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August 17, 2010

Mr. Christopher Meyer
Project Manager
Attn: Docket No. 08-AFC-5
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Imperial Valley Solar (formerly Solar Two) (08-AFC-5)
Applicant's Submittal of Attachment 2 to Reply Brief Regarding Revised Conditions of Certification

Dear Mr. Meyer:

On behalf of Imperial Valley Solar (formerly Solar Two), LLC, URS Corporation Americas (URS) hereby submits Attachment 2 to Reply Brief Regarding Revised Conditions of Certification.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized to submit on behalf of Imperial Valley Solar, LLC.

Sincerely,

Angela Leiba
Project Manager

AL: ml

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IMPERIAL VALLEY SOLAR REVISED CONDITIONS

BIO-6 The project owner shall develop and implement project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the BLM Biologist, USFWS, CDFG, and the CPM. The WEAP shall be administered to all onsite personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The WEAP shall:

- Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting electronic media and written material, including wallet-sized cards with summary information on special status species and sensitive biological resources, is made available to all participants;
- Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, explain the reasons for protecting these resources, and the function of flagging in designating sensitive resources and authorized work areas;
- Place special emphasis on FTHL, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection and status, penalties for violations, reporting requirements, and protection measures;
- Include signage to be posted at the entrance to the project site and throughout the project site which has the following information:
  - ~~15 m.p.h. speed limit~~ 10 m.p.h. speed limit (for all unpaved roads that are not stabilized) or 25 m.p.h. speed limit (for all paved or stabilized roads); provided, however, that the Designated Biologist will monitor the roads and have the authority to adjust the speed limit if there is a marked increase in species' mortality on the roads;
  - A picture of the FTHL; and
  - Reminder to check under vehicles before driving.
- Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers to dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;
- Present the meaning of various temporary and permanent habitat protection measures;
- Identify whom to contact if there are further comments and questions about the material discussed in the program; and
- Include a training acknowledgment form to be signed by each worker indicating that they received the WEAP training and shall abide by the guidelines.
- The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Verification: At least 30 days prior to the start of any project-related site disturbance activities, the project owner shall provide to the BLM Biologist and the CPM a copy of the draft WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. At least ten days prior to site and related facilities mobilization, the project owner shall submit two copies of the BLM- and CPM-approved final WEAP.

Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least six months after the start of commercial operation.

Throughout the life of the project, the worker education program shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation, employees shall sign a form stating that they attend the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the BLM Biologist and the CMP upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training.

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

BIO-8 The project owner shall undertake the following measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to biological resources during construction and operation:

- The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities. Spoils shall be stockpiled in disturbed areas lacking native vegetation or where habitat quality is poor. Spoil sites shall not be located within drainages or locations that may be subjected to high storm flows, where spoil shall be washed back into a drainage or lake. Disturbance of shrubs and surface soils due to stockpiling shall be minimized. All disturbances, vehicles and equipment shall be confined to the flagged areas.
- Whenever possible, equipment and vehicles shall use existing surfaces or previously disturbed areas rather than clearing vegetation and grading the ROW. Where grading is necessary, surface soils shall be stockpiled and replaced following construction to facilitate habitat restoration.

- To the extent possible, existing roads shall be used for travel and equipment storage. New and existing roads that are planned for construction, widening or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads (e.g. new spur roads associated with both transmission line options) or the construction zone, the route would be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.
- Newly created access routes shall be restricted by constructing barricades, erecting fences with locked gates at road intersections, and/or by posting signs. In these cases, the project proponent shall maintain, including monitoring, all control structures and facilities for the life of the project and until habitat restoration is complete.
- Vehicular traffic during project construction and operation shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed ~~15 miles per hour on the project site~~ 10 miles per hour on all unpaved roads that are not stabilized and 25 miles per hour on all paved or stabilized roads; provided, however, that the Designated Biologist will monitor the roads and have the authority to adjust the speed limit if there is a marked increase in species' mortality on the roads.
- Transmission lines, access roads, pulling sites, storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources.
- Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Mitigating Bird Collisions with Power Lines (APLIC 2004) to reduce the likelihood of large bird electrocutions and collisions.
- Road surfacing and sealants as well as soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.
- Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards wildlife habitat. Lighting shall be kept to the minimum level for safety and security needs by using motion or infrared light sensors and switches to keep lights off when not required, and shielding operational lights downward to minimize skyward illumination. No high intensity, steady burning, bright lights such as sodium vapor or spotlights shall be used. FAA visibility lighting shall employ only strobed, strobe-like or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used.
- Parking and storage shall occur where FTHL removal surveys have been conducted.
- At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores and other excavations) have been inspected for wildlife and then backfilled. If backfilling is not feasible, all trenches,

bores, and other excavations shall be sloped at a 3:1 slope at the ends to provide wildlife escape ramps, or covered to completely prevent wildlife access. All trenches, bores and other excavations outside the permanently fenced area shall be inspected periodically throughout and at the end of each workday by the Designated Biologist or a Biological Monitor. Should a FTHL or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the individual to a safe location.

- During construction, examine areas of active surface disturbance periodically—at least hourly when surface temperatures exceed 29°C (85°F) for the presence of FTHL.
- Any construction pipe, culvert, or similar structure with a diameter greater than three inches, stored less than eight inches aboveground for one or more nights, would be inspected for wildlife before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on pipe racks.
- Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract FTHL predators to construction sites. During construction, a Biological Monitor shall patrol these areas to ensure water does not puddle and attract common ravens, and other wildlife to the site, and shall take appropriate action to reduced water application rates where necessary.
- During construction, road killed animals or other carcasses detected by personnel on roads associated with the Project area will be reported immediately to a Biological Monitor or Designated Biologists, who will remove the roadkill promptly. During operations, the Project Environmental Compliance Monitor will be notified of any roadkills and promptly remove and dispose of any roadkills to discourage scavenger activity. For special-status species road-kill, the Biological Monitor shall contact CDFG and USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in BIO-11 below.
- All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil would be properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.
- All contractors, subcontractors, employees and visitors shall comply with litter and pollution laws. During construction all trash and food-related waste shall be placed in self-closing containers and removed ~~daily from the site~~ <u>regularly to prevent overflow</u>. Workers shall not feed wildlife, or bring pets to the project site.

Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.

- Standard erosion control measures shall be implemented for all phases of construction and operation where sediment run-off from exposed slopes threatens to enter “Waters of the State” and/or “Waters of the U. S.”. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the Project site shall be stabilized to reduce erosion potential, both during and following construction, except for those portions of roads crossing Waters of the U.S. where soil tackifiers shall not be used. Areas of disturbed soils (access and staging areas) with slopes toward drainages shall be stabilized to reduce erosion potential.
- If preconstruction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife.
- The owner shall minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible.
- The project owner shall not allow water containing mud, silt or other pollutants from grading, aggregate washing, or other activities to enter a lake or flowing stream or be placed in locations that may be subjected to high storm flows.
- Raw cement/concrete, broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, asphalt or washings thereof, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to vegetation or wildlife resources, resulting from project related activities shall be prevented from contaminating the soil and/or entering waters of the state. These materials, placed within or where they may enter a drainage or lake, by project owner or any party working under contract or with the permission of the project owner shall be removed immediately.
- When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any drainage.
- No equipment maintenance shall be done within 150 feet of any ephemeral drainage except in designated maintenance areas where petroleum products or other pollutants from the equipment may not enter these areas under any flow.
- The project owner must have a Frac-Out Contingency Plan approved by CDFG and the CPM prior to commencement of construction of the reclaimed water pipeline for horizontal directional drilling under the waterways.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures would be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

BIO-9 IVS awaits Staff’s proposed revisions.

BIO-10 FLAT-TAILED HORNED LIZARD COMPENSATORY MITIGATION

The project owner shall provide compensatory land to mitigate for habitat loss and direct impacts to flat-tailed horned lizards based on revised estimates of suitable flat-tailed horned lizard habitat on-site. The project owner shall provide compensatory mitigation at a 1:1 ratio for 6,063.1 acres of impacts outside of the FTHL Management Area (MA) and at a 6:1 ratio for impacts to 92.6 acres within the FTHL MA. These impact acreages are to be adjusted to reflect the final approved project footprint.

For purposes of this condition, the project footprint means all lands disturbed in the construction and operation of the IVS Project, including the offsite transmission line, as well as undeveloped areas inside the Project's boundaries that will no longer provide viable long-term habitat for the species mentioned above. To satisfy this condition, the project owner shall acquire, protect and transfer to an approved land manager no fewer than 6,619.9 acres of FTHL habitat (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 in this condition.

Funding of this mitigation shall be phased to ensure that appropriate compensation lands and/or funding reflect the phasing of actual project impacts and will ensure that all impacts are fully compensated prior to occurring.

COMPENSATORY MITIGATION LAND ACQUISITION

1. **Method of Acquisition.** Compensation lands required to meet this condition shall be acquired in whole or in part either:
   a. By the project owner for donation, as approved by the CPM, to a state or federal land management agency or non-profit land management organization,
   b. By BLM with funds provided by the project owner,
   c. By a third party approved by the CPM to acquire or donate the lands with funds provided by the project owner, or
   d. By the National Fish and Wildlife Foundation (NFWF) with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account.

   If the project owner chooses to delegate responsibility for acquisition of all or portions of compensation lands to a third party such as a nongovernmental organization supportive of desert habitat conservation, such delegation shall be subject to approval by the CPM, in consultation with the project owner and CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. The CPM shall provide a written response and explanation to the project owner within 30 days of receiving the proposal. 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 or initiation of each phase of the project.

2. **Selection Criteria for Compensation Lands**. The compensation lands selected for acquisition to meet Energy Commission requirements shall:
   a. be within in or near FTHL Management Areas (MAs) in the Colorado Desert, with potential to contribute to FTHL habitat connectivity and build linkages between FTHL MAs, known populations of FTHLs, and/or other preserve lands;
   b. provide high to moderate quality habitat for FTHL with capacity to regenerate naturally when disturbances are removed, though moderate to good quality habitat is acceptable near protected FTHL habitats;
   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 where FTHLs can be reasonably expected to occur currently occupied by FTHL, based on habitat or historic occurrences, ideally with populations that are stable, recovering, or likely to recover;
   e. ideally contain soils that are stable and not suffering erosional damage;. 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;
   f. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and
   g. 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.

   These requirements may be adjusted upon mutual agreement with the resource agencies (CEC, CDFG, BLM, and USFWS) depending on the specific lands available and in consideration of larger flat-tailed horned lizard mitigation efforts.

3. **Review and Approval of Compensation Lands Prior to Acquisition**. If the project owner assumes responsibility for acquiring the compensation lands, 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 flat-tailed horned lizard 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. The CPM shall provide a written response and explanation to the project owner within 30

4. **Compensation Lands Acquisition Conditions**: If the project owner assumes responsibility to acquire the compensation lands, 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, has 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 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.

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

5. **Compensation Lands Acquisition Costs**: If the project owner assumes responsibility to acquire all or a part of the compensation lands to meet Energy Commission and CESA requirements, the project owner shall fund the following items in addition to actual land costs:
   a. Level 1 Environmental Site Assessment,
   b. Appraisal,
   c. Closing and Escrow costs,
   d. Biological survey for determining mitigation value of the land, and
   e. Agency costs to accept the land.

