Administrative Costs (Land Cost x 10%) ⁶	\$1,074,600	\$1,000	\$5,800
Agency cost to accept land donation ⁷ (Land Cost x 15%) x 1.17 (17% of the 15% for overhead)	\$1,885,923	\$1,755	\$10,179
SUBTOTAL - Acquisition and Initial Site Work	\$17,601,948	\$33,255	\$95,004
Long-term Management and Maintenance (LTMM) fee at \$1450/acre⁸	\$15,581,700	\$14,500	\$84,100
Subtotal - Owner Acquisition Option Excl. NFWF Fees	\$33,183,648	\$47,755	\$179,104
Total Phase 1 Mitigation - Owner Acquisition Option Desert Tortoise, Streambed & Plants			\$33,410,507
<u>NFWF Fees</u>			
Establish Project Specific Account ⁹	\$12,000		
Call for and Process Pre-Proposal Modified RFP or RFP ¹⁰	\$30,000		
NFWF Management fee for Acquisition and Enhancement Actions (Subtotal x 3%)	\$528,058	\$998	\$2,850
NFWF Management Fee for LTMM account (LTMM x 1%)	\$155,817	\$145	\$841
Subtotal of NFWF Fees	\$725,875	\$1,143	\$3,691
TOTAL Estimated cost for deposit in project specific sub-account	\$33,909,523	\$48,898	\$182,795
Total Phase 1 Mitigation - NFWF Option Desert Tortoise, Streambed & Plants			\$34,141,216

Biological Resources – Table 2 – Estimate of Phase 1 Security

Ivanpah (07-AFC-5)			9/3/2010
CEC's Bio. Res. Mitigation/Compensation Cost Estimate - Owner Acquisition & NFWF Options			
Construction Phase I Security Estimate for 1,282 acre Project Disturbance and 3:1 Mitigation			
Item	Desert Tortoise Compensation	Rare Plant Compensation	Streambed Compensation
Phase 1 Number of Acres	1,282	10	58
Phase 1 Mitigation Number of Acres (3:1 for Desert Tortoise, 1:1 for Plants and Streams)	3,846	10	58
Estimated number of parcels to be acquired, at 160 acres per parcel ²	24	1	0
Land cost at \$1000/acre ³	\$3,846,000	\$10,000	\$58,000
Level 1 Environmental Site Assessment at \$3000/parcel	\$72,113	\$3,000	\$1,088
Appraisal at no less than \$5,000/parcel	\$120,188	\$5,000	\$1,813
Initial site work - clean-up, restoration or enhancement, at \$250/acre ⁴	\$961,500	\$2,500	\$14,500
Closing and Escrow Cost at \$5000 for 2 transactions ⁵	\$120,188	\$5,000	\$1,813
Biological survey for determining mitigation value of land (habitat based with species specific augmentation) at \$5000/parcel	\$120,188	\$5,000	\$1,813
3rd Party Administrative Costs (Land Cost x 10%) ⁶	\$384,600	\$1,000	\$5,800
Agency cost to accept land donation ⁷ (Land Cost x 15%) x 1.17 (17% of the 15% for overhead)	\$674,973	\$1,755	\$10,179
SUBTOTAL - Acquisition and Initial Site Work	\$6,299,748	\$33,255	\$95,004
Long-term Management and Maintenance (LTMM) fee at \$1450/acre⁸	\$5,576,700	\$14,500	\$84,100
Subtotal - Owner Acquisition Option Excl. NFWF Fees	\$11,876,448	\$47,755	\$179,104
Total Phase 1 Mitigation - Owner Acquisition Option Desert Tortoise, Streambed & Plants			\$12,103,307
NFWF Fees			
Establish Project Specific Account ⁹	\$12,000		
Call for and Process Pre-Proposal Modified RFP or RFP ¹⁰	\$30,000		
NFWF Management fee for Acquisition and Enhancement Actions (Subtotal x 3%)	\$188,992	\$998	\$2,850
NFWF Management Fee for LTMM account (LTMM x 1%)	\$55,767	\$145	\$841
Subtotal of NFWF Fees	\$286,759	\$1,143	\$3,691
TOTAL Estimated cost for deposit in project specific sub-account	\$12,163,207	\$48,898	\$182,795
Total Phase 1 Mitigation - NFWF Option Desert Tortoise, Streambed & Plants			\$12,394,900

