

| |
|----------------------------------|
| DOCKET 07-AFC-5 |
|----------------------------------|

STATE OF CALIFORNIA

Energy Resources Conservation
and Development Commission

| | |
|------|-------------|
| DATE | SEP 02 2010 |
|------|-------------|

| | |
|-------|-------------|
| RECD. | SEP 02 2010 |
|-------|-------------|

Application for Certification for the IVANPAH)
SOLAR ELECTRIC GENERATING SYSTEM)
)
)
_____)

Docket No. 07-AFC-5

APPLICANT'S COMMENTS
On
THE PRESIDING MEMBER'S PROPOSED DECISION
For
THE IVANPAH SOLAR ELECTRIC GENERATING SYSTEM

September 2, 2010

ELLISON, SCHNEIDER & HARRIS L.L.P.

Jeffery D. Harris

Greggory L. Wheatland

Samantha G. Pottenger

2600 Capitol Avenue, Suite 400

Sacramento, California 95816

Telephone: (916) 447-2166

Facsimile: (916) 447-3512

Attorneys for Ivanpah Solar Electric Generating System

TABLE OF CONTENTS

1
2
3
4 INTRODUCTION1
5 I. IN EITHER ITS CURRENT STATE IN THE PMPD, OR IN THE MORE
6 DAMAGING STATE PROPOSED BY STAFF SINCE RELEASE OF THE PMPD,
7 BIO-17 WILL MAKE IT IMPOSSIBLE TO FINANCE AND THUS BUILD THE
8 PROJECT1
9 A. BIO-17 Should Distinguish Between The Different Paths For (1) Project Owner
10 Land Acquisition And (2) Third Party Land Acquisition.....2
11 B. BIO-17 Should Not Dictate To BLM How BLM Will Use Its 1:1 Compensatory
12 Mitigation.....2
13 C. BIO-17’s “Double Counting” of the “Long-Term Management and Maintenance
14 Fund” Must Be Corrected.3
15 D. BIO-17 Should Allow For A Phase-In Of The Security Obligation.....4
16 II. THE CALIFORNIA DEPARTMENT OF FISH & GAME AGREES THAT THE
17 REAT PROGRAM DOES NOT AND SHOULD NOT APPLY TO THE IVANPAH
18 SOLAR PROJECT.....6
19 III. BIO-17 SHOULD NOT, AS THE STAFF HAS URGED IN ITS POST-PMPD
20 FILINGS, CONVERT THE “OPTIONAL, VOLUNTARY” SBX8 34 IN-LIEU FEE
21 PROGRAM INTO MANDATORY OBLIGATIONS.7
22 A. SBx8 34 Establishes an “Optional, Voluntary” Program that Requires Developers to
23 Affirmatively “Elect” to Join those To-Be-Developed Programs.8
24 B. Staff Seeks to Convert the Optional, Voluntary SBx8 34 In-Lieu Fee Programs into
25 Mandatory Conditions in BIO-17.....9
26 IV. THE COMMITTEE SHOULD ADOPT THE APPLICANT’S REVISED BIO-17 AS
27 IT IS SUPPORTED BY THE RECORD AND WILL ALLOW THE PROJECT TO
28 BE FINANCED AND CONSTRUCTED.10
29 A. Applicant’s Proposed Revisions to BIO-17 Present a Reasonable and Balanced
30 Approach to Desert Tortoise Mitigation That is Supported by the Record.10
31 B. Staff’s Revised BIO-17 Is Both Contrary to Law and Bad Public Policy.11
32 V. THE COMMITTEE DOES NOT HAVE TO DELAY THIS PROCEEDING TO
33 ADDRESS THE INTERVENORS' ARGUMENTS RELATED TO THE DESERT
34 TORTOISE RELOCATION PLAN BEING DEVELOPED BY THE FEDERAL
35 GOVERNMENT PURSUANT TO FEDERAL AUTHORITIES.....12
36 VI. BIO-18 SHOULD BE REVISED AS THE APPLICANT PROPOSES TO REFLECT
37 THE FACT THAT SEVERAL OF THE SPECIES OF CONCERN ARE “CRYPTIC”
38 AND CAN FOR ALL PRACTICAL PURPOSES DISAPPEAR FOR YEARS DUE
39 ONLY TO DROUGHT; THEREFORE MORE REALISTIC PLANT PROTECTION
40 GOALS ARE NECESSARY.....13

| | | | |
|----|------|---|----|
| 1 | VII. | THE PMPD SHOULD BE REVISED TO REFLECT SLIGHT CHANGES IN | |
| 2 | | OTHER IMPORTANT CONDITIONS OF CERTIFICATION. | 15 |
| 3 | A. | BIO-12 Should Be The March 29, 2010 Version Agreed to By the Parties, Not | |
| 4 | | Staff's Post-PMPD Revisions. | 15 |
| 5 | B. | Staff's New Condition BIO-21 Purports to Address an Impact Found to Be Less | |
| 6 | | than Significant, and Thus Staff's Addition Is Not Supported by the Record..... | 16 |
| 7 | C. | BIO-20 Regarding Waters of the State Should Be Revised to Parallel the Desert | |
| 8 | | Tortoise Mitigation Obligations in BIO-17 | 16 |
| 9 | D. | While REC-1 Is Not Required as Matter of Law, The Staff and Applicant Have | |
| 10 | | Agreed to Revised Language for REC-1 To Memorialize the Applicant's | |
| 11 | | Commitment to Built an Interpretative Center. | 17 |
| 12 | E. | To Correct A Cut and Paste Error, TRANS-4 In the PMPD Should be Deleted and | |
| 13 | | Former TRANS-5 Renumbered and Reinstated. | 17 |
| 14 | F. | The Committee Should Reject Staff's Post-PMPD Suggested Changes Finding New | |
| 15 | | Significant Impacts | 18 |
| 16 | | CONCLUSIONS..... | 18 |
| 17 | | | |

1 **INTRODUCTION**
2

3 We thank the Committee for its continuing hard work on this project. We have several
4 comments on the PMPD, as noted below, but ask that the Committee place its highest priority on
5 reviewing and reconsidering BIO-17. In particular, the Commission should consider how this
6 condition would be implemented, as it appears to us to not only be infeasible, but to place
7 demands on the project that would make the project itself infeasible.

8 **I. IN EITHER ITS CURRENT STATE IN THE PMPD, OR IN THE MORE**
9 **DAMAGING STATE PROPOSED BY STAFF SINCE RELEASE OF THE PMPD,**
10 **BIO-17 WILL MAKE IT IMPOSSIBLE TO FINANCE AND THUS BUILD THE**
11 **PROJECT .**
12

13 In its current confusing state in the PMPD, or in the more damaging state proposed by
14 Staff since release of the PMPD, BIO-17 unnecessarily threatens the viability of the Ivanpah
15 Solar Electric Generating System project— unless the condition is modified, consistent with the
16 record in this proceeding. In requesting the Committee to reexamine BIO-17, Applicant
17 respectfully requests that the Committee take one of two actions. First, the Applicant
18 respectfully requests that the Committee replace the PMPD version of BIO-17 with the
19 Applicant’s revised BIO-17. In the alternative, if the Committee is unwilling to use the
20 Applicant’s proposed version of BIO-17, the Applicant respectfully requests that the Committee
21 include within the Commission’s Final Decision a clear statement of Commission “Intent” as to
22 exactly how the Committee envisions the implementation of BIO-17. That statement of
23 Commission Intent would be a road map for what is now a confusing, and unimplementable,
24 obligation.

25 In significant part, Applicant is concerned that it does not fully understand Condition
26 BIO-17, and either would be unable to implement it as written or, due to that lack of
27 understanding, would inadvertently fail to fulfill the Commission’s intent, whether through
28 action or omission. At the PMPD Hearing, we suggested that the Staff version of BIO-17, in
29 particular, be “mapped out” to evaluate whether it could in fact be implemented as written.
30 Applicant submits that it cannot.

1 Fortunately, BIO-17, as provided in the PMPD, can be revised with minimal changes to
2 conform to record in this proceeding and the applicable standards, providing a reasonable and
3 implementable condition. BIO-17 should be revised to accomplish the following:

- 4 A. BIO-17 should distinguish between the different paths for (1) project owner land
5 acquisition and (2) third party land acquisition.
- 6 B. BIO-17 should not presume to dictate to BLM how BLM will use its 1:1 compensatory
7 mitigation.
- 8 C. BIO-17's "Double Counting" of the "Long-Term Management and Maintenance Fund"
9 should be corrected.
- 10 D. BIO-17 should expressly provide for a phase-in of the Security obligation.
- 11 E. BIO-17 should not, as the Staff has urged in its post-PMPD filings, convert the voluntary
12 SBx8 34 in-lieu fee program into mandatory obligations.

13
14 Applicant has proposed revisions to the PMPD's versions of BIO-17, consistent with
15 these concepts. Applicant's proposed revisions are provided in Attachment 1 hereto.

16
17 **A. BIO-17 Should Distinguish Between The Different Paths For (1) Project Owner**
18 **Land Acquisition And (2) Third Party Land Acquisition.**

19 The PMPD offers two distinct, but related paths for the satisfaction of the Staff-requested
20 acquisition of additional desert tortoise compensation lands: (1) project owner acquired lands
21 and (2) third party acquired lands via an in-lieu fee program.

22 While both paths aim at ensuring that lands are acquired, the paths are distinct. The
23 Applicant's proposed revisions to BIO-17 recognize these two distinct paths. The Applicant has
24 added to the PMPD's language "Verification" language with two separate headings: "Project
25 Owner Acquired Lands" and "Third-Party Acquired Lands."

26 **B. BIO-17 Should Not Dictate To BLM How BLM Will Use Its 1:1 Compensatory**
27 **Mitigation.**

28 The Commission has been clear in that it respects the powers, authorities and duties of its
29 federal partner, the BLM. However, the PMPD version of BIO-17 presumes to dictate to the
30 BLM precisely how the BLM should use its 1:1 compensation funds:

1 The remaining third of the 3:1 compensatory mitigation, to satisfy
2 BLM’s mitigation requirements and the balance of the Energy
3 Commission’s mitigation requirements, shall be developed in
4 accordance with BLM’s desert tortoise mitigation requirements as
5 described in the Northern and Eastern Mojave Desert Management
6 Plan (BLM 2002). BLM’s compensatory mitigation plan, serving
7 as one third of the 3:1 mitigation ratio required to satisfy CESA,
8 would include acquisition of up to 4,073 acres [sic] of land within
9 the Eastern Mojave Recovery Unit, or desert tortoise habitat
10 enhancement or rehabilitation activities that meet BLM, CDFG,
11 USFWS and Energy Commission approval, or some combination
12 of the two.
13

14 As a matter of law, the Commission cannot legally bind the BLM in the BLM’s implementation
15 of its plenary authority under federal law. As a matter of practice, the Commission’s respect for
16 its federal partner means that BIO-17 should not contain provisions that purport to limit the
17 BLM’s exercise of its legal authorities under federal law.

18 Applicant’s revised BIO-17 removes this language in favor of recognition of the legally
19 defensible position that BLM’s 1:1 mitigation will be employed by BLM consistent with BLM’s
20 “responsibilities as the federal land manager.” As recognition of the federal mitigation
21 obligations, Applicant’s proposal also includes acknowledgement of the BLM’s determination
22 that the compensatory mitigation for the project shall include 50 miles of desert tortoise fencing
23 in the Northeastern Mojave Recovery Unit and the habitat restoration of at least 50 off-road
24 vehicle routes within the Desert Wildlife Management Area.

25 **C. BIO-17’s “Double Counting” of the “Long-Term Management and Maintenance**
26 **Fund” Must Be Corrected.**

27 Given the complexity of Staff’s proposed BIO-17, it is not surprising that it contains a
28 “double counting” of the “Long-Term Management and Maintenance Fund.” This double
29 counting should be corrected so that Applicant has, at most, a single obligation to pay any Long-
30 Term Management and Maintenance Fund.

31 The Long-Term Management and Maintenance Fund was formerly referred to as an
32 “endowment.” The funds are intended to provide, as the new, longer name suggests, for the
33 Long-Term management and maintenance of acquired lands. Logic dictates that this fee should
34 be imposed only once.

1 Unfortunately, the Long-Term Management and Maintenance Fund is double counted.
2 First, there is a Long-Term Management and Maintenance Fund imposed as part of the
3 “Security” formula for the in-lieu fee in BIO-17’s Section 4, “Energy Commission
4 Complementary Mitigation Security” on pages 65-66 of the PMPD. Second, the Long-Term
5 Management and Maintenance Fund is included as a separate and distinct separate obligation
6 under 5.d of the PMPD, “Long-Term Management Endowment Fund” on page 67.

7 The effect of the double-counting of the Long-Term Management and Maintenance Fund
8 is the payment of a Long-Term Management and Maintenance Fund in 5.d that compounds the
9 Long-Term Management and Maintenance Fund in Section 4. Like compounding interest, the
10 Applicant is asked to pay a Long-Term Management and Maintenance Fund that includes in its
11 base calculation a second Long-Term Management and Maintenance Fund. This double-
12 counting must be removed.

13 To correct this double-counting error, the Applicant’s revised BIO-17 removes the Long-
14 Term Management and Maintenance Fund line item from Section 4 of the PMPD version of
15 BIO-17. The Long-Term Management and Maintenance Fund remains in the language
16 preserved from the PMPD’s Section 5.

17 The inclusion of the Long-Term Management and Maintenance Fund in the Section 5.d
18 language is correct in that this fee should be separate and distinct from the Security to reflect the
19 Project Owner Acquired Lands scenario. If the project owner successfully secures lands, there
20 should be a single Long-Term Management and Maintenance Fund, as reflected in the Section
21 5.d language. The Long-Term Management and Maintenance Fund is thus counted only once, as
22 it should be.

23 **D. BIO-17 Should Allow For A Phase-In Of The Security Obligation**

24 BIO-17 should allow for a phase-in of the Security obligation. Such a phase-in of
25 Security obligations is consistent with the phasing of the three powerplants over a 48-month
26 construction period. A phase-in is also consistent with the fact that “security” of land acquisition
27 is moot if and when sufficient suitable lands are acquired; that is, posting security to acquire
28 lands is moot once those lands have been identified and secured by a legally binding option
29 agreement or other legal instrument.

30 To be clear, the Appellant is not suggesting that mitigation be delayed; instead, the
31 Applicant is simply seeking to synchronize the phased-construction schedule with a phase-in

1 Security schedule. As set forth below, the Security payment can and should proceed in sync with
2 the phasing of the construction schedule.

3 It is important to recognize the significant and very real distinction between the capital
4 costs structure and front-loaded capital outlay for this renewable, solar energy project and that of
5 a conventional generation facility.

6 In a conventional generating facility, like a natural-gas fired powerplant or even coal and
7 nuclear power, the most significant costs are the costs of fuel. Those fuel costs are spread out
8 over the life of the project. For example, a natural gas project is not required to pay for all of its
9 natural gas fuel costs up front. Instead, the fuel costs can be spread across the useful life of the
10 natural gas facility. Moreover, over the life of that facility, the conventional plant operator will
11 have the opportunity to “hedge” its fuel prices over several years, adjusting and improving its
12 fuel costs over time or gaining certainty through Long-Term commitment.

13 In marked contrast, all of the costs of this solar thermal facility are borne up front. The
14 solar renewable projects major costs are the upfront capital costs. All of that capital must be
15 “front loaded” in terms of equipment, materials, and labor. While there are obvious savings in
16 the “out years” from not having to manage for a fuel cycle, the fact remains that the capital costs
17 and indeed the majority of the costs for a solar thermal project are “up front” costs. Consistent
18 with the State of California’s Renewable Portfolio Standard (“RPS”) and greenhouse gas
19 (“GHG”) policy objectives, the Commission must be take into consideration the impacts of
20 “front loading” mitigation costs in a manner that is inconsistent with the projects potential
21 impacts.

