STATE OF CALIFORNIA

Energy Resources Conservation
and Development Commission

Application for Certification for the IVANPAH SOLAR ELECTRIC GENERATING SYSTEM	)	Docket No. 07-AFC-5

REPLY BRIEF OF IVANPAH SOLAR PROJECT

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I. INTRODUCTION

Pursuant to the Committee's Briefing Order, Solar Partners I, LLC; Solar Partners II, LLC; and Solar Partners VIII, LLC, the owners of the three separate solar plant sites collectively referred to as the Ivanpah Solar Electric Generating System or Ivanpah Solar Project ("Applicant")[1] hereby files the following Reply Brief.

A. Certification Of The Ivanpah Solar Project Is Supported By Substantial Evidence.

The only decision the Commission can reach under the standard recognized by the Sierra Club in its Opening Brief, that there must be "sufficient substantial evidence to support the findings and conclusions required for certification of the site and related facility," is to certify the Ivanpah Solar Project. The CEQA Guidelines provide the definition of "substantial evidence" that governs for these purposes as follows:

> 'Substantial evidence' as used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, *even though other conclusions might also be reached*. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. *Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate,* or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.[2]

Significantly, a decision to certify the Ivanpah Solar Project is supported by substantial evidence if the record contains enough relevant information to support the decision, even if there is conflicting evidence in the record: "Determinations in an EIR must be upheld if they are supported by substantial evidence; *the mere presence of conflicting evidence in the administrative record does not invalidate them*."[3]

As a matter of law, merely pointing to conflicting evidence in the record, as Intervenors (other than CURE) have done collectively and individually in their opening briefs, cannot

[1] These three companies are Delaware limited liability companies. BrightSource Energy Inc. (BSE), a Delaware corporation, is a technology and development company, and the parent company of the Solar Partners entities.

[2] 14 C.C.R. § 15384(a); emphasis added.

[3] *Barthelemy v. Chino Basin Municipal Water District* 38 Cal.App.4th 1609, 1619; emphasis added.

establish that the Commission's decision is not supported by substantial evidence. Instead, substantial evidence *must* be based on the record as a whole, which Intervenors have utterly failed to address.

In this Reply Brief, we address the most egregious of the arguments raised by the Intevenors and Staff, and we review the substantial evidence supporting the certification of the Ivanpah Solar Project based upon the findings of fact, conclusions of law and Conditions of Certification proposed by the Applicant.

II. AIR QUALITY

A. The Record Makes Clear The Amount And Extent That The Boilers Will Be Authorized To Operate.

The Opening Brief of the Center for Biological Diversity ("CBD") argues the "FSA did not accurately reflect * * * the amount and extent that the Project would use natural gas boilers as a supplemental energy source."[4] This is simply incorrect. The analysis in the FSA is based on the following assumptions:

- Maximum hourly operating impacts were determined based on the maximum firing rate for each boiler, plus testing of one emergency generator.[5]

- Maximum daily operating impacts were determined based on 4 hours of operation of each boiler at maximum fuel use, plus testing of one emergency generator.[6] The FSA incorporates the Mojave Desert Air Quality Management District's (MDAQMD) condition limiting daily fuel firing to not more than four hours per day.[7]

- Maximum annual operating impacts were determined based on the use of fuel in the boilers equal to 5% of the solar input to each unit.[8] Using the solar thermal input estimate that was provided in the AFC, this equals 480,000 MMBTU/yr.[9] This is equivalent to the amount of fuel that would be burned during approximately 520 hours of maximum fuel firing in all of the boilers.[10] The FSA proposed a Condition of Certification limiting

[4] CBD Opening Brief, pp 8-9; pp. 34-38.

[5] Ex. 300, p. 6.1-23.

[6] Ex. 300, p. 6.1-23.

[7] Ex. 300, Conditions of Certification AQ-11 and AQ-22.

[8] Ex. 300, p. 6.1-23.

[9] Ex. 1 Table 5.1-15, p. 5.1-29.

[10] Maximum hourly fuel use rate = (231.1+231.1+462.2 MMBtu/hr) (Ivanpah 1 + Ivanpah 2 +Ivanpah 3). 480,000 MMBTU/yr /(231.1+231.1+462.2) MMBTU/hr = 520 hours/year (rounded to two significant figures).

annual fuel use to 5% of the solar thermal input to each unit.[11] The FSA also incorporated the District condition limiting annual boiler operation to 1460 hours per year.[12]

It is expected that boiler use will actually be much lower than the maximum allowed; for example, average daily fuel use is expected to be less than the amount burned in one hour of firing at full load. However, the impacts presented in the FSA are based on the worst-case estimates discussed above.

The descriptions of expected boiler use, when expressed as hours of operation, in the Application and the FSA are therefore illustrative, not limiting. The emission calculations and analysis of impacts presented in the FSA are based on maximum allowable fuel use, not hours of boiler operation. The statement on page 7.2-4 of the FSA ("average daily operation of the natural gas boilers would be limited to one hour") is incorrect; the statement should have read "average daily operation of the natural gas boilers is expected to be not more than one hour;" however, none of the analyses of Project impacts relies on this statement.

The emission estimates presented on pages 6.1-14 through 6.1-17 of the FSA were based on 1460 hours per year of boiler operation, and reflect the limits contained in the District permit conditions.[13] The FSA also states on this page that actual emissions are expected to be less than 1/3 of the maximum allowable emissions.[14] This is consistent with statements made elsewhere in the FSA that the expected average boiler use would be less than one hour per day.[15]

The Applicant has requested that the District permit conditions be expressed in terms of fuel use instead of hours, allowing more hours of operation if the boiler is fired at less than full capacity. This expression does not affect maximum hourly or daily emissions in any way, because emissions in the FDOC and the FSA were estimated by calculating the amount of fuel that would be burned in one day or one year, and assuming that the boilers would be fired at capacity for the hours in the permit limit, and multiplying that fuel consumption times a fuel-based emission factor. The permit condition expresses the same amount of fuel combustion directly, instead of as hours of operation and an implicit fuel firing rate. Therefore, changing the

[11] Ex. 300, Condition of Certification AQ-SC10.

[12] Ex. 300, Conditions of Certification AQ-11 and AQ-22.

[13] Ex. 300, p. 6.1-14.

[14] Ex. 300, p. 6.1-15, footnote a to Air Quality Table 7.

[15] Ex. 300, p. 3-8; 3-9.

form of the limit from hours of boiler operation to quantity of fuel used does not affect the analysis in the FSA in any way.

B. There Is No Evidence In The Record To Support CBD's Contention That The Project Will Result In The "Elimination Of Potentially Thousands Of Acres Of Well-Developed Cryptobiotic Soil Crusts."

First, the existence of "potentially thousands of acres of well-developed cryptobiotic soil crusts"[16] at the Project site is entirely speculative, and not supported by the record. The deep, fine-grained soils that appear necessary to support an extensive crust do not occur in or near the Project site. [17]

Second, the claim that the Project would eliminate a significant portion of any "well-developed cryptobiotic soil crust" that may be present is not supported by the record. The fact that the Project will occupy a large area does not mean that all of the soil, or even a significant fraction of it, constitutes "well-developed cryptobiotic soil crust" or that any significant portion of any such crust will be disturbed.

C. There Is No Evidence In The Record To Support CBD's Assumption That The Project Would "Leave Bare Soils More Likely To Be Eroded By Winds."

CBD's claim that the project will result in "bare soils" is simply incorrect.[18] On the contrary, the Project includes extensive dust control measures designed to reduce or eliminate bare soil, and to stabilize disturbed soil to the degree necessary to reduce or eliminate excessive wind erosion. As Staff concluded, Conditions of Certification AQ-SC1 through AQ-SC4, for construction, and AQ-SC7, for operation, will mitigate these potential impacts to less than significant.[19]

D. Evidence In The Record Indicates That Fugitive Dust Will Be Controlled To A Level Of Insignificance.

The AFC describes the dust control measures that were an integral part of the Project design.[20] Staff proposed additional dust control measures in the FSA, and determined that the

[16] CBD Opening Brief, p. 33.

[17] 1/14 RT 93-94.

[18] CBD Opening Brief, p. 33.

[19] Ex. 315, p. 4-7.

[20] Ex. 1, Appendix Section 5.1F.3.

combined effect of Project components and additional mitigation measures would reduce dust emissions to a level of insignificance.[21] CBD's assumption that disturbed but stabilized soil would be more likely to be eroded by winds is unsupported by evidence in the record.

CBD correctly points out that the FSA does not discuss the difficulty of implementing fugitive dust measures "in the desert environment".[22] The FSA contains no such discussion for the simple reason that no such difficulty exists. The Conditions of Certification proposed by Staff require that dust from the *Project site* be controlled to avoid visible emissions,[23] a requirement that does not apply to the surrounding "desert environment." The Conditions of Certification proposed by Staff provide the flexibility to allow the operator to meet control objectives in a manner that minimizes other impacts. For example, by allowing the use of water instead of prescribing chemical stabilizers, introduction of such materials into the desert can be minimized. By allowing the frequency of application to be determined by results, rather than prescription, the potential of impacts from adding water to the desert can be minimized.