Biological Resources – Table 3 – Estimate of Phase 2 Security

Ivanpah (07-AFC-5)			9/3/2010
CEC's Bio. Res. Mitigation/Compensation Cost Estimate - Owner Acquisition & NFWF Options			
Construction Phase 2 Security Estimate for 2,300 acre Project Disturbance and 3:1 Mitigation			
	Desert Tortoise Compensation	Rare Plant Compensation	Streambed Compensation
Phase 2 Number of Acres	2,300	20	117
Phase 2 Mitigation Number of Acres (3:1 for Desert Tortoise, 1:1 for Plants and Streams)	6,900	20	117
Estimated number of parcels to be acquired, at 160 acres per parcel ²	43	1	1
Land cost at \$1000/acre ³	\$6,900,000	\$20,000	\$117,000
Level 1 Environmental Site Assessment at \$3000/parcel	\$129,375	\$3,000	\$2,194
Appraisal at no less than \$5,000/parcel	\$215,625	\$5,000	\$3,656
Initial site work - clean-up, restoration or enhancement, at \$250/acre ⁴	\$1,725,000	\$5,000	\$29,250
Closing and Escrow Cost at \$5000 for 2 transactions ⁵	\$215,625	\$5,000	\$3,656
Biological survey for determining mitigation value of land (habitat based with species specific augmentation) at \$5000/parcel	\$215,625	\$5,000	\$3,656
3rd Party Administrative Costs (Land Cost x 10%) ⁶	\$690,000	\$2,000	\$11,700
Agency cost to accept land donation ⁷ (Land Cost x 15%) x 1.17 (17% of the 15% for overhead)	\$1,210,950	\$3,510	\$20,534
SUBTOTAL - Acquisition and Initial Site Work	\$11,302,200	\$48,510	\$191,646
Long-term Management and Maintenance (LTMM) fee at \$1450/acre ⁸	\$10,005,000	\$29,000	\$169,650
Subtotal - Owner Acquisition Option Excl. NFWF Fees	\$21,307,200	\$77,510	\$361,296
Total Phase 2 Mitigation - Owner Acquisition Option Desert Tortoise, Streambed & Plants			\$21,746,006
<u>NFWF Fees</u>			
Establish Project Specific Account ⁹ (Initial Fee paid in Phase 1)	\$0		
Call for and Process Pre-Proposal Modified RFP or RPF ¹⁰	\$30,000		
NFWF Management fee for Acquisition and Enhancement Actions (Subtotal x 3%)	\$339,066	\$1,455	\$5,749
NFWF Management Fee for LTMM account (LTMM x 1%)	\$100,050	\$290	\$1,697
Subtotal of NFWF Fees	\$469,116	\$1,745	\$7,446
TOTAL Estimated cost for deposit in project specific sub-account	\$21,776,316	\$79,255	\$368,742
Total Phase 2 Mitigation - NFWF Option Desert Tortoise, Streambed & Plants			\$22,224,313

Footnotes to Biological Resources Tables 1 and 2:

1. Not all costs will apply to all REAT agency requirements.
2. 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.
3. Generalized estimate taking into consideration 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, those data may be considered by the CPM in finalizing the Security estimate. Note: Regardless of the estimates, the developer is responsible for providing adequate funding to implement the required mitigation.
4. Parcel sizes may range from 1 acre to 640 acres and above. The 160 acre parcel estimate is used in this security calculation.
5. Based on information from California Department of Fish and Game.
6. Two transactions at \$2500 each: landowner to 3rd party; 3rd party to agency. The transactions will likely be separated in time.
7. Federal agencies only. State agencies may or may not require cost to accept donations.
8. Estimate for purposes of calculating general costs. The actual long term management and maintenance costs will be determined using a Property Analysis Report (PAR) or a PAR-like assessment tailored to the specific acquisition.
9. Each renewable energy project will be a separate sub-account within the REAT-NFWF account, regardless of the number of required mitigation actions per project. If a project and its mitigation are phased, this fee is only applied when the project specific account is established and not charged again when additional funds are deposited with subsequent phases.
10. If determined necessary by the REAT agencies if multiple 3rd parties have expressed interest; for transparency and objective selection of 3rd party to carryout acquisition.

Biological Resources Page 64 – Please Revise Condition of Certification BIO-17

Staff's proposed edits have been made using the version provided in Exhibit 316 on August 24, 2010 as the baseline, with changes to the text of that Exhibit shown as ~~strikeout~~ for deletion and underline for new text.