   If the project owner uses BLM to acquire all or a portion of the compensation

lands, the project owner shall provide the BLM with funds for items a. to e. above as well as actual land costs.

If the project owner uses in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF) to acquire some or all of the compensation lands, the project owner shall provide funds for items a. to e. above as well as actual land costs and third party administrative costs. If the Project owner elects to use the REAT Account with NFWF, the Project owner will be responsible for providing sufficient funds to cover actual acquisition costs and fees not to exceed 10% of the estimated costs below.

Estimated costs associated with acquisition of compensation lands are:

ESTIMATED LAND ACQUISITION COSTS PER ACRE OR PARCEL

	ACQUISITION METHOD		
COST ITEM	**PROJECT OWNER**	**BLM**	**REAT/NFWF**
Land cost/acre	Covered by Owner	$500	$500
Level 1 Environmental Site Assessment	Covered by Owner	$3,000	$3,000
Appraisal/parcel	Covered by Owner	$5,000	$5,000
Closing and Escrow Costs/parcel	Covered by Owner	$5,000	$5,000
Biological Survey/parcel	Covered by Owner	$5,000	$5,000
3rd Party Admin. Costs/parcel	$0	$0	10% of land cost
Agency Cost to Accept	$580,896.23	$580,896.23	$580,896.23

These costs are current estimates and shall be modified based on actual costs or with the concurrence of the REAT agencies. The number of parcels are estimated based on 160 acres per parcel.

TOTAL ESTIMATED LAND ACQUISITION COSTS

	ACQUISITION METHOD		
COST ITEM	**PROJECT OWNER**	**BLM**	**REAT/NFWF**
Acres Purchased	6618.7	6618.7	6618.7
Parcels Purchased	41.4	41.4	41.4
Land cost	Covered by Owner	$3,309,350	$3,309,350
Level 1 Environmental Site	Covered by Owner	$124,100	$165,468

Assessment			
Appraisal	Covered by Owner	$206,834	$206,834
Closing and Escrow Costs	Covered by Owner	$206,834	$206,834
Biological Survey	Covered by Owner	$206,834	$206,834
3rd Party Admin. Costs	$0	$0	$330,935
Agency Cost to Accept	$580,896	$580,896	$580,896
TOTAL	$4,179,814	$4,634,850	$4,965,785

COMPENSATORY MITIGATION LAND IMPROVEMENT

1. **Land Improvement Requirements**: 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 be implemented by the state or federal land management agency or non-profit organization holding the land or their representative. The specific activities will vary depending on the condition and location of the land acquired but may include:
    - Installation of signs,
    - Removal of trash,
    - Construction and repair of fences,
    - Surveys of boundaries and property lines,
    - Removal of invasive plants,
    - Removal of roads,
    - And similar measures to protect habitat and improve habitat quality.

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.

2. **Compensation Lands Improvement Costs**: Land improvement costs will vary depending on the activities undertaken. The cost of those actions is $27/acre.

    Assuming all of the compensation is met with land acquisition, the total land improvement costs is estimated to be $178,705.

COMPENSATORY MITIGATION LAND LONG-TERM MANAGEMENT

1. **Long-term Management Requirements**: Long-term management is required to ensure that the compensation lands are managed and maintained to protect FTHL. This may include maintenance of signs, fences, removal of invasive weeds, and elimination of unauthorized use.

2. **Long-term Management Plan:** The owner of or the entity responsible for management of the compensation lands shall prepare a Management Plan for the compensation lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be submitted for approval of the CPM, in consultation with CDFG, BLM and USFWS.

3. **Long-term Management Costs:** For those compensation lands that are donated to or owned by the BLM, the long-term management costs will be determined by BLM in consultation with the CDFG, CEC, and USFWS.

   For those compensation lands that are donated to or owned by a state land management agency or a non-profit organization, 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 CPM will consult with the project owner and CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds on any lands. For any compensation lands that are not managed by a federal land management agency, the CPM, in consultation with the project owner and CDFG, will designate another state agency or non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

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

   The long-term maintenance and management fee holder/manager shall be subject to 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

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 FTHL. 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

Long-term management on lands donated to or owned by BLM are to be determined by BLM and are currently anticipated to include costs associated with managing the lands for the benefit of the FTHL that are different from the management activities generally implemented by BLM on its lands. Such tasks may include dedicating a one-quarter time biologist and one one-half time ranger for patrols. The estimated cost of this long-term management is $692 per acre for a total of $4,580,140. This amount shall be adjusted based on final analysis by the BLM and/or a PAR analysis.

If the compensation lands are administered with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), the project owner shall pay the following additional fees:

1. Project Specific Account Establishment - $12,000
2. Management fee for acquisition and enhancement – 3% of all acquisition and enhancement costs
3. Management fee for long-term management account – 1% of long-term management costs

COMPENSATORY MITIGATION LAND FUNDS

1. **Compensation Mitigation Fund**: The project owner shall provide funding for acquisition, improvement, and long-term management of FTHL compensation land. The current estimated funding shall be $9,931,405 based on the costs itemized below. This amount shall be updated and verified prior to payment and shall be adjusted to reflect actual costs or more current estimates during phasing:

EXAMPLE of TOTAL COMPENSATION LAND COSTS

	ACQUISITION METHOD		
COST ITEM	**PROJECT OWNER**	**BLM**	**REAT/NFWF**
Acres Purchased	6618.7	6618.7	6618.7
Parcels Purchased	41.4	41.4	41.4
Land Acquisition Cost	$4,179,814	$4,634,850	$4,965,785
Land Improvement Cost	$178,705	$178,705	$178,705
Long-term Management Cost	$0	$0	$4,580,140
NFWF Fees	$0	$0	$206,775
TOTAL	$4,358,519	$4,813,555	$9,931,405

2. **Fund Payment**: Because the project is phased, the mitigation funding will also be phased. The phasing of funding will ensure that the security is in place to ensure mitigation for any impact before it occurs. This will be accomplished by requiring funding for all the mitigation necessary to mitigate the impacts associated with a specific phase. Specific payments shall reflect the approach chosen by the project owner for land acquisition and shall include funds for land enhancement and long-term management consistent with the amount of land to be disturbed during each phase. The project owner shall make the following compensatory mitigation payments based on the following project phasing and assuming REAT/NFWF funding:

3.

TIME	PROJECT ACTIVITY	MITIGATION PAYMENT
Phase 1a – October 2010	Start of construction, no more than 378.3 acres of site disturbance activities.	$574,758
Phase 1b – (estimated after the close of financing during the 1st quarter 2011)	Completion on Phase 1 construction (300 MW); mitigation provided for 2,682.3 acres	$3,819,470 less adjustments from phase 1a and for phase 1 b for land acquisition method, and land improvement and long-term

		management costs
Phase 2	Initiation and completion of Phase 2 (450 MW) mitigation provided for 3,558.1 acres	$5,052,854 less adjustments from phase 1 b and for land acquisition method, and land improvement and long-term management costs

4. **REAT/NFWF Payment**: If the project owner elects to comply with the requirements in this condition for acquisition, initial improvement, long-term maintenance and management, 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), the Project owner shall make an initial deposit to the REAT Account in an amount equal to the estimated costs of administering these requirements.

   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.

5. **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 the mitigation required by this condition is available prior to the start of ground-disturbing activities for each phase of the project discussed in the described in section 2 immediately above.

   The CPM may use money from the Security solely for implementation of the requirements of this condition or if nesting of mitigation is obtained, to satisfy the conditions of BIO-17. 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.

The amount of the Security shall correspond to the mitigation fund payments described in "fund payment" above.

6. **Audit**: The project owner may request the CPM to for an independent audit of the compensatory mitigation funds.

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

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

If a third party is responsible for management of the compensation lands, they shall provide the CDFG, BLM and USFWS with a management plan for the compensation lands associated with any phase of construction 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.

BIO-17 ~~LAKE AND STREAMBED AND~~WATERS OF THE U.S., WATERS OF THE STATE~~AND~~ PENINSULAR BIGHORN SHEEP FORAGING HABITAT IMPACT MINIMIZATION AND COMPENSATION MEASURES

The project owner is required to compensate for the loss of ~~881~~247 acres of ephemeral wash foraging habitat for the Peninsular bighorn sheep (PBHS) defined as the 28% of the ephemeral washes on site that provide sufficient vegetation to potentially provide PBHS foraging opportunities, as well as the functional loss of ~~48 acres of state jurisdictional~~38.2 of permanently impacted,14 acres of temporarily impacted, 1.63 acres of indirectly impacted waters of the U.S and 48 acres of indirectly impacted waters of the state. Mitigation presented within this proposed Condition of Certification is designed to mitigate for impacts resulting from implementation of ~~Drainage Avoidance #1 Alternative,~~ the alternative preliminarily determined by the U.S. Army Corps of Engineers to be the least environmentally damaging practicable alternative. This alternative substantially reduces impacts to federal and state jurisdictional waters ~~and waters of the U.S~~. Further review and possible revision of compensation land acreage requirements will be necessary following determination of the final project footprint and impacts. ~~The acquisition of jurisdictional state waters can be included with the FTHL, burrowing owl, golden eagle, American badger, and desert kit fox mitigation lands (**BIO-10**) if they are acquired within 18 months of start of construction. If FTHL habitat mitigation lands are not acquired within 18 months, the project owner shall independently provide 48 acres of off-site desert ephemeral wash habitat.~~If changes are made to the project footprint, the mitigation requirement will be equal to the amount of the 247 acres of

ratio, the amount of permanently impacted waters of the U.S. at a 5:1 ratio and the amount of temporarily impacted waters of the U.S. at a 1:1 ratio.

If all or any portion of the acquired habitat compensation lands from **BIO-10** meets the criteria for bighorn sheep foraging habitat and ~~state waters compensation lands~~provide for the replacement of the functional values associated with the impacted waters of the U.S. and the impacted waters of the state, then the requirements of **BIO-17** are reduced by that amount.

In coordination with the U.S. Army Cops of Engineers, the U.S. Fish and Wildlife Service and State Parks, the applicant has proposed to conduct enhancement and rehabilitation of Carrizo Creek and marsh located west/northwest of the project on the Anza Borrego State Park. This area was chosen because it is within the same watershed as the project and is within known PBHS populations. The measures are focused on Tamarisk (*Tamarix* ssp.) removal which will restore and enhance the aquatic functions of this area and PBHS foraging habitat. If this mitigation option is chosen, the applicant shall do the following:

- • Carrizo Creek Enhancement Plan: the applicant shall prepare an enhancement and rehabilitation plan that shall cover approximately 25 miles of Carrizo Creek from the headwaters downstream through Carrizo Marsh (Carrizo Creek Enhancement Plan). The enhancement and rehabilitation plan shall be prepared in accordance with the Corps' and EPA's Final Mitigation Rule (33 CFR Part 325 and 332 [40 CFR Part 230]) and will include detailed methods for the initial removal, retreatment methods, limited native species replanting, monitoring and reporting protocols, and performance standards.
- • Mitigation Plan. Prepare a Mitigation Plan which provides for the rehabilitation and enhancement of 247 ephemeral washes consistent with the Carrizo Creek Plan. Although the applicant will prepare the enhancement and rehabilitation plan for the entire 25-mile reach of Carrizo Creek, the applicant will only be responsible for the enhancement and rehabilitation the amount necessary to mitigate direct and indirect impacts to waters of the U.S. and PBHS foraging habitat. The amount of mitigation shall be 247 acres of the Carrizo Creek. The Mitigation Plan shall include the measures needed to rehabilitate and enhance 247 acres of Carrizo Creek, monitoring of the rehabilitated and enhanced areas for 5 years, submitting annual reports to the CPM, Corps, USFWS, CDFG and BLM; success criteria; long term management requirements; and adaptive management provisions if the success criteria are not being met. The Mitigation Plan shall be submitted to the CPM, Corps, and USFWS for approval.
- • Long Term Management. Following completion of the initial 5 year monitoring period and concurrence from the Corps that the Mitigation Plan's success criteria, the long term management shall be the responsibility of

the Anza Borrego State Park.