The results-based approach of Staff's proposed Conditions of Certification provides environmental protection that is superior to prescription of specific methods and techniques, at least with regard to dust generation and mitigation. The operator must do whatever it takes to achieve the required result: the less active control that must be applied to achieve the result, the smaller the Project's impact on the environment.

CBD's attempt to portray the FSA as lacking information needed by the public to assess the significance of particulate impacts is therefore completely unfounded and misguided; to the contrary, the information CBD suggests would be appropriate would itself be misleading, and to subjugate preferred environmental results to serve a standard for specificity that does not exist would be absurd. The FSA describes the impacts that will be allowed by Project approval through the quantification of emissions and by the terms of the proposed mitigation requirements, and concludes that those impacts are not significant. CBD has failed to point to any evidence in the record that contradicts the Staff's conclusions.

[21] Ex. 300, p. 6.1-22.

[22] CBD Opening Brief, p. 33.

[23] See Ex. 300, Conditions of Certification AQ-SC4 and AQ-SC7.

E. Impacts From GHG Emissions From The Project Are Insignificant.

CBD picks at the quantitative aspects of the analysis of GHG emissions in the FSA,[24] but fails to refute, or even get close to challenging, the basic conclusion of the FSA on this issue: construction and operation of this Project will result in a substantial reduction in global emissions of GHGs.

It may be possible that other projects would reduce GHGs more—the originally proposed Project, for example, would have resulted in a larger reduction in GHGs than the Biological Mitigation Project. Other projects, of different designs, might have greater GHG emission reductions as well. Nothing in CEQA, nor in any applicable law, prevents approval of a project that provides significant environmental benefits in favor of a hypothetical perfect project, particularly with respect to a single factor and, of course, larger reductions in GHGs does not necessarily translate to improved performance or reduced impacts in other regards. The evidence before the Commission, however, demonstrates that characterization of *this* Project as being in competition with those other projects is a false argument. In order to meet California's renewable energy goals, we don't need one project—we need many, of various types and in various locations, to achieve California's Renewables Portfolio Standard and greenhouse gas emission reduction goals.

1. CBD Mischaracterizes California Natural Resources Agency Guidance On Review Of GHGs Under CEQA.

CBD cites a California Natural Resources Agency document for its claim that "any analysis regarding the Project's greenhouse gas emissions must be rigorous, site-specific, and inclusive of both short-term and long-term effects."[25] Examination of this document reveals, however, that this characterization is inaccurate from beginning to end.

The guidance, far from specifying any particular form of analysis, explicitly states that GHG review may even be qualitative: "[M]andating that lead agencies must quantify emissions whenever possible would be a departure from the CEQA statute."[26]

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[24] CBD Opening Brief, pp. 33 et seq.

[25] CBD Opening Brief, pp. 33-34.

[26] Cal. Nat. Res. Agency, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97* (Dec. 2009) at p. 83.

With regard to site-specificity, the guidance states that the GHG review may (indeed, must) consider system-wide impacts:

> "The first factor in subdivision (b), for example, asks lead agencies to consider whether the project will result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting. All project components, including construction and operation, equipment and energy use, and development phases must be considered in this analysis. (State CEQA Guidelines, § 15378 (project includes ―the whole of the action).) For example, a mass transit project may involve GHG emissions during its construction phase, but substantial evidence may also indicate that it will cause existing commuters to switch from single-occupant vehicles to mass transit use. Operation of such a project may ultimately result in a decrease in GHG emissions. Such analysis, provided that it is supported with substantial evidence and fully accounts for all project emissions, may support a lead agency's determination that GHG emissions associated with a project are not cumulatively considerable."[27]

The guidance also states: "In the context of power generation, to the extent that a project may cause changes in greenhouse gas emissions in an existing power system, and substantial evidence substantiates such changes, those changes may be considered pursuant to section 15064.4(b)(1)."[28]

Finally, the guidance has this to say about the need to consider short-term impacts: "For example, ***if*** the emissions occurring in the short-term will have impacts that differ from emissions occurring in the future, those differences ***may*** need to be analyzed." [29] In the case of the Ivanpah Project, the only differences between short- and long-term impacts relate to construction impacts, which have been addressed, and commissioning emissions, which are still not significant and are addressed below.

2. GHGs Are Not Subject To PSD Review At This Time.

CBD incorrectly claims that GHGs are currently "subject to regulation" under the Clean Air Act.[30] USEPA has unambiguously determined that GHGs are not currently subject to regulation, nor will they be until EPA adopts a regulation that imposes a control requirement.

> "When the light-duty vehicle rule is finalized, the GHGs subject to regulation under that rule would become immediately subject to regulation under the PSD

[27] Id. at p. 24.

[28] Id. at p. 83.

[29] Id. at p. 84 (emphasis added).

[30] CBD Opening Brief, p. 34.

> program, meaning that from that point forward, prior to constructing any new major source or major modifications that would increase GHGs, a source owner would need to apply for, and a permitting authority would need to issue, a permit under the PSD program that addresses these increases."[31]
>
> "I expect that the final action on reconsideration will explain that greenhouse-gas emissions will become 'subject to regulation' under the Clean Air Act, such as to make them part of the Act's stationary-source permitting programs, in January of 2011, when Model Year 2012 light-duty vehicles will need to comply with EPA's greenhouse-gas emissions standard. As a result of that final action, no facility will need to address greenhouse-gas emissions in Clean Air Act permitting before 2011."[32]

There is no evidence in the record to support CBD's contention that the Project is subject to GHG review under PSD, and no amount of conjecture can subvert EPA's clear statements of intent and interpretation.

3. There Is No Requirement Under CEQA To Examine Alternatives To The Project That Have Lower GHG Emissions, Because The GHG Impacts From The Project Are Insignificant.

CBD is almost correct in its characterization of CEC's responsibility with regard to analysis of GHGs. CEC must consider alternatives that avoid impacts, impact minimization, and mitigation for projects with significant impacts (not emissions, as stated by CBD). Because, from a CEQA perspective, the Project's GHG impacts are clearly insignificant (the Project's effect on global GHG emissions is a net reduction, and the Project's impact with respect to GHG emissions is beneficial), CEQA does not require the consideration of mitigation measures for GHG emissions or of alternatives that would reduce GHG emissions.

CBD quibbles with the assumptions made in the FSA for calculations of Project GHG emissions. Astonishingly, CBD is upset that the emission estimate used to demonstrate the

[31] Federal Register, Volume 74, Number 206, pp. 55292-55365, October 27, 2009 at p. 55294.

[32] Letter, EPA Administrator Lisa P. Jackson to the Honorable Jay D. Rockefeller IV, February 22, 2010.

Project's insignificance is higher than they would have calculated.[33] Furthermore, CBD confirms in its brief that the record is clear on the basis for Staff's assessment of impacts.[34]

The FSA estimated GHG emissions of 27,444 metric tons per year on a CO2 equivalent basis (MtCO2e/yr),[35] which corresponds to an annual fuel usage by the boilers of 480,000 MMBTU/yr, and includes auxiliary equipment. The Applicant estimated GHG emissions of 25,628 MtCO2e/yr 2e,[36] based on use of fuel equivalent to 5% of the design annual solar thermal input (480,000 MMBTU/yr).

CBD notes that the GHG emissions calculated in the FSA are lower than the GHG emissions authorized under the District permit.[37] What CBD fails to consider is that the FSA also includes an additional proposed Condition of Certification that restricts the Project operations to the levels evaluated in the FSA. The condition limiting boiler fuel use to 5% of the solar thermal input is designed to be more restrictive than the District's annual limit, and is consistent with the GHG calculations in the FSA.[38] CEC Staff estimated GHG emissions under the mitigated Project proposal to be 20,900 MtCO2e/yr,[39] based on the limit in the Conditions of Certification.

Furthermore, calculation of GHG emissions based on the District's fuel use limit shows that CBD's claim that the alleged numerical inaccuracy makes the FSA "misleading" is a tempest in a teapot. The FSA's analysis demonstrates that the Project will result in a reduction of system-wide GHG emissions.[40] It does this by comparing the facility GHG performance (0.029 MtCO2e /MWh) with those of other sources of power that would be displaced (0.370 to 0.430 for natural gas combined cycle). Using the highest GHG emission allowable in the worst case,

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[33] "[A]lthough the FSA states repeatedly that the gas boilers (which are the primary source of GHG emissions) will only be used for up to 4 hours a day with an average of no more than one hour a day (see, e.g., FSA/DEIS at 3-8, 3-9, 6.1-64, 7.2-4), during the evidentiary hearing before the CEC it was made clear that the calculations of GHG emissions were in fact not based on 365 hours per year as one would be lead to believe from reading the FSA, but rather was based on an entirely different calculation using a figure of 480,000 mmBtus per year." CBD Opening Brief, p. 34.

[34] Id.

[35] Ex. 300, pp. 61-65.