22 Applicant’s revised BIO-17 synchronizes the phased construction with the phased-in
23 Security as follows:

- 24 • At least fifteen days prior to commencement of construction of Ivanpah 1, the
25 Construction Logistics Area and the access road and power block to Ivanpah 2, the
26 project owner shall also provide the initial installment of Security in the amount of thirty
27 two percent (32%) of the Total Security. This security will cover the percentage of land
28 disturbed by fencing Ivanpah 1, the Construction Logistics Area and the access road and
29 power block to Ivanpah 2.
- 30
31 • At least fifteen days prior to commencement of construction of the remainder of Ivanpah
32 2 and Ivanpah 3, the project shall either (1) provide the final installment of Security in the
33 amount of sixty eight percent (68% of the Total Security) or (2) provide information that
34 demonstrates to the CPM and the BLM’s Authorized Officer that 7,164 acres of land

1 suitable for desert tortoise has been identified and secured through a legally binding
2 option agreement or other legal instrument.
3

4 The phasing of Security to be synchronized with the phasing of construction is the only
5 reasonable and feasible means for the Ivanpah Solar Electric Generating System to be
6 constructed.

7 If the Commission, instead, elects to “front load” Security obligations, that front-loading
8 coupled with the need to front-load the capital costs of this renewable facility may make it
9 impossible to finance the Project. Applicant’s revised BIO-17 offers a means of synchronizing
10 Security with the phased construction schedule in a manner that will allow this important project
11 to jumpstart California’s progress toward meeting its RPS and GHG goals.
12

13 **II. THE CALIFORNIA DEPARTMENT OF FISH & GAME AGREES THAT THE**
14 **REAT PROGRAM DOES NOT AND SHOULD NOT APPLY TO THE IVANPAH**
15 **SOLAR PROJECT.**
16

17 Staff points to one table, a July 23, 2010 document titled “Desert Renewable Energy
18 REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the
19 REAT-NFWF Mitigation Account” as the basis for draconian changes to BIO-17. However, the
20 California Department of Fish & Game (“CDFG”) disagrees with the use of this REAT table for
21 the Ivanpah Project.

22 In a letter dated September 1, 2010 to the Committee for this proceeding, Kevin Hunting,
23 Chief Deputy Director of CDFG, clarifies that the REAT document is a “working draft” that
24 should not and does not apply to the Ivanpah Solar Project:
25

26 The document is a working draft that does not yet reflect the
27 position of all of the REAT agencies with respect to biological
28 mitigation implementation and it lacks the context of representing
29 only one of several available mitigation options. As such it does
30 not reflect the Department’s approach to securing mitigation costs
31 and includes costs that may not be relevant for the state to exact.
32 (CDFG Letter, September 1, 2010, p. 1; Attachment 2 hereto.)
33

34 CDFG is unambiguous in stating that the draft REAT table, relied upon by Staff for its post-
35 PMPD revisions to BIO-17, is simply not relevant or applicable to the Ivanpah Solar Project:

1
2 We therefore recommend either removal of the table from any
3 official decision-making document or clarify that it is a working
4 draft REAT document and *should not be relied upon for this*
5 *specific project.* (*Id.*; emphasis added.)
6

7 There is no doubt that Staff relied on the REAT numbers for its post-PMPD changes to BIO-17,
8 as well as BIO-16, BIO-18, and BIO-20. As Staff witness Dr. Sanders testified at the August
9 24th hearing:

10 MS. SANDERS: Waters of the state, desert tortoise compensatory
11 mitigation and rare plant land acquisitions all reflect the new
12 REAT numbers.
13

14 MR. DE YOUNG: Which condition numbers are those?
15

16 MS. SANDERS: That would be -- so it would be 17,
17 18 -- oh, Bio 19, bighorn sheep mitigation, and Bio 20.
18

19 MR. HARRIS: 17.
20

21 MS. SANDERS: And 16. I'm sorry. Let me go through it again.
22 Bio 16, burrowing owl. Bio 17, desert tortoise compensatory
23 mitigation. Bio 18, special status plant mitigation. And not Bio
24 19. There's no land acquisition with that. Bio 20, stream bed
25 measures. Any other? That's it. (8/24 RT p. 88.)
26

27 The Staff's reliance on this working draft REAT document is simply misplaced.

28 It would be wholly inappropriate to accept the Staff's invitation to use this draft
29 document as the basis for mitigation costs for this Project. Accordingly, the Commission should
30 give the Staff's post-PMPD revisions to BIO-17 no weight and instead adopt Applicant's revised
31 BIO-17.

32 **III. BIO-17 SHOULD NOT, AS THE STAFF HAS URGED IN ITS POST-PMPD**
33 **FILINGS, CONVERT THE "OPTIONAL, VOLUNTARY" SBx8 34 IN-LIEU FEE**
34 **PROGRAM INTO MANDATORY OBLIGATIONS.**
35

36 BIO-17 should not, as the Staff has urged in its post-PMPD filings, convert the voluntary
37 SBx8 34 in-lieu fee program into mandatory obligations. Instead BIO-17 should allow for the
38 possibility that the project owner could later "volunteer" to join the to-be-developed SBx8 34 in-
39 lieu fee program, subject to that later participation being approved by the CPM as satisfying the

1 substantive requirements of BIO-17. The Committee should make none of the SBx8 34 changes
2 proposed by Staff in its post-PMPD filings.

3 The SBx8 34 programs hold promise, but they do not exist today. Accordingly, BIO-17
4 should allow for the possibility that the project owner could later “volunteer” to join the to-be-
5 developed SB 34 in-lieu fee program, subject to that later participation being approved by the
6 CPM as satisfying the substantive requirements of BIO-17. Applicant’s revisions to BIO-17
7 allow for the possibility of future participation in the yet-to-be-developed SBx8 34 in-lieu fee
8 programs.

9 **A. SBx8 34 Establishes an “Optional, Voluntary” Program that Requires Developers**
10 **to Affirmatively “Elect” to Join those To-Be-Developed Programs.**

11 CDFG’s position on the inapplicability of the draft working REAT document is
12 unambiguous.¹ In addition, there can be no doubt that the programs established by SBx8 34 are
13 *voluntary*. The plain language of SBx8 34 is unambiguous. Section 2099(b)(3) provides: “The
14 fund shall serve, and be managed, as an optional, voluntary method for developers or owners of
15 eligible projects to deposit fees to complete mitigation actions meeting the conditions of
16 subdivision (c) of Section 2069....” (Emphasis added.)

17 Similarly, Section 2099(b)(5) notes that the program applies only if the developer makes
18 an affirmative election to volunteer for the SBx8 34 programs: “A developer or owner of an
19 eligible project that elects to use mitigation actions developed and authorized by the department
20 pursuant to Section 2069 shall remit fees to the department for deposit into the fund for those
21 mitigation actions in an amount that reflects the determination by the Energy Commission....”
22 (Emphasis added.) Similarly, Section 2099(b)(1) allows for the “department shall collect a fee
23 from the owner or developer of an eligible project that elects to use mitigation actions developed
24 and approved by the department pursuant to Section 2069....” (Emphasis added.)

25 Even the Legislative Counsel’s Digest² reflects the optional, voluntary nature of the SBx8
26 34 program, requiring the developer to affirmatively volunteer:

¹ In the interest of clarity, CDFG’s letter speaks to the inapplicability of the working draft REAT table to the Ivanpah Project. CDFG has not reviewed Applicant’s PMPD comments, in general, or Applicant’s proposed revisions to the PMPD conditions, in particular. CDFG’s letter should not be read as an endorsement of Applicant’s PMPD comments.

² Though not part of the statutory language, the Legislative Counsel’s Digest has been relied upon as a source of determining legislative intent.

1 “The bill would establish the Renewable Energy Resources
2 Development Fee Trust Fund as a continuously appropriated fund
3 in the State Treasury to serve, and be managed, as an optional,
4 voluntary method for developers or owners of eligible projects, as
5 defined, to deposit fees sufficient to complete mitigation actions
6 established by the department and thereby meet their requirements
7 pursuant to CESA or the certification authority of the Energy
8 Commission.” (Emphasis added.)
9

10 The plain language of SBx8 34 programs is unambiguous: these SBx8 34 programs are
11 optional, voluntary programs that require an election be made, if and when those programs are
12 finalized. Moreover, without an APA-compliant rulemaking, the SBx8 34 programs will be
13 “guidance” subject to change as Administrations and agency personnel change. Staff’s attempts
14 to convert the optional into the mandatory in Staff’s post-PMPD filings must be rejected.

15 **B. Staff Seeks to Convert the Optional, Voluntary SBx8 34 In-Lieu Fee Programs**
16 **into Mandatory Conditions in BIO-17.**

17 The Staff’s post-PMPD filings on BIO-17 seek to convert the optional, voluntary SBx8
18 34 programs into mandatory Conditions of Certification. As a matter of law, the Commission
19 must reject Staff’s efforts to convert an optional, voluntary program into a mandatory program.

20 The working draft REAT document is titled, “Desert Renewable Energy REAT
21 Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the
22 REAT-NFWF Mitigation Account.” (Emphasis added.) “NFWF” is the “National Fish and
23 Wildlife Foundation.” The “REAT-NFWF Mitigation Account” – Staff’s sole basis for its post-
24 PMPD changes to BIO-17 -- was created by SBx8 34.

25 Section 2099(b)(2) of SBx8 34 states, “ Upon direction by the department, the Controller
26 shall create any accounts or subaccounts within the fund that the department determines are
27 necessary or convenient to facilitate management of the fund.”

28 As explained in the SBx8 34 Draft Interim Mitigation Strategy (“IMS”), the NFWF
29 account is a SBx8 34 established account:

30 “Concurrent with development of the IMS, the Department has
31 taken the following actions to ensure SB 34 provisions will be
32 operational:

33 1) Established, through the National Fish and Wildlife Foundation
34 (NFWF) MOU, processes to accept and manage mitigation funds
35 received under the in-lieu fee program and that DIG can authorize
36 money to be disbursed from the trust account into NFWF’s REAT

1 account under DFG's authority to contract with 3rd parties to
2 implement the mitigation actions. (Draft IMS, p. 22.)
3

4 The "REAT-NFWF Mitigation Account" exists because SBx8 34 creates the program. For Staff
5 to argue otherwise, defies both the facts and logic.

6 Staff attempts to cure this fatal flaw by suggesting that the SBx8 34 based REAT
7 program "may be revised with updated information." (Staff's PMPD Comments – Set 1, p. 45.)
8 This is a smokescreen. Converting an option, voluntary program into a mandatory condition is
9 not cured by simply requiring the project owner to comply with the "updated" SBx8 34
10 calculations.

11 Staff's post-PMPD changes to BIO-17 are all predicated on converting the "optional,
12 voluntary" SBx8 34 programs into mandates. The Staff cites to a July 23, 2010 REAT document
13 that – in addition to being draft – expressly states in the title to the document that it must be
14 "used with the "REAT-NFWF Mitigation Account." SBx8 34 dictates voluntary participation,
15 meaning Staff cannot convert the program to a regulatory mandate. Staff's post-PMPD revision
16 must be rejected in total.

17 **IV. THE COMMITTEE SHOULD ADOPT THE APPLICANT'S REVISED BIO-17 AS IT**
18 **IS SUPPORTED BY THE RECORD AND WILL ALLOW THE PROJECT TO BE**
19 **FINANCED AND CONSTRUCTED.**
20

21 The discussion above in Section I sets forth the Applicant's prospered improvements to
22 BIO-17. Section II explains why the Commission should not adopt the SBx8 34 mitigation
23 scheme proposed by Staff in its post-PMPD filings. This section summarizes the Applicant's
24 proposed changes to BIO-17, consistent with the record in this proceeding.

25 **A. Applicant's Proposed Revisions to BIO-17 Present a Reasonable and Balanced**
26 **Approach to Desert Tortoise Mitigation That is Supported by the Record.**

27
28 Attachment 1 sets forth Applicant's revised BIO-17. In summary, as revised by the
29 Applicant, BIO-17 does the following:

- 30 1. Distinguishes between the different paths for (1) project owner land acquisition and (2)
31 third party land acquisition. (Verification Sections 1 and 2)
32
- 33 2. Removes the CEC Staff's attempts to dictate to BLM how BLM will use its 1:1
34 compensatory mitigation. (Condition language deletions)

- 1 3. Keeps, with revisions, Staff’s criteria for compensation lands. (Section 3)
- 2
- 3 4. Allow for a phase-in of the Security obligation: (Section 4)
- 4 a. Separate paths for project owner acquired lands versus third party acquired lands
- 5 b. Removes the “double counting” of Endowment money, by eliminating the
- 6 endowment from the Security section. Security is for acquisition. These
- 7 enumerates costs should be acquisition related costs only. Endowment is covered
- 8 separately in Section 6.
- 9
- 10 5. Keeps the Staff’s transfer of title provisions, with slight revisions. (Section 5)
- 11
- 12 6. Keeps and revises Staff’s Long-Term Management and Maintenance (endowment)
- 13 concept. (Section 6)
- 14
- 15 7. Keeps Staff’s Post-Construction Reporting Requirements. (Section 7)
- 16
- 17 8. Allows for “optional voluntary” SBx8 34 participation, using the “optional, voluntary”
- 18 language of the statute. (Section 8)
- 19
- 20 9. Corrects acreages to correspond to the acreage numbers set forth in the Applicant’s
- 21 Biological Mitigation Proposal (also known as Mitigated Ivanpah 3) (Ex. 88) and uses
- 22 these corrected acreages in the calculations set forth in revised BIO-17.
- 23

24 **B. Staff’s Revised BIO-17 Is Both Contrary to Law and Bad Public Policy.**

25
26 As discussed above, the Staff’s post-PMPD changes to BIO-17 convert an optional,
27 voluntary program into a regulatory mandate. As such, they are contrary to law.

28 From a policy perspective, Staff originally sought \$20 million dollars for Desert Tortoise
29 mitigation with a 25% additional cap for a total obligation of approximately \$25 million – a little
30 more than \$1 million dollars for each of the twenty-three live desert tortoise found on or adjacent
31 to the site during protocol-level surveys (in fact, under the M3 Proposal, the number of tortoise
32 within the area of the site would only be seventeen). In its so-called “REAT” formulation, the
33 Staff has (1) increased the base dollar amount from \$20 million to approximately \$25 million
34 and (2) removed the cap, all in the name of “certainty.” The project is “certainly” in grave
35 jeopardy if BIO-17 remains unchanged.

36 As was established at the August 24th Committee Conference, SBx8 34 provides only \$10
37 million for “advanced mitigation” for the entire State of California and, unlike the fees that must
38 be paid by private parties, that \$10 million must be repaid to the State, pursuant to Section
39 2009(b)(4). In this case, Staff’s post-PMPD changes to BIO-17 seek more than \$25 million and

1 that \$25 million is subject to being increased as land costs increase, a virtual certainty with state-
2 mandated land acquisition requirements.

3 Can it really be the policy of the State of California to provide \$10 million capped for a
4 state-wide program that must be repaid while asking one renewable project to provide a
5 minimum of \$25 million uncapped for a single project?