- • Funding. The applicant shall be responsible for funding the measures outlined in the approved Management Plan. It is estimated that the initial rehabilitation and enhancement will cost approximately $494,000 ($2,000 per acre) and that the 5 years of monitoring and active management will cost approximately $230,000 ($60,000 for the first three years when it is anticipated that some follow up control for tamarisk will be required as well as replanting of native vegetation and other weed control; $50,000 for years four and five of the monitoring period where it is anticipated that efforts will be limited mostly to monitoring and maintenance). Long term management is estimated to cost $170,924 (based on an assumed cost of $692 per acre). The estimates regarding the cost associated with carrying out the enhancement/rehabilitation methods, monitoring and maintenance are based on Tamarisk Coalition cost estimates that were updated as of 2008. These numbers are appropriate for planning purposes; the actual cost, however, will depend on the degree of infestation present. The total cost of meeting the requirements of this condition is estimated to be ~~$894,924.~~994,924.
- • Security. The project owner shall provide security to ensure satisfaction of the terms of this condition as follows: (1) prior to initiation of ground-disturbing activity for Phase 1A, the applicant shall provide security in the amount of $494,000 to ensure the implementation of the enhancement and rehabilitation measures; (2) remainder of the ~~cost~~security associated with this mitigation measure equaling ~~$300,924~~400,924 shall be provided ~~upon financial close for the project~~prior to initiation of ground-disturbing activity for Phase 1B. For purposes of this Condition, financial close shall be defined as sixty days following receipt of the DOE loan guarantee.

Should the applicant not proceed with the above described mitigation of the Carrizo Creek, the applicant shall either, in coordination with the CEC, BLM, Corps, USFWS and CDFG, identify similar enhancement and rehabilitation measures on state or federally owned lands or acquire lands on which similar enhancement and rehabilitation measures can be implemented. If alternative measures are proposed, the mitigation land shall meet the following criteria. Although the criteria for ephemeral wash foraging habitat and ~~waters of the states~~ habitat of the waters of U.S. and of waters of the state are listed separately below, ~~the~~any alternative compensation lands acquired pursuant to this conditions must meet both sets of criteria.

1. Selection Criteria for Compensation Lands: Land selected as compensation for loss of ephemeral wash PBHS foraging habitat must satisfy the following criteria;

    a. Be within the “Essential Habitat Line” for PBHS, as delineated by the USFWS Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000). If sufficient available suitable habitat is not found within the Essential Habitat Line, then habitat immediately adjacent

b. Be comprised of the same or higher quality habitat of demonstrated known utilization by PBHS as forage, and selected in conjunction with input from CDFG and the USFWS.

Land selected as compensation for impacts to ~~state jurisdictional~~ waters of the U.S. and for impacts to waters of the state must satisfy the following criteria:

c. Compensation land purchased in Sonoran creosote scrub habitat must include ephemeral washes with at least 48 acres of ~~state jurisdictional waters, mitigated at a 1:1 ratio~~waters of the state and 247 acres of waters of the U.S. and must allow for enhancement measures that will fully mitigate for the functional values of waters of the U.S. and waters of the state impacted by the project.

d. Be characterized by similar soil permeability, hydrological and biological functions as the impacted drainages.

e. Located in the Colorado Desert.

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 FTHL in relation to the criteria listed above, and must be approved by the CPM. The CPM will share the proposal with and consult with Corps, CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition.

3. Compensation Lands Acquisition Requirements: The project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, in consultation with Corps, CDFG, BLM, and the USFWS, has 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 Corps, 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

c. Initial Protection and Habitat Improvement. The project owner shall fund activities that the CPM, in consultation with the Corps, 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 $27 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 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

~~609,652~~170,924 (calculated at $692 an acre for ~~881~~247 acres) or the project owner shall include $~~609,652~~170,924 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 $692 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 project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:

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

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

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

f. Other Expenses. In addition to the costs listed above, the project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.

g. 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 for the drainages on the acquired compensation lands. The objective of the Management Plan shall be to enhance the wildlife value and the aquatic functions of the drainages and may include enhancement actions such as weed control, fencing to exclude livestock and OHVs, or erosion control. 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 as provided above to the CPM, with copies of the final document to CDFG, to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM in consultation with CDFG. Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, of the form of the Security. The CPM may draw on the Security if the CPM determines the project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition~~,~~. The CPM's use of the Security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition. The Security shall be

Security shall be provided in the amount of ~~$1,297,656.86 $1,609,296.75 or ($1,388,492.84 $1,645,382.61~~847,448~~$900,448 or (963,480~~$910,479 if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 3.h. of this condition, below). The security is calculated in part, from the items that follow but adjusted as specified below (consult **Biological Resources Mitigation/Compensation Cost Estimate Table ~~5~~** for the calculation of estimated costs):

i. land acquisition costs for compensation land, calculated at $500/acre x ~~881~~247 acres = ~~$440,500~~123,500;

ii. initial protection and habitat improvement activities on the compensation land, calculated at $~~27~~2,000/acre x ~~881~~247 acres = $~~23,787~~494,000;

iii. long-term maintenance and management on the compensation land calculated at $692/acre x ~~881~~247 acres = $~~609,652~~170,924;

iv. pre-acquisition liability survey at no less than $~~2,500~~3,000 per parcel (assuming ~~40~~40160 acres per parcel ~~(No. of parcels = 881 acres ÷ 40 acres = 22 parcels) 22 parcels x $2500 = $55,000~~ 62 parcels): = ~~$18,000~~6,000;

v. appraisal fees at $~~3,000~~5,000 per parcel = ~~$66,000 $115,000~~30,000~~0~~10,000;

vi. ~~BLM~~Agency cost to accept land ~~$102,717.86 $77,307.75 (if BLM is determine to be most reasonable land manager); and~~calculated at (land cost x 15%) x 1.17 (17% of the 15% for overhead) = $21,674.25;

vii. ~~$115,000$44,050Biological survey for determining mitigation value of land~~Closing and escrow cost at $5,000 per parcel = $~~115,000~~30,000~~0~~10,000;

viii. Third party administrative costs (land cost x 10%) = $12,350;

~~viii.~~

ix. ~~viii.~~ NFWF fee = $~~90,835.98 $36,085.86~~63,031 (if NFWF is used for acquisition).

The amount of security shall be adjusted for any change in the project footprint as described above. In addition, the amount of Security specified in this section may be reduced in proportion to any of the secured mitigation requirements that the project owner has completed at the time the Security is required to be submitted. If all or any portion of required habitat compensation lands from **BIO-10** and **BIO-17** meets the criteria set forth for special status compensation lands may be used to fulfill that portion of the obligation for this condition, thus reducing the compensation acreage amount needed to fulfill the needed ~~881~~247 acres. Also, if the project owner transfers funds for long-term management of the compensation lands to an entity approved to hold those funds, the Security would not include any amount for long-term maintenance and management of the lands. The project owner will be entitled to partial or complete release of the Security as the secured mitigation requirements are successfully completed.

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.

4. The project owner may choose to satisfy its mitigation obligations identified in this condition 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.

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

- • Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, whether native or nonnative, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.
- • Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.
- • Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California.

6. ~~Lake~~Waters of the U.S. and ~~Streambed~~Waters of the State Impact Minimization and Compensation Measures. The project owner shall provide a copy of Condition of Certification **BIO-17** from the Energy Commission Decision to all contractors, subcontractors, and the Applicant's project supervisors. Copies shall be readily available at work sites at all times during periods of active work and

- • The information provided by the applicant regarding streambed alteration is incomplete or inaccurate;
- • New information becomes available that was not known to it in preparing the terms and conditions;
- • The project or project activities as described in the SAA have changed; or
- • The conditions affecting biological resources changed or the CPM or BLM Biologist, in consultation with CDFG or USACE, determines that project activities would result in a substantial adverse effect on the environment.
  Should project conditions change and impacts to bed, bank, or channel occur on any of the water ways along the reclaimed water pipeline route, a revised Lake and streambed Alteration Agreement (LSAA) application must be submitted to the Commission in consultation with CDFG either (1) for a Commission determination that the revised LSAA application complies with CEQA and CESA; or (2) should the project conditions change after a final decision in on the AFC in this proceeding, through an application for amendment to the Commission's final decision issued in this proceeding.

Verification: Prior to groundbreaking activities, the applicant shall submit to the CPM an enhancement and rehabilitation plan for the Carrizo Creek and a Mitigation Plan for restoring the 247 acres of Carrizo Creek consistent with the restoration and rehabilitation plan. The applicant shall submit documentation that the enhancement and rehabilitation plan and the Mitigation Plan have been approved by the Corps, USFWS, and State Parks. No later than 18 months after ground-disturbing activities, the applicant shall submit documentation that the initial enhancement and rehabilitation measures have been completed. The applicant shall submit annual monitoring reports to the CPM, Corps, USFWS, CDFG, State Parks and CDFG documenting the success of the enhancement and rehabilitation activities. At the end of the initial 5 year monitoring period, applicant shall submit documentation to the CPM that the Corps has accepted the mitigation as being complete and documentation that funding has been provided to State Parks for the long term management of the mitigation lands and that State Parks has accepted such funds and has agreed to carry out long term management of these areas.

~~No~~If the applicant elects to acquire lands to satisfy this condition, no later than 12 months after the start of ground-disturbing project activities, the project owner, or a third-party approved by the CPM, in consultation with CDFG and BLM, shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase containing no less than ~~48 acres of state jurisdictional waters and 881~~of the state, 247 acres of ~~applicable~~ PBHS foraging habitat and 247 acres of ephemeral drainages, and

shall obtain approval from the CPM, in consultation with CDFG, BLM, and USFWS, prior to acquisition.

Draft agreements to delegate land acquisition to CDFG, BLM, or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 30 days prior to start of any project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with section 3.h of this condition. Within 180 days after the land purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM, and USFWS, for the compensation lands and associated funds.

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.

If electing to satisfy the requirements of this condition by utilizing the options created by CDFG pursuant to SBX8 34, 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.

No fewer than 30 days prior to the start of work potentially affecting jurisdictional state waters, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above best management practices will be implemented and provide a discussion of work in jurisdictional state waters in Compliance Reports for the duration of the project.