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 at a 3:1 ratio for impacts to 3,582 acres or the area disturbed by the final project footprint. At least two thirds of the 3:1 mitigation requirement shall be achieved by acquisition, in fee title or in easement, of no less than 7,164 acres of land suitable for desert tortoise or ~~two thirds of twice~~ twice the area disturbed by the final project footprint. The Energy Commission's compensatory mitigation requirement consists of habitat acquisition at a 2:1 ratio as well as the BLM's 1:1 desert tortoise mitigation approach of habitat enhancement. The project owner shall provide Security as specified in this condition in an amount sufficient to ensure the entire 3:1 mitigation requirement, including funding for the acquisition, initial habitat improvements and long-term management for the Energy Commission's compensation lands to be acquired and the mitigation to be provided through BLM. The ~~remaining third of the 3:1 compensatory 1:1 mitigation that will~~ to satisfy both BLM's mitigation requirements and the balance a portion of the Energy Commission's mitigation requirements shall be developed in accordance with BLM's desert tortoise mitigation requirements as described in the Northern and Eastern Mojave Desert Management Plan (BLM 2002). BLM's compensatory mitigation plan, serving as one third of the 3:1 mitigation ratio required to satisfy CESA, consists of desert tortoise habitat enhancement including installation of at least 50 miles of desert tortoise exclusion fencing on roadways in the Northeastern Mojave Recovery Unit, and habitat restoration of at least 50 routes within the Desert Wildlife Management Area. ~~In lieu of acquiring lands and implementing the fencing and habitat enhancement described above,~~ The project owner may elect to 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) [Deposit of Funds to a NFWF Account] as described in #4 of this condition. ~~in an amount that is the sum of: 1) BLM's compensatory mitigation cost covering the cost of fencing and route restoration; and 2) the costs of acquiring, enhancing and managing the Energy Commission compensation lands and 3) the Long-Term Maintenance of Fencing and Habitat Restoration Fee, as described below in #6.~~ The Energy Commission requirements for acquisition of 7,164 acres of compensation lands and ~~maintenance of fencing and habitat enhancements through BLM~~ shall include all of the following:

1. Responsibility for Acquisition of Compensation Lands: The project owner may delegate its responsibility for acquisition of compensation lands ~~may be delegated~~ to a third party, such as a non-governmental organization supportive of Mojave Desert habitat conservation. Such delegation shall

be subject to approval in writing by the CPM, in consultation with BLM, CDFG and USFWS, prior to land acquisition, enhancement or management activities. If habitat disturbance exceeds that described in this analysis, the project owner shall be responsible for funding acquisition, habitat improvements and long-term management of additional compensation lands or additional funds required to compensate for any additional habitat disturbances. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. Water and mineral rights shall be included as part of the land acquisition. Agreements to delegate land acquisition to CDFG or an approved third party and to manage compensation lands shall be implemented within 18 months of the Energy Commission's decision.

2. Selection Criteria for Compensation Lands. The compensation lands selected for acquisition shall:
 - a. be as close to the project site as possible;
 - b. provide good quality 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 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 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.

3. Review and Approval of Compensation Lands Prior to Acquisition. A minimum of three months prior to acquisition of the property, the project owner shall submit a formal acquisition proposal to the CPM, CDFG, USFWS and BLM 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. Approval from the CPM, in consultation with BLM, CDFG and the USFWS, shall be required for acquisition of all parcels comprising the 7,164 acres.

4. Energy Commission Compensation Land Mitigation Security. The project owner shall provide financial assurances Security to the CPM and CDFG with copies of the document(s) to CDFG, BLM and the USFWS, to guarantee that an adequate level of funding is available to implement the Energy Commission compensation land mitigation requirements described in this condition (Condition of Certification **BIO-17**). The CPM se funds shall use the Security be used solely for implementation of the mitigation measures associated with the project in the event the mitigation is not provided as required in this condition. Alternatively, financial assurance can be provided to the CPM and CDFG in The Security may be in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. Security must be provided to the CPM prior to initiating ground-disturbing project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with BLM, CDFG and the USFWS, to ensure funding in the amount of \$24,556,482. This Security amount was calculated in accordance with the REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account dated July 23, 2010. This Security estimates described below are is based on the most current guidance from the REAT agencies (Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010) and may be revised with updated information. This Security estimate reflects the amount that would be required for Security if the project owner acquired the 7,164 acres of mitigation lands itself. If the project owner elected to satisfy this mitigation requirement through the REAT Account, NFWF would require additional administrative costs estimated at \$570,938, bringing the total required Security to \$25,127,420. The Security shall be provided in conformance with one of the following two options or a combination of the two options if approved by the CPM:

- a. **Project Owner Acquisition of Compensation Lands** - If the project owner is locating, acquiring and protecting compensation lands itself, the project owner shall provide the CPM with Security in the total amount of \$33,183,648 prior to initiating any ground-disturbing project-related activities; if the project owner elects to construct the project in two phases in accordance with Condition of Certification BIO-22, the project owner shall provide Security in the amount of \$11,876,448 prior to initiating any ground-disturbing activities associated with Phase 1, and shall provide Security in the amount of \$21,307,200 prior to initiating any ground-disturbing activities associated with Phase 2; or
- b. **Deposit of Funds to a NFWF Account** – If the project owner elects to comply with mitigation requirements by funding NFWF's implementation of the project's mitigation, the project owner shall deposit funds in the total amount of \$33,909,523 to the NFWF Account; if the project owner elects to construct the project in two phases in accordance with Condition of Certification BIO-22, the

project owner shall deposit funds in the amount of \$12,163,207 prior to initiating any ground-disturbing activities associated with Phase 1, and shall provide Security in the amount of \$21,788,316 prior to initiating any ground-disturbing activities associated with Phase 2.

Actual Cost. The actual cost to comply with this condition will vary depending on the final footprint of the Project, and the actual costs of acquiring, improving and managing the compensation lands. Regardless of actual cost, the project owner shall be responsible for implementing all aspects of this condition.

5. Compensation Lands Acquisition Conditions The project owner shall comply with the following conditions relating to acquisition of the Energy Commission compensation lands after the CDFG and the CPM, in consultation with BLM and the USFWS, have approved the proposed compensation lands and received Security as applicable and as described above.
 - 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 documents for the proposed 7,164 acres. All documents conveying or conserving compensation lands and all conditions of title/easement are subject to a field review and approval by the CPM, in consultation with BLM, CDFG and the USFWS, California Department of General Services and, if applicable, the Fish and Game Commission and/or the Wildlife Conservation Board.
 - b. Title/Conveyance: The project owner shall transfer fee title or a conservation easement to the 7,164 acres of compensation lands to CDFG under terms approved by the CPM and 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 in consultation with CDFG 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 the CPM and CDFG. If the approved non-profit holds a conservation easement, CDFG or another designee of the CPM 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.
 - c. Initial Habitat Improvement Fund. The project owner shall fund the initial protection and habitat improvement of the 7,164 acres. Alternatively, a non-profit organization may hold the habitat improvement funds if they are qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if

they meet the approval of the CPM in consultation with CDFG. If CDFG takes fee title to the compensation lands, the habitat improvement fund must go to CDFG.

- d. Long-term Management and Maintenance Fund. Prior to ground-disturbing project activities, the project owner shall provide to CDFG in accordance with and as included in Item #4 of this condition a non-wasting capital long-term management and maintenance fee in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis that will be conducted for the 7,164 acres. Alternatively, a non-profit organization may hold the long-term management and maintenance fees if they are qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if they meet the approval of the CPM in consultation with CDFG. If CDFG takes fee title to the compensation lands, the long-term management and maintenance fee must go to CDFG, where it will be held in the special deposit fund established pursuant to California Government Code section 16370. If the special deposit fund is not used to manage the, long-term management and maintenance fund, the California Wildlife Foundation or similarly approved entity identified by CDFG shall manage the long-term management and maintenance fund for CDFG and with CDFG supervision.
- e. Interest, Principal, and Pooling of Funds. The project owner, ~~CDFG~~ and the CPM in consultation with CDFG shall ensure that an agreement is in place with the long-term management and maintenance fund holder/manager to ensure the following ~~conditions~~ requirements are met:
- Withdrawal of Principal. The long-term management and maintenance fund principal shall not be drawn upon unless such withdrawal is deemed necessary ~~by the CDFG or the approved third-party long-term management and maintenance fund manager~~ to ensure the continued viability of the species on the 7,164 acres. ~~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 pursuant to Government Code section 16370. If the special deposit fund is not used to manage the long-term management and maintenance fund, the California Wildlife Foundation or similarly approved entity identified by CDFG will manage the long-term management and maintenance fund for CDFG with CDFG supervision.~~
 - Pooling Long-Term Management and Maintenance Funds. CDFG, or a CPM ~~and CDFG~~ approved non-profit organization qualified to hold long-term management and maintenance fund pursuant to California Government Code section 65965, may pool the long-term management and maintenance fund with other such funds for the

operation, management, and protection of the 7,164 acres for local populations of desert tortoise. However, for reporting purposes, the long-term management and maintenance fund must be tracked and reported individually to the CDFG and CPM.

- Reimbursement Fund. The project owner shall provide reimbursement to ~~CDFG~~ the CPM, 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.