6 No, it cannot.

7 As both a matter of law and policy, the Committee should accept the Applicant's revised
8 BIO-17.

9 **V. THE COMMITTEE DOES NOT HAVE TO DELAY THIS PROCEEDING TO**
10 **ADDRESS THE INTERVENORS' ARGUMENTS RELATED TO THE DESERT**
11 **TORTOISE RELOCATION PLAN BEING DEVELOPED BY THE FEDERAL**
12 **GOVERNMENT PURSUANT TO FEDERAL AUTHORITIES.**
13

14 At the August 24, 2010, PMPD Conference and Evidentiary Hearing, the Intervenors
15 expressed much concern and consternation regarding the DRAFT Biological Opinion and its
16 desert tortoise relocation or translocation plan. While the Intervenors suggest that the Committee
17 cannot proceed without the final desert tortoise translocation plan, this is simply untrue.

18 To begin, the PMPD appropriately addresses the federal desert translocation plan.
19 Specifically, Condition BIO-7 provides, among other things, that "The BRMIMP shall
20 incorporate avoidance and minimization measures described in final versions of the Desert
21 Tortoise Translocation Plan...." Similarly, BIO-9 requires, "The project owner shall develop
22 and implement a final Desert Tortoise Relocation/Translocation Plan (Plan) that is consistent
23 with current USFWS approved guidelines, and meets the approval of BLM, USFWS, CDFG and
24 Energy Commission staff." The PMPD covers all aspects of translocation. There are no gaps.

25 Next, it is important to remember that the translocation plan being developed as part of
26 the DRAFT federal Biological Opinion is a creature of *federal law*. To the extent this issue is
27 one of federal law, the Commission preempted. There are no decisions that the Commission
28 must (or can) make on these federal issues and thus no reason for delay of these state law
29 proceedings.

30 Further, Commission precedent confirms that the Commission need not have a final
31 federal Biological Opinion before it acts to certify a project. The Sutter Powerplant Project, the
32 Delta Energy Center, and the Metcalf Energy Center, to name just a few, were all certified before

1 the final federal Biological Opinion was issued. Each contained conditions similar to BIO-7 and
2 BIO-9 in the PMPD. There were no defects in those prior cases given the imposition of
3 appropriate Conditions of Certification, and there are no defects here. The federal nature of the
4 Biological Opinion means that the Commission need not make any decision related to these
5 issues before certifying the project.
6

7 **VI. BIO-18 SHOULD BE REVISED AS THE APPLICANT PROPOSES TO REFLECT**
8 **THE FACT THAT SEVERAL OF THE SPECIES OF CONCERN ARE “CRYPTIC”**
9 **AND CAN FOR ALL PRACTICAL PURPOSES DISAPPEAR FOR YEARS DUE**
10 **ONLY TO DROUGHT; THEREFORE MORE REALISTIC PLANT PROTECTION**
11 **GOALS ARE NECESSARY.**
12

13 Staff and Applicant were largely in accord with most of the proposed language for BIO-
14 18. This accord is reflected in the March 29, 2010 Staff’s Compilation of Edits to recommended
15 Conditions of Certification.

16 Applicant proposes additional revision to the language from Exhibit 317 to assure that
17 plant “Protection Goals” are practical and attainable. Specifically, for field verification in this
18 desert environment it is important to distinguish between (1) long-lived perennials (desert
19 pincushion and Parish’s club-cholla) which are present year in and year out regardless of the
20 rainfall that occurs, and (2) plants that are adapted to drought by dying back and/or going to
21 seed, thereby “hiding” from the substantial and prolonged drought periods that typify the desert,
22 are “cryptic.” These cryptic plants typically exhibit large swings in germination and growth in
23 response to precipitation variability and include the nine-awned pappus grass, Mojave milkweed,
24 and Rusby’s desert-mallow. Cryptic species thrive in wet years and remain largely dormant in
25 dry years. They are *not* long-lived perennials that are present in wet and dry years.

26 For example, in 2007 no plants of the nine-awned pappus grass were found during
27 intensive survey but, in 2008, there were more than 8,000 individual localities of nine-awned
28 pappus grass. Low rainfall prevailed in 2007, while above normal rainfall supported unusually
29 lush vegetation conditions in 2008. While a 75 percent protection goal is practical for long-lived
30 perennials like the pincushion and club-cholla, because of the nature of the other species’
31 adaptation to the desert’s highly variable precipitation regime, a 75% goal for them cannot be
32 implemented in any meaningful way , due to the enormous variability inherent in cryptic plants.

1 The Applicant of course agrees to retain the seventy-five percent protection goal for the
2 two rare cactus species, since under natural conditions individuals of these species do persist
3 from year to year. These are set forth and defined in *Ex.88* as complete avoidance by removal of
4 476 acres of project acreage and establishing three Rare Plant Mitigation Areas or through
5 salvage/transplantation of individual plants onsite. For two remaining species, Mojave milkweed
6 and Rusby's desert mallow, protection will be accomplished by removing 476 acres from the
7 project area, and by establishing three Rare Plant Mitigation Areas, in addition to installing
8 protective fencing around individuals within the heliostat array, to the maximum extent it is
9 feasible to do so. Because the nine-awned pappus grass emerges in abundance only in years with
10 adequate summer rains, the establishment of numerous small fences "halos" within the heliostat
11 array is infeasible for this species. Based on the field surveys, it is expected that a considerable
12 seed bank for nine-awned pappus grass is present in the Rare Plant Mitigation Areas onsite that
13 would continue to be expressed in favorable years. Monitoring of these areas will be conducted
14 and prescribed in the Special-Status Plant Remedial Action Plan.

15 Applicant has also removed the reference to conducting additional spring/fall rare plant
16 surveys because they would not contribute information useful in defining the Special-Status
17 Plant Protection Areas. Reconnaissance conducted the week of August 23, 2010 documents the
18 failure of summer rains (not an uncommon event in the typically summer-dry Mojave Desert)
19 and consequent absence of any summer-fall germination or growth. The existing survey data are
20 sufficient. Rare plant surveys of the entire site including the one mile buffer were conducted in
21 2007 and again in 2008. As the CEC Staff stated, these surveys "were of the highest professional
22 quality and met all applicable guidelines" in place at the time surveys were conducted (*Staffs*
23 *Reply Brief dated 4/16, page 24.*) Additionally, Applicant's submittals have been found to be
24 data adequate. Additional data will not substantially assist with defining the location of Special-
25 Status Plant Protection Areas. Three Rare Plant Mitigation Areas have already been defined in
26 the Applicant's February 2010 Biological Mitigation Proposal ("Mitigated Ivanpah 3") (*Ex. 88*).
27 The location of the Special-Status Plant Protection Areas within the heliostat array will be
28 defined to a large extent by engineering constraints such as the location of the drive zones in
29 between the heliostat rows. For these reasons, additional preconstruction surveys are unnecessary
30 and overly burdensome.

1 Applicant has also removed reference to the purchase of Mojave milkweed acquisition
2 lands and long-term surveys on public lands for the sake of obtaining information on rare plants
3 located beyond the project boundary. Rare plant mitigation described in the Applicant's February
4 2010 Biological Mitigation Proposal ("Mitigated Ivanpah 3") (Ex. 88), includes removal of 476
5 acres from the project, the establishment of three Rare Plant Mitigation Areas, the
6 salvage/transplantation of rare cactus located outside the Rare Plant Mitigation Areas, and the
7 installation of protective fencing around Mojave milkweed and Rusby's desert mallow localities
8 within the heliostat array. Rare plant mitigation will be monitored by the Applicant over the
9 long-term, to document that rare plant mitigation is functioning successfully. Should mitigation
10 be found unsuccessful, remedial measures will be implemented as described in the Rare Plant
11 Avoidance and Protection Plan. Mitigation proposed by the Applicant for this project is in
12 proportion to the magnitude of the impact and is adequate to offset rare plant losses. In
13 particular, surveys of public lands for duration of up to ten years would not offset rare plant
14 impacts related to the proposed project and they are overly burdensome. Applicant revisions to
15 BIO-18 are attached hereto in Attachment 1.

16 **VII. THE PMPD SHOULD BE REVISED TO REFLECT SLIGHT CHANGES IN**
17 **OTHER IMPORTANT CONDITIONS OF CERTIFICATION.**
18

19 There are a number of Conditions of Certification that require modification. The text for
20 changes to Conditions of Certification (other than BIO-17 and BIO-18) are included in
21 Attachment 3.

22 **A. BIO-12 Should Be The March 29, 2010 Version Agreed to By the Parties, Not**
23 **Staff's Post-PMPD Revisions.**

24 As stated in its August 26, 2010 letter to Hearing Officer Kramer regarding clerical errors
25 in the PMPD language, Applicant supports adopting the revised language agreed to by Staff and
26 Applicant as set forth in Staff's March 29, 2010 filing entitled, Energy Commission Staff's
27 Compilation of Edits to Recommended Conditions of Certification- Ivanpah Solar Electric
28 Generating System (07-AFC-05). (Ex. 317.)

29 In its post-PMPD filings, Staff seeks to impose a Raven Management Fee. This fee
30 program is not mentioned in the record of this proceeding. If and when a final, regional plan is

1 developed, the Ivanpah Solar Electric Generating System, like every other project, would be
2 subject to the then-created, legally-enforceable program.

3 It is plain legal error for the Commission to add in such a fee program, absent the
4 required underlying record. Staff’s post-PMPD additions to BIO-12 must be rejected.

5 **B. Staff’s New Condition BIO-21 Purports to Address an Impact Found to Be Less**
6 **than Significant, and Thus Staff’s Addition Is Not Supported by the**
7 **Record.**

8 At the PMPD Conference, Staff noted that it has recommended an additional Biology
9 condition BIO-21, related to bird and bat issues.³ However, there is no finding of fact in the
10 PMPD that the project has the potential to have significant impacts on birds and bats; those
11 potential impacts are less than significant . (PMPD, Biological Resources, pp. 37-38.) While
12 lacking any finding of significant impacts, Staff in its post-PMPD comments added BIO-21,
13 because “it felt good”: “So it felt good to do it, even though we didn't necessarily think it was
14 warranted at the beginning.” (PMPD Conference Transcript, 8/24 RT 140.)

15 Feelings aside, the imposition of a Condition of Certification absent a finding of
16 significant impact is contrary to law. Staff’s new BIO-21 must be rejected.

17 **C. BIO-20 Regarding Waters of the State Should Be Revised to Parallel the Desert**
18 **Tortoise Mitigation Obligations in BIO-17**

19 Condition BIO-20 should be corrected. To begin, the PMPD language has an incorrect
20 acreage total. The correct acreage of potentially affected waters of the state is 175 acres of state
21 jurisdictional waters, not 198.

22 The Applicant has also proposed changes to BIO-20 to parallel changes to BIO-17. In
23 particular, the changes to BIO-20 follow the same phasing of security as BIO-17. At least fifteen
24 days prior to commencement of construction of Ivanpah 1, the Construction Logistics Area and
25 the access road and power block to Ivanpah 2, the project owner shall also provide the initial
26 installment of Security in the amount of thirty two percent (32%) of the Total Security. This
27 security will cover the percentage of land disturbed by fencing Ivanpah 1, the Construction
28 Logistics Area and the access road and power block to Ivanpah 2. In addition, at least fifteen

³ To be clear, the BLM’s FEIS has a different condition, numbered BIO-21, related to rare plant and botany issues. The FEIS Condition and Staff post-PMPD recommendation are separate and distinct, another reason to reject Staff’s late proposed addition.

1 days prior to commencement of construction of the remainder of Ivanpah 2 and Ivanpah 3, the
2 project shall provide the final installment of Security in the amount of sixty eight percent (68%)
3 of the Total Security, unless the project owner has decided to acquire appropriate mitigation
4 lands.

5 Staff and Applicant contemplated that the desert wash compensation land requirement
6 could be nested within the compensation land requirement discussed in BIO-17. It is currently
7 Applicant's plan to propose desert tortoise compensation lands that include the prescribed
8 amount of desert wash acreage nested within the parcels as satisfaction of the 2:1 mitigation
9 requirement for desert tortoise habitat. The proposed language for BIO-20 is set forth in
10 Attachment 3.

11 **D. While REC-1 Is Not Required as Matter of Law, The Staff and Applicant Have**
12 **Agreed to Revised Language for REC-1 To Memorialize the Applicant's**
13 **Commitment to Built an Interpretative Center.**

14 The PMPD agrees that as a matter of law, REC-1 is not required because Public
15 Resources Code Section 25529, focused on coastal powerplants, is simply inapplicable to the
16 facts in the record before the Commission.⁴ Nevertheless, Applicant has committed to build a
17 Solar / Ecological Interpretive Center to be developed to in the vicinity of the ISEGS project.
18 The proposed language memorializing this commitment is set forth in Attachment 3.

19

20 **E. To Correct A Cut and Paste Error, TRANS-4 In the PMPD Should be Deleted**
21 **and Former TRANS-5 Renumbered and Reinstated.**

22

23 The Applicant recommended deletion of TRANS-4. Instead, TRANS-5, an
24 uncontroverted condition, was mistakenly deleted. TRANS-4 (Verification Of Power Tower
25 Receiver Luminance And Monitoring) should be deleted. TRANS-5 (Power Tower Lighting)
26 should be re-inserted:

27

⁴ The record clearly shows that the Project will not cause significant impacts to recreation, as the Project will not disrupt recreation opportunities, and the project's indirect impacts by itself would not substantially diminish the quality of outdoor recreation experiences. Furthermore, even if Public Resources Code Section 25529 were applicable to the Project as suggested by Staff, Section 25529's requirement that an area be established for public use is more than satisfied by Applicant's commitment to paving and re-routing Colosseum Road and to improving and re-routing various other hiking trails to afford continued public access to the site and the public lands to the west of the site.

1 **POWER TOWER LIGHTING**

2
3 **TRANS-54** The project owner shall ensure that each power tower is marked and lighted
4 according to the recommendations included in the FAA aeronautical study performed for
5 each tower. Additionally, the project owner shall submit FAA Form 7460-2 Part II,
6 Notice of Actual Construction or Alteration, to the FAA within 5 days of completion of
7 construction of the tower to its greatest height. The project owner shall provide evidence
8 of compliance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking
9 and Lighting by submitting a copy of Form 7460-2 to BLM’s Authorized Officer and the
10 CPM for review and approval upon completion of construction or each power tower.

11
12 **Verification:** Within 5 days of completion of construction of each of the seven power
13 towers, the project owner shall submit the above referenced evidence to BLM’s
14 Authorized Officer and the CPM for review and approval.
15
16

17 **F. The Committee Should Reject Staff’s Post-PMPD Suggested Changes Finding**
18 **New Significant Impacts**

19
20 Surprisingly, Staff’s Comments on the PMPD, Set 1, dated August 27, 2010, can be read
21 as recommending that the Committee find a new significant impact. Specifically, in response to
22 a public comment (not testimony or other evidence in the hearing record) Staff apparently invites
23 the Committee to find a new significant impact associated with the FAA-required aircraft safety
24 lighting on the three solar receiver towers. (Staff PMPD Comments, Set 1, p. 75.)

25 Since the Staff’s recommendation is based on public comments not offered during the
26 hearings, not sponsored by any witness subject to cross-examination, and not part of the hearing
27 record, it should be given no weight. Staff proposed new finding of a significant effect here (and
28 any other similar recommendations that may or may not be within Staff’s filings) should be
29 rejected.⁵

30 **CONCLUSIONS**

31
32 We thank the Committee for its continuing hard work. It is imperative that the
33 Committee hold the September 15, 2001 Business Meeting date for approval of the Ivanpah
34 Solar Electric Generating System. Given the need to mobilize biologists to move desert tortoise

⁵ Further, if these newly recommended findings of significant impact are adopted, the Commission must make the required findings to Override such impacts.

1 within specified fall time periods, the need to conduct significant site work prior to desert
2 tortoise relocation, and the requirement to commence construction 2010, the window of
3 opportunity is threatening to close with any more delays.