[36] Ex. 1, p. 5.1-46.

[37] CBD Opening Brief, p. 35.

[38] Ex. 300, Condition AC-SC10.

[39] Ex. 315, p. 4-24.

[40] Ex. 300, p. 6.1-66

based on the District permit limit, the Project's GHG performance would be 0.077 -- still a small fraction of the displaced emissions.

4. CEQA Does Not Require Comparison Of Project Direct Emissions With A Numerical Emission Threshold.

CBD suggests that CEC should establish a numerical threshold for GHG impact significance.[41] It refers to several such thresholds proposed or adopted by various agencies.

The Commission itself has already considered CBD's suggestion, and after a great deal of thought, discussion, and public debate has concluded that numerical thresholds of significance are not necessary for the assessment of impacts from power plant projects before it:

> Our recommendation is that all power plant applicants are subject to CEQA analysis to determine the significance of their GHG impact, with no attempt to adopt numerical thresholds.[42]

In short, the analyses by both Staff and Applicant of the significance of the impacts of the Project's greenhouse gas emissions are fully consistent with applicable guidance.

5. Inclusion Of The Boiler Commissioning Emissions Does Not Change The GHG Analysis.

CBD opines that the Staff's estimates of GHG emissions do not include GHG emissions associated with commissioning activities.[43] CBD then goes on to cite Staff testimony describing the GHG emissions during commissioning.[44] It is unclear what CBD is complaining of. To the extent they are attempting to argue that GHG emissions during a year which includes commissioning activities will be higher than GHG emissions during a year with worst-case boiler operations, there is no evidence in the record to substantiate this claim. If CBD is complaining about some different point, their argument is unintelligible.

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[41] CBD Opening Brief at 35-36.

[42] Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting Applications. CEC-700-2009-004. March 2009. p. 19.

[43] CBD Opening Brief, p 36.

[44] Ibid.

6. CEQA Does Not Require A Lifecycle Analysis For GHGs.

CBD argues that the record is deficient in that it does not include a lifecycle analysis of the GHG emissions from the Project.[45] There is nothing in the CEC's Framework document,[46] or in the Commission's precedential decision regarding GHG emissions in the matter of the Avenal Energy Project,[47] or under any other applicable California law or regulation, including CEQA, that supports CBD's claim that a lifecycle analysis is required. Furthermore, CBD's argument in this matter is selective; the extensive testimony of CBD witness Bill Powers regarding their proposed rooftop solar photovoltaic project alternative did not include, or even mention, a lifecycle analysis of GHGs generated by this option.[48]

In its initial guidance regarding the assessment of GHG impacts during power plant siting cases, the Commission recognized that some parties had argued in support of the use of life cycle analyses. However, the Commission's response was direct:

> "Life cycle materials and fuels analysis are more difficult and subject to infinite complexity and variation, but these are refinements that can be dealt with separately *or not at all*, depending on what is reasonable (and what reliable information is reasonably available." (emphasis added)[49]

7. The Project's PM_{10} Air Quality Impacts Are Not Cumulatively Significant.

CBD claims that "the cumulative impacts analysis is flawed because it fails to look at the contribution of the proposed project to air quality exceedances and focuses solely on whether the proposed project itself would cause the exceedances."[50] This is simply untrue. The record shows that, for all pollutants and averaging times except for 24-hour PM_{10}, the cumulative impact of the Project and background is below all ambient air quality standards.[51] With regard to PM_{10}, the record shows that worst case Project impact is less than 4% of the existing background

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[45] CBD Opening Brief, p. 37-38.

[46] *Framework for Evaluating Greenhouse Gas Implications of Natural-Gas Fired Power Plants in California*. CEC-700-2009-009. May 2009. Note that although the Framework document focuses on gas-fired power plants, it is the GHG emissions associated with the use of the Project's gas-fired boilers to produce electricity that CBD complains of.

[47] Final Commission Decision. Avenal Energy. 08-AFC-1. December 2009.

[48] 1/12 RT 266 et seq.

[49] Committee Guidance, op. cit. p. 10.

[50] CBD Opening Brief, p. 42.

[51] Ex. 300, p. 6.1-23.

concentration.[52] The record shows that no other stationary sources were identified that would impact the same areas as this Project.[53] The record shows that several other construction projects in the region were identified, but CEC Staff determined those projects would have "minimal air quality impacts,"[54] and that mitigation of construction emissions from this Project, and a similar standard for mitigation of other projects, would make CEQA air quality impacts less than significant.[55]

Far from failing to look at the Project's potential contribution to existing violations of ambient standards, the FSA describes the Project's relative contribution to each of the ambient standards (whether violated or not), and correctly concludes that the Project's contribution to violations is insignificant.

8. The Project's PM_{10} Air Quality Impacts Are Not Cumulatively Considerable.

CBD suggests that the Project's PM_{10} air quality impacts are cumulatively considerable because the Project would be located within an area designated as nonattainment for PM_{10}.[56]

CBD mischaracterizes the relevance of the region's nonattainment status under CEQA, and misconstrues the requirements of the CEQA cumulative impact analysis. The test is not whether the cumulative impact of a project plus surroundings is "significant." The test is to determine whether the project's incremental impact, considering the cumulative effect of the project and other local projects, is significant.[57] This means that a project's impact that would be insignificant in another context is subject to more scrutiny and tighter limits.

The Mojave Desert AQMD is the regulatory agency with responsibility for achieving and maintaining air quality standards within San Bernardino County. The District requires emission offsets as mitigation only for project emissions above certain thresholds set forth in the AQMD's Rules and Regulations. Specifically, emissions from projects below the PM_{10} offset threshold of

[52] Id.

[53] Ex. 300, p. 6.1-33.

[54] Id.

[55] Id.

[56] CBD Opening Brief, p. 42.

[57] "'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." 14 CAC 15064(i)(1).

15 tons per year[58] do not require any further project-specific review or analyses. Instead, the District, as the agency with the responsibility for achieving and maintaining ambient air quality standards in the region, accounts for and manages the potential cumulative impacts of such small projects through its regulatory control programs, adopting measures to reduce emissions as it works towards regional compliance. This is all that is required.

The following PM control techniques are included in the Project design, and made enforceable by Conditions of Certification AQ-SC1 through AQ-SC9:

Construction Dust Mitigation

- Designation of an onsite Air Quality Construction Mitigation Manager, with the authority to shut down construction activities if dust mitigation does not meet requirements.
- Creation of an Air Quality Construction Mitigation Plan, including the following elements
  - Paving of main access roads
  - Stabilization of unpaved roads
  - 10 mph vehicle speed limit on unpaved roads
  - Inspection and washing of equipment tires before driving offsite
  - Graveled exits to prevent trackout onto roadways
  - Periodic sweeping of paved roads
  - Covers for soil piles and disturbed areas
  - Covers for bulk transport
  - Wind erosion control at all construction areas and disturbed land
  - Dust plume response procedures
  - Control of diesel particulate emissions
  - Monthly compliance reports

Operating Dust Mitigation

- Creation of a Site Operations Dust Control Plan, including the following elements
  - Wind erosion control techniques
  - 10 mph vehicle speed limit on unpaved roads
  - Use of soil stabilizers on all unpaved roads and disturbed soil
  - Diesel engines will meet most stringent applicable EPA Tier standards

In this case, between the Project's design and Staff mitigation proposals, particulate control measures have been imposed to make the Project's impact on regional and local air quality insignificant.

[58] MDAQMD Rule 1303.

III. ALTERNATIVES

A. The Sierra Club Proposal Is Not a Feasible Alternative That Will Avoid or Substantially Lessen Any of the Proposed Effects of the Project.

The Opening Brief of the Sierra Club contains a proposal that the Sierra Club characterizes as an "Alternative". The Sierra Club asserts that this proposal "actually and fully mitigates all Project impacts on the desert tortoise in the Ivanpah Valley..."[59]

There are four important conclusions that can be drawn from the Sierra Club proposal. First, as we explain in our Opening Brief, the Sierra Club proposal is merely a "concept" and not an "Alternative" as that term is understood under CEQA.[60]

Second, because the boundaries of the Sierra Club proposal include the area proposed by the Applicant as the Site for Ivanpah I, the Sierra Club proposal confirms that Ivanpah I "actually and fully mitigates" the Project impacts on the Desert Tortoise in the Ivanpah Valley.

Third, to the extent that the Sierra Club proposal recommends the relocation of Ivanpah 2 and Ivanpah 3, the Sierra Club has failed to demonstrate that the proposed reconfiguration is feasible.

Fourth, the Sierra Club has not shown that its proposal will avoid or substantially lessen any of the proposed effects of the Project. The Sierra Club alleges that its proposed location is environmentally superior. However, that allegation is premised on fatally flawed Desert Tortoise "surveys" that were conducted on the wrong lands, during the wrong season, by unqualified volunteers.