6. Long-term Maintenance of Fencing and Habitat Restoration. In addition to the funding described above for the acquisition, enhancement and management of the Energy Commission compensation lands, the Project owner shall provide sufficient funds to ensure that long-term management and maintenance is provided for ~~to maintain~~ the habitat improvements required by BLM for the ISEGS project, including fencing of roads in the Northeastern Mojave Recovery Unit, and habitat restoration of routes in the Desert Wildlife Management Area. The maintenance shall occur as long as the roads continue to operate as functional roadways and for the duration of project impacts. This long-term maintenance fee shall be calculated upon completion of a Property Analysis Record (PAR) or PAR-like analysis of the proposed enhancement actions, and shall be sufficient to fund annual inspections and repairs/maintenance of all fencing and habitat improvements completed as part of the BLM mitigation requirements for the ISEGS project.

The Project owner may choose to satisfy its mitigation obligations identified in this Decision by paying an in lieu fee instead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable in-lieu fee provision, to the extent the in-lieu fee provision is found by the Commission to be in compliance with CEQA and CESA requirements.

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

If purchase of 7,164 acres of mitigation lands as described in this condition, or as described in **BIO-22** (phasing), is not completed at least 30 days prior to the start of ground-disturbing activities, the Project owner shall provide the CPM with approved Security at least 30 days prior to the start of ground-disturbing activities. The Security shall be in accordance with Item # 4 of this condition and other requirements of this condition, allowing for either Acquisition of Mitigation Lands by the project owner of use of the NFWF Account to satisfy this condition, and with **BIO-22** (phasing) if the project owner elects to use that option. ~~\$24,556,482 or the amount calculated based on the most current REAT Biological Resource Compensation /Mitigation Cost Estimate available at the time of deposit of the Security.~~

~~If the project owner elects to Deposit Funds to the NFWF Account, it the mitigation requirement for purchase of 7,164 acres through the REAT-NFWF Account, the total required Security shall be \$25,127,420 (or the amount calculated based on the most current REAT Biological Resource Compensation/Mitigation Cost Estimate, including NFWF fees, available at the time of deposit of the Security). The project owner shall provide documentation of deposit of the required security to the REAT-NFWF Account at least 30 days prior to start of ground-disturbing activities on the project site.~~

~~At least 60 days prior to ground-disturbing project activities~~ Within 6 months of the Energy Commission decision the project owner shall provide to the CPM for review and approval a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount for the long-term maintenance fee to fund maintenance of the proposed enhancement actions (desert tortoise exclusion fencing and DWMA route restoration). The project owner shall deposit the long-term maintenance fee into the REAT-NFWF account or another third-party recipient acceptable to the CPM in consultation with and CDFG and BLM within 18 months of the Energy Commission decision.

Starting with the first year following construction and continuing for the duration of project impacts, the project owner shall provide to the CPM, BLM and CDFG an annual report describing: the results of the annual inspection of fencing and rehabilitated routes; a summary of fence repairs and maintenance of reclaimed routes completed during the year; and recommendations and a cost estimate for repairs and maintenance activities needed for the upcoming year.

A minimum of three months prior to acquisition of the property, the project owner shall submit a formal acquisition proposal to the CPM, CDFG, USFWS and BLM describing the parcels intended for purchase.

No later than 18 months following the publication of the Energy Commission Decision the project owner shall provide written verification to the CPM and CDFG that the Energy Commission compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient(s). The project owner, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of 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. Within six months of the land or easement purchase, as determined by the date on the title, the project owner, or an approved third party, shall provide CDFG and the CPM with a management plan for the Energy Commission compensation lands and associated funds. The CPM shall review and approve the management plan, in consultation with CDFG, BLM and the USFWS.

Within 90 days after completion of project construction, the project owner shall provide to the CPM and CDFG an analysis with the final accounting of the amount of habitat disturbed during project construction. If habitat disturbance exceeds 3,582 acres, the project owner shall provide a compensation plan to the CMP for their review and

approval, in consultation with CDFG, BLM and the USFWS. The compensation plan shall be submitted no later than 90 days from the CPM's receipt of the final accounting, and shall include a description of additional funds required or lands that must be purchased to compensate for the unanticipated habitat disturbances, and a schedule for that acquisition or funding inclusive of all associated long-term management and maintenance fund and enhancement costs. The amount of funding for habitat acquisition, initial habitat improvement, and long-term management shall be calculated at the adjusted market value at the time of construction.