4

5 Dated: September 2, 2010


ELLISON, SCHNEIDER & HARRIS L.L.P.

6

7

8

9

By 

Jeffery D. Harris

10

11

12

13

14

15

Greggory L. Wheatland
Samantha G. Pottenger
2600 Capitol Avenue, Suite 400
Sacramento, California 95816
Telephone: (916) 447-2166
Facsimile: (916) 447-3512

16

Attorneys for Ivanpah Solar Electric Generating System

ATTACHMENT 1
APPLICANT'S PROPOSED CONDITIONS OF CERTIFICATION
BIO- 17 & BIO-18

Applicant's Proposed BIO-17

Desert Tortoise Compensatory Mitigation

BIO-17 To fully mitigate for habitat loss and potential take of desert tortoise, the project owner shall provide compensatory mitigation at a 3:1 ratio for impacts to 3,582 acres, or the area disturbed by the final project footprint. At least two thirds of the 3:1 mitigation requirement shall be achieved by acquisition, in fee title or in easement, of no less than 7,164 acres of land suitable for desert tortoise.

The project owner shall acquire, or provide funding for, the acquisition, initial habitat improvements and long-term management of these Energy Commission Compensation Mitigation Lands. The remaining one third of the 3:1 compensatory mitigation requirement, to satisfy BLM's mitigation requirements and the balance of the Energy Commission's mitigation requirements, shall be developed by the BLM in accordance with BLM's responsibilities as the federal land manager. The BLM has determined that the compensatory mitigation for the project shall include 50 miles of desert tortoise fencing in the Northeastern Mojave Recovery Unit and the habitat restoration of at least 50 routes within the Desert Wildlife Management Area.

The project owner may later agree to voluntarily participate in the in-lieu fee program underdevelopment pursuant to the requirements of SB x8 34 (Chapter 9, Stats. 2010); provided, however, that the CPM will approve the project's owner's proposed voluntary participation by determining that such voluntary participation satisfies the substantive requirements of this Condition.

Verification:

Project Owner Acquired Lands

1. If the project owner elects to acquire 7,164 acres of land suitable for desert tortoise, then fifteen days prior to commencement of construction, the project owner shall transmit to CPM and the BLM's Authorized Officer a statement, signed by the project manager, attesting that the project owner intends to acquire 7,164 acres of land suitable for desert tortoise and describing the project's owner's plans for acquiring such lands.
 - a. Security, as defined below, shall be provided for Project Owner Acquired Lands as described in Section 4 below.

- b. The transfer of title of such acquired lands shall be effectuated as described below in Section 5, titled “Land Title Transfer for Acquired Lands.”

Third-Party Acquired Lands

2. Responsibility for Acquisition of Lands: The responsibility for acquisition of compensation lands may be delegated to a third party, such as a non-governmental organization supportive of Mojave Desert habitat conservation. Such delegation shall be subject to approval in writing by the CPM, in consultation with BLM, CDFG and USFWS, prior to land acquisition, enhancement or management activities. If habitat disturbance exceeds that described in this condition, the project owner shall be responsible for funding acquisition, habitat improvements and long-term management of additional compensation lands or additional funds required to compensate for any additional habitat disturbances. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. Water and mineral rights shall be included as part of the land acquisition. Agreements to delegate land acquisition to CDFG or an approved third party and to manage compensation lands shall be implemented within 18 months of the Energy Commission’s decision.
 - a. Security, as defined below, shall be provided for Third Party Acquired Lands as described in Section 4 below.
 - b. The transfer of title of such acquired lands shall be effectuated as described below in Section 5, titled “Land Title Transfer for Acquired Lands.”

Selection Criteria for Compensation Lands

3. Regardless of whether the compensation lands selected for acquisition are Project Owner Acquired Lands or Third-Party Acquired Lands, such lands shall to the extent feasible :
 - a. Be as close to the project site as possible;
 - b. Provide good quality habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed;
 - c. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
 - d. Be connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover;

- e. Not have a history of intensive recreational use or other disturbance that might make habitat recovery and restoration infeasible;
- f. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration, and
- g. not contain hazardous wastes.
- h. Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM, CDFG, USFWS and BLM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above. Approval from the CPM, in consultation with BLM, CDFG and the USFWS, shall be required for acquisition of all parcels comprising the 7,164 acres.

Security

4. Energy Commission Compensation Land Mitigation Security: The project owner shall provide financial assurances to the CPM with copies of the document(s) to BLM, CDFG and the USFWS, to guarantee that an adequate level of funding is available to implement the Energy Commission Compensation Land Mitigation requirements described in this condition (the "Security"). The Security shall be used solely for implementation of the measures associated with the project. Alternatively, 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 financial instrument. This Security amount was calculated as follows and may be revised upon completion of a Property Analysis Record (PAR) or PAR-like analysis of the proposed compensation lands:
 - a. land acquisition costs for compensation lands, calculated at \$910/acre x 3,582 acres x 2:1 = \$6,519,240;
 - b. costs of initial habitat improvements to compensation lands, calculated at \$250/acre x 3,582 acres x 2:1 = \$1,791,000; and
 - c. Costs of installing 50 miles of desert tortoise fencing in the Northeastern Mojave Recovery Unit and the habitat restoration of at least 50 routes within the Desert Wildlife Management Area, for a total of \$ 3,381,000, which includes:
 - i. 50 miles of fence x \$6.50 per linear foot;
 - ii. 50 miles of Desert Tortoise Monitoring= \$432,000;

- iii. 50 miles of OHV trail rehabilitation and reclamation, calculated at 3,000 SF per trail x \$2.50 per SF= \$375,000;
 - iv. 50 miles of OHV desert tortoise monitoring= \$108,000;
 - v. Allowance for permitting activities= \$500,000;
 - vi. Allowance for Project Management= \$250,000.
- d. **Total Security** = \$11,691,240.
- e. **Project Owner Acquired Lands**: Security shall be paid as follows:
- i. At least fifteen days prior to commencement of construction of Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2, the project owner shall also provide the initial installment of Security in the amount of thirty two percent (32%) of the Total Security. This security will cover the percentage of land disturbed by fencing Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2.
 - ii. At least fifteen days prior to commencement of construction of the remainder of Ivanpah 2 and Ivanpah 3, the project shall provide either: (1) the final installment of Security in the amount of sixty eight percent (68% of the Total Security), or (2) provide information that demonstrates to the CPM and the BLM's Authorized Officer that 7,164 acres of land suitable for desert tortoise has been identified and secured through a legally binding option agreement or other legal instrument.
 - iii. Upon confirmation by the CPM and the BLM's Authorized Officer that 7,164 acres of land suitable for desert tortoise has been identified and secured through a legally binding option agreement or other legal instrument, the project owner shall be entitled to either a refund of monies paid pursuant to subsections (i) and (ii) above, or any funds paid to date may be credited against the project owner's Long-Term Management and Maintenance fees to be paid pursuant to Section 6 below.
- f. **Third Party Acquired Lands**: Security shall be paid as follows:
- i. At least fifteen days prior to commencement of construction of Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2, the project owner shall also provide the initial installment of Security in the amount of thirty two percent (32%) of the Total Security. This security will cover the percentage of land disturbed by fencing Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2.

- ii. At least fifteen days prior to commencement of construction of the remainder of Ivanpah 2 and Ivanpah 3, the project shall provide the final installment of Security in the amount of sixty eight percent (68% of the Total Security).

Land Title Transfer for Acquired Lands

- 5. **Compensation Lands Acquisition Conditions:** Regardless of whether the project owner elects to acquire 7,164 acres of land suitable for desert tortoise or allows a third-party to acquire such lands, the project owner shall comply with the following conditions relating to acquisition.
 - a. **Preliminary Report:** The project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary documents for the proposed 7,164 acres. All documents conveying or conserving compensation lands and all conditions of title/easement are subject to a field review and approval by the CPM, in consultation with BLM, CDFG and the USFWS, California Department of General Services and, if applicable, the Fish and Game Commission and/or the Wildlife Conservation Board.
 - b. **Title/Conveyance:** The project owner shall transfer fee title or a conservation easement to the 7,164 acres of compensation lands to CDFG under terms approved by CPM. Alternatively, a non-profit organization qualified to manage compensation lands (pursuant to California Government Code section 65965) and approved by the CPM in consultation with CDFG may hold fee title or a conservation easement over the habitat mitigation lands. If the approved non-profit organization holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CPM. If the approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If a Security is provided, the project owner or an approved third party shall complete the proposed compensation lands acquisition within 18 months of the start of project ground-disturbing activities.

Long-term Management and Maintenance

- 6. **Initial Habitat Improvement Fund:** The project owner shall fund the initial protection and habitat improvement of the 7,164 acres. Alternatively, a non-profit organization may hold the habitat improvement funds if they are qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if they meet the approval of the CPM in consultation with CDFG. If CDFG takes fee title to the compensation lands, the habitat improvement fund must go to CDFG.

- a. Long-term Management and Maintenance Fund. Prior to ground-disturbing project activities, the project owner shall provide to CDFG a non-wasting capital long-term management and maintenance fee in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis that will be conducted for the 7,164 acres acquired and the fencing and habitat restoration as required by the BLM. The project owner's financial responsibility for the actual cost of mitigation shall not increase by more than 25% of the total Security Amount (\$11,691,240). Alternatively, a non-profit organization may hold the long-term management and maintenance fees if they are qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if they meet the approval of CDFG and the CPM. If CDFG takes fee title to the compensation lands, the long-term management and maintenance fee must go to CDFG, where it will be held in the special deposit fund established pursuant to California Government Code section 16370. If the special deposit fund is not used to manage the long-term management and maintenance fee, the California Wildlife Foundation or similarly approved entity identified by CDFG shall manage the long-term management and maintenance fee for CDFG and with CDFG supervision.
- b. Interest, Principal, and Pooling of Funds. The project owner, CDFG and the CPM shall ensure that an agreement is in place with the long-term management and maintenance fee holder/manager to ensure the following conditions:
 - i. Interest. Interest generated from the initial capital long-term management and maintenance fee shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.
 - ii. Withdrawal of Principal. The long-term management and maintenance fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CDFG or the approved third-party long-term management and maintenance fee manager to ensure the continued viability of the species on the 7,164 acres. If CDFG takes fee title to the compensation lands, monies received by CDFG pursuant to this provision shall be deposited in a special deposit fund established pursuant to Government Code section 16370. If the special deposit fund is not used to manage the long-term management and maintenance fee, the California Wildlife Foundation or similarly approved entity identified by CDFG will

manage the long-term management and maintenance fee for CDFG with CDFG supervision.

- iii. Pooling Long-term Management and Maintenance Fee Funds. CDFG, or a CPM and CDFG approved non-profit organization qualified to hold long-term management and maintenance fees pursuant to California Government Code section 65965, may pool the long-term management and maintenance fee with other long-term management and maintenance fees for the operation, management, and protection of the 7,164 acres for local populations of desert tortoise. However, for reporting purposes, the long-term management and maintenance fee fund must be tracked and reported individually to the CDFG and CPM.
- iv. Reimbursement Fund. The project owner shall provide reimbursement to CDFG or an approved third party for reasonable expenses incurred during title, easement, and documentation review; expenses incurred from other state or state approved federal agency reviews; and overhead related to providing compensation lands.

- 7. **Post-Construction Reporting Requirements:** Within 90 days after completion of project construction, the project owner shall provide to the CPM and CDFG an analysis with the final accounting of the amount of habitat disturbed during project construction. If habitat disturbance exceeds 3,582 acres, the project owner shall provide a compensation plan to the CMP for review and approval, in consultation with BLM, CDFG and the USFWS. The additional compensation plan shall be submitted no later than 90 days from the CPM's receipt of the final accounting, and shall include a description of additional funds required or lands that will be acquired to compensate for the unanticipated habitat disturbances, and a schedule for that acquisition or funding inclusive of all associated long-term management and maintenance fee and enhancement costs. The project owner's financial responsibility for the actual cost of mitigation shall not increase by more than 25 percent of the total Security Amount (\$11,691,240).
- 8. **SBx8 34 Programs Under Development.** The project owner may later seek approval to participate in the in-lieu fee and other optional, voluntary programs under development pursuant to the requirements of SB x8 34 (Chapter 9, Stats. 2010). The project owner may submit a request to participate in the optional, voluntary SBx8 34 in-lieu fee and other programs developed to the CPM for review and approval and to BLM, CDFG, and USWFS for review and comment. The CPM shall approve the project owner's request if the CPM determines that the request will satisfy the substantive requirements of this Condition.

Applicant's Proposed BIO-18

Special-Status Plant Impact Avoidance and Minimization

BIO-18 The project owner shall implement the following measures to avoid and minimize impacts to special-status plant species.

1. On-Site Plant Avoidance/Minimization Areas: To the extent feasible, the project owner shall avoid and minimize disturbance to all special-status plant species within the project site. Impact avoidance (such as protection from project-related impacts through removal of acreage from the project footprint) and other avoidance/minimization efforts shall occur in all feasible locations. Impact avoidance/minimization shall focus on areas that support the highest density and diversity of special-status plant species and shall remove, at a minimum, the three areas totaling 476 acres and labeled "Rare Plant Mitigation Area" in **Project Description Figure 13** from the project footprint. The natural gas pipeline shall be aligned and narrowed to avoid special-status plant occurrences north of Ivanpah 3 as depicted in **Project Description Figure 13**. Impact avoidance and minimization shall also be conducted throughout the site. Impact avoidance and minimization within the solar field shall consist of protecting small perimeters ("halos") around all Mojave milkweed and Rusby's desert-mallow plants as determined feasible. Rare plant avoidance and minimization measures are described in the Applicant's January 2010 Draft Rare Plant Avoidance and Protection (Exhibit 81) and the Applicant's February 2010 Biological Mitigation Proposal ("Mitigated Ivanpah 3") (Exhibit 88).
2. Protection Goals: The project owner shall implement all feasible measures to protect or salvage and transplant 75 percent of the individuals of the two long-lived perennials, desert pincushion and Parish's club-cholla. All feasible measures will be implemented to protect species that are subject to seasonal variation, Mojave milkweed, Rusby's desert-mallow, and nine-awned pappus grass. More detail on protection goals for these special-status plant species is included in the Applicant's 2010 Draft Rare Plant Avoidance and Protection Plan (Exhibit 81) and the Applicant's February 2010 Biological Mitigation Proposal ("Mitigated Ivanpah 3") (Exhibit 88). Each year during construction, monitoring the percent protection achieved shall be conducted as described in the Rare Plant Protection and Avoidance Plan. Baseline and post-construction monitoring shall be based on surveys conducted by a qualified botanist.
3. Identify and Establish Special-Status Plant Protection Areas: The project owner shall identify Special-Status Plant Protection Areas for exclusion from the project footprint and avoidance of project-related impacts to facilitate achieving protection goals. The Rare Plant Protection Areas shall

encompass at a minimum the three areas totaling 476 acres and labeled “Rare Plant Mitigation Area” in **Project Description Figure 13**. The locations of the Special-Status Plant Protection Areas shall be clearly depicted on all final maps and project drawings and descriptions for exclusion of all project activities.