1. The Sierra Club Proposal Is A Concept, Not An Alternative.

The Sierra Club's Opening Brief states that on "June 22, 2009, the Sierra Club provided the decision making agencies with a Project alternative that would allow the full 400 MW plant to go forward on schedule, while avoiding the most significant impacts on the desert tortoise."[61] This statement is not only factually incorrect, but makes multiple assumptions that simply have no factual, evidentiary basis whatsoever.

[59] Sierra Club Opening Brief, p. 28.

[60] Applicant's Opening Brief, pp. 44-45.

[61] Sierra Club Opening Brief, p. 14.

First, the Sierra Club did not present an alternative in June 2009. Instead, the Sierra Club merely proposed a concept of a potential "reconfiguration" of the Project at an undisclosed location so that "much" of the Project would be built on lands closer to I-15. Significantly, the Sierra Club did not indicate where the proposed reconfiguration would occur, how much of the Project would be moved or how close the reconfigured project would be to I-15. This does not an alternative make, let alone one that would allow a project of any size be approved on a timely schedule, nor allow any reasonable assessment of any beneficial or detrimental environmental impacts.

The Sierra Club's own witness confirmed that instead of a fully developed alternative that would meet the requirements of CEQA and NEPA, the Sierra Club has offered instead a "concept":

> My understanding of the alternative as it was presented by the Sierra Club was that this is ***a concept***, the ***concept*** of moving the site closer to the freeway. The Sierra Club in my understanding ***never provided a map*** of where that project would go. There have not been any hard lines established at the ***boundaries*** of where this alternative would occur. (Emphasis added)[62]

When asked to identify where the Sierra Club's proposed reconfiguration would occur, the Sierra Club's witness was unable or unwilling to do so.[63]

Under CEQA, a mere request for reconfiguration of the project is not a viable alternative. This is vividly illustrated in the case of *Save San Francisco Bay Association v. San Francisco Bay Conservation and Development Commission*.[64] In that case, the Court upheld the validity of an EIR for an aquarium at Pier 39 in San Francisco. The Court noted that the petitioners in that case did not champion a specific alternative site:

> They merely tout the virtues of an unspecified waterfront location that would not require fill. In this four-year, vigorously contested, well publicized planning process, which generated an administrative record of close to 10,000 pages, it strains belief that there exists an upland site on the seven and one-half mile stretch of the San Francisco waterfront that is available and appropriate for the project's purpose that somehow escaped the attention of appellants, BCDC, the City and the public.[65]

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[62] 1/14 RT 315.

[63] 1/12 RT. pp. 340, 343-345. (Mr. Cashen: "My field investigation was not designed to determine where the boundary should be", 1/14 RT p. 345); also see 1/12 RT pp. 315-16.

[64] 10 Cal.App.4th 908 (Cal. App. 1st Dist. 1992).

[65] *Save San Francisco Bay Assn. v. San Francisco Bay Conservation & Dev. Com.*, 10 Cal. App. 4th 908, 929-930

During the pendency of this appeal, the appellants requested that the Court take judicial notice of material outside the administrative record relating to several potential sites along the San Francisco waterfront which could possibly accommodate the aquarium project. The court denied these requests.

In the instant case, the Sierra Club did not champion a *specific* alternative site. Up until the last day of hearings in this proceeding, the Sierra Club merely touted the virtues of an unspecified reconfiguration that would somehow impact fewer tortoises. In this proceeding, a nearly three-year, vigorously contested, well publicized review process that to date has generated an administrative record of more than fourteen thousand one hundred pages (14,100) pages, it similarly strains belief that there exists an alternative site materially different from the Staff's I-15 alternative that is available and appropriate for the Project's purpose that somehow escaped the attention of the parties to this proceeding.

Just as the Appellants in the Pier 39 case sought to reopen the judicial record relating to new evidence of a potential alternative site, the Sierra Club in this proceedings sought to cure its failure to identify the boundaries of its "reconfiguration" concept by introducing at the final evidentiary hearing a map of its proposal. The Sierra Club does not explain why the map was not produced in the January hearings when Mr. Cashen was asked to identify the boundaries of the proposal. While identification of the boundaries of the Sierra Club proposal is helpful, this map alone does not transform a mere concept into a viable alternative. As we explain below, the proposed boundaries of the Sierra Club proposal is not feasible and would not avoid or substantially lessen any of the proposed effects of the Project.

2. The Sierra Club Proposal Confirms That The Site Of Ivanpah Unit 1 Is An Excellent Location For A Solar Power Plant.

The Sierra Club sings the praises of its proposed reconfiguration. According to the Sierra Club's Opening Brief, this proposal "actually and fully mitigates all Project impacts on the desert tortoise in the Ivanpah Valley."[66] According to the Sierra Club, its proposal "optimizes development of lands currently unsuitable for desert tortoise"[67] and "fully protects the desert

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(Cal. App. 1st Dist. 1992).

[66] Sierra Club Opening Brief, p, 28.

[67] Sierra Club Opening Brief, p. 17.

tortoise".[68] The Sierra Club does not explain that the Applicant has indeed made use of their preferred area for the project: *the Ivanpah 1 plant is, in fact, located almost entirely within it.*

As shown in Applicant's Exhibit 89, nearly the entire nine hundred thirteen (913) acre Ivanpah 1 plant boundaries overlaps the Sierra Club map of the proposed reconfiguration. Therefore, to the extent that Ivanpah 1 falls within the boundaries of the Sierra Club proposal, the Applicant and Sierra Club are in agreement that the Ivanpah 1 site actually and fully mitigates all Project impacts on the Desert Tortoise in the Ivanpah Valley. Ivanpah 1 "optimizes development of lands currently unsuitable for Desert Tortoise" and "fully protects the desert tortoise."

The Applicant is pleased to have the endorsement of the Sierra Club for Ivanpah 1.

3. The Sierra Club Has Not Shown That Its Proposal Is Feasible.

Although the Sierra Club characterized its reconfiguration proposal as an Alternative, it has not shown that the proposal would feasibly accommodate Units 1, 2 and 3. From even a cursory examination of Exhibit 89, it is clear that the area proposed by the Sierra Club is a narrow polygon that is inconsistent with the basic Project engineering. The Ivanpah Solar Project requires three concentric, roughly circular heliostat fields, not compressed, irregularly shaped polygons.[69]

As Staff testified, the technology "doesn't give you a lot of flexibility to make the project narrower" like the narrow configuration shown on the Sierra Club's map, and "You still end up with kind of 1000-acre squares."[70]

In its Opening Brief, the Commission's Staff reiterates these same concerns about the irregularly shaped Sierra Club map lands. Specifically, the Staff notes the numerous constraints that make the Sierra Club's proposal infeasible:

> The site has further constraints, inasmuch as there is a transmission line ROW on the west boundary of the Figure 2 site, a planned Caltrans entry station to the southeast, and a proposed solar photovoltaic project immediately to the north.

[68] Sierra Club Opening Brief, p. 21.

[69] The Sierra Club complains that Applicant should have tried to re-design the technology to fit the irregular shape of the Sierra Club's map. Notwithstanding the fact that the Applicant is under no obligation to present the Sierra Club's case, the fact remains the Sierra Club never supplied a map before it filed its testimony on the Biological Mitigation Proposal on March 16, 2010. To claim that the Applicant is at fault for not "cooperating" when the Sierra Club failed to produce a map until March 16, 2010 is disingenuous at best.

[70] 1/14 RT 278-279.

Within these constraints, the I-15 alternative becomes little more than an alternative configuration for Phase 1 of the project.[71]

Applicant is in complete agreement with the Staff on this point. The land constraints make the Sierra Club Concept infeasible.

Furthermore, the Sierra Club's witness cautioned the Committee to avoid placing any Project features in "[t]he southern portion of the alternative site (i.e., near Nipton Road) posses [sic] an extremely high diversity and abundance of plant and animal resources that should be avoided by the Project."[72] However, on cross-examination, when asked to draw a line for this southern boundary, Mr. Cashen declined to draw such a line.[73]

It is reasonable for the Committee to conclude that Mr. Cashen's "southern" boundary line must be within the areas he surveyed. Put another way, if Mr. Cashen had not walked the "southern" area, which he deems off-limits, how else could he reasonably and credibly draw the conclusion that the southern portion of the area must be avoided?

In summary, even if the entire area of the Sierra Club proposal was available, it would not be feasible to locate Units 1, 2 and 3 within the proposal. However, if an unspecified southern portion of the Sierra Club proposal is off-limits, then the proposal is even less feasible for the reconfiguration of Units 1, 2 and 3.

4. The Sierra Club Has Not Shown That Its Proposal Will Avoid Or Substantially Lessen Any Of The Proposed Effects Of The Project .

The Sierra Club's Opening Brief asserts that the Project "does nothing to protect the desert tortoise" while it baldly asserts that its own proposal "fully protects the desert tortoise." These assertions are pure hyperbole. As Exhibit 89 illustrates, the Sierra Club proposal and Ivanpah 1 almost completely overlap. While the Sierra Club proposal does suggest the relocation of Units 2 and 3 (albeit avoiding the issue of configuring Units 2 and 3 in infeasible irregular shaped polygons, as discussed above), the record, including Sierra Club's own expert testimony, demonstrates that even if it were feasible, the reconfiguration would not result in "fully protect[ing] the desert tortoise." In fact, there is no reasonable basis to conclude that there would be any significant difference in the impacts on Desert Tortoise at all.