BIO-19 SPECIAL STATUS PLANT IMPACT AVOIDANCE, MINIMIZATION, AND COMPENSATION

This condition contains the following four sections:

- **Section A: Special-Status Plant Impact Avoidance and Minimization Measures** contains the Best Management Practices and other measures designed to avoid accidental impacts to special status plants on the project site that occur outside of the Project Disturbance Area and within 100 feet of the Project Disturbance Area and special status plants occurring within the rights of way for the off-site water pipeline and, transmission line, as practicable, during construction, operation, and closure.
- **Section B: Conduct Late Season Botanical Surveys** describes guidelines for conducting summer-fall 2010 surveys to detect special-status plants that would have been missed during the spring 2010 surveys.
- **Section C: Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys** outlines the level of avoidance required for plants detected during the summer-fall surveys, based on the species' rarity and status codes.
- **Section D: Off-Site Compensatory Mitigation for Special-Status Plants** describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/enhancement, in lieu fees, or a combination of acquisition and restoration/enhancement.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the plant site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation.

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

Section A. Special Status Plant Avoidance and Minimization Measures

To protect all special status plants[1] located on site outside of the Project Disturbance Area and within 100 feet of the permitted Project Disturbance Area (including access roads, staging areas, laydown areas, parking and storage areas) and special status plants occurring within the rights of way for the offsite pipeline and transmission line, from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

1. Designated Botanist. An experienced botanist who meets the qualifications described in Section **B-2** below shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this

[1] Staff defines special-status plants as described in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Natural Resources Agency, Department of Fish and Game, issued November 24, 2009.

During operation of the project, the Designated Biologist shall be responsible for protecting special status plant on site occurring within 100 feet of the Project Disturbance Area and special status plant occurring with the right of way for the offsite pipeline and transmission line, as practicable.

2. Special Status Plant Impact Avoidance and Minimization Plan. The project owner shall develop and implement a Special Status Plant Impact Avoidance and Minimization Plan and shall incorporate the Plan into the BRMIMP (**BIO-7**). The Plan shall include the following elements:

    a. Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears: limiting the width of the work area; adjusting the location of staging areas, lay downs, spur roads and poles or towers; driving and crushing vegetation as an alternative to blading temporary roads to preserve the seed bank, and minor adjustments to the alignment of the roads and pipelines within the constraints of the right-of-way (ROW). These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP;

    b. Establish Environmentally Sensitive Areas (ESAs). Before construction, the Designated Botanist shall establish ESAs to protect avoided special status plants that occur onsite outside of the Project Disturbance Areas and within 100 feet of Project Disturbance Areas, and avoided special status plants that occur within the rights of way for the offsite pipeline and transmission line. This includes plant occurrences identified during the spring 2010 surveys and the late season 2010 surveys. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall be placed a minimum of 20 feet from the uphill side of the occurrence and 10 feet from the downhill side~~, and.~~ . Where this is not possible due to construction constraints, other protection measures, such as silt-fencing and signs prohibiting movement of the fencing or sediment controls, may be employed to protect the occurrences. ESAs shall be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fence under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be ~~permanently marked~~clearly identified (with signage or other markers) to ensure that avoided plants are not inadvertently harmed during construction, operation, or closure. Where avoidance will not allow for long-term viability of the species, no ESA shall be established.

c. Special-Status Plant Worker Environmental Awareness Program (WEAP). The Plan shall include training components specific to protection of special-status plants, and shall be incorporated into the WEAP described in **BIO-6**;

d. Herbicide and Soil Stabilizer Drift Control Measures. The Plan shall provide detailed specifications for avoiding herbicide and soil stabilizer drift, and shall include a list of herbicides and soil stabilizers that will be used on the Project with manufacturer's guidance on appropriate use. The Plan shall Indicate where the herbicides will be used, and what techniques will be used to avoid chemical drift or residual toxicity to special-status plants, consistent with guidelines provided by the Nature Conservancy's *The Global Invasive Species Team*~~. <http://www.invasive.org/gist/products.html>~~[2], the U.S. Environmental Protection Agency, and the Pesticide Action Network Database.[3]

e. Erosion and Sediment Control Measures. The Plan shall include measures to ensure that erosion and sediment control measures do not inadvertently impact special-status plants located within an ESA (e.g., by using invasive or non-native plants in seed mixes, introducing pest plants through contaminated seed or straw, etc.). These measures shall be incorporated in the Storm Water Pollution Prevention Plan.

f. Avoid Special-Status Plant Occurrences. Designate spoil areas; equipment, vehicle, and materials storage areas; parking; equipment and vehicle maintenance areas, and; wash areas at least 100 feet from any ESAs.

g. Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction~~, operation, or~~ and decommissioning activities ~~within 100 feet of the occurrences,~~ and quarterly monitoring ~~for the remainder of construction~~during operations. The Project owner shall also conduct annual monitoring of the avoided occurrences on site, and off site occurrences that are adjacent to the Project, for the life of the Project (see Verification, below).

h. ~~g.~~ Seed Collection. ~~Conduct~~As feasible, conduct pre construction collection of seed (or other propagules) of the affected special status plants within the Project Disturbance Area in the summer fall season prior to the start of construction and according to the seed collection and

[2] Hillmer, J. & D. Liedtke. 2003. Safe herbicide handling: a guide for land stewards and volunteer stewards. Ohio Chapter, The Nature Conservancy, Dublin, OH. 200 pp. Online: <http://www.invasive.org/gist/products.html.

[3] Pesticide Action Network of North America. Kegley, S.E., Hill, B.R., Orme, S., Choi, A.H., 2010. PAN Pesticide Database, Pesticide Action Network, North America. San Francisco, CA. Online: <http://www.pesticideinfo.org>

storage guidelines contained in (Wall 2009a; Bainbridge 2007). Collection of seed (or other propagules) shall be done by the Rancho Santa Ana Botanic Garden (RSABG) Conservation Program staff or other qualified seed or restoration specialist. The Project owner shall be responsible for all costs associated with seed storage . All seed storage shall occur at RSABG or other qualified seed dealer and at least 40 percent of the collected seed shall remain in long term storage at RSABG Seed Conservation Program, San Diego Natural History Museum, or other qualified seed conservation program, and made available for contingency efforts in the event of on site or off site mitigation failure. Feasibility shall be determined based on the availability of seeds prior to construction activities. For Phase 1(a) and 1(b), it is recognized that seed collection may not be possible given the timing of approvals and the scheduled initiation of construction.

Section B. Conduct Late-Season Botanical Surveys

The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants as described below:

1. Survey Timing. Surveys shall be timed to detect~~: a)~~ summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October).~~, and b) f~~ Fall-blooming perennials that respond to the cooler, later season storms that originate in the Pacific northwest (typically beginning in September or October) shall only be required if blooms and seeds are necessary for identification or the species are summer-deciduous and require leaves for identification. The surveys shall not be timed to coincide with the statistical peak bloom period of the target species but shall instead be based on plant phenology and the timing of a significant storm event (i.e., a 10mm or greater rain or ~~storm event~~multiple storm events of sufficient volume to trigger germination, as measured at or within 1 mile of the Project site). Surveys ~~for summer annuals shall be timed to occur approximately 4 to 7 weeks following a warm, tropical storm. Re surveys shall occur as many times as necessary to ensure that surveys are conducted during the appropriate identification period for the target taxa, which may be blooms, fruit, seed characteristics, or vegetative characteristics, depending on~~at the appropriate time to capture the characteristics necessary to identify the taxon.

2. Surveyor Qualifications and Training. Surveys shall be conducted by a qualified botanist knowledgeable in the complex biology of the local flora, and consistent with CDFG protocols (CDFG 2009). The botanical survey crew shall be prepared to mobilize quickly to conduct appropriately timed surveys. Each surveyor shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit reference sites (where available) and/or review herbarium specimens of all BLM Sensitive plants, CNPS List 1B or 2 (Nature Serve rank S1

the potential for range extensions ~~are likely to be found~~is unknown, the list of potentially occurring special-status plants shall include all special-status taxa known to occur within the Sonoran Desert region in California. The list shall also include taxa with bloom seasons that begin in fall and extend into the early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.

3. Survey Coverage.

   a. Survey protocol utilized for the 2010 late spring surveys for the project site could be utilized for summer/fall botanical surveys (see **Methods** section of the URS report titled "Imperial Valley Solar (formerly Solar Two) (08-AFC-5) Applicant's Submittal of Late Spring Botany Report, URS Project No. 27657106.00804", dated June 11, 2010; **or** the project owner can do the following:

   b. ~~At a minimum, the Applicant shall conduct comprehensive surveys (i.e., 100 percent visual coverage) of the washes, and other lowlands within the Project Disturbance Area to capture the full extent of the washes that will be affected by development in the washes. In the intervening uplands (dry areas), surveys shall be conducted to ensure a 25 percent visual coverage. Other special or unique habitats associated with rare plants shall also be surveyed at 100 percent visual coverage. Transects shall be "intuitive controlled" (per Whitaker et al. 1998) to ensure a focus on habitat most likely to support rare plants (such as desert washes), rather than on pre-defined, evenly-spaced survey grids. In the one-mile Energy Commission buffer areas (outside the Project Disturbance Area), washes and other habitats strongly associated with rare plants shall also be surveyed comprehensively (i.e., 100 percent visual coverage) if they will be affected by development in the washes, but the intervening uplands or habitat not strongly associated with rare plants may be spot-checked or sampled at approximately 10 percent visual coverage.~~The survey coverage or intensity shall be in accordance with BLM Survey Protocols (issued July 2009), which specify that intuitive controlled surveys shall only be accomplished by botanists familiar with the habitats and species that may reasonably be expected to occur in the project area.

4. Documenting Occurrences. If a special-status plant is detected, the full extent of the population ~~shall be assessed, both onsite and offsite. The number of individuals shall be counted (or sub-sampled and~~onsite shall be recorded using GPS in accordance with BLM survey protocols. Additionally, the extent of the population within one mile of project boundaries shall be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the population affected by the project. For populations that are very dense or very large, the population size may be estimated ~~in the event of large populations). The boundaries of all occurrences shall be recorded with hand-held GPS units of one~~

~~similar to that used in the AFC (SES 2008a)~~by simple sampling techniques. When populations are very extensive or locally abundant, the survey must provide some basis for this assertion and roughly map the extent on a topographic map. All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; small populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the ~~progress reports and~~ final botanical report shall be prepared to ensure consistency with ~~mapping protocol and definitions of occurrences in CNDDB:~~definition of an occurrence by CNDDB , i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence'. The project owner shall also submit the raw GPS shape files and metadata, and completed CNDDB forms for each 'occurrence' (as defined by CNDDB).

5. Reporting. ~~Progress Reports shall be submitted during surveys (as described below in verification), and shall include: a) the raw GPS data and metadata; b) a spreadsheet of the data (from the 'dbf' file), and c) a map of the data showing occurrence locations (labeled with their corresponding occurrence number from the GPS files) and Project features on a USGS topographic base map.~~ Raw GPS data, metadata, and CNDDB field forms shall be provided to the CPM within two weeks of the completion of each survey. If surveys are split into two or more periods (e.g., a late summer survey and a fall survey), then a summary letter shall be submitted following each survey period.