4. Protection of Adjacent Occurrences: The project owner shall identify special-status plants occurrences within 250 feet of the project fence line. A qualified botanist shall delineate the boundaries of these special-status plant occurrences prior to the initiation of ground disturbing activities. These flagged special-status plant occurrences shall be designated as Environmentally Sensitive Areas on plans and specifications, and shall be protected from accidental impacts during construction (e.g., vehicle traffic, temporary placement of soils or vegetation) and from the indirect impacts of project operation (e.g., herbicide spraying, changes in upstream hydrology, etc).
5. Develop and Implement a Special-Status Plant Protection and Monitoring Plan: The project owner shall develop and implement a Special-Status Plant Protection and Monitoring Plan for special-status plants occurring within the Special-Status Plant Protection Areas and on-site areas designated for impact minimization. The goal of the Special-Status Plant Protection and Monitoring Plan shall be to maintain the special-status plant species as healthy, reproductive populations that can be sustained in perpetuity. At a minimum, the Special-Status Plant Protection and Monitoring Plan shall:
 - establish baseline conditions and numbers of the plant occurrences in all protected areas (i.e., those to be excluded from the footprint and on-site areas to be protected) and success standards for protection of special-status plant occurrences;
 - provide information about microhabitat preferences and fecundity, essential pollinators, reproductive biology, and propagation and culture requirements for each special-status species;
 - describe measures (e.g., fencing, signage) to avoid direct construction and operation impacts to special-status plants within all protected areas;
 - Describe measures to avoid or minimize indirect construction and operations impacts to special-status plants within protected areas (e.g., runoff from mirror-washing, use of soil stabilizers/tackifiers, alterations of hydrology from drainage diversions, erosion/sedimentation from disturbed soils upslope, herbicide drift, the spread of non-native plants, etc.);
 - provide a monitoring schedule and plan for assessing the numbers and condition of special-status plants; and

- Identify specific triggers for remedial action (e.g., numbers of plants dropping below a threshold).
6. Develop Special-Status Plant Remedial Action Plan: The project owner shall develop a detailed Special-Status Plant Remedial Action Plan to be implemented if special-status plants within the 476 acres of protected area and on-site minimization “halos” fail to meet success standards described in the Special-Status Plant Protection and Monitoring Plan. The Plant Remedial Action Plan shall include specifications for ex-situ/offsite conservation of seed and other propagules, and the seed bank and other symbionts contained in the topsoil where these plants occur. The remedial measures described in the Plant Remedial Action Plan shall not substitute for plant protection or other mitigation measures. The Special-Status Plant Remedial Action Plan shall include, at a minimum:
 - guidelines for seed collection (and/or other propagules) for each species;
 - specifications for collecting, storing, and preserving the upper layer of soil containing seed and important soil organisms;
 - detailed replacement planting or seeding program with biologically meaningful quantitative and qualitative success criteria (see Pavlik 1996), monitoring specifications, and triggers for remedial action; and
 - ecological specifications for suitable planting or seeding sites.
 7. Seed Collection: The project owner shall develop and implement a Seed Collection Plan to collect and store seed for Mojave milkweed, Rusby’s desert-mallow, and nine-awned pappus grass. Propagules from the Parish’s club-cholla shall be obtained and collection of propagules from desert pincushion will be attempted; however, it has not been determined if this is possible for this species. The source of seeds and/or propagules shall be from plants proposed for removal within the project footprint if possible, but this would limit the number of seeds that could be collected. The project owner shall engage the services of a qualified contractor approved by the CPM to undertake seed and/or propagule collection and storage.
 8. Gas Pipeline Revegetation and Monitoring: In the natural gas pipeline construction corridor where disturbed soils will be revegetated, the topsoil excavated shall be segregated, kept intact, and protected, under conditions shown to sustain seed bank viability. Revegetation measures are described in the Closure, Revegetation, and Rehabilitation Plan and addressed separately in BIO-14. Rare plant seed collection for Rusby’s desert mallow and Mojave milkweed is not feasible on a large scale for several reasons: 1) the rarity of the plants in this area (for example, only four Rusby’s desert mallow plants occur within the project footprint), 2) the

very low number of seeds produced by any individual plant, 3) plants do not appear every year, and seed may not be produced every year plants are present, as both germination and seed production are heavily dependent on the amount of rainfall, and 4) the need to maintain natural seed bank dynamics within the Rare Plant Protection Areas. If the amount and periodicity of seasonal rainfall is appropriate, seed from nine-awned pappus grass will be collected and added to the revegetation seed mixture proposed in the Closure, Revegetation, and Rehabilitation Plan. Monitoring methods, success criteria used to evaluate the success of revegetation, and remedial measures that will be implemented should revegetation be determined unsuccessful, are also described in the Closure, Revegetation, and Rehabilitation Plan.

Verification: No less than 30 days following the publication of the Energy Commission Decision the project owner shall submit maps and design drawings depicting the location of Special-Status Plant Protection Areas within and adjacent to the project site, and shall identify the species and numbers of plants within each of the Special-Status Plant Protection Areas.

No less than 60 days following submission of the maps and design drawings depicting the location of Special-Status Plant Protection Areas, the project owner shall submit draft versions of the Special-Status Plant Protection and Monitoring Plan and the Seed Collection Plan to the CPM and BLM's Authorized Agent for review and approval, and to the CDFG for review and comment. The final plans shall be incorporated into the BRMIMP.

Within 30 days of the start of construction, the project owner shall submit a copy of the contract with the CPM-approved seed contractor.

The project owner shall identify special-status plants occurrences within 250 feet of the project fence line. A qualified botanist shall delineate the boundaries of these special status plant occurrences at least 30 days prior to the initiation of ground disturbing activities.

The Designated Biologist shall maintain written and photographic records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM, BLM Authorized Agent, and CDFG. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report for a period not less than 10 years for the Special-Status Plant Protection and Monitoring Plan, and the Special-Status Plant Remedial Action Plan, including funding for the seed storage.

ATTACHMENT 2

LETTER FROM

**KEVIN HUNTING, CHIEF DEPUTY DIRECTOR
CALIFORNIA DEPARTMENT OF FISH AND GAME**

**RE: ENERGY COMMISSION STAFF'S TRANSMITTAL OF UPDATED RENEWABLE
ENERGY ACTION TEAM (REAT) DRAFT AGENCY GUIDANCE FOR MITIGATION
COST ESTIMATES- IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-5)**

(SEPTEMBER 1, 2010)



DEPARTMENT OF FISH AND GAME

JOHN McCAMMAN, Director

1416 9th Street, 12th Floor

Sacramento, CA 95814

916-653-7667

<http://www.dfg.ca.gov>



September 1, 2010

To Commissioner Jeffrey Byron, Presiding Member
To Commissioner James D. Boyd, Associate Member
To John Kessler, Project Manager
California Energy Commission
1516 9th Street
Sacramento, CA 95814-5512

Re: Energy Commission Staff's Transmittal of Updated Renewable Energy Action Team (REAT) Draft Agency Guidance for Mitigation Cost Estimates—Ivanpah Solar Electric Generating System (07-AFC-5) (Received by CEC, 7/30/10)

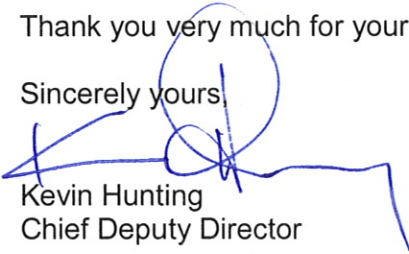
Dear Sirs:

The Department of Fish and Game (Department) has been participating in the on-going review of the table of cost estimates for mitigation for projects opting to participate in the joint Renewable Energy Action Team (REAT) mitigation implementation program through the National Fish and Wildlife Foundation (NFWF). The document is a working draft that does not yet reflect the position of all of the REAT agencies with respect to biological mitigation implementation and lacks the context of representing only one of several available mitigation options. As such, it does not reflect the Department's approach to securing mitigation costs and includes costs that may not be relevant for the state to exact.

Since the Ivanpah project has been working closely with the Department on a series of actions that we believe would meet the California Endangered Species Act (CESA) full mitigation standard, it is apparent to us that they intend to handle biological mitigation independently and not use the NFWF approach for which the draft cost table is intended. We therefore recommend either removal of the table from any official decision-making document or clarify that it is a working draft REAT document and should not be relied upon for this specific project.

Thank you very much for your consideration of this letter.

Sincerely yours,



Kevin Hunting
Chief Deputy Director

cc: Michael Picker, Special Advisor, Governor Arnold Schwarzenegger
Melissa Jones, Executive Director, California Energy Commission
Robert Weisenmiller, Commissioner, California Energy Commission
Terry O'Brien, Deputy Director, Energy Commission Siting Division
Tom Pogachnik, Assistant State Director, Bureau of Land Management
Amedee Brickey, Renewable Energy Coordinator, U.S. Fish and Wildlife Service

ATTACHMENT 3 GENERAL COMMENTS

I. ENVIRONMENTAL ASSESSMENT

BIOLOGICAL RESOURCES

Page 2, section 2, para 1, sentence 2: “Vegetation on the site and in the immediate project area consists of primarily Mojave creosote bush scrub, with Mojave yucca – Nevada ephedra scrub, and Mojave wash scrub also represented.”

Comment: The Mojave yucca-Nevada ephedra scrub vegetation type does not exist within the Project area. As noted in the Project’s Biological Assessment Section 3.1.2 (Ex. 311) “Two other vegetation types, Mojave Yucca – Nevada Tea Scrub and Mojave Wash Scrub also occur. The Mojave Yucca – Nevada Ephedra Scrub vegetation type is restricted to a small area of limestone pavement plain at the base of the limestone hills of the eastern extension of the Clark Mountain Range, in the north-central area of the one-mile buffer.” The PMPD should be clarified to reflect that point. Applicant recommends the following clarification:

Vegetation on the site and in the immediate project area consists of primarily Mojave creosote bush scrub, with ~~Mojave yucca – Nevada ephedra scrub,~~ and Mojave wash scrub also represented.

Page 2, section 2, para 1, sentence 3: “Plant communities at the site are characterized by an unusually high diversity and density of native succulents and relatively low levels of noxious weeds.”

Comment: As shown in Exs. 30 and 46, the type of plant communities at the site are typical for the immediate area, as the Clark Mountains lie within a summer precipitation anomaly that leads to high succulent density and diversity. The measured density of barrel cacti is less than a tenth of the “high density” creosote bush-white bursage-barrel cactus community type (Ex. 34, Attachment DR23-1). Applicant recommends the following clarification:

Plant communities at the site are characterized by ~~an unusually~~ high diversity and density of native succulents and relatively low levels of noxious weeds.

Page 2, section 2, para 1, sentence 5: “The Clark Mountain Range occurs to the north and west of the project area, and the topography slopes gradually down to the east and southeast toward Ivanpah Dry Lake on the alluvial fans and bajada on the Clark Mountains’ east and south flanks.”

Comment: As shown in Ex. 5, the topography of the Clark Mountain Range slopes gradually down to the east and southeast toward the Ivanpah Dry Lake on the alluvial

fans and bajada on the Clark Mountain's east flank only, not the south. Therefore, Applicant recommends the following clarification:

The Clark Mountain Range occurs to the north and west of the project area, and the topography slopes gradually down to the east and southeast toward Ivanpah Dry Lake on the alluvial fans and bajada on the Clark Mountain's east and south flanks.

Page 2, section 2, para 2, sentence 5: "This density is unusual because it occurs on a bajada rather than on rocky slopes where high barrel cactus densities would be expected."

Comment: As shown in Ex. 47, the distribution of 1 to 2 cacti per acre is a rather sparse distribution, and in most cases is typical of the densities found on an alluvial fan at this elevation in this region. In fact, per Ex. 34, Attachment DR23-1, Dr. Todd Keeler-Wolf (CDFG Vegetation Ecologist) indicated that barrel cactus densities need to be in the order of 400 per hectare to meet the description of the creosote bush-white bursage-barrel cactus community type (approximately 12.8 times more dense than the levels observed at the Ivanpah Project site). Thus, the density of barrel cacti as well as other cactus species is not unusual. Therefore, Applicant recommends deleting this sentence.

Page 2, section 2, para 4: "...and Mojave yucca (*Yucca schidigera*)."

Comment: Clerical error. The correct spelling of the Latin name of Mojave yucca is *Yucca schidigera*.

Page 3, section 2, para 1: "...pima ratany (*Krameria erecta*), Nevada ephedra, Mojave Desert California buckwheat..."

Comment: Clerical error. Applicant recommends the following correction:

...pPima ratany (*Krameria erecta*), Nevada ephedra, ~~Mojave Desert~~ California buckwheat...

Page 6, section 3: "However, quite a few were detected during the 2007/2008 surveys or otherwise known to occur at or near the site; they are indicated by **bold-face type**."

Comment: The use of the term "quite a few" is unqualified, especially given the number of species noted in the Biological Resources Table 1, as compared to those actually found on the Project site, and does not justify the implication of plentitude suggested by the term. Applicant recommends that the term be deleted, and the sentence corrected as follows:

~~However, quite a~~ A few were detected during the 2007/2008 surveys or otherwise known to occur at or near the site; they are indicated by **bold-face type**.

Page 20, para 1: “Although the Mojave is the driest of the North American deserts, the east Mojave does receive a large percentage of its annual precipitation from summer “monsoon” rains. The relative abundance of cacti, many yuccas, agaves, and agave-like plants tend to be greater where warm-season rainfall is abundant. This is true of the ISEGS project area where cacti are extremely abundant.”

Comment: As described in Ex. 30, Section 3.4.2, only parts of the eastern Mojave receive a large percentage of its annual precipitation from summer monsoon rains. And, as discussed above, the density of cacti in the project area is not great. Additionally, there is only one species of yucca in the Project site, and there are no agave present. (See Ex. 30, Section 3.5) Accordingly, Applicant recommends the following clarification:

Although the Mojave is the driest of the North American deserts, a part of the eastern Mojave ~~does~~ receives a ~~large~~ percentage of its annual precipitation from summer “monsoon” rains. (Ex. 30, Section 3.4.2)The relative abundance of succulents (cacti and ~~many~~ yuccas) ~~agaves, and agave-like plants~~ tend to be greater where warm-season rainfall is abundant. This is true of the ISEGS project area where cacti are ~~extremely~~ relatively abundant.

Page 24, para 3: “Mirror wash water would similarly concentrate along the drip line below the heliostats, causing minor erosion of the soil at the drip line and promoting growth of weeds. (Ex. 300, p. 6.2-34.)”

Comment: This statement ignores the analysis performed to date, and not considered in the analysis in Exhibit 300. The evidence provided by Applicant showed that insufficient runoff would occur to support weed growth, and would be well below a threshold where erosion would result (Also see Ex. , Applicant’s Closure, Revegetation, and Rehabilitation Plan, Chapter 1, pp. 1-7). Applicant recommends that the sentence be deleted.

Page 25, para 1: A substantial portion of the Ivanpah Valley documented occurrences of small-flowered androstephium, Mojave milkweed, desert pincushion, nine-awned pappus grass, Parish’s club-cholla, and Rusby’s desert-mallow would be directly, indirectly, and cumulatively impacted by the project.”

Comment: As shown in Exhibit 91, the initial documentation of small-flowered androstephium on the Project site was the result of a misidentification. The plants initially identified as small-flowered androstephium are actually crowned muilla, which is a List 4.2 on the California Native Plant Society’s Inventory of Rare and Endangered Plants. The small-flowered androstephium has not been identified or documented at the Project site. As the evidentiary record shows that small-flowered androstephium do not actually occur at the project site, the PMPD should be revised accordingly. Applicant recommends deleting all references to the small-flowered androstephium.

Page 37, Finding of Fact 2: “Approximately 2,000 ephemeral washes, which form part of the regional bajada, occur throughout the project area.”

Comment: As shown by geomorphic studies of the Project area, the ephemeral drainages occurring in the Project area form braided patterns in which most channels are discontinuous and segmented. (Ex. 5, Data Response 40) Applicant recommends clarifying Finding of Fact 2 as follows:

Approximately 2,000 ephemeral washes segments, which form part of the regional bajada, occur throughout the project area.”