[71] Staff Opening Brief, p. 23; emphasis added.

[72] Ex. 611, p. 20.

[73] 1/12 RT 344-347.

Based on a field study conducted by Scott Cashen, the Sierra Club asserts that the Sierra Club's proposal "contains approximately one-half of the density of tortoises as the proposed project site."[74] However, the conclusion as to relative density cannot be counted upon, as the Cashen field studies are deeply flawed. Cashen surveyed the wrong areas, at the wrong time of year, using inadequately trained volunteers.

a. The Cashen Surveys Were Conducted In The Wrong Areas.

To begin, Cashen surveyed the wrong lands. Specifically, all of Cashen's December 7, 2009 surveys, and a portion of the December 9, 2009 surveys were conducted outside the proposed Sierra Club map boundaries.[75] Instead of surveying within the boundaries of the Sierra Club proposal, on December 7, 2009, Cashen surveyed areas immediately adjacent to I-15 and within the right-of-way for the Cal-Trans Joint Port of Entry, and of the December 9, 2009 surveys, a portion were conducted outside the proposed Sierra Club map boundaries, within the right-of-way for the Cal-Trans Joint Port of Entry. No one proposes locating the Project in the area immediately adjacent to I-15.

Both Exhibit 87 and Exhibit 89 show the transects the Cashen team walked. Exhibit 87 and Exhibit 89 show the December 7, 2009, transects. These transects are all within the 1,000 foot right-of-way buffer reserved for the Cal-Trans Joint Port of Entry. The area is completely outside the boundaries of the Ivanpah Solar Project.

The Sierra Club's assertion that "The [mapped alternative] encompasses land that contains approximately one-half the density of desert tortoises as the proposed Project site,"[76] *cannot be supported by surveys conducted <u>outside</u> the boundaries of the Sierra Club proposal.*

Mr. Cashen *admitted* he conducted surveys around one hundred (100) feet away from Interstate 15, well within the one thousand (1,000) foot right-of-way for the Cal-Trans Joint Port of Entry:

> MR. CASHEN: * * * And one other thing I just wanted to make clear, because I think there's a –
>
> HEARING OFFICER KRAMER: Briefly, please.

[74] Sierra Club Opening Brief, p. 19.

[75] Exhibit 87, Exhibit 89.

[76] Sierra Club Opening Brief, pp. 19-20; citing to "Ex. 612 at p. 5; Fig. 1."

MR. CASHEN: -- briefly -- misconception. *I did not sample right next to the highway. I was close to the highway, but I was over 100 feet away from the highway*, and it's not necessarily clear on that image that was provided.[77]

It is hardly surprising that Mr. Cashen would find evidence of fewer tortoises 100 feet from I-15 than he would find a mile away. All parties would expect to find decreased Desert Tortoise populations at such a close distance to I-15. Mr. Cashen admittedly attributes lower numbers of tortoises in lands near I-15 to the proximity to the highway, explaining that "[r]oad kills are considered a significant source of mortality to desert tortoises."[78] This sentiment is shared by Dr. Ron Marlow of Defenders of Wildlife, who explained that the "habitat is not good because of the existence of the road."[45] He further explained that there is a significant negative effect on Desert Tortoise populations up to five kilometers out from I-15.[79] Dr. Michael Connor of Western Watersheds Project testified that I-15 is a sink because "sooner or later the tortoise ends up on the road and gets killed."[80] Dr. Marlow agreed that the threat posed by I-15 could be addressed through tortoise fencing along the freeway, explaining that "[i]f the road was rendered no longer a threat, the good vegetation and soil and all the rest of that would suddenly become much better habitat."[81]

There is no evidence in the record regarding Desert Tortoise densities in the boundaries of the Sierra Club proposal, except for the portion of the proposal that overlaps with Unit 1 and which the Sierra Club agrees is unsuitable for Desert Tortoise.

b. The Cashen Surveys Were Conducted During the Wrong Season and Are Thus Unreliable.

Although the Sierra Club's Opening Brief asserts that the Cashen survey employed U.S. Fish and Wildlife Service's protocol survey guidance for the Desert Tortoise, the Sierra Club's witness contradicted this claim during the January 12, 2010 Evidentiary Hearing:

[Mr. Harris] On page 9, you talk about your field survey methods and you say, "Our field survey methods replicate those performed by the applicants consultant

[77] 1/14 RT 193-194.

[78] Exhibit 611, p. 12.

[79] 1/11 RT 457.

[80] 1/11 RT 437-438.

[81] 1/11 RT 457, 460.

at the project site and those recommended in the U.S. Fish and Wildlife [protocol] surveys." Those surveys though were not conducted in season; isn't that correct?

[Mr. Cashen] I was up in December is when we conducted our study.

[Mr. Harris] To your understanding, is that the season for U.S. Fish and Wildlife protocol surveys?

[Mr. Cashen] No, that is not.[82]

Accordingly, the Sierra Club's Desert Tortoise surveys did not satisfy the required protocols and certainly did not "replicate" the Applicant's Desert Tortoise surveys.

The surveys conducted by the Applicant for biological resources in the Project area focused on threatened, endangered, and other special-status wildlife species that could potentially occur onsite. Field surveys included general reconnaissance and USFWS protocol-level Desert Tortoise surveys.[83] The Applicant's Desert Tortoise Surveys are the only complete, in-season surveys in the record and those surveys are unrefuted.[84]

c. The Sierra Club's Desert Tortoise Surveys Were Conducted By Volunteers Who Were Not Properly Trained as Required by U.S. Fish & Wildlife Protocols.

The Sierra Club admitted that its survey techniques did not follow the proper U.S. Fish & Wildlife Service Protocols and were conducted out of season in the winter. In addition to this fatal flaw, the Sierra Club's field-trained, volunteer survey crew lacked the knowledge, skill, and training to perform surveys.

The Sierra Club's witness testified that he had a group of volunteers perform the "surveys" for Desert Tortoise. The witness explained that the surveys were performed by eight members of American Conservation Experience (ACE)[85], who were instructed in the field on the

[82] 1/12 RT 340-341.

[83] Ex 65, pp. 40-41.

[84] Only twenty-five (25) live Desert Tortoises were encountered on the 4,062 acre Ivanpah Solar Project Site during the 2007 and 2008 USFWS protocol tortoise surveys. If the site contained the maximum recommended desert tortoise density, as prescribed by the USFWS, this area would contain not 25 desert tortoise but six hundred fifty-one (651) -- in other words, twenty-six times the number of Desert Tortoises actually found during on-the-ground surveys of the Project site. (USFWS recommends a maximum Desert Tortoise density of 39 Desert Tortoise per Square Kilometer (USFWS 2008b.); as the Ivanpah Solar Project site is approximately 16.45 Square Kilometers, the USFWS's recommended maximum density would be 39 x 16.45, or 651).

[85] "American Conservation Experience is a volunteer program for both international and American participants who want to make a difference in their world. ACE is grounded in the philosophy that international understanding and

techniques for locating burrows.[86] This is the only training these volunteers received.[87] The volunteer crews were responsible for conducting the line-transect surveys.[88]

The Defenders of Wildlife offered Dr. Marlow as an expert in Desert Tortoise matters. Dr. Marlow's testimony clearly demonstrates that pursuant to U.S. Fish and Wildlife Survey requirements the Sierra Club's field-trained volunteers were unqualified to perform Desert Tortoise surveys:

> [MR. HARRIS] Dr. Marlow, a couple questions. You talked about, you know, well-trained surveyors could miss a desert tortoise, or they could miss an elephant, so how long does it take to become a well-trained surveyor?
>
> DR. MARLOW: The Fish and Wildlife Service, in the last two years, has required its contracted surveyors to be trained for three weeks.
>
> MR. HARRIS: Do you consider that kind of a minimum to really become a good surveyor for these courses?
>
> DR. MARLOW: The Fish and Wildlife Service does. I would prefer to see more training.[89]

Defenders of Wildlife's expert, Dr. Marlow, further testified that a single day of training for a volunteer is undoubtedly insufficient:

> MR. HARRIS: So if I was going to go out there for a day as a volunteer, get one day of training, that's probably not sufficient in your mind?
>
> DR. MARLOW: No, and it's not that we would improve your ability to necessarily be observant and see things. It's just that the survey protocols require that you absolutely see everything that's within one or two or three meters of the line you're supposed to be walking.[90]

The expert testimony of Dr. Marlow on the level of training required to be a qualified Desert Tortoise surveyor is clear and unrefuted. The U.S. Fish & Wildlife Service requires its

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goodwill can be achieved through cooperative labor on meaningful conservation projects . By attracting a corps of conservation-minded volunteers, ACE contributes to the breakdown of cultural barriers while advancing ecological awareness on a global scale." http://www.usaconservation.org/Home/mission_statement.html.