   The Final Summer-Fall Botanical Survey Report shall be prepared consistent with CDFG guidelines (CDFG 2009), and BLM guidelines ~~(Lund pers comm)~~ and shall include the following components:

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

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

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

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

e. a completed CNDDB field form for every occurrence (occurrences of the same species within 0.25 mile or less of each other combined as one occurrence, consistent with CNDDB methodology), and;

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

Section C. ~~Triggers for Implementation of Mitigation~~Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys

The project owner shall apply the following avoidance standards ~~listed below establish criteria that would trigger implementation of additional mitigation measures for impacts to late summer/fall season~~to late blooming special status plant species ~~(if~~that might be detected during ~~the~~late summer/fall season surveys~~ required under Section B of this Condition). These~~. Avoidance and/or the mitigation measures~~,~~ described in Section D below~~,~~ would reduce impacts to any special-status plant species detected during the late summer/fall plant surveys to less than significant levels. ~~These rankings are based on the internationally accepted Natural Heritage Methodology, available online at: http://www.natureserve.org/prodServices/heritagemethodology.jsp Included in this methodology is the NatureServe global and state ranking process (www.natureserve.org/explorer/ranking) which provides an estimate of extinction risk worldwide and in California (Master et al. 2009). Avoidance and Minimization Measures described in Section A of this condition are required for all special status plants, regardless of NatureServe rank or CNPS List.~~

1. ~~Triggers. The following triggers for implementation of mitigation are not intended for use beyond their use in the application of this Condition (Subsection C):~~ Mitigation for CNDDB Rank 1 Plants (Critically Imperiled) – Avoidance Required: If late blooming species with a CNDDB rank of 1 are detected within the Project Disturbance Area, the project owner shall prepare and implement a Special Status Plant Mitigation Plan (Plan). The goal of the Plan shall be to retain at least 75 percent of the local population of the affected species. Compensatory mitigation, as described in Section D of this condition, and at a mitigation ratio of 3:1, shall be required for the 25 percent or portion that is not avoided. If after agency consultation, avoidance would not satisfy the long-term viability of the plant population, compensatory mitigation alone will be allowed. The Plan shall include at a minimum, the following components and definitions:

    a. A description of the occurrences of the CNDDB rank 1 species on and off the project site, the percent of the local population affected, and a description of how these occurrences would be impacted by the project, including direct and indirect effects. The local population shall be measured by the number of individuals occurring on the project site and within the local watershed of the project for wash-dependent species or

considered impacted if they are within the project footprint or if they would be affected by project-related hydrologic changes.

b. A description of how avoidance and minimization measures would be implemented on the project, with the requirement of retaining at least 75 percent of the local population of this species. Compensatory mitigation, at a ratio of 3:1, and in accordance with the standards and specifications described in Section D of this condition, shall be required for the remaining 25 percent of the local population that is not avoided. Isolated 'islands' of protected plants disconnected by the project from natural fluvial processes shall not be considered to be protected and shall not be credited as contributing to the 75 percent avoidance requirement because such isolated populations are not sustainable. For currently isolated plant occurrences, the 75 % avoidance shall not be required as the isolated populations are unlikely to be sustainable. Mitigation as provided in Section D shall be required for such isolated occurrences.

2. Mitigation for CNDDB Rank 2 Plants (Imperiled): If species with a CNDDB rank of 2 are detected within the Project Disturbance Area, the project owner shall prepare and implement a Special Status Plant Mitigation Plan (Plan).The Plan shall include mitigation, at a ratio of 2:1 as described below in Section D for Rank 2 plants that cannot be avoided. If after agency consultation, it is determined that avoidance would not satisfy the long-term viability of the plant, compensatory mitigation alone will be allowed. The content of the Plan and definitions shall be as described above in subsection C.1.

a. ~~Level 1 Trigger. BLM requests 100 percent avoidance for BLM Sensitive species (CNPS List 1 species are BLM Sensitive) but BLM's State Botanist will decide the level of avoidance on a case by case basis. Any impacts to non BLM Sensitive species with a NatureServe Global Rank of G1 or G2 will trigger mitigation as described in Section D below.~~A description of the occurrences of the CNDDB rank 2 species on and off the project site, the percent of the local population affected, and how these occurrences would be affected by the project. The local population shall be measured, and the impacts defined, as described above under #1(a).

b. ~~A description of the avoidance~~Avoidance and minimization measures that would achieve ~~complete~~maximize practicable avoidance of occurrences ~~on the project linears and construction laydown areas, unless such avoidance would cause disturbance to areas not previously surveyed for biological resources. Level 2 Trigger. Any impact to a CNPS List 2 taxon will trigger mitigation described in Section D below. However, should a CNPS List 3 or 4 taxon be of local or regional significance, as described below in 2b, then the level of protection for the taxon shall be adjusted.~~ If after agency consultation, it is determined that avoidance would not satisfy

allowed.

c. Compensatory mitigation, at a ratio of 2:1, and in accordance with the standards and specifications described in Section D of this condition, shall be required for any special status plant species that cannot be avoided.

2. ~~Avoidance on Linears RequiredAdjustments for Triggers. The levels of protection for a taxon may be adjusted under the following scenarios: The Plan shall include the following: that describes measures to achieve complete avoidance of occurrences on the project linears and contruction laydown areas, unless such avoidance would create greater environmental impacts in other resource areas (e.g., Cultural Resource Sites) or other restrictions (e.g., FAA or other restrictions for placement of transmission poles). The project owner shall provide compensatory mitigation, at a ratio of 2:1, as described below in Section D for impacts to Rank 2 plants that could not be avoided.~~

a. ~~State or Federal Listed Species. If a state or federal listed species is detected, the project owner shall immediately notify the CDFG, USFWS, and the CPM, and comply with all measures contained in this condition as well as the terms and conditions of any applicable federal permit, including avoidance and reconfiguration if required.~~

b. ~~Local or Regional Significance. CNPS List 4 (typically assigned a State rank of 3) shall be adjusted to a higher level of protection if the plant occurrence has local or regional significance not captured by the above rankings. According to CDFG protocol (CDFG 2009): "List 3 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity shall be considered in determining whether cumulative impacts to a List 4 plant are significant even if individual project impacts are not. CNPS List 3 and 4 may be considered regionally significant if, e.g., the occurrence is located at the periphery of the species' range, or exhibits unusual morphology, or occurs in an unusual habitat/substrate."~~

~~A plant occurrence of any rank may be assigned a five percent higher level of protection in its ranking if the plant occurrence exhibits one or more of the following features:~~

3. Mitigation for CNDDB Rank 3 Plants (Vulnerable) – No Onsite Avoidance Required Unless Local or Regional Significance: If species with a CNDDB rank of 3 are detected within the Project Disturbance Area, no onsite avoidance or compensatory mitigation shall be required unless the occurrence shall be treated as a CNDDB rank 2 plant species. A plant occurrence would be considered to have local or regional significance, in which case, the plant occurrence shall be treated as a CNDDB 2 ranked plant. A plant occurrence would be considered to have local or regional significance if:

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

~~ii. represents a significant range extension or disjunct occurrence (e.g., is located outside of the 9 quad region 1centered on the nearest known occurrence);~~

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

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

~~c. portion of the local population that cannot be avoided. New, Un Described Taxa and Other Occurrences of Questionable Taxonomic Status. BLM will treat new un described taxa as if they are BLM Sensitive, and requests 100 percent avoidance, but BLM's State Botanist will decide the level of avoidance on a case by case basis. Proposed additions to the CNPS Inventory, including any new un described, taxa that are proposed additions to the CNPS Inventory, will be, treated as Proposed unless rejected by the CNPS Rare Plant Botanist after the initial literature review and consultation with the network of botanists, representing state and federal agencies, consulting firms, and academic institutions. A description of the peer review process is available at: http://www.cnps.org/cnps/rareplants/. Typically, under NatureServe and CNPS ranking protocol, plants with a questionable taxonomy are assigned a lower conservation priority with the caveat that resolution of this uncertainty may result in a status change that may be lower or higher than originally assigned.~~

~~d. Significant Cumulative Effects. The assessment of known threats from over 50 sources are considered and reflected in the CNDDB threat rank, including renewable energy (see http://www.natureserve.org/publications/ConsStatusAssess-Status Factors.pdf, "Threats").~~

~~e. Ownership/Management Threats. The degree to which a taxon's occurrences are adequately protected and managed is not included in the set of core factors used for NatureServe rankings that pre date the 2009 revised protocols (Master et al. 2009). The threats to special status plants with many occurrences on private lands without conservation easements, or on BLM lands managed for multiple uses (outside of a FTHL Management Area) will be captured in the new rankings available in summer 2010.~~

~~3.~~ ~~Basis for Assessing Total Documented Occurrences. The accounting or inventory of the species' total known or documented occurrences shall be based on the following sources: CNDDB processed and unprocessed data; California Consortium of Herbaria and other herbaria records; BLM records; survey data from other renewable energy projects and other related projects for which survey data is available; and reported occurrences by qualified botanists accompanied by a completed CNDDB or similar field form (with or without voucher specimens). Data considered unreliable include: range implied in literature but without collection numbers or specific location information and anecdotal reports without documentation or from non credible sources. Occurrences based on historic (pre CEQA, or pre 1972) collections that have not since been verified will not be considered unless verified and documented by one of the sources described above.~~

~~a.~~

~~b.~~

~~c.~~

4. Pre-Construction Notification for State- or Federal-Listed Species, or BLM Sensitive Species. If a state or federal-listed species or BLM Sensitive species is detected, the project owner shall immediately notify the CDFG, USFWS, BLM, and the CPM.

5. Preservation of the Germplasm of Affected Special Status Plants. ~~For all~~As additional mitigation for the significant impacts to special status plants, regardless of whether compensatory mitigation is required, ~~mitigation shall include seed collection from the~~prior to construction, the project owner shall collect seeds from all available affected special status plants onsite ~~prior to construction~~ to conserve the germplasm and provide a seed source for restoration efforts. The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden. The costs associated with the long term storage of the seed shall be the responsibility of the project owner. Any efforts to propagate and reintroduce special status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plant approved by the CPM and made available for contingency efforts in the event of on site or off site mitigation failure. Feasibility shall be determined based on the availability of seeds prior to construction activities. For Phase 1(a) and 1(b), it is recognized that seed collection may not be possible given the timing of approvals and the scheduled initiation of construction.

Section D. Mitigation Measures for Special Status Plants

Where compensatory mitigation is required under the terms of Section C, above, the project owner shall mitigate project impacts to special status plant occurrences with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, or restoration/enhancement of populations of the target species, and shall meet the performance standards for mitigation described below. In the event that no opportunities for acquisition or restoration/enhancement exist, the Project owner can fund a species distribution study designed to promote the future preservation, protection or recovery of the species. Finally, if the project owner chooses, an in lieu fee can be paid to satisfy these requirements. If all or a portion of the acquired habitat compensation lands for Bio-10 or Bio-17 provide for the replacement of the Special Status Plants impacted, then the requirements of this condition will be reduced by that amount. Compensatory mitigation shall be at a ratio of 3:1 for CNDDB Rank 1 plants, with three acres of habitat acquired or restored/enhanced for every acre of habitat occupied by the special status plant that will be disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the compensatory mitigation will be ¾ of an acre). The mitigation ratio for CNDDB Rank 2 plants shall be 2:1. So, for the example above, the mitigation ratio would be one-half acre for the Rank 2 plants.