BIOLOGICAL RESOURCES , CONDITIONS OF CERTIFICATION

Page 47, Condition of Certification **BIO-8: Desert Tortoise Clearance Surveys and Fencing**

Comment: Applicant supports the PMPD’s version of this condition.

Page 53, Condition of Certification **BIO-11: Impact Avoidance and Minimization Measures**

Comment: Applicant supports the PMPD’s version of this condition.

Page 57, Condition of Certification **BIO-12: Raven Management Plan**

Comment: As stated in its August 26, 2010 letter to Hearing Officer Kramer regarding clerical errors in the PMPD language, Applicant supports adopting the revised language agreed to by Staff and Applicant as set forth in Staff’s March 29th, 2010 filing entitled, *Energy Commission Staff’s Compilation of Edits to Recommended Conditions of Certification- Ivanpah Solar Electric Generating System (07-AFC-05)*. In its post-PMPD filings, Staff seeks to impose a Raven Management Fee. This fee program is not mentioned in the record of this proceeding. If and when a final, regional plan is developed, the Ivanpah Solar Project, like every other project, would be subject to the then-created, legally-enforceable program. It is plain legal error for the Commission to add in such a fee program, absent the required underlying record. Staff’s post-PMPD additions to **BIO-12** must be rejected.

Page 59, Condition of Certification **BIO-14: Closure, Revegetation, and Rehabilitation Plan**

Comment: Applicant recommends that the Commission adopt Applicant’s revised **BIO-14**, as follows, to reflect the Applicant’s July 2010 version of the Closure, Revegetation and Rehabilitation Plan, which was prepared in coordination with BLM’s consultant Dr. Ted St. John and BLM’s biologist Dr. Larry LaPré:

BIO-14 The project owner shall develop and implement a revised Closure, Revegetation and Rehabilitation Plan (Plan) in cooperation with BLM and Energy Commission staff, USFWS and CDFG to guide site restoration and closure activities, including methods

proposed for revegetation of disturbed areas immediately following construction and rehabilitation and revegetation upon closure of the facility. This plan must address preconstruction salvage and relocation of succulent vegetation from the site to either an onsite or nearby nursery facility for storage and propagation of material to reclaim disturbed areas. In the case of unexpected closure, the plan should assume restoration activities could possibly take place prior to the anticipated lifespan of the plant. The Plan ~~shall address all issues discussed in **Biological Resources Appendix A: Revisions to Draft Closure, Revegetation and Rehabilitation Plan**, and shall include but is not limited to the following elements in the revised plan:~~

1. Plan Purpose: The plan shall explicitly identify the objective of the revegetation plan to be re-creation of the types of habitats lost during construction and operation of the proposed solar energy facility. The final revegetation plan shall include introduction of mid- to late-successional species.
2. Standards/Monitoring: Performance standards for success thresholds, weed cover, performance monitoring methods and schedule, and maintenance monitoring ~~in~~ will be specified in the revised Plan shall be conducted as described in **Biological Resources Appendix B**.
3. Baseline Surveys – Baseline vegetation surveys for planning restoration efforts ~~shall have been~~ be conducted as described in **Biological Resources Appendix B the July 2010 version of the Closure, Revegetation and Rehabilitation Plan**.
4. Vegetation Clearing: Clearing of vegetation shall be limited to areas for which final maps are provided to BLM before approval of the ROW. Clearing of vegetation will be permitted on roads, utility routes, heliostat maintenance pathways, building and parking areas, and temporary staging areas provided these are specifically documented on a georeferenced construction alignment drawing or aerial photo or shape file, showing the exact locations of soil disturbance. BLM will consider
5. Vegetation Mowing; ~~Vegetation mowing shall be limited to areas adjoining vehicle pathways used for heliostat installation to allow installation of the heliostat pylon and allow for tracking clearance under the heliostat. Vegetation mowing may be repeated during the life of the facility to maintain appropriate clearance for heliostat tracking.~~
6. Succulent Salvage: The revised Plan shall include a table that shows proposed succulent salvage by species and the number of plants onsite proposed for salvage, the lower threshold height for salvage, the number in each size class, and the fate of plants not salvaged. An inventory and map of proposed succulent transplants shall be provided as described in Appendix A. Information gained from succulent transplant experience gained in ISEGS 1 shall be applied to future salvage operations, as described in **Biological Resources Appendix B**.
7. Seed Handling: Seed collection, testing and application shall be conducted as described in ~~**Biological Resources Appendix B**~~ the July 2010 version of the

Closure, Revegetation and Rehabilitation Plan, with collection areas within 40 miles of the project boundaries the Ivanpah Valley, and on similar terrain, soil, exposure, slope, and elevation to the project site.

8. Soil Preparation: Soil descriptions, compaction measurements, mulch application, and soil storage, ~~seed farming, mycorrhizal inoculation, and biological crust collection and storage~~ shall be conducted as described in the July 2010 version of the Closure, Revegetation and Rehabilitation Plan ~~Biological Resources Appendix B~~. Soil stockpiles shall not be placed on areas that support special-status plant species or other sensitive biological resources.
9. Weed Management. Weed management activities ~~needed to control weeds resulting from mirror washing~~ shall be conducted as described in the July 2010 version of the Closure, Revegetation and Rehabilitation Plan ~~Biological Resources Appendix B~~.
10. ~~Final Closure Plan~~. A Final Closure Plan, which addresses the final revegetation and rehabilitation activities upon closure and decommissioning of the project, shall be completed as part of the revised Plan. The Final Closure Plan shall include a cost estimate, adjusted for inflation, reflecting the costs of the revegetation, rehabilitation, and monitoring for the duration of time estimated to achieve the objective of re-creating plant communities impacted by the project.

Verification: ~~No more than 30 days from the Energy Commission Decision and BLM Record of Decision the project owner shall provide BLM's Authorized Officer and the CPM with a draft version of the revised Closure, Revegetation and Rehabilitation Plan. At least 60 days prior to start of any project-related ground disturbance activities, the project owner shall provide BLM's Authorized Officer and the CPM with the Closure, Revegetation and Rehabilitation Plan that has been reviewed and approved by BLM, USFWS, CDFG, and the Energy Commission staff. All modifications to the approved Revegetation and Reclamation Plan must be made only after consultation with BLM's Authorized Officer, and the CPM, USFWS and CDFG. The project owner shall notify BLM's Authorized Officer and the CPM and no less than 5 working days before implementing any BLM- and CPM-approved modifications to the Closure, Revegetation and Rehabilitation Plan.~~

Within 30 days after completion of project construction for each phase of development, the project owner shall provide to BLM's Authorized Officer and the CPM for review and approval, a written report identifying which items of the Closure, Revegetation and Rehabilitation Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which items are still outstanding.

At least one year prior to planned closure and decommissioning the project owner shall submit to the BLM-Authorized Officer and the CPM a final Closure Plan for review to determine if revisions are needed. The project owner shall incorporate all required revisions to the final Closure Plan and submit to the BLM-Authorized Officer and the CPM no less than 90 days prior

to the start of ground disturbing activities associated with closure and decommissioning activities.

Page 62-63, Condition of Certification **BIO-16: Burrowing Owl Impact Avoidance and Minimization Measures.**

Comment: CDFG only allows for “passive” relocation. Subsection 4 of the Condition should be revised as follows.

Burrowing Owl Impact Avoidance and Minimization Measures

BIO-16 The project owner shall implement the following measures for the burrowing owl: ***

4. ~~Actively~~ Passively relocate all owls occupying burrows that will be temporarily or permanently impacted by the project and implement the following CDFG take avoidance measures:
 - a. Occupied burrows shall not be disturbed during the nesting season (February 1 – August 31) unless a qualified biologist can verify through non-invasive methods that egg laying/incubation has not begun or juveniles are foraging independently and able to fly;
 - b. A qualified biologist must passively relocate owls, confirm that owls have left burrows prior to ground-disturbing activities, and monitor the burrows. (Active relocation is not allowed by CDFG.) Once evacuation is confirmed, the biologist should hand excavate burrows and then fill burrows to prevent reoccupation; and ***

Page 64, Condition of Certification **BIO-17: Desert Tortoise Compensatory Mitigation**

Comment: Applicant recommends that the Commission adopt Applicant’s revised **BIO-17**, as set forth in Attachment 1

Page 69, Condition of Certification **BIO-18: Special-Status Plant Impact Avoidance and Minimization**

Comment: Applicant recommends that the Commission adopt Applicant’s revised **BIO-18**, as set forth in Attachment 1.

Page 75, Condition of Certification **BIO-19: Nelson’s Bighorn sheep mitigation**

Comment: Applicant supports the PMPD’s version of this condition.

Page 76, Condition of Certification **BIO-20: Streambed Impact Minimization and Compensation Measures**

Comment: As discussed above, Applicant recommends that the Commission adopt Applicant’s proposed BIO-20 condition as set forth below:

Streambed Impact Minimization and Compensation Measures

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

Acquire Off-Site Desert Wash: The project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes ephemeral washes with at least 175 acres of state jurisdictional waters. The terms and conditions of this acquisition or easement shall be as described in Condition of Certification **BIO-17** with the additional criteria that the desert wash mitigation lands: 1) include at least 175 acres of state jurisdictional waters; and 2) be characterized by similar soil permeability, hydrological and biological functions as the impacted drainages. The desert wash mitigation lands may be included with the desert tortoise mitigation lands ONLY if the above criteria are met.

Verification:

1. Security for Implementation of Mitigation: If the Desert Wash mitigation land is to be procured separately from the Desert Tortoise mitigation land, a security in the form of an irrevocable letter of credit, pledged savings account, or other financial instrument. This Security amount shall be calculated as follows, and may be revised upon completion of a Property Analysis Record (PAR) or PAR-like analysis of the proposed compensation lands:

- a. land acquisition costs for compensation lands, calculated at \$910/acre x 175 acres x 1:1 = \$159,250;
- b. costs of initial habitat improvements to compensation lands, calculated at \$250/acre x 175 acres x 1:1 = \$43,750;

Total security = \$203,000

- c. Project Owner Acquired Lands: Security shall be paid as follows:
 - i. At least fifteen days prior to commencement of construction of Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2, the project owner shall also provide the initial installment of Security in the amount of thirty two percent (32%) of the Total Security. This security will cover the percentage of land disturbed by fencing Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2.
 - ii. At least fifteen days prior to commencement of construction of the remainder of Ivanpah 2 and Ivanpah 3, the project shall either (1) provide the final installment of Security in the amount of sixty eight percent (68%) of the Total Security or (2) provide information that demonstrates to the CPM and the BLM's Authorized Officer that 175 acres of suitable Desert Wash mitigation land has been identified and secured through a legally binding

option agreement or other legal instrument, whether as part of the Desert Tortoise mitigation land or separately.

- iii. Upon confirmation by the CPM and the BLM's Authorized Officer that 175 acres of land suitable for Desert Wash mitigation land has been identified and secured through a legally binding option agreement or other legal instrument, whether as part of the Desert Tortoise mitigation land or separately, the project owner shall be entitled to either a refund of monies paid pursuant to subsections (i) and (ii) above.
- d. Third Party Acquired Lands: Security shall be paid as follows:
 - i. At least fifteen days prior to commencement of construction of Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2, the project owner shall also provide the initial installment of Security in the amount of thirty two percent (32%) of the Total Security. This security will cover the percentage of land disturbed by fencing Ivanpah 1, the Construction Logistics Area and the access road and power block to Ivanpah 2.
 - ii. At least fifteen days prior to commencement of construction of the remainder of Ivanpah 2 and Ivanpah 3, the project shall provide the final installment of Security in the amount of sixty eight percent (68% of the Total Security).
2. Land Title Transfer for Acquired Lands If the project owner elects to acquire 175 acres of land suitable as desert wash separately from compensation lands to be used for mitigation of desert tortoise, and regardless whether the project owner elects to or allows a third-party to acquire such lands, the project owner shall comply with the following conditions relating to acquisition of the Energy Commission Complementary Mitigation compensation lands after the CDFG and the CPM, in consultation with BLM and the USFWS, have approved the proposed compensation lands and received Security as applicable and as described above.
 - a. Preliminary Report: The project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary documents for the proposed 175 acres. All documents conveying or conserving compensation lands and all conditions of title/easement are subject to a field review and approval by CDFG and the CPM, in consultation with BLM, CDFG and the USFWS, California Department of General Services and, if applicable, the Fish and Game Commission and/or the Wildlife Conservation Board.
 - b. Title/Conveyance: The project owner shall transfer fee title or a conservation easement to the 175 acres of compensation lands to CDFG under terms approved by CDFG/CPM. Alternatively, a non-profit organization qualified to manage compensation lands (pursuant to California Government Code section 65965) and approved by CDFG and the CPM in consultation with CDFG may hold fee title or a conservation easement over the habitat mitigation lands. If the approved non-

profit organization holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG/CPM. If the approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If a Security is provided, the project owner or an approved third party shall complete the proposed compensation lands acquisition within 18 months of the start of project ground-disturbing activities.

3. Preparation of Management Plan: The project owner shall submit to Energy Commission CPM a draft Management Plan that reflects site-specific enhancement measures for the drainages on the acquired compensation lands. The objective of the Management Plan shall be to provide initial enhancement of the wildlife value of the drainages, and may include enhancement actions such as weed control, fencing to exclude livestock,. No later than 90 days after acquisition of the compensation lands the project owner shall submit a final Management Plan for review and approval to the CPM and CDFG.
4. Right of Access and Review for Compliance Monitoring: The CPM reserves the right to enter the project site or allow CDFG to enter the project site at any time to ensure compliance with these conditions. The project owner herein grants to the CPM and to CDFG employees and/or their representatives the right to enter the project site at any time, to ensure compliance with the terms and conditions and/or to determine the impacts of storm events, maintenance activities, or other actions that might affect the restoration and revegetation efforts. The CPM and CDFG may, at the CPM's discretion, review relevant documents maintained by the operator, interview the operator's employees and agents, inspect the work site consistent with project safety procedures, and take other actions to assess compliance with or effectiveness of mitigation measures.
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 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.
 - a. Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

- b. **Physical Conditions:** a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.
 - c. **Legal Conditions:** a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.
6. **Code of Regulations:** The project owner shall provide a copy of the Streambed Impact Minimization and Compensation Measures 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 must be presented to any CDFG personnel or personnel from another agency upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the project owner, the CPM, if the CPM in consultation with CDFG, determines that the project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:
- a. The information provided by the applicant regarding streambed alteration is incomplete or inaccurate;
 - b. New information becomes available that was not known to it in preparing the terms and conditions;
 - c. The project or project activities as described in the Final Staff Assessment have changed; or
 - d. The conditions affecting biological resources changed or the CPM, in consultation with CDFG, determines that project activities will result in a substantial adverse effect on the environment.
7. **Best Management Practices:** The project owner shall also comply with the following conditions:
- a. The project owner shall minimize road building, construction activities and vegetation clearing within ephemeral drainages to the extent feasible.
 - b. The project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter ephemeral drainages or be placed in locations that may be subjected to high storm flows.

- c. The project owner shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the project owner to ensure compliance.
 - d. 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.
 - e. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering waters of the state. These materials, placed within or where they may enter a drainage or Ivanpah Dry Lake, by project owner or any party working under contract or with the permission of the project owner shall be removed immediately.
 - f. No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, waters of the state.
 - g. 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.
 - h. No equipment maintenance shall occur within 150 feet of any ephemeral drainage where petroleum products or other pollutants from the equipment may enter these areas under any flow.
8. No fewer than 30 days prior to the start of work potentially affecting waters of the state, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above best management practices will be implemented and provide a discussion of work in waters of the state in Compliance Reports for the duration of the project.