If the project owner elects to satisfy its mitigation obligations by paying an in-lieu fee instead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable in-lieu fee provision, the Project owner shall notify the Commission that it would like a determination that the Project's in-lieu fee proposal meets CEQA and CESA requirements.

Biological Resources Page 69 – Please Revise Condition of Certification BIO-18

*Staff's proposed edits are to provide consistency with the revised Security estimate tables included herein that use the assumption of 160 acres/parcel rather than 40 acres. This Security estimate reflects the Project Owner Acquisition estimate, as described in **BIO-17**. Staff has also added the security amount in reference to the new Condition of Certification BIO-22 (Phasing) so that the project owner may use that option for fulfilling this condition. The updates to **BIO-18** only apply to Item 11.*

Special-Status Plant Impact Avoidance And Minimization

BIO-18 The project owner shall implement the following measures to avoid and minimize impacts to special-status plant species. Items 2, 3, 5, 6, 7, 10, and 11 are recommended exclusively by Energy Commission staff.

11. Acquire Off- Site Occurrence of Mojave Milkweed or Adjacent Land: The project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes at least 30 acres supporting a viable occurrence of Mojave milkweed (or suitable habitat adjacent to a known occurrence). The terms and conditions of this acquisition or easement shall be as described in Condition of Certification **BIO-17** with the additional criteria that the Mojave milkweed mitigation lands: 1) provide habitat for the special-status plant species that is of similar or better quality (e.g., in terms of native plant composition) than that impacted; 2) contain OR abut a known occurrence of Mojave milkweed, ideally with populations that are stable, recovering, or likely to recover, that shares the same watershed as the land; and 3) be adequately sized and buffered to support self-sustaining special-status plant populations. These mitigation lands may be included with the desert tortoise mitigation lands **ONLY** if the above criteria are met. Estimated security for acquisition of compensation lands for Mojave milkweed should the lands be in addition to desert tortoise mitigation lands is \$107,265. If the project owner elects to construct the project in two phases in accordance with Condition of

Certification **BIO-22**, the project owner shall provide Security in the amount of \$47,755 prior to initiating any ground-disturbing activities associated with Phase 1, and shall provide Security in the amount of \$77,510 prior to initiating any ground-disturbing activities associated with Phase 2. If sufficient new Mojave milkweed occurrences are discovered on desert tortoise compensation lands (not public lands) in accordance with item 9 above prior to acquiring this land, the associated security shall be refunded to the project owner.

Biological Resources Page 75 – Please Revise Condition of Certification BIO-20

*Staff's proposed edits are to provide consistency with the revised Security estimate tables included herein that use the assumption of 160 acres/parcel rather than 40 acres. This Security estimate reflects the Project Owner Acquisition estimate, as described in **BIO-17**. Staff has also added the security amounts in reference to the new Condition of Certification BIO-22 (Phasing) so that the project owner may use that option for fulfilling this condition. The updates to BIO-20 only apply to Item 2.*

Streambed Impact Minimization and Compensation Measures

BIO-20 The project owner shall implement the following measures to avoid, minimize and mitigate for impacts to ephemeral drainages:

2. Security for Implementation of Mitigation: A security in the form of an irrevocable letter of credit, pledged savings account, or certificate of deposit for the amount of all mitigation measures pursuant to this condition of certification shall be submitted to, and approved by, the CPM, in consultation with CDFG, prior to commencing project activities within areas of CDFG jurisdiction. This amount shall be based on a cost estimate which shall be submitted to CDFG for review and to the CPM for approval within 60 days of the Energy Commission Decision's publication and prior to commencing project activities within areas of CDFG jurisdiction. Estimated security for acquisition of compensation lands for state waters should the lands be in addition to desert tortoise mitigation lands is \$ 540,400. If the project owner elects to construct the project in two phases in accordance with Condition of Certification **BIO-22**, the project owner shall provide Security in the amount of \$179,104 prior to initiating any ground-disturbing activities associated with Phase 1, and shall provide Security in the amount of \$361,296 prior to initiating any ground-disturbing activities associated with Phase 2;. The security shall be approved by the CPM, in consultation with CDFG's legal advisors, prior to its execution, and shall allow the CPM at its discretion to recover funds immediately if the CPM, in consultation with CDFG, determines there has been a default.