The project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands or pay in lieu fees to satisfy this requirement. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) report, and other transactional costs related to the use of compensatory mitigation.

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

I. ~~Special Status Plant Mitigation Plan. Upon completion of the summer fall 2010 surveys, (see Section B of this Condition), the project owner shall prepare a Special Status Plant Mitigation Plan. The Plan shall also include the mitigation requirements for any additional special status plants found during the summer fall 2010 surveys (see Sections B and C of this Condition) in accordance with the mitigation triggers described above (Section C of this condition) and that meet the performance standards specified below. Avoidance and Minimization Measures described in Section A of this condition are required for all special status plants, regardless of NatureServe rank or CNPS List.~~**Compensatory Mitigation by Acquisition:** The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands include all of the following:

1. ~~On Site Avoidance~~. ~~BLM requests 100 percent avoidance for BLM Sensitive species but BLM's State Botanist will decide the level of avoidance on a case by case basis. On site avoidance shall also be required if the impact to a special status species with a NatureServe Global Rank of G1 or G2 exceeds 10 percent of the species' known and documented occurrences (see 'Level 1 Trigger', Section C of this Condition). Under this scenario, the Project owner shall be required to avoid a minimum of 75 percent of the total population. For perennial taxa the percent avoidance shall be measured based on the percentage of the total individuals affected; for annuals the percent avoidance shall be measured based on the total area occupied by the occurrence plus any additional habitat deemed essential for maintaining healthy, reproductive populations (BLM CDD 2002). The Project owner shall implement all measures described in Section A of this Condition to protect the avoided occurrence from accidental direct and indirect effects during construction, operation, and closure.~~Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:

2. ~~Off Site Compensatory Mitigation. One or more of the following options for mitigation may be used to reduce Level 2 and Level 3 impacts to special status plants (see Section C of this Condition) to less than significant levels:~~

    a. ~~Acquire Off Site Compensatory Land. To fully mitigate for the loss of special status plants, the Project owner shall provide compensatory mitigation by acquiring, in fee title or conservation easement, lands meeting the specific criteria outlined in D2b below, and in an amount equal to the amount of occupied special status plant habitat disturbed by the final Project footprint. The Project footprint means all lands disturbed in the construction and operation of the Project, including all Project linears.~~

    b. ~~Criteria for Compensatory Acquisition Lands. If offsite acquisition is selected to meet the mitigation obligations under **BIO-19**, the Project owner shall acquire, in fee title or conservation easement, lands that meet the criteria below. The responsibilities for acquisition and management of the compensation lands may be delegated by written agreement to a qualified third party, such as a non governmental organization dedicated to habitat conservation. Additional funds shall be provided for basic long term stewardship of the conservation easement. At a minimum, long term management shall consist of the activities described in Land Trust Standards and Practices (Land Trust Alliance 2004, Practice 12A) http://www.landtrustalliance.org/learning/sp/land trust standards and practices for start up and annual management activities, including preparation of a long term management and monitoring plan. The amount of the long term management and maintenance fund shall be based on PAR or PAR like analysis. The terms and conditions for acquisition under this condition shall be modeled on those described in **BIO 10**. The acquisition lands must be within California, and must meet one or more of the following additional requirements:~~

a. ~~1.~~ Occupied ~~with good to excellent site integrity. Contains an~~Habitat, No Habitat Threats. The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special ~~status plant. The occurrence may be smaller than the affected occurrence but must be a viable reproducing occurrence~~ status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction)~~, with good or better habitat quality than the affected occurrence, and with a reasonable expectation of long term sustainability. The amount of land to be acquired shall be equivalent to the total acres of the affected occupied habitat mitigated at a ratio of 3:1 (3 acres acquired for every one acre of occupied habitat affected)~~.

b. ~~2.~~ Occupied ~~but with threats to habitat quality and accompanied by an approved restoration plan. The occurrence or the site may contain threats to its integrity~~Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may also be acquired as long as the population ~~or the site can~~could be reasonably expected to recover with ~~minor~~habitat restoration efforts (e.g., ~~barricading~~ OHV~~, excluding~~ or grazing exclusion, or ~~minor pest plant~~ removal of invasive non-native plants) and is accompanied by a ~~restoration plan that meets the minimum standards~~Habitat Enhancement/Restoration Plan as described in Section D~~2c Guidelines for the Preparation of Habitat Restoration Plan below. The amount of land to be acquired shall be equivalent to the total acres of affected occupied habitat mitigated at a ratio of 3:1 (3 acres acquired for every one acre of occupied habitat affected), with the additional expense of preparing and implementing an approved habitat restoration plan, including long term monitoring. The restoration plan shall be prepared in accordance with all guidelines described below in Section D2c, Guidelines for the Preparation of Habitat Restoration Plan~~.II, below.

c. ~~3.~~ Unoccupied but Adjacent. The project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The ~~acquired habitat may be~~Project owner shall provide evidence that acquisitions of such unoccupied ~~but it improves~~lands would improve the defensibility and long ~~-~~term sustainability of the occupied habitat by ~~expanding the~~providing a protective buffer ~~of protection~~ around the occurrence ~~so as to prevent future development of adjacent habitat and protect its~~and by enhancing connectivity ~~to undisturbed habitat. Buffer lands may or may not be dominated by the same habitats that support the special status plants but must provide some habitat continuity between the occupied habitat and undisturbed habitats of a high integrity beyond the buffer lands. Habitat integrity, connectivity, defensibility, and potential threats shall also be addressed in the proposal. The amount of land to be~~

~~mitigated at a ratio of 4:1 (4 acres acquired for every one acre of occupied habitat affected)~~with undisturbed habitat. This acquisition may include habitat restoration efforts where appropriate, particularly when these restoration efforts will benefit adjacent habitat that is occupied by the target species.

~~4. Unoccupied and not adjacent to occupied habitat. Must contain high quality habitat that is critical to the maintenance or sustainability of the affected species and represent a potential reserve in the future (for either natural colonization or artificial). Good to high quality within the Colorado Desert near or within the Yuha Desert or West Mesa FTHL Management Areas. Acquired lands may also focus on linkages for species dispersal between major populations and refugia at higher elevations/more mesic habitats to accommodate species migration with future climate change. Habitat integrity, connectivity, defensibility, and potential threats shall also be addressed in the proposal. The amount of land to be acquired shall be equivalent to the total acres of affected occupied habitat mitigated at a ratio of 5:1 (5 acres acquired for every one acre of occupied habitat affected).~~

2. Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM ~~and CDFG,~~ describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for ~~project related impacts to~~ special -status plants in relation to the criteria ~~specified~~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~~shall provide a written response to the proposal within 30 days of receipt, explaining the reasons for approving or disapproving the proposal.

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

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

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

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

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

    c. ~~Guidelines for the Preparation of~~Initial Protection and Habitat ~~Restoration Plan~~Improvement. The ~~Project owner shall submit a detailed Habitat Restoration Plan that includes all of the following components and according to the guidelines in [1)] through [10)] below:~~project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be $27 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, but actual costs will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in

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.

~~1. Define the goals of the restoration project and a measurable course of action developed to achieve those goals. The goals and objectives must meet the following performance standards described below:~~

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

e. Long-term Maintenance and Management Funding. The project owner shall provide money to establish an account with non-wasting capital that will be used to fund long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands. Until an approved PAR or PAR-like analysis is conducted for the compensation lands, the amount of required funding is initially estimated to be $692 for every acre of compensation lands, using as the best available proxy, the estimated cost for special status species habitat compensatory mitigation. If compensatory lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see verification section at the end of this condition), the project owner shall either: (i) provide initial payment equal to the amount of $692 per acre, multiplied by a mitigation ratio of 3:1 (for Rank 1 species) or 2:1 (for Rank 2 species), and multiplied by the number of acres the project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the Energy Commission under subsection (g), “Mitigation Security” below, in an amount equal to $692 multiplied by the number of acres the project owner proposes to acquire for compensatory mitigation at the established mitigation ratio. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project Disturbance Area as described above. If an initial payment is made based on the estimated per acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $692 per acquired 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

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.

f. Interest, Principal, and Pooling of Funds. The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund (endowment) holder/manager to ensure the following requirements are met:

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

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

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

g. Other Expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.

6. Security. It is anticipated that the mitigation lands required under this condition will be nested in the mitigation lands required under BIO-10. Therefore, the security required under BIO-10 is adequate security for the mitigation required

measures in this condition and in BIO-10 may not fully satisfy the project owner's obligations under this condition.

If it is determined that the mitigation lands acquired under BIO-10 do not satisfy the requirements of this condition, then the project owner will be required to provide additional security: Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The amount of the Security shall be $692 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, and multiplied by the established mitigation ratio, for every acre of habitat supporting the target special status plant species which is significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition, and the project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

II. Compensatory Mitigation by Habitat Enhancement/Restoration: As an alternative or adjunct to land acquisition for compensatory mitigation the project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio for Rank 1 plants and 2:1 for Rank 2 plants, with improvements applied to three acres, or two acres, respectively, of habitat for every acre special-status plant habitat directly or indirectly disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is 1/4 acre than the improvements would be applied to an area equal to 3/4 of an acre at a 3:1 ratio, or one-half acre at a 2:1 ratio). Examples of suitable enhancement projects include but are not limited to the following: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control of invasive non-native plants that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows or increasing groundwater availability for dependent species.

~~• The proposed habitat restoration project must~~If the project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the

achieve ~~the~~ rescue of an off-site occurrence ~~on acquired compensation land~~ that is currently assessed ~~with: a long~~ , based on the NatureServe threat ranking system[4] with one of the following threat ranks: a) long-term decline >30 ~~percent, or;~~% ; b) an immediate threat that affects >30 ~~percent~~% of the population, or~~;~~ c) has an overall threat impact that is High to Very High ~~(see NatureServe Threat Ranking system, at: http://www.natureserve.org/publications/ConsStatusAsse ss_StatusFactors.pdf, "Threats").• The proposed restoration must achieve~~. "Rescue" would be considered successful if it achieves an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").

~~• Restoration projects may include one or more of the following types of projects: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control invasive weeds that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore critical lost or degraded hydrologic or geomorphic functions to known special status plant occurrences that have lost historic sheet flow or instream flows, as a result of diverting washes upslope by roads or ditches.~~

If the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat Enhancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for implementation and monitoring of the Plan. The amount of the Security shall be $692 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, at the ratio of 3:1 for Rank 1 plants and 2:1 for Rank 2 plants, for every acre of habitat supporting the target special-status plant species which is directly or indirectly impacted by the project. The amount of the security may be adjusted based on the actual costs of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the enhancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by the CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:

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

[4] Master, L., D. Faber-Langendoen, R. Bittman, G. A., Hammerson, B. Heidel, J. Nichols, L. Ramsay, and A. Tomaino. 2009. *NatureServe Conservation Status Assessments: Factors for Assessing Extinction Risk.* NatureServe, Arlington, VA. Online: http://www.natureserve.org/publications/ConsStatusAssess StatusFactors.pdf, "Threats". See also: Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity. Version 1. NatureServe, Arlington, Virginia. Online: http://www.natureserve.org/publications/pubs/invasiveSpecies.pdf

downgrading of the overall threat rank to slight or low (from “High” to “Very High”).