*Staff's Proposed **BIO-21***

Comment: Applicant opposes the draft **BIO-21** condition proposed by Staff at the August 24, 2010 Committee Conference and Evidentiary Hearing. **BIO-21** is being imposed because “it felt good to do it” and to achieve “maximum consistency” with the BLM, even though there is no basis in the record to support the imposition of such a condition. As testified by Staff witness, Dr. Susan Sanders, Staff “didn’t necessarily think” such a condition was “warranted in the beginning” because there was no information to support a finding of significant impacts. (8/30 RT, p. 140)

Comment: All points raised in this appendix have been discussed by Dr. Geoffrey Spaulding and Dr. St. John, and resolved, either as inapplicable to the project or addressed by the Closure, Revegetation, and Rehabilitation Plan of July 2010. The information presented in this appendix is out of date, and has been superseded by the Closure, Revegetation, and Rehabilitation Plan of July 2010. The Appendix should be deleted or replaced with the July 2010 Closure, Revegetation, and Rehabilitation Plan.

SOIL AND WATER RESOURCES

Page 6, para 2, line 8: “If discharged to land, discharge of this water would be subject to the requirements of the State Water Resources Control Board’s general permit number 2003-003-DWQ.”

Comment: This sentence should be modified to reflect the most recent developments as follows:

If discharged to land, discharge of this water would be subject to the requirements of the State Water Resources Control Board’s general permit number 2003-003-DWQ Order No. 2003-0003-DWQ (Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality).

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Page 4, para 4: “Local subsidence in the form of sinkholes was observed at the site and along the northern edge of Ivanpah Dry Lake. While sinkholes can sometimes be attributed to groundwater withdrawal as well as other causes, the cause in this case is believed to be from dehydration of clays between the soil surface and the water table resulting in a major loss of volume and the collapse of overlying soils. The potential for such shrinkage to affect structural components must be mitigated through facility design protocols consistent with the CBC. Condition GEO-1 as well as the conditions listed in the Facility Design section of this Decision will ensure compliance with CBC requirements. (Ex. 1, Appendix 5.4A; Ex. 300, pp. 6.15-10, 6.15-16.)”

Comment: There are no sinkholes in the project vicinity, and none have been found on site. The giant desiccation polygons and clay-rich soils on the margin of Ivanpah Dry Lake, more than 2.5 miles to the east, have no bearing on the geology of the alluvial fan upon which the project is sited. The text should be revised as follows:

Local subsidence in the form of sinkholes was observed ~~at the site and~~ along the northern edge of Ivanpah Dry Lake. While sinkholes can sometimes be attributed to groundwater withdrawal as well as other causes, the cause in this case is believed to be from dehydration of clays ~~between beneath the playa soil surface and the water table~~ resulting in a major loss of volume and the collapse of overlying soils. ~~The potential for such shrinkage to affect structural components must be mitigated through~~

facility design protocols consistent with the CBC. Condition **GEO-1** as well as the conditions listed in the **Facility Design** section of this Decision will ensure compliance with CBC requirements. (Ex. 1, Appendix 5.4A; Ex. 300, pp. 6.15-10, 6.15-16.)

Page 6, section 3, para 1: Quaternary alluvial deposits underlying the project site typically contain a wide variety of vertebrate fossils. Applicant's records search revealed that significant paleontological resources have been documented in nearby Paleozoic carbonate bedrock and could be encountered during construction of the Ivanpah 3 plant and linear facilities. However, the young to intermediate age alluvium that underlies the majority of the site, as well as Pre-Cambrian metamorphic rocks located just northeast of Ivanpah 2, are considered to be of low to negligible sensitivity for paleontological resources. (Ex. 1, § 5.8.4, Appendix 5.8; Ex. 300, p. 6.15-22.)

Comment: Alluvial deposits do not typically contain a wide variety of vertebrate fossils in fact, the opposite is true, as described in Ex. 1, Section 5.8.4.2.1. This fact has not been contested by the CEC Staff. In fact, the reference in the PMPD text (Ex. 300, p. 6-15.22 concurs with our edits. It states: “The young to intermediate age alluvium that underlies the majority of the site, as well as Pre-Cambrian metamorphic rocks located just northeast of Ivanpah 2, are considered to be of low to negligible sensitivity with respect to containing paleontological resources.”

Fossil resources in the Paleozoic rocks were hitherto unknown, and not revealed by the records search but by the field survey (in Ex. 1, Section 5.8.). Applicant recommends clarifying this description as follows:

~~Quaternary alluvial deposits underlying the project site typically contain a wide variety of vertebrate~~ lack scientifically significant fossils. Applicant's ~~records search~~ field survey revealed that significant paleontological resources ~~have been documented~~ occur in nearby Paleozoic carbonate bedrock, ~~and could be~~ but are highly unlikely to be encountered during construction of the Ivanpah 3 plant and linear facilities. ~~However,~~ Therefore, the young to intermediate age alluvium that underlies the majority of the site, as well as Pre-Cambrian metamorphic rocks located just northeast of Ivanpah 2, are considered to be of low to negligible sensitivity for paleontological resources. (Ex. 1, § 5.8.4, Appendix 5.8; Ex. 300, p. 6.15-22.)

II. INTRODUCTION

Page 1, para 3: “Ivanpah 1 would be 920 acres, Ivanpah 2 would be 1,097 acres, and Ivanpah 3 would be 1,227 acres.”

Comment: This description should be modified to reflect the most recent developments as follows:

Ivanpah 1 would be ~~914 920~~ acres, Ivanpah 2 would be 1,097 acres, and Ivanpah 3 would be 1, 227 acres.

Page 2, para 5: “Raw ground water would be drawn from one of two wells, located on the northwest corner of Ivanpah 1, which would provide water to all three plants. Each well would have sufficient capacity to supply water for all three phases. Actual water use is not expected to exceed 100 acre feet per year for all three plants. Groundwater would go through a treatment system for use as boiler make-up water and to wash the heliostats. No wastewater would be generated by the system, except for a small stream that would be treated and used for landscape irrigation.”

Comment: This description should be modified to reflect the most recent developments as follows:

Raw ground water would be drawn from one of two wells, located ~~on the northwest corner of Ivanpah 1~~ near the administration/warehouse building in the Construction Logistics Area (CLA), which would provide water to all three plants. Each well would have sufficient capacity to supply water for all three phases. Actual water use is not expected to exceed 100 acre feet per year for all three plants during commercial operations. Groundwater would go through a treatment system for use as boiler make-up water and to wash the heliostats. No wastewater would be generated by the system, ~~except for a small stream that would be treated and used for landscape irrigation~~.

Page 3, para 1: “The Applicant indicates that it would take 48 months to complete the project with construction expected to cost approximately \$300 million, for Ivanpah 1, \$280 million for Ivanpah 2, and \$520 million for Ivanpah 3. Commercial operation would begin during the third quarter of 2010 and be completed during the fourth quarter 2013, if approved by the Energy Commission. The Applicant proposes to begin project construction during the fall of 2010.

Comment: This description should be modified to reflect the most recent developments as follows:

The Applicant indicates that it would take ~~about 42~~ 48 months to complete the project with construction and engineering expected to cost approximately ~~\$300~~ 450 million, for ~~Ivanpah 1, \$280 million for Ivanpah 2, and \$520 million for Ivanpah 3~~ each of the three Ivanpah generating projects. Commercial operation would begin during the fourth quarter of ~~third quarter of 2012~~ or first quarter 2013 at Ivanpah 1, in 2013 for Ivanpah 2, and in 2014 at Ivanpah 3 ~~and be completed during the fourth quarter 2013~~, if approved by the Energy Commission. The Applicant proposes to begin project construction during the fall of 2010.

III. PROJECT DESCRIPTION AND PURPOSE

Page 1, para 3: “Development and construction is expected to cost approximately \$1,100 million. Construction could begin during the fourth quarter of 2010 and be completed during the fourth quarter 2013. The facility will be operated 7 days a week, 14 hours per day.”

Comment: This description should be modified to reflect the most recent estimates as follows:

Development and construction is expected to cost approximately \$1.81 billion ~~1,100 million~~. Construction could begin during the fourth quarter of 2010 and be completed by the first during the fourth quarter 2013 at Ivanpah 1. The facility will be operated 7 days a week, up to 14 hours per day.

Page 5, para 1: “Because the BLM expressed concern that the two original proposed well locations would interfere with monitoring and regulation of the Primm Valley Golf Club Colosseum wells, the applicant relocated the proposed wells 4,250 feet south of their original location to the northwest corner of Ivanpah 1.

Comment: This description should be modified to reflect the most recent developments as follows:

Because the BLM expressed concern that the two original proposed well locations would interfere with monitoring and regulation of the Primm Valley Golf Club Colosseum wells, the applicant relocated the proposed wells ~~4,250 feet south of their original location to the northwest corner of Ivanpah 1~~ further to the west to be near the administration/warehouse building.

IV. ENGINEERING ASSESSMENT

TRANSMISSION SYSTEM ENGINEERING

Page 8, Finding of Fact 6: “The evidence analyzes the potential environmental effects of the line removal and replacement and finds no effects except that special status plants may be harmed during the construction activities, resulting in an unmitigable significant impact.”

Comment: Finding of Fact 6 should be deleted for two reasons. First, there is no evidence in the record to support the conclusion that special status plants even occur in the Eldorado-Ivanpah transmission segment removal/replacement area, let alone to support the conclusion that such plants would be harmed during construction activities. Second, without evidence to support a finding of a significant impact, it is unclear how the PMPD can then determine that such impacts are unmitigable.

Comment: The specifics of the Project’s interconnection, as detailed in Sections A-G of the PMPD’s version of TSE-5, should be moved from the Condition section to the Verification section of TSE-5 as proposed by Applicant in its Opening Brief.

V. PUBLIC HEALTH AND SAFETY

AIR QUALITY

Comment: With the exception of Applicant’s recommended correction of clerical errors in Conditions of Certification AQ-SC5 and AQ-SC6, as described in Applicant’s August 26, 2010 filing “Clerical Errors In PMPD Condition Language for the Ivanpah Solar Electric Generating System (07-AFC-5),” Applicant has no comments on the PMPD’s Air Quality section.

WASTE MANAGEMENT

Page 2, section 2, para 2: “. . . Non-recyclable wastes will be collected and disposed of pursuant to applicable LORS.”

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . Non-recyclable wastes will be collected and disposed of pursuant to applicable LORS. (Ex. 1, §§ 5.14.4.1.1, 5.14.5, 5.14.2)

Page 3, para 3: “. . . Although spills might occur, proper hazardous material handling and good practices will keep spill wastes to a minimum.”

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . Although spills might occur, proper hazardous material handling and good practices will keep spill wastes to a minimum. (Ex. 1, §5.14.5)

Page 4, para 1: “. . . in accordance with LORS applicable to generators of hazardous waste.”

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . in accordance with LORS applicable to generators of hazardous waste. (Exs. 1, pp.5.14-2, 17; 300, pp. 6.13-9 to 6.13-10.)

Page 4, para 5: “. . . The evidence shows that there is sufficient capacity at these facilities to handle the project’s construction and operation nonhazardous wastes.”

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . The evidence shows that there is sufficient capacity at these facilities to handle the project’s construction and operation nonhazardous wastes. (Ex. 1, p. 5.14-10)

Page 5, para 1: “. . . Evidence indicates there is sufficient capacity at these facilities to handle the project’s hazardous wastes during its operating lifetime.”

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . Evidence indicates there is sufficient capacity at these facilities to handle the project’s hazardous wastes during its operating lifetime. (Exs. 1, p. 5.14-11 & 12; 300, p. 6.13-11.)

Page 8, Condition WASTE-3, verification:

Comment: Applicant recommends the addition of the following language to the verification to conform with the revised language agreed to by Staff and Applicant, as set forth in Staff’s March 29, 2010 Compilation of Edits:

Verification: The project owner shall submit the Construction Waste Management Plan to BLM’s Authorized Officer, and the CPM for approval no less than 30 days prior to the initiation of construction activities at the site. BLM’s Authorized Officer and the CPM shall approve or identify any material deficiencies in the Construction Waste Management Plan within 30 days following receipt of the Plan.

Page 9, Condition WASTE-6, verification:

Comment: Applicant recommends the addition of the following language to paragraph 1 of the verification to conform with the revised language agreed to by Staff and Applicant, as set forth in Staff’s March 29, 2010 Compilation of Edits:

Verification: The project owner shall submit the Operation Waste Management Plan to BLM’s Authorized Officer, and the CPM for approval no less than 30 days prior to the start of project operation. BLM’s Authorized Officer and the CPM shall approve or identify any material deficiencies in the Operation Waste Management Plan within 30 days following receipt of the Plan. The project owner shall submit any required revisions to BLM’s Authorized Officer, and the CPM within 20 days of

notification from BLM's Authorized Officer. and the CPM that revisions are necessary.

Page 10, Condition WASTE-7, verification, sentence 2:

Comment: Applicant recommends the addition of the following language to paragraph 1 of the verification to conform with the revised language agreed to by Staff and Applicant, as set forth in Staff's March 29, 2010 Compilation of Edits:

The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; amount of contaminated soil/material generated; how release was managed and material cleaned up; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements ~~placed~~ imposed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release.

VI. LOCAL IMPACT ASSESSMENT

LAND USE

Page 2, para 1, line 1- "Local ordinances and policies applicable to the project include the San Bernardino County General Plan, and the San Bernardino County 2007 Development Code.

Pages 8-9- "Those policies are not applicable, however, where they conflict with allowed uses on Federal lands."

Comment: The Commission should clarify that the San Bernardino County General Plan and 2007 Development Code are not an applicable LORS.

By its express terms, the County General Plan is not a law that is applicable to the Project, regardless of whether the policies of the County conflict with allowed uses on federal land. As noted in the evidentiary record, the Ivanpah Solar Project is "located entirely on public land and would be under federal jurisdiction."¹ Lands controlled by the BLM are specifically considered "non-jurisdiction"² by the San Bernardino County General Plan, and are "outside the governing control of the County Board of Supervisors."³ Additionally, the General Plan specifically states "County designated

¹ Ex. 300, p. 6.5-3.

² Ex. 1100, pp. I-12,13; also see the San Bernardino County General Plan Map, available at <http://www.co.san-bernardino.ca.us/landuseservices/General%20Plan%20Update/Mapping/1-Land%20Use%20Zoning%20Districts%20Maps/CJDJA.pdf> .

³ Ex. 1100, pp. I-12,13; also see the San Bernardino County General Plan Map, available at <http://www.co.san-bernardino.ca.us/landuseservices/General%20Plan%20Update/Mapping/1-Land%20Use%20Zoning%20Districts%20Maps/CJDJA.pdf> .

Land Use Zoning Districts,” and accordingly, all corresponding zoning and land use restrictions, “do not apply to Federal or State owned property.”⁴ Thus, because the Ivanpah Solar Project is located on federal land, the Project site is “non-jurisdiction,” and the San Bernardino County General Plan, General Plan policies, and Development Code do not apply to the Ivanpah Solar Project.

Page 4, para 4: “The project site is in the general area addressed by the United States Fish and Wildlife Service (USFWS) Desert Tortoise Recovery Plan and Critical Habitat designation. The recovery plan describes a strategy for recovery and delisting of the desert tortoise.”

Comment: The PMPD should clarify that the Project site is not within an area with critical habitat designation, and does not conflict with a Habitat or Conservation Plan.