PROJECT CONSTRUCTION AND COMPENSATION PHASING PLAN

BIO-22 As an alternative to providing mitigation or security for compensatory mitigation for the entire project prior to the start of the first ground-disturbing activities, the project owner may elect to provide security for compensatory mitigation in two phases as specified in this condition. Only the phases identified as Phase 1 and Phase 2, as described in this condition, and as provided by the applicant on September 2, 2010 in their Comments on the Presiding Member’s Proposed Decision, may be used for the phasing of mitigation and security requirements. To the extent those sources are found to contain conflicting information about Project phasing, the description in this condition shall control. This condition presumes that the phases identified in this condition are identical to the phases that the Bureau of Land Management (BLM) will authorize work on through issuance of “notices to proceed”; if phases used by BLM are not identical to the phases as described in this condition and the materials identified above, the project owner shall obtain separate written authorization from the CPM prior to beginning work on each of the two phases. In no event shall any project disturbance occur unless security has been provided for the required mitigation associated with the particular phase of construction.

For purposes of this condition:

“Project Disturbance” or “ground disturbance” means any project-related ground, habitat, or species disturbing action.

“Project Disturbance Area” or “ground disturbance area” means all areas that would be temporarily or permanently disturbed during construction or operation of the Project, including all linear facilities, or which would be subject to any project-related ground, habitat, or species disturbing action.

“Project construction” or “construction” means any ground-disturbing activity, including but not limited to construction work, site mobilization, fence construction, or any desert tortoise translocation activities.

“Security” means the security that is required under other biological conditions of certification to ensure required mitigation measures will be implemented, or payments by the project owner into the National Fish and Wildlife Foundation (NFWF) mitigation account in accordance with the option provided in other conditions of certification.

Overview of Project Phases

Phase 1 includes the following components (1,282 acres):

- a. Fence Colosseum Road;

- b. Fence the Construction Logistics Area (CLA) and Construct Holding Pens in the CLA;
- c. Fence, Conduct Clearance Surveys, and Construct Ivanpah 1
- d. Fence Access Road and Power Block for Ivanpah 2, and Perform Construction Within Ivanpah 2 Power Block.

Phase 1 would include 1,282 acres of desert tortoise mitigation, as well as 10 of the 30 acres of rare plant mitigation, and 58 of the 175 acres of state waters mitigation.

Phase 2 includes the following components (2,300 acres):

- a. Construct Ivanpah 2 – Consists of the diagonal access roads, perimeter road for fence, channel crossings as needed, and solar field including grading of approximately 90 acres in the southwest and central regions of the solar field area;
- b. Construct Ivanpah 3 - Consists of the diagonal access roads, perimeter road for fence, channel crossings as needed, power block, and solar field including grading of approximately 120 acres in the southern and western regions of the solar field area;
- c. Other external features including roads and gas line.

Phase 2 would include 2,300 acres of desert tortoise mitigation, as well as 20 of the 30 acres of rare plant mitigation, and 117 of the 175 acres of state waters mitigation.

General Requirements

At no time may the project owner cause ground-disturbance to any location outside of the area that has been approved for construction according to the phasing plan identified in this Condition of Certification.

Prior to initiating construction in either phase of the Project, the project owner shall comply with all pre-construction requirements in this and other Conditions of Certification and shall notify the CPM that it has obtained a Notice to Proceed for the particular phase from the BLM.

Construction activities, including work on linear and non-linear features, shall not occur outside desert tortoise exclusion areas that have been fenced and cleared in accordance with USFWS protocols and as described in Condition of Certification **BIO-8** (Desert Tortoise Clearance and Exclusion Fencing). The project owner shall provide security to ensure implementation of the mitigation requirements in Conditions of Certification **BIO-17** (Desert Tortoise Compensatory Mitigation), **BIO-18** (Special-Status Plant Impact Avoidance and Minimization) and **BIO-20** (Streambed Impact Minimization and Compensation Measures) for each of the two phases prior to any project construction associated with that phase. Phasing of security only applies to security required by the Conditions listed above. If the project owner elects to phase payments of security under either a Project Owner Acquisition or

NFWF option and if the commencement of construction is delayed beyond June 1, 2011, the amount of the security (including payments to NFWF if applicable [see definition of security above]) will be adjusted by the CPM in consultation with DFG, BLM and USFWS prior to each phase to reflect the CPM's best estimate at that time of the estimated costs of land acquisition, long-term management and maintenance costs, and other costs that are included in the security computation. Those costs may be greater than the costs identified in the conditions of certification.

Even when security has been provided, the project owner shall complete the acquisition, protection and transfer of all compensation lands required in the conditions of certification listed above, as well as all funding requirements associated with those lands, within the time periods identified in those conditions of certification.