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

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

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

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

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

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

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

9. Contingency Plan. Describe the contingency plan ~~and adaptive management measures~~ for failure to meet annual goals.

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

~~Mitigation Security. The Project owner shall provide financial assurances to the CPM under terms modeled on those specified in **Section 3** of **BIO-10**, to guarantee that an adequate level of funding is available to implement the mitigation measures described above. These funds shall be used solely for implementation of the measures associated with the project in the event the project owner fails to comply with the requirements specified in 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. Financial assurance can be provided to the CPM in the form of security prior to initiating ground disturbing project activities. Prior to submittal to the CPM, the security shall be approved by the CPM, in consultation with BLM, to ensure funding. The amount of the security shall be determined according to the mitigation ratios described in **D2b** [1) through 4)], Off-Site Compensatory Mitigation section of this condition. The amount of security shall be adjusted for any 7change in the Project footprint as described above.~~

~~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), under terms modeled on those in Section A.3(i) in Condition of Certification **BIO-10**.~~

~~The responsibility for acquisition of compensation lands may be delegated to /a third party other than NFWF, such as a qualified land trust or other non1governmental organization supportive of habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to /approval by the CPM in consultation with BLM prior to land acquisition, restoration, or management activities.~~

III. Compensatory Mitigation by Conducting or Contributing to a Special Status Plant Species Distribution Study: As determined by the CPM, in the event that there are no opportunities for mitigation through acquisition or restoration/enhancement, a Scientific Study of Distribution and Status for the affected special status plant species may be implemented or funded. Information on the distribution, status, or health of known occurrences, ecological requirements, and ownership and management opportunities is very limited for many of the special status species that occur on the project or have potential to occur on the project, especially the late summer and fall blooming species. Some of these late blooming species are only known from a few viable occurrences in California, and historic occurrences that have not been relocated or surveyed since they were first documented. The objectives of this study would be to better understand the full distribution of the affected species, the degree and immediacy of threats to occurrences, and ownership and management opportunities, with the primary goal of future preservation, protection, or recovery of the affected species within California. Additionally, the study should delineate other areas in the region that should be avoided or protected due to rare plant presence. To further ensure protection, study data shall be published in the state's rare plant database.

At a minimum, the study shall include the following:

1. Occurrence and Life History Review. The Study would include an evaluation of all documented, historical, and reported localities for the affected species and a review of current information on the species life history. This would include a review of the CNDDB database, records from regional and national herbaria, literature review, consultation with U.C. Riverside, San Diego Natural History Museum, and other educational institutions or natural heritage organizations in California, Arizona, and Nevada, etc.), other biotechnical survey reports from the region, and information from regional botanical experts.

2. Conduct Site Visits to Documented and Reported Localities. Documented and reported occurrences would be evaluated in the field during the appropriate time of the year for each late blooming species. If located, these occurrences would be evaluated for population size (area and quantity), population trend, ecological characteristics, soils, habitat quality, potential threats, degree and immediacy of threats, ownership, and management opportunities. GPS location data would also be collected during these site visits.

3. Survey Surrounding Areas. Areas surrounding the occurrences that contain habitat suitable to support the affected species shall be surveyed to determine the full extent of its range and distribution. If additional populations are found, collect data (GPS and assessment) on these additional populations consistent with III.2 above.

4. Prepare a Status and Distribution Study Report. A report shall be prepared that contains the results of the surveys and assessments. The report shall contain the following components: a) Range and Distribution (including maps and GPS data); b) Abundance and Population Trends; c) Life History; d) Habitat Necessary for Survival; d) Factors affecting Ability to Survive and Reproduce; e) Degree and Immediacy of Threat; f) Ownership and Management Opportunities for Protection or Recovery; g) Sources of Information, and g) Conclusions. The conclusions shall contain the following factors: i) present or threatened modification or destruction of its habitat; ii) competition; iii) disease; iv) or other natural occurrences (such as climate change) or human-related activities. This valuable information will provide a better understanding of the ecological factors driving the distribution of these species, identify opportunities for mitigation, and management opportunities for recovery. All data from this study will be submitted for incorporation into the CNDDB system and the study report will be made available to resource agencies, conservation groups, and other interested parties.

The cost to implement or fund the study shall be no greater than the cost for acquisition, enhancement, and long-term management of compensatory mitigation lands based on the specifications and standards for acquisition or restoration/enhancement described under D.I and D.II.

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

Raw GPS data, metadata, and CNDDB field forms shall be submitted to the CPM within two weeks of the completion of each survey. A preliminary summary of results for the late summer ~~and~~ /fall botanical surveys shall also be submitted to the CPM and BLM's State Botanist ~~no later than September 30, 2010 and October 30, 2010, respectively. The Final Summer~~ within two weeks following the completion of the surveys. If surveys are split into more than one period, then a summary letter shall be submitted following each survey period. The Final Summer-Fall Botanical Survey Report, GIS shape files, and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground ~~disturbing activities~~-disturbing activities. The Final Report shall include a detailed accounting of the acreage of Project impacts to special status plant occurrences. Where avoidance shall not provide for the long-term viability of the special status plants, the report will document the reasons why avoidance is deemed to not be effective.

A draft Conceptual Special Status Plant Mitigation Plan as described in Section C shall be submitted to the BLM State Botanist and the CPM for review and approval no less than 30 days prior to the start of ground-disturbing activities, if required.

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

No less than 30 days prior to the start of ground-disturbing activities, the project owner shall submit grading plans and construction drawings ~~depicting~~to the CPM which depict the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition.

~~No less than 30 days prior to ground disturbing activities the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, a draft Special Status Plant Mitigation Plan. If state or federal listed plants are potentially affected, the Project owner shall also submit the Special Status Plant Mitigation Plan to CDFG and USFWS. The Plan shall contain, at a minimum, a conceptual proposal for compensatory mitigation through acquisition and possible restoration. If avoidance is mandatory (in accordance with Section C 1 and D 1 of this condition) the draft Plan shall include grading plans and other relevant construction drawings clearly depicting the location of the avoided plants.~~

If the mitigation actions required under this condition are not completed prior to ground-disturbing activities, the project owner shall provide the CPM with approved Security as described above.

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, however, shall be deemed in compliance of this condition if it has provided the required funding and satisfied the provisions of this condition no later than 12 moths after start of ground-disturbing project activities. 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. Provision of such funds will satisfy the project owner's obligations under this condition.

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

The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM of such completion no later than 18 months after the start of project ground-disturbing activities. If NFWF or another approved third party is being used for the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

If habitat enhancement is proposed, no later than six months following the start of ground-disturbing activities, the project owner shall obtain CPM approval of the final Habitat Enhancement/Restoration Plan, prepared in accordance with Section D, and submit to the CPM or a third party approved by the CPM Security adequate for long-term implementation and monitoring of the Habitat Enhancement/Restoration Plan.

Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the ~~restoration on acquired lands~~enhancement project shall be completed within five years of initiation. ~~During the initial five year period, quarterly reports shall be submitted to the CPM no more than 30 days after the end of each quarter. After completion of the initial five year period, the~~

~~he project to monitor effectiveness of restoration measures and description of any planned remedial actions or additional habitat restoration measures to be performed in the upcoming year~~Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the ~~Project~~project's progress in meeting the ~~restoration~~enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.

~~Within 90 days after completion of Project construction, the Project owner shall provide to the CPM an analysis with the final accounting, based on GIS analysis of post construction aerial photography, of the amount of special status plants and their habitat disturbed during Project construction. This shall be the basis for the final number of acres of habitat required for acquisition, as described in Section C.~~

~~If the Project owner elects to fund the acquisition and initial improvement of compensation lands through NFWF by depositing funds for that purpose into NFWF's REAT Account, payment of the initial funds for acquisition and initial improvement must be made at least 30 days prior to the start of ground disturbing activities. No later than 12 months after the start of ground disturbing project activities, the project owner, or a third party approved by the CPM, in consultation with CDFG and BLM, shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase and shall obtain approval from the CPM, in consultation with CDFG, BLM, and USFWS, prior to acquisition. The PAR or PAR like Analysis shall be completed no later than 18 months from the start of ground disturbing activities, after which the amount will be adjusted. If acquisition is proposed, the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, a final Special Status Plant Mitigation Plan for proposed acquisition lands no later than 18 months from the start of ground disturbing activities.~~

~~Draft agreements to delegate land acquisition to CDFG, BLM, or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 30 days prior to start of any project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with Mitigation Security section D of this condition. Within 180 days after the land purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM, and USFWS, for the compensation lands and associated funds.~~

If a Status and Distribution Study is proposed, the study shall commence no later than six months following the start of ground-disturbing activities. The draft study shall be

years following the start of ground-disturbing activities. The final study shall be submitted no more than 30 months following the start of ground-disturbing activities.

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

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

~~If special status plant are preserved onsite, an annual report shall be prepared that summarizes any~~The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants ~~onsite~~ to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, ~~an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends~~completed CNDDB field forms for each avoided occurrence on-site and within 100 feet of the Project boundary off-site, and description of the remedial action, if warranted and planned for the upcoming year. ~~Implementation~~ The completed forms shall include an inventory of the special-status plant ~~impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.~~occurrences and description of the habitat conditions, an indication of population and habitat quality trends.

BIO-21 IVS awaits Staff's proposed revisions.

SOIL&WATER-2 The Imperial Valley Solar Project plans to utilize groundwater purchased from the Dan Boyer Water Company, if recycled water is not available from the Seeley County Water District for project construction. Staff assumes the well will provide water for project operations and construction if the Seeley Wastewater Treatment Plant supply is not available. This condition limits water purchases from the Dan Boyer Water Company to ~~34~~ 39.5 acre-

feet per year, and specifies that water purchases and use restrictions have been met and documented by both Imperial Valley Solar and Dan Boyer Water Company. No later than ~~sixty~~ thirty (30) days before any use of water from the Dan Boyer well, the project owner shall document that all required metering devices are in place and maintained as required by the well owner's permit. An annual summary of daily water sales by the water purveyor differentiating between Imperial Valley Solar power purchases and other water customers (which need to be identified and which may be collectively accounted for) shall be submitted to the CPM in the annual compliance report. This report shall include copies of all the Dan Boyer Water Company invoices to Imperial Valley Solar as back-up for the reported sales and deliveries.

Verification: At least ~~60~~ thirty (30) days prior to use of water from the Dan Boyer Water Company for Imperial Valley Solar project, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the Dan Boyer Water Company well. In the annual compliance report, the project owner shall provide a report on the servicing, testing, and calibration of the metering devices.

The project owner shall submit a water use summary report to the CPM in the annual compliance report for the entire time that Imperial Valley Solar is using water from this well ~~life of the project~~. As part of this report, the project owner shall include the monthly sales invoices of all sales to Imperial Valley Solar by the Dan Boyer Water Company. The monthly sales invoices shall differentiate between water sold to Imperial Valley Solar and water sold to other customers (which need to be identified and which may be collectively accounted for). The annual water use summary report shall be based on the volume of water used by Imperial Valley Solar and shall distinguish recorded daily use of potable and operation water. The report shall include the project's daily maximum, monthly range, and monthly average in gallons per day, and the annual use in acre-feet. After the first year and for subsequent years, this information shall also include the yearly range and yearly average potable and operation water used by the project.