[86] Ex. 600, p. 9.

[87] Ex. 600, p. 9.

[88] Ex. 600, p. 10.

[89] 1/11 RT 477-478.

[90] 1/11 RT 478-479.

surveyors to be trained for three weeks. Further, Dr. Marlow "would prefer to see more" than the three week minimum used by the U.S. Fish & Wildlife Service in training its Desert Tortoise surveyors. The Sierra Club's field-trained volunteers were decidedly unqualified, performing transects during the wrong season.

Based on these U.S. Fish & Wildlife Service standards (three weeks training) and Dr. Marlow's expert opinion (even more than three weeks would be preferable), the Sierra Club's field-trained volunteers were so unqualified to perform Desert Tortoise surveys that it would unreasonable to give the Sierra Club's testimony on its Desert Tortoise surveys any weight.

IV. BIOLOGY

A. Desert Tortoise.

1. The Intervenor's Wrongly Equate Habitat Loss with CESA "Take."

The Intervenors focus heavily on Ivanpah Solar Project's footprint, arguing that the loss of this acreage is effectively a "take" as that term of art is used in CESA. The Sierra Club, for example, argues that in addition to mortality that may occur from relocation, the project would "destroy" over 3,582 acres of "high quality desert tortoise habitat" and this loss of habitat is also a "take" under CESA.[91]

Intervenors are mistaken in asserting that CESA equates potential habitat loss with "take". Under California law, proscribed taking involves "mortality" and not the loss of habitat.[92]

In *Environmental Council of Sacramento, et al v. City of Sacramento*[93] (hereinafter "ECOS" case), the plaintiff challenged the EIR for the Natomas Basin within the City of Sacramento, alleging, among other things, that the EIR that found that a threatened hawk species and a threatened snake species would be protected by a habitat conservation plan and its implementation agreement, which provided that one-half acre for habitat reserves would be purchased with mitigation fees for every acre developed. The plaintiffs alleged that the loss of habitat was a "take" pursuant to CESA. The Court unambiguously rejected this theory:

[91] Sierra Club Opening Brief, p. 22.

[92] Cal. Fish & Game Code § 86.

[93] 48 Cal. Rptr.3d 544 (2006).

> We agree with defendants that plaintiffs tend to equate habitat loss with take. *The two are not synonymous*.
>
> We reject any insinuation that the definition of "take" under Fish and Game Code section 2081, subdivision (b)(2) encompasses the *taking of habitat alone* or the impacts of the taking. As section 86 of the Fish and Game Code makes clear, proscribed taking involves mortality.[94]

This case is directly on point, and is dispositive here. The potential loss of habitat during the life of the Project is not a "take" pursuant to CESA.

In support of the contention that loss of habitat is a "take" under CESA, the Sierra Club's Opening Brief cites as its only legal authority a memo from the Attorney General for the proposition that "the Department of Fish and Game has interpreted the prohibition on take to include acts that are the proximate cause of the death of the listed species."[95] However, the Attorney General's memo does *not* support this proposition.

Instead, the Attorney General's memo notes that "There is a debate concerning whether the definition of take includes destruction or modification of a species' habitat that is the cause of death to members of a listed species."[96] The Attorney General's memo explains that while the Department of Fish and Game General Counsel, in a 1995 memo to DFG Staff, took the view that loss of habitat can be a "take", the Attorney General's Office *rejected* this view and has opined in an official Attorney General's Opinion[97] that CESA "does not prohibit indirect harm to a state-listed endangered or threatened species by way of habitat modification."

The Attorney General's Opinion notes that prior to the enactment of CESA, not only had federal regulations implementing ESA expressly included habitat modification in the definition of the term "harm," but these federal regulations had already been judicially observed. The Attorney General noted that the proposed state CESA legislation, as amended in the Assembly on April 23, 1984, would have added section 2066 to expand the definition of "take" in the Act to include the broad terms that gave rise to determining that the federal act included habitat

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[94] *Environmental Council of Sac v. City of Sacramento*, 48 Cal. Rptr.3d 544, 559-560 (2006).

[95] Sierra Club Opening Brief, p. 22, citing the Attorney General's memo of August 5, 2008, Revised Supplemental Memo Regarding Reallocation of Water." The Sierra Club did not provide a citation to the location of this memo, but it can be read here:
http://deltavision.ca.gov/BlueRibbonTaskForce/July2008/Handouts/Item_3_Attachment3.pdf

[96] *Id.*

[97] 78 Ops. Cal. Atty. Gen. 137 (1995).

modification, but that " on August 6, 1984, the proposed definitional expansion was deleted in the Senate." The Attorney General's Opinion concluded that "[t]hese events suggest that the Legislature was aware of the broader federal definition and intentionally departed from it."[98]

It has been the legal position of the California Attorney General since 1995 and the conclusion of the court in *ECOS* that habitat loss and take are not synonymous under CESA. Significantly, the Attorney General's opinion and the conclusion of the court in *ECOS* do not support the Staff's contention that CESA requires the Applicant to acquire 8,000 acres of tortoise *habitat* to mitigate for 4,000 acres purportedly "*taken*" by the Project; instead, they directly contradict the basis for Staff's contention. CESA requires no mitigation for habitat modification. None. Therefore, Staff's proposed mitigation measures, based on acres and not take, must be rejected as inconsistent with clearly established law.

2. The Staff and Intervenors Seek To Re-Litigate The Final EIS For The NEMO Wherein The BLM Found, And The Courts Confirmed, A 1:1 Mitigation Ratio For This Specific Project Site.

As discussed in the Applicant's Opening Brief, the Final EIS for the BLM's Northern and Eastern Mojave Desert Management Plan ("NEMO") determined that a 1:1 mitigation ratio is required for the Ivanpah Solar Project site located outside the Ivanpah DWMA. For areas like the Ivanpah Solar Project site that are located outside of Areas of Critical Environmental Concern and outside "critical habitat" for endangered species, the BLM's Final EIS for the NEMO calls for a 1:1 mitigation ratio, indicating the lowest quality habitat:

> ***Compensation shall be required by BLM for disturbances of Desert Tortoise habitat at the rate of 1 acre for each acre disturbed [a 1:1 ratio]***; this is the same as the current requirement in BLM's Desert Tortoise Statewide Management Policy. Funds collected from project proponents shall be directed to habitat enhancement, rehabilitation or acquisition in the Eastern Mojave Recovery Unit. Proponents may also implement enhancement or rehabilitation projects or donate lands directly, at BLM discretion.[99]

As a matter of law, the proper mitigation ratio for this specific Project site has been determined in the final EIS for the NEMO to be 1:1. There is no basis in law for the Commission to ignore this legally binding determination.

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[98] 78 Ops. Cal. Atty. Gen. 137 (1995).

[99] NEMO FEIS, Section A.7, p. A-18. Available at http://www.blm.gov/ca/news/pdfs/nemo2002/.

The Intervenors seek to re-litigate this finding by arguing that the Ivanpah Solar Project Site should have been included in the Ivanpah DWMA. They argue that it was mere "oversight" that caused this area not to be included within the DWMA. This is not just incorrect; it is misrepresents an extensive federal process that was the subject of judicial litigation.

Western Watersheds, for example, seeks to re-litigate the findings regarding the Ivanpah Project site and its location outside the Ivanpah DWMA:

> Consequently, the BLM elected not to include the North Ivanpah Valley in the Ivanpah DWMA. Thus, the NEMO Plan's analysis did not specifically address conservation of the Northeastern Mojave desert tortoises nor did it address California State interests in these tortoises. As a practical matter, the tortoise population in the North Ivanpah Valley was *ignored*, with obvious consequences.

Western Watersheds' arguments were not *ignored* by BLM; their arguments simply did not prevail because there was substantial evidence to support BLM's decision to exclude the Project site from the DWMA. BLM did not "ignore" the arguments about placing the area that is now proposed for the Ivanpah Solar Project inside the Ivanpah DWMA. Instead, a thorough legal process played itself out, and the Final EIS for the NEMO confirmed BLM's affirmative decision that the portion of the Ivanpah Valley which is now proposed as the Ivanpah Solar Project site should not be part of the Ivanpah DWMA.

Similarly, CBD argues that the site was considered for inclusion within the Ivanpah DWMA[100], but fails to acknowledge the decision reflected in the Final EIS for the NEMO, finding the area now proposed for the Ivanpah Solar Project site is not within the Ivanpah DWMA.

California courts have long and definitively rejected identical arguments to those now raised by Intervenors, that debates and conflicting views discussed during the environmental review processes call into question the final agency decision. Where plaintiffs alleged that arguments to the contrary on appropriate mitigation ratios put forth during the drafting process of environmental review were "ignored," the Courts quickly and decidedly quashed such erroneous claims, even when documents showed internal debate within the agencies themselves:

> In a similar vein, plaintiffs contend the Department did not rely on the 'best scientific and other information that is reasonably available' as required by Fish and Game Code section 2081, subdivision (c). They cite to internal reviews of earlier drafts of the Conservation Plan by members of the Department's staff.