Additional requirements within the project's conditions of certification that are not expressly phased in this condition shall be phased as necessary to carry out the purpose of this condition, and to ensure that no project construction occurs in an area for which the project owner has not provided security and obtained permission to begin construction. Examples may include such activities as construction and location of desert tortoise exclusion fencing or timing of pre-construction clearance surveys for other species. The project owner shall first obtain approval from the CPM, acting in consultation with BLM, CDFG and USFWS, for the phasing of any requirements or deadlines that are not expressly phased in conditions of certification.

Security Requirements

Security for phased construction shall be in the amounts as specified in Conditions of Certification **BIO-17**, **-18** and **-20**, and may be adjusted by the CPM in consultation with DFG, BLM and USFWS based upon more accurate information provided by the project owner confirming the acreages described in this table, and on updates from the REAT agencies with more current guidance than the *Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010*.



**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 *IVANPAH SOLAR ELECTRIC
GENERATING SYSTEM*

DOCKET No. 07-AFC-5
PROOF OF SERVICE
(Revised 3/11/10)

APPLICANT

Solar Partners, LLC
John Woolard,
Chief Executive Officer
1999 Harrison Street, Suite #500
Oakland, CA 94612

Todd A. Stewart, Project Manager
Ivanpah SEGS
sdeyoung@brightsourceenergy.com
E-mail Preferred

Steve De Young, Project Manager
Ivanpah SEGS.
1999 Harrison Street, Ste. 2150
Oakland, CA 94612
tstewart@brightsourceenergy.com

APPLICANT'S CONSULTANTS

John L. Carrier, J. D.
2485 Natomas Park Dr. #600
Sacramento, CA 95833-2937
jcarrier@ch2m.com

COUNSEL FOR APPLICANT

Jeffery D. Harris
Ellison, Schneider
& Harris L.L.P.
2600 Capitol Avenue, Ste. 400
Sacramento, CA 95816-5905
jdh@eslawfirm.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

Tom Hurshman,
Project Manager
Bureau of Land Management
2465 South Townsend Ave.
Montrose, CO 81401
tom_hurshman@blm.gov

Raymond C. Lee, Field Manager
Bureau of Land Management
1303 South U.S. Highway 95
Needles, CA 92363
Raymond_Lee@ca.blm.gov

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

INTERVENORS

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

Western Watersheds Project
Michael J. Connor, Ph.D.
P.O. Box 2364
Reseda, CA 91337-2364
mjconnor@westernwatersheds.org

Gloria Smith, Joanne Spalding
Sidney Silliman, Devorah Ancel
Sierra Club
85 Second Street, 2nd Fl.
San Francisco, CA 94105
E-mail Service Preferred
gloria.smith@sierraclub.org
joanne.spalding@sierraclub.org
gssilliman@csupomona.edu
devorah.ancel@sierraclub.org

*indicates change

INTERVENORS CONT.

Joshua Basofin, CA Rep.
Defenders of Wildlife
1303 J Street, Ste. 270
Sacramento, CA 95814

E-mail Service Preferred

jbasofin@defenders.org.

Basin and Range Watch
Laura Cunningham

Kevin Emmerich

P.O. Box 70

Beatty, NV 89003

atmictoadranch@netzero.net

Center for Biological Diversity

Lisa T. Belenky, Sr. Attorney

Ileene Anderson, Public Lands Desert Director

351 California Street, Ste. 600

San Francisco, CA 94104

E-mail Service Preferred

lbelenky@biologicaldiversity.org

ianderson@biologicaldiversity.org

California Native Plant Society

Greg Suba, Tara Hansen & Jim Andre

2707 K Street, Suite 1

Sacramento, California, 95816-5113

E-mail Service Preferred

gsuba@cnps.org

thansen@cnps.org

granites@telis.org

County of San Bernardino

Bart W. Brizzee, Deputy Co. Counsel

385 N. Arrowhead Avenue, 4th Fl.

San Bernardino, California, 92415

bbrizzee@cc.sbcounty.gov

ENERGY COMMISSION

JEFFREY D. BYRON

Commissioner and Presiding Member

jbyron@energy.state.ca.us

JAMES D. BOYD

Vice Chairman and

Associate Member

jboyd@energy.state.ca.us.

Paul Kramer

Hearing Officer

pkramer@energy.state.ca.us

John Kessler

Project Manager

jkessler@energy.state.ca.us

Dick Ratliff

Staff Counsel

dratliff@energy.state.ca.us

Jennifer Jennings

Public Adviser

publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, Maria Santourdjian, declare that on September 3, 2010, I served and filed copies of the attached, CEC Staff's Suggested Edits to the PMPD – Set 2, dated September 3, 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/ivanpah].

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. 07-AFC-5
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.

Originally Signed by _____
Maria Santourdjian