The PMPD states that that the project site “is within the general area addressed by the DT Recovery Plan and Critical Habitat designation.”⁵ Applicant believes that the PMPD should be clarified to recognize that the Project itself “is not within designated critical habitat for any species,”⁶ and that there are no other habitat conservation plans or natural community conservation plans applicable to the Project location.⁷

The suggested clarification is as follows:

The project site is in the general area addressed by the United States Fish and Wildlife Service (USFWS) Desert Tortoise Recovery Plan and Critical Habitat designation. However, the project site itself is not within designated critical habitat for any species, and there are no other applicable habitat conservation plans or natural community conservation plans.

TRAFFIC AND TRANSPORTATION

The PMPD finds that the construction traffic impacts of the ISEGS, in combination with the construction traffic impacts of other projects in the region during the same period, will create a cumulatively significant effect on Northbound I-15 traffic on Friday afternoons. The PMPD states that, “looking regionally, projects that will potentially be under construction at the same time as the ISEGS, are the Southern Nevada Supplemental Airport, the Desert Xpress Train, the I-15 Mountain Pass Truck Lane, the First Solar “Stateline” Photovoltaic Project, and the Caltrans Joint Point of Entry....It is highly likely that some, if not all of these projects would result in additional vehicular trips on northbound I-15 on Friday afternoons.”

However, there is no evidence in this record that any of the alleged cumulative projects will be under construction during the ISEGS construction period. The I-15 Mountain Pass Truck

⁴ Ex. 1100, pp. I-12,13,14; also see the San Bernardino County General Plan Map, available at <http://www.co.san-bernardino.ca.us/landuseservices/General%20Plan%20Update/Mapping/1-Land%20Use%20Zoning%20Districts%20Maps/CJDJA.pdf> .

⁵ PMPD, Land Use p. 4.

⁶ Ex. 300, pp. 6.5-11, 6.2-29.

⁷ Ex. 300, p. 6.5-11.

Lane was completed in 2010, and the Desert Xpress and the Southern Nevada Supplemental Airport will not begin construction for many years. The evidence in this record shows that the construction traffic impacts from the Ivanpah Solar Project are extremely minor and extremely limited in time and scope of occurrence. During peak construction, a period of approximately three months,⁸ the Ivanpah Solar Project will add an estimated 174 vehicles to a flow of traffic of more than 30,000 vehicles per day. This impact will occur only for northbound traffic on I-15, only during a limited period of peak construction (approximately three months), only one day a week (Friday) and for only a few hours (late afternoon) of that day.⁹ The temporary additions of 174 cars on certain Fridays will not change the Level of Service (LOS) rating during this time.

Given the temporary duration of the construction impacts, the relatively minor nature of the impacts and the absence of any credible evidence that the ISEGS construction impacts will overlap with construction of the other listed projects, the PMPD errs by finding the construction impacts on traffic to be cumulatively significant, and should be corrected in accordance with the evidence in this proceeding.

Page 16, Condition TRANS-4

Comment: The entire condition (TRANS-4) should be deleted.

The Applicant and Staff recommended deletion of TRANS-4. Instead, TRANS-5, an uncontroverted condition was mistakenly deleted. TRANS-4 (Verification Of Power Tower Receiver Luminance And Monitoring) should be deleted. TRANS-5 (Power Tower Lighting) should be re-inserted

The uncontroverted evidence from the record shows that the light from the power tower receivers will not pose a safety hazard to pilots, motorists or hikers. Additionally, the number of towers at the project will be three, not seven. Thus, the Applicant respectfully submits that such a Plan is entirely unnecessary, and not supported by the record.

It is undisputed that the intensity of the light at the base of the tower is well below established safety levels and that any pilots, motorists or hikers will be at substantially greater and even safer distances. In the absence of any evidence of any discernible harm and without any specific standard or regulation regarding allowable light levels, a periodic “evaluation” would serve no productive purpose. The Commission should not require studies simply for the sake of doing a study.

⁸ RT 12/14/09, 93.

⁹ Ex. 65, p. 103.

SOCIOECONOMICS

Page 2, section 1, para 4:

Comment: Applicant recommends adding the following citation to the evidentiary record to support the statements in this section. Applicant recommends the addition of the following:

. . . The previous analysis assumed that most of the workers would commute from the Las Vegas area. (Ex. 1 § 5.10.4.3.1, 12/14/09 RT 114:15-25, 115:1-18.)

Page 5, Socioeconomics and Environmental Justice Table 7:

Comment: The PMPD states that Table 7 was replicated from a table produced by Staff. However, the numbers used by Staff in the FSA were incorrect, and these errors were carried over to the PMPD. Applicant recommends correcting the table as follows to match the estimates in the evidentiary record (Ex. 1, §§ 5.10.4.3.6 and 5.10.4.4.6):

| | |
|---------------------------------------|---|
| Estimated Secondary Employment | |
| Construction | 528 <u>1,151</u> jobs |
| Operation | 42 <u>30</u> jobs |
| Estimated Secondary Income | |
| Construction | \$20.5 <u>\$44.8</u> million |
| Operation | \$470,150 <u>\$1.1</u> million |

Page 9, Finding of Fact 15: “As a result of the updated, smaller footprint for ISEGS Phase III, the number of employees and the potential economic benefits would be reduced proportionately; however, since there are no project-related socioeconomic impacts, the smaller footprint does not change that finding.”

Comment: Even though Applicant’s Mitigation Proposal reduced the footprint for ISEGS Phase III, Applicant did not reduce the labor force estimates. Applicant recommends that Finding of Fact 15 be either deleted, or revised as follows:

~~As a result of~~ Despite the updated, smaller footprint for ISEGS Phase III, ~~the number of employees and the potential economic benefits would be~~ labor force estimates have not been reduced proportionately. ~~;~~ however, ~~since~~ Since there are no project-related socioeconomic impacts, the smaller footprint does not change that finding.

Page 9, Conclusion of Law 1:

Comment: The Socioeconomics section of the PMPD does not have an Appendix A; thus, Applicant recommends deleting the reference to Appendix A in Conclusion of Law 1.

NOISE AND VIBRATION

Page 2, para 4: “Moreover, with the exception of 0.5 mile of gas pipeline and 570 feet of water line, all linear facilities will be within the project site and construction noise impacts will be similar to those for the power plant.”

Comment: This description should be updated to conform with Applicant’s Biological Mitigation Proposal (Ex. 88) as follows:

Moreover, with the exception of ~~0.5~~ 1.5 mile of gas pipeline ~~and 570 feet of water line~~ and the paving of 1.6 miles of Colosseum Road, all linear facilities will be within the project site and construction noise impacts will be similar to those for the power plant.

Page 3, para 1: “The first two Conditions establish a notification and complaint process to resolve issues arising from any excessive construction noise; Condition **NOISE-6** limits construction to the hours between 7:00 a.m. and 7:00 p.m.”

Comment: The Applicant recommends that the text be clarified to explain that only noisy construction is limited to the hours between 7:00 a.m. and 7:00 p.m. Applicant recommends the following clarification:

The first two Conditions establish a notification and complaint process to resolve issues arising from any excessive construction noise; Condition **NOISE-6** limits noisy construction to the hours between 7:00 a.m. and 7:00 p.m.

Page 4, Finding of Fact 3: “Construction noise levels are temporary and transitory in nature and will be mitigated to the extent feasible by sound reduction devices, limiting construction to day-time hours, and providing a notice and complaint process to the public.”

Comment: As explained above, Applicant recommends that Noise and Vibration Finding of Fact 3 be revised to clarify that noisy construction will be limited during day-time hours, not all construction activities. Applicant recommends the following clarification to Finding of Fact 3:

Construction noise levels are temporary and transitory in nature and will be mitigated to the extent feasible by sound reduction devices, limiting noisy construction activities to day-time hours, and providing a notice and complaint process to the public.

Page 8, Condition **NOISE-6**, para 1: “Heavy equipment operation and noisy construction work that causes off-site annoyance as evidenced by the filing of a legitimate noise complaint shall be restricted to the 7:00 a.m. to 7:00 p.m. time period.”

Comment: Applicant recommends that this condition be clarified as follows:

~~Heavy equipment operation and n~~Noisy construction work or heavy equipment operation that causes off-site annoyance as evidenced by the filing of a legitimate noise complaint shall be restricted to the 7:00 a.m. to 7:00 p.m. time period.

VISUAL RESOURCES

Page 20, para 5: “This strong level of overall project visual change would not be compatible with the moderate overall visual sensitivity of the Ivanpah Valley, nor with the high overall visual sensitivity of the Stateline Wilderness Area in which this viewpoint is located.

Comment: This description of KOP 9 should be modified to clarify that the KOP 9 is not actually within the Stateline Wilderness Area, as illustrated in Exhibit 69.

VII. VERRIDE FINDINGS

Pages 2-3

The PMPD correctly identifies multiple benefits of the Ivanpah Solar Project. The Applicant respectfully requests that the Commission include the other important benefits of the Project that are a part of the evidentiary record:

1. The Ivanpah Solar Project provides reliability benefits by load following and by being available on peak. The Project's generation is “peak coincident,” delivering power when large air conditioners and other loads require additional generation resources.
2. The Ivanpah Solar Project will avoid more than 13 million tons of CO₂ emissions over the lifecycle of the Project, as well as 85 percent of the air emissions from an equally-sized natural gas plant.
3. Electricity produced by the Ivanpah Solar Project will displace fossil-fuel derived power and reduce the need to operate peaking power plants.
4. The plants will employ dry-cooling, which will reduce water usage by 90 percent, allowing the Ivanpah Solar Project to use approximately 30 times less water than competing technologies using wet cooling.
5. The Low Impact Design uses BrightSource’s proprietary hanging heliostats, which minimize the need for grading and concrete pads required for competing technologies.
6. The BrightSource Energy Luz Power Tower 550 (LPT 550) technology has been proven at the demonstration facility in Israel. This technology is reliably producing the world’s

highest temperature steam for solar energy, and has been validated by an independent engineering firm.

7. The Ivanpah Solar Project will provide substantial economic benefits during both construction and operation of the Project.

Pages 3-4, Findings of Fact

Comment: The Applicant respectfully requests that the facts identified above be incorporated into the Commission's Findings of Fact as Findings of Fact 6 through 12, respectively.

VIII. RECREATION

The Applicant supports the deletion of Staff's proposed REC-1 condition. The record clearly shows that the Project will not cause significant impacts to recreation, as the Project will not disrupt recreation opportunities, and the project's indirect impacts by itself would not substantially diminish the quality of outdoor recreation experiences.¹⁰ Furthermore, even if Public Resources Code Section 25529 were applicable to the Project as suggested by Staff, Section 25529's requirement that an area be established for public use is more than satisfied by Applicant's commitment to paving and re-routing Colosseum Road and to improving and re-routing various other hiking trails to afford continued public access to the site and the public lands to the west of the site.¹¹

Nevertheless, Applicant has committed to build a Solar / Ecological Interpretive Center to be developed to in the vicinity of the ISEGS project. The proposed language memorializing this commitment is as follows:

REC-1: Prior to the start of commercial operations of the first ISEGS power plant to be constructed, the project owner shall prepare plans for a Solar / Ecological Interpretive Center to be developed to in the vicinity of the ISEGS project. The project owner in consultation with the County shall propose a location on-site or off-site that provides a vantage point to observe as many features as is possible of the ISEGS project without compromising safety or security. The project owner's plans for the Solar / Ecological Interpretive Center may be coordinated with San Bernardino County.

¹⁰ Ex. 300, p. 6.18-15.

¹¹ Off-road, recreational vehicle trails currently authorized by BLM which run through the proposed project site would be re-located outside of the project boundary fence. The trails that would be rerouted are:

- Trail 699226, which passes through the northern third of Ivanpah 3, would be rerouted along the northern border of Ivanpah 3;
- Trail 699198 would be rerouted between Ivanpah 2 and 3; and
- An unnumbered trail on the east side of Ivanpah 3 would be relocated outside the project site so that it would provide continued access to the limestone outcrop. (Ex. 300, p. 3-11)

Verification:¹²

The Solar / Ecological Interpretive Center shall include or make accessible to the public the following features:

1. surfaced public parking
2. information kiosks describing ISEGS solar energy technology;
3. picnic area with tables,
4. garbage cans;
5. interpretive signs identifying local landmarks and ecological features;
6. a contained restroom facility (or reasonable access to a facility with flush toilets and sinks should the Solar / Ecological Interpretive Center be constructed adjacent to another facility having a restroom);

At least 30 days prior to commercial operation of the first power plant of the ISEGS development, the project owner shall submit plans to BLM's Authorized Officer and the CPM for review and approval for a Solar / Ecological Interpretive Center to be developed in the ISEGS vicinity in coordination with San Bernardino County.

Within 6 months of approval of the proposed Solar /Ecological Interpretive Center plans (1) by the Commission and the BLM, for an on-site Center, or (2) by the County of San Bernardino, for an off-site Center, being final and no longer subject to administrative or judicial review, the project owner shall commence construction of the Center and shall to the extent feasible complete construction within one year following the start of construction if the Center is located off of the ISEGS site. If located on-site, then construction of the Center shall follow the completion of all ISEGS construction. Upon completion the project owner shall submit notice to BLM and the Energy Commission that it has completed construction of the Solar / Ecological Interpretive Center.

In each Annual Compliance Report, the project owner shall provide a summary of estimated public use of the Solar / Ecological Interpretive Center and summarize any issues associated with operating and maintenance activities.

¹² Applicant believes Staff is in accord with this language; however, Applicant added a provision regarding the approvals by the CEC, the BLM and/or San Bernardino County being final and no longer subject to administrative or judicial review. Staff also wanted to move the "Verification" designation down to the paragraph that starts with "At least 30 days prior to...." Applicant believes that the implementation details should be in the verification, not the condition language, especially where, as here, Public Resources Code Section 25529 is wholly inapplicable, and Applicant has voluntarily committed to building the Solar/Ecological Interpretive Center.

STATE OF CALIFORNIA

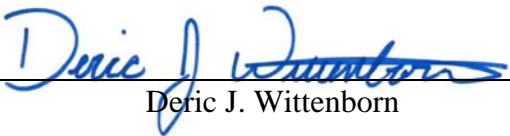
Energy Resources Conservation
and Development Commission

In the Matter of:)
) Docket No. 07-AFC-5
Application for Certification for the Ivanpah Solar)
Electric Generation System)
)
)
_____)

PROOF OF SERVICE

I, Deric J. Wittenborn, declare that on September 2, 2010, I served copies of the attached *Applicant's Comments on the Presiding Member's Proposed Decision for the Ivanpah Solar Electric Generating System and Attachments* by E-Mail and U.S. Mail to each party on the attached service list.

I declare under the penalty of perjury that the foregoing is true and correct.



Deric J. Wittenborn

07-AFC-5
Service List
September 2, 2010

sdeyoung@brightsourceenergy.com
tstewart@brightsourceenergy.com
jcarrier@ch2m.com
jdh@eslawfirm.com
e-recipient@caiso.com
tom_hurshman@blm.gov
Raymond_Lee@ca.blm.gov
dfgpalm@adelphia.net
tgulesserian@adamsbroadwell.com
mjconnor@westernwatersheds.org
gloria.smith@sierraclub.org
joanne.spalding@sierraclub.org
gssilliman@csupomona.edu
devorah.ancel@sierraclub.org
jbasofin@defenders.org
atomicoadranch@netzero.net
lbelenky@biologicaldiversity.org
ianderson@biologicaldiversity.org
gsuba@cnps.org
thansen@cnps.org
bbrizze@cc.sbcounty.gov
jbyron@energy.state.ca.us
jboyd@energy.state.ca.us
pkramer@energy.state.ca.us
jkessler@energy.state.ca.us
dratliff@energy.state.ca.us
pao@energy.state.ca.us
docket@energy.state.ca.us
sgp@eslawfirm.com
glw@eslawfirm.com
granites@telis.org

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