[100] CBD Opening Brief, p. 14.

> Vibrant internal debate and dissension throughout the environmental review process is healthy. *We reject plaintiffs' innuendo that critiques of drafts means that the ultimate decision to approve the Conservation Plan is not supported by the best scientific information available*.[101]

The Final EIS for the NEMO represents settled law. BLM determined and the Final EIS for the NEMO confirms that a 1:1 ratio is all that is required as a matter of law to fully mitigate the project impacts on the Desert Tortoise on the Ivanpah Solar Project site.

3. Staff's Recommendation of Additional Mitigation Requirements in Excess of BLM's 1:1 Mitigation Ratio Is Flawed, and Not Supported by Law.

While acknowledging that the Project will mitigate the impacts of the desert tortoise in compliance with the 1:1 mitigation ratio set forth in BLM's NEMO, the Staff's Opening Brief argues that the Commission should require the Applicant to provide substantially greater mitigation.

The Staff's Opening Brief recommends additional mitigation requirements for three reasons. First the Staff's Opening Brief argues, without citation to the record, that the payment of 1:1 mitigation pursuant to the NEMO, is "completely inconsistent with the take permit requirements in prior Energy Commission decisions."[102] As explained in detail below, contrary to Staff's assertions, there are no standard conditions regularly imposed by the Commission to acquire lands.

Second, Staff argues that no substantial evidence supports the Applicant's contention that compliance with the 1:1 mitigation ratio will satisfy CESA's requirement to "fully mitigate" tortoise impacts.[103] However, Staff's argument fails to recognize the other mitigation measures that Applicant will employ beyond the 1:1 mitigation ratio, which must be considered with the 1:1 mitigation ratio to assess the measure of the proposed mitigation relative to the CESA standard. Staff's attempts to impose mitigation that far exceeds the "roughly proportional" standard imposed by statute further distorts its assessment of the mitigation appropriate to meet the CESA standard.

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[101] *Environmental Council of Sacramento v. City of Sacramento*, 48 Cal. Rptr.3d 544, 561 (2006), fn 5 emphasis added.

[102] Staff Opening Brief, pp. 17-18.

[103] Staff Opening Brief, p. 17.

Third, Staff argues that if the Applicant complies with the 1:1 mitigation ratio set by NEMO, CESA requirements for funding and monitoring would "disappear from the condition entirely."[104] Staff's argument ignores the fact that these CESA funding and monitoring requirements will be met through other measures that the Applicant will implement, such as the Desert Tortoise relocation/translocation plan.

4. Staff's Assertion That The Commission Regularly Requires The Acquisition Of Land As Mitigation Ignores The Fact That The Ivanpah Project Is Located On Federal Lands.

We presume that the reference in Staff's Opening Brief to prior Energy Commission decisions is a reference to Staff's citation, in an effort to bolster the suggestion that the Commission regularly requires land acquisition as mitigation, to four cases it purports to stand for the proposition that land acquisition conditions are standard: Harper Lake, Victorville, High Desert, and Beacon. Staff asserted that these four cases prove that the Commission regularly requires land acquisition. However, none of these four cases are on point. *Each is located on private lands, not BLM lands*. Unlike the Ivanpah Solar Project, none of these projects had federally-mandated mitigation, site restoration and bonding obligations:

> MR. HARRIS: Harper Lake is located on private lands and not BLM lands, isn't that true?
>
> MS. SANDERS: I'm not sure.[105]
>
> MR. HARRIS: The Victorville 2 project is located on private lands and not BLM lands, isn't that true?
>
> MS. SANDERS: That's my recollection, yes.
>
> MR. HARRIS: The High Desert project is located on private lands and not BLM lands, isn't that correct?
>
> MS. SANDERS: I don't know.[106]

[104] Staff Opening Brief, p. 17.

[105] The Commission can take notice of its own decisions in the LUZ proceedings, confirming these Harper Lake projects are located entirely on private lands. See Docket 87-AFC-1C.

[106] The Commission can take notice of its own decisions in the High Desert proceedings, confirming that this project is located entirely on private lands. See Docket 97-AFC-1.

MR. HARRIS: The Beacon project is located on private lands and not on BLM lands, is that correct?

MS. SANDERS: Correct.

Each case cited by Staff for the proposition that land acquisition is a requirement was imposed for projects on *private* lands – private lands without BLM-required mitigation, site restoration and bonding obligations like the Ivanpah Solar project, located wholly on BLM lands. The suggestion that land acquisition is required simply is not supported by the record.

5. The Applicant Has Offered, And Will Be Required By Legally Enforceable Conditions To Implement, Plenary Mitigation For The Commission to Find Full Mitigation, Satisfying CESA.

Staff asserts that Applicant's compliance with the BLM's 1:1 mitigation ratio will fail to satisfy CESA's requirement to "fully mitigate" tortoise impacts".[107] However, this narrow view fails to recognize other mitigation measures provided by the Applicant.

Applicant's Opening Brief details that out of an abundance of caution, the Applicant has provided plenary additional mitigation to form the basis of a finding of full mitigation, including, but not limited to: payment of BLM's in lieu mitigation fees; careful site selection, avoiding and minimizing impacts to desert tortoise and other biological resources; consistent reductions to the Project's footprint, culminating in the Mitigated Ivanpah 3 configuration; the Low Impact Design, which both avoids and minimizes impacts to desert tortoise and other biological resources; Desert Tortoise relocation/translocation plan that minimizes potential impacts; permanent desert tortoise fencing that avoids and minimizes impacts; tortoise-proof fencing of I-15 to stop ongoing loss of tortoise; temporary construction fencing that avoids and minimizes impacts to desert tortoise; active supervision of construction work that avoids and minimizes impacts to desert tortoise, clearance surveys of permanent exclusion areas that avoids and minimizes impacts to desert tortoise; transportation and release of desert tortoises to be relocated to minimize impacts; identification of relocation/translocation areas that will minimize impacts; post-relocation monitoring and reporting that will verify the effectiveness of the relocation/translocation plan; a raven management plan that will minimize the effect on desert tortoise by managing a major predator; a federal bonding requirement that provides financial

[107] Staff Opening Brief, p. 17.

security for closure, rehabilitation, and revegetation; the closure, rehabilitation, and revegetation plan will minimize the effect on desert tortoise, avoiding impacts "in perpetuity"; and site rehabilitation will occur after the end of the project.[108]

These mitigation measures are certainly "full" by any measure. On this basis, the Commission should find compliance with CESA full mitigation requirements, as bounded by rough proportionality.

6. In addition to the Mitigation Measures Already Imposed, Requiring An Additional 8,000 Acres of Land "Acquisition" Is Clearly Beyond the Rough Proportionality Limit That CESA on Full Mitigation.

In addition to imposition of all of the various mitigation measures discussed in the section immediately above, and in addition to the Applicant's site restoration and bonding obligations for this project on federal lands, the Parties seek to impose more, approximately 8,000 acres of additional mitigation in the form of land acquisition.[109] As we explain above, CESA does not consider habitat modification to be a "take". (See Section IV.A.1 above.) Therefore, CESA does not require the Ivanpah Solar Project to provide any land as mitigation for land that may be used by the project.

This acquisition of an additional 8,000 acres -- in addition to the other mitigation measures described in the Applicant's Opening Brief and reference above -- is clearly excessive, and violates CESA requirements for "rough proportionality" between impacts and mitigation.

Acquisition of land is simply not a requisite element of mitigation under CESA. CESA and its implementing regulations do not even include the words "acquisition" or "acquire."[110] Section 2081(b)(2) of CESA clearly explains the term "fully mitigate" is tempered by the requirement for mitigation measures must be "roughly proportional" to impacts. The court in *Environmental Protection and Information Center v. California Dept. of Forestry and Fire*

[108] Applicant's Opening Brief, Section II.B.2 d.vii, pp. 94-112.

[109] See, for example, Western Watersheds Opening Brief, p. 7 and Staff Opening Brief, p. 9.

[110] During evidentiary hearings, Mr. Flint from the CDFG confirmed that the words acquire and acquisition do not occur in either the statue or the regulations. 1/11 RT 363.

"MR. HARRIS: In terms of both the code and the regulation, does the word acquisition appear in either the Fish and Game Code section or in the implementing regulations, to your recollection?

MR. FLINT: No. The word acquisition does not appear anywhere in the regulation or the code." 1/11 RT 363.

Protection,[111] read the roughly proportional language to define the scope of the "fully mitigate" requirement. The court explained that "reading the 'roughly proportional' language together with the 'fully mitigate' language leads to the conclusion the Legislature intended that a landowner bear no more – but also no less – then the costs incurred from the impact of its activity on listed species."[112] The courts also confirm that "Mitigation measures must be roughly proportional to the impacts caused by the project."[113]

Given the enormous amount of mitigation already imposed on the project, the additional land acquisition burden sought by some parties is clearly excessive, in violation of CESA's requirement that mitigation be roughly proportional to the project's impacts. Under CESA, the sole impact or "take" is the impact on the species itself (here, Desert Tortoises), not its habitat. A requirement to acquire 8,000 acres of land is not roughly proportional to the impact.