SOIL&WATER-9 If water is to be used from the Dan Boyer Water Company, the project owner shall provide the CPM two copies of the following: (1) Dan Boyer Water Company's well registration ~~use permit~~; (2) documentation and proof necessary to verify that all of Imperial County's specific terms for the well permit have been met; and (3) ~~the~~ an executed Water Purchase Agreement (agreement) or option between Imperial Valley Solar and the Dan Boyer Water Company for the long term supply of groundwater for the project. The agreement shall specify the agreed upon delivery rate to meet the Imperial Valley Solar project's maximum construction and operation requirements (maximum supply of ~~34~~ 39.5 acre-feet per year).

No later than 30 days prior to use of If recycled water from the Seeley Waste Water Treatment Facility (WWTF)becomes an alternative water supply, the project owner shall provide the CPM two copies of the executed Recycled Water Purchase Agreement (agreement) with the recycled waste water purveyor for the long-term supply (40 years) of disinfected tertiary recycled water to the Imperial Valley Solar project. The project shall not use recycled connection to a recycled water pipeline for project use. The agreement shall specify a delivery rate to meet Imperial Valley Solar project's maximum operation requirements and all terms and costs for the delivery and use of recycled water at the Imperial Valley Solar project. The Imperial Valley Solar project shall not use recycled water ~~connect to the new recycled water pipeline~~ without the final agreement in place and submitted to the CPM. The project owner shall comply with the requirements of Title 22 and Title 17 of the California Code of Regulations and section 13523 of the California Water Code insofar as it applies to use of water by the Imperial Valley Solar project.

The project owner shall work with the Seeley Waste Water Treatment Facility (SWWTF) to obtain approval from the RWQCB Division of Water Rights for the diversion of flows from the New River to the Imperial Valley Solar project.

Before ~~If~~ recycled water from the SWWTF is used available as the project's water supply, the project owner shall do the following:

1. Submit to the CPM evidence that the SWWTF has obtained approval from the RWQCB Division of Water Rights for any diversion of flows from the New River to the Imperial Valley Solar project;

2. Submit to the CPM evidence that a final agreement has been made between the project owner and the SWWTF that specifies the delivery rate to meet Imperial Valley Solar project's maximum operation requirements and all terms and costs for the delivery and use of recycled water by the Imperial Valley Solar project

3. Submit to the CPM evidence that metering devices are operational on the water supply and distribution systems.

4. Maintain metering devices as part of the water supply and distribution systems to monitor and record, in gallons per day, the total volume(s) of water supplied to Imperial Valley Solar project from the SWWTP. Those metering devices shall be operational for the life of the project.

5. For the first year of operation, the project owner shall prepare an annual Water Use Summary, which will include the monthly average of daily water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. For subsequent years, the annual Water Use Summary shall also include the annual water used by the project in prior

years. The annual Water Use Summary shall be submitted to the CPM as part of the annual compliance report.

Verification: No later than ~~60~~ thirty (30) days prior to use of water from the Dan Boyer Water Company well, ~~construction~~ the project owner shall submit two copies of the well registration ~~permit~~, including the necessary documentation and proof that the specific terms of the registration ~~permit~~ have been met, and the executed agreement or option for the supply of groundwater for the project. The agreement or option shall specify that the water purveyor can provide water at a maximum rate up to 250,000 gpd and a maximum of ~~34~~ 39.5 acre feet per year to the Imperial Valley Solar project.

No later than 30 days prior to use of water from the SWWTF, the project owner shall submit the items referenced in paragraphs 1 through 3 above. During the life of the project, while water from the SWWTF is being used, the project owner shall comply with items referenced in paragraphs 4 and 5 above.

TRANS-1 The IVS Project owner shall, in coordination with Imperial County, develop and implement a construction traffic control plan prior to earth moving activities. The plan should include scheduled delivery of heavy equipment and building material deliveries, coordination with the County of Imperial to mitigate any potential adverse traffic impacts from other proposed construction projects that may occur during the construction phase of IVS Project, and adequate access for emergency vehicles to the IVS Project site.

Specifically, the overall traffic control plan shall include the following:

- Schedule delivery of heavy equipment and building material deliveries, as well as the movement of hazardous materials to the site, including the adjacent lay-down area;
- Coordinate with the Imperial County to mitigate any potential adverse traffic impacts from other proposed construction projects that may occur during the construction phase of the project; and
- Ensure there is adequate access for emergency vehicles at the project site. The construction traffic control plan shall also include the following for activities of substantial stature:
- Signing, lighting, and traffic control device placement; and
- Temporary travel lane closures and potential need for flaggers.

Verification: At least ~~60~~ thirty (30) days prior to start of site mobilization, the project owner shall provide to the County of Imperial for review and comment and the Compliance Project Manager (CPM) for review and approval a copy of the construction traffic control plan.

TRANS-2 Prior to construction, the project owner shall receive the signed agreement from the San Diego Metropolitan Transit System (MTS) regarding the authority to construct the proposed railroad crossing. After the physical improvements are completed to the railroad crossing, the project owner shall receive written approval from the MTS as to the adequacy of the improvements.

Verification: At least ~~60~~ thirty (30) days prior to the start of site mobilization, the project owner shall provide the CPM a copy of the executed agreement with MTS regarding the proposed railroad crossing. No more than 3 months after completion of the railroad crossing improvements, the project owner shall provide the CPM with a copy of written approval from MTS regarding the adequacy of the grade crossing improvements.

TRANS-4 The project owner shall prepare and implement a SunCatcher Mirror Positioning Plan that would avoid the potential for human health and safety and significant visual distractions from solar radiation exposure.

Verification: At least ~~90~~ thirty (30) days before the commercial operation of the IVS Project, the project owner shall submit the SunCatcher Mirror Positioning Plan (MPP) to the CPM for review and approval. The project owner shall also submit the plan to California Department of Transportation (Caltrans), California Highway Patrol (CHP), the Federal Aviation Administration (FAA), and Imperial County for review and comment and forward any comments received to BLM's Authorized Officer and the CPM. The Mirror Positioning Plan shall accomplish the following:

- 1. Identify the mirror movements and positions (including reasonably possible malfunctions) that could result in possible exposure of observers at various locations including those in aircraft, motorists, pedestrians, and hikers to reflected solar radiation from the mirrors.
- 2. Describe within the MPP how programmed SunCatcher operation would avoid the potential for human health and safety hazards attributable to solar radiation at locations of observers where momentary solar radiation exposure might be greater than the Maximum Permissible Exposure of 10 kW/m^2 for a period of 0.25 second or less or where excessive brightness might be hazardous to motorists.
- 3. Prepare a monitoring plan that would a) obtain field measurements in response to legitimate complaints; b) verify that the Mirror Positioning Plan would avoid the potential for health and safety hazards, including temporary or permanent blindness, at locations of possible observers; c) provide requirements and procedures to document, investigate, and resolve legitimate complaints regarding glare or excessive brightness.

- 4. The monitoring plan shall be coordinated with the FAA, Caltrans, CHP, and Imperial County and be updated on an annual basis for the first five years and at 2-year intervals after that.

VIS-4 To reduce the visual dominance and glare effects of the SunCatchers to motorists on Highway I-8, the applicant shall employ a combination of measures as necessary, including set-backs of the nearest SunCatcher units to a distance of ~~360~~300 223 feet from the adjoining roadway or as necessary to avoid excessive glare and reduce visual height and dominance of SunCatchers, slatted fencing as described under Condition of Certification VIS-6, and set-backs of SunCatcher units from project fencing.

Verification: At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized Officer and the CPM a revised plan depicting how the proposed SunCatchers will be set back from the highway. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM. The project owner shall not begin construction until receiving BLM Authorized Officer and CPM approval of the revised plan.

VIS-6

1. The project owner shall insure the minimum distance from any SunCatcher reflector assembly to the property line shall be no less than ~~360~~300 223 feet to the nearest public roadway to reduce the possibility of flash blindness.

2. The project owner shall add a perforated metal diffusion shield to all SunCatchers behind the PCU to mitigate the 5% of the visible light spectrum that is observed in the operational images. If the PCU is approximately, 5'x7', then 2' on either side of the PCU should give a significant reduction in the halo effect.

3. The project owner shall modify the "offset tracking" procedure to require a 25° offset to minimize the presence of intrusive brightness.

4. The project owner shall modify the "Morning Stow to Tracking Transitions" timing to occur 30 minutes before sunrise and end in a 25° offset tracking position, ready to move into tracking position.

5. The project owner shall modify the "Night Stow" timing so it occurs 30 minutes after sunset to avoid any intrusive light effects.

6. The project owner shall develop an Emergency Glare Response Plan to quickly redirect a malfunctioning mirror to a safe orientation.

7. The project owner shall monitor the site during all hours of operation on a weekly basis for five years using video surveillance trucks to identify and document intrusive light conditions needing correction.

Verification: Within 90 days before commercial operation of any part of the generation system, the project owner will submit an Emergency Response Plan, a visual monitoring plan and a confirmation of the intrusive light reduction of the modifications of the SunCatcher units If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM . The project owner shall not begin commercial operation until receiving BLM Authorized Officer and CPM approval of the revised plan. Within 48 hours of receiving a glare complaint, the project owner shall provide the BLM Authorized Officer and CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation.

The project owner shall notify the BLM Authorized Officer and CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to the BLM Authorized Officer and CPM within 30 days.

WORKER SAFETY -8 As security only in the event that the project owner does not reach an agreement with Imperial County Fire Department pursuant to **WORKER SAFETY-7**(1), the ~~The~~ project owner shall:

Provide a $2,067,000 payment to Imperial County Fire Department prior to the start of construction. This funding shall off-set any initial funding required by **WORKER SAFETY-7** above until the funds are exhausted. This offset will be based on a full accounting by the Imperial County Fire Department regarding the use of these funds.

Verification: At least 30 days prior to the start of site mobilization the project, if project owner has not reached an agreement with the Imperial Fire Department pursuant to **WORKER SAFETY-7** (1), owner shall provide documentation of the payment described above to the CEC CPM. The CEC CPM shall adjust the payments initially required by WORKER SAFETY-7 based upon the accounting provided by the Imperial County Fire Department.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION FOR THE
IMPERIAL VALLEY SOLAR PROJECT
(formerly known as SES Solar Two Project)
IMPERIAL VALLEY SOLAR, LLC

Docket No. 08-AFC-5
PROOF OF SERVICE
(Revised 6/8/10)

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DECLARATION OF SERVICE

I, Darin Neufeld, declare that on August 17, 2010, I served and filed copies of the attached Applicant's Submittal of Attachment 2 to Reply Brief Regarding Revised Conditions of Certification. The original documents, filed with the Docket Unit, are accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:
[http://www.energy.ca.gov/sitingcases/solartwo/index.html]

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

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

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

_____ by personal delivery;

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

AND

FOR FILING WITH THE ENERGY COMMISSION:

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

OR

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

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-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.

Darin Neufeld

*indicates change