7. If the Commission Finds CESA Full Mitigation to Require More Mitigation than Required by BLM, This Additional Mitigation Is Provided in the Applicant's Proposed Conditions.

With respect to Desert Tortoise mitigation, the question before the Commission distills down to the simple issue of whether CESA "full mitigation" requires something more than the Federal ESA. As set forth in the Applicant's Opening Brief and in this Reply Brief, the Federal ESA mitigation satisfies CESA full mitigation.[114]

Even assuming, without agreeing, that CESA somehow requires something more than ESA, the discussion in the sections immediately above confirms that the Applicant has offered to provide substantially more mitigation than the federal ESA requires. The list of mitigation measures, lettered (a)-(r) in Applicant's Opening Brief far exceeds the mitigation required under ESA and far exceeds the amount of mitigation that has been required of any project licensed by the Commission in the past 35 years.[115]

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[111] *Environmental Protection and Information Center v. California Dept. of Forestry and Fire Protection*, 44 Cal. 4th 459, 510 (2008).

[112] *Environmental Protection and Information Center v. California Dept. of Forestry and Fire Protection*, 44 Cal. 4th 459, 511 (2008).

[113] *Environmental Council of Sacramento v. City of Sacramento*, 48 Cal. Rptr.3d 544 (2006), citing 14 C.C.R. § 15126.4(a)(4)(B) and *Napa Citizens for Honest Government v. Napa Bd. of Supervisors*, 91 Cal. App.4th 342, 360 (2001).

[114] Applicant's Opening Brief, Section II.B.2, pp. 67-112.

[115] Applicant's Opening Brief, Section II.B.2 d.vii, pp. 94-112.

Further, even assuming, without agreeing, that CESA requires something more than ESA, neither Staff nor Intervenors have offered facts or competent legal authority to support the proposition that CESA requires seven to eight times more mitigation than ESA. Under the BLM's In Lieu fee program, full mitigation for this federally listed species on federal lands that will be fully restored at the end of the grant, is approximately $3 to $3.5 million. The CEC Staff argues that CESA requires an additional $25 million to mitigate for the same impacts that will be fully mitigated under the ESA. Clearly, CESA mitigation seven to eight times greater than the federal mitigation for the same impacts on the same species by the same project on federally managed lands is the antithesis of "rough proportionality."

The desert tortoise survey count at Ivanpah is cited herein as either twenty-five (25) or twenty (20). By way of clarification, in 2007 and 2008, the Applicant performed USFWS-compliant protocol surveys for desert tortoise, locating a total of twenty-five (25) desert tortoise within the areas surveyed which included the plant site and zone of influence.[116] Figure 3-1 of Exhibit 88 shows the location of all twenty-five (25) desert tortoise located during the 2007 and 2008 surveys. Of the twenty-five (25) desert tortoise located, twenty (20) were located within the footprint of the nominal 400 MW project site, which included the five-tower, nominal 200-MW Ivanpah 3 plant site as well as Ivanpah 1 and 2.[117] Finally, in the interest of completeness, of the original twenty-five (25) located during the 2007 and 2008 surveys, only seventeen (17) were located within the footprint of Biological Mitigation Proposal (Mitigated Ivanpah 3).

Given that only seventeen tortoises were found on the Biological Mitigation Proposal Project site, the Staff's proposed mitigation would be in excess of $1,000,000 per tortoise - the most expensive mitigation in the history of California - and, in the improbable event that such unprecedented mitigation is adopted by the Commission, a strong disincentive to the licensing of future renewable projects in this state.

8. There Is Substantial Evidence In The Record Regarding Relocation/Translocation Of Desert Tortoise as Mitigation.

CBD[118], Sierra Club[119], Western Watersheds Project[120], and others suggest that there is not substantial evidence in the record regarding the relocation of Desert Tortoise associated with

[116] Ex. 65, p. 42.

[117] Ex. 88, Figure 3-1.

[118] See CBD Opening Brief, p. 20.

the Ivanpah Solar Project. Sierra Club inconsistently argues that relocation is "not mitigation under CEQA,[121]" and then that it is an "unproven mitigation measure."[122] These allegations are simply incorrect. The Intervenors ignore the substantial evidence in the record, including the following.

A Draft Desert Tortoise Translocation/Relocation Plan was submitted in Supplemental Data Response Set 2A as Attachment BR5-1A on March 19, 2009.[123] Comments on that initial Plan were received and addressed in a revised Draft Desert Tortoise Translocation/Relocation Plan (Revision 1) as Attachment BR5-1B, which was submitted as Supplemental Data Response Set 2D on May 27, 2009.[124] Comments on the Revision 1 document were received from CDFG and CEC on July 14, 2009.[125] In response to those comments, the Applicant completed 100 percent coverage surveys for desert tortoise in the four potential translocation areas to the west of the Ivanpah SEGS project site (see Figure BR52.B-1).[126] The survey results are provided in Attachment BR5-2B of Supplemental Data Response Set 2J and confirm that the density of desert tortoise in the area is low and that translocation into sites to the west of the project (N1 through N4) will not overburden the existing population.[127] This information, as well as other evidence in the record, refutes the Intervenor's assertions that there is not substantial evidence on the issue of Desert Tortoise relocation. As shown above the information also considers "edge effects" and potential impacts to remaining Desert Tortoise in the area.

In addition, BLM's Biological Assessment, dated January 12, 2010, has been submitted to the U.S. Fish & Wildlife Service.[128] That Biological Assessment includes, among other

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[119] Sierra Club Opening Brief, pp. 7-11.

[120] When the 433 acres were within the project footprint, Western Watersheds argued for 3:1 mitigation for this land as Desert Tortoise Habitat. Once the 433 acres were removed from the Project footprint with the Biological Mitigation Proposal, Western Watersheds reversed course, arguing that these 433 acres should not even be considered as suitable Desert Tortoise habitat for relocation of tortoises. See Western Watershed Project Opening Brief, p. 7.

[121] Sierra Club Opening Brief, p. 7.

[122] Sierra Club Opening Brief, p. 25

[123] Ex. 38.

[124] Ex. 41.

[125] Ex. 47, p. 2.

[126] Ex. 47.

[127] Ex. 47.

[128] Ex. 311.

things, "Attachment D: Desert Tortoise Translocation/Relocation Plan for the Ivanpah Solar Electric Generating System," for review, comment and approval by the U.S. Fish & Wildlife Service. The U.S. Fish & Wildlife Service will incorporate specific Desert Tortoise relocation/translocation protocols into its Biological Opinion.

This substantial evidence on relocation/translocation satisfies the U.S. Fish & Wildlife Service. Specifically, the U.S. Fish & Wildlife Service stated:

> The Ventura Fish and Wildlife Office has reviewed the latest report on desert tortoise surveys and vegetation surveys in the proposed translocation areas that were completed by CH2MHill and Southern Nevada Environmental Inc for the Ivanpah ISEGS project. *Based on the information provided, we feel that there is enough information to evaluate the effects of the relocation of desert tortoises* immediately west of the project site and the proposed translocation of desert tortoises from the project site to the identified translocation areas. *Based on the results of the surveys, it appears that translocation would be most appropriate in sites N1, N2, N3, and N4 because of higher quality habitat and low density resident populations*.[129]

The U.S. Fish & Wildlife Service is satisfied that it has substantial evidence, and it will use this substantial evidence to provide binding guidance on desert Tortoise relocation/translocation. This is all that is required for the Commission to find substantial evidence.[130] The Intervenor's claims are without merit.

9. CBD's Statistics On Death Associated With Desert Tortoise Relocation By The U.S. Army At Fort Irwin Are Grossly Mischaracterized And Not Analogous To The Minimal Relocation Of Desert Tortoise Associated With The Ivanpah Solar Project.

CBD and Sierra Club argue that recent translocation experiences at Fort Irwin indicate a high rate of mortality, up to 45%.[131] However, the authority for the "45%" number is not in the record, and thus the figure should be given no weight.

CBD witness Ilene Anderson includes this figure in her testimony: "An overall 45% mortality of translocated desert tortoise has been documented since the translocation occurred

[129] Ex. 73; emphasis added.

[130] As the Committee is aware, the Commission has the legal authority to issue its certification without a federal Biological Opinion, and has done so on numerous occasions.

[131] CBD Opening Brief, p. 20; Sierra Club Opening Brief, p. 10, 12, and 26.

2008 and the last surveys in 2009 [no footnote citation]."[132] There is no citation to substantiate this very specific numerical value.

There is a citation in the preceding sentence of Ms. Anderson's testimony to "Gowan and Berry": "Since my previous testimony, additional data on the success of translocation of desert tortoise has become available. Gowan and Berry reported at the Desert Tortoise Council Symposium on February 27, 2010, results of monitored desert tortoises on the the [sic] Fort Irwin translocation site."[133] However the referenced Gowan and Berry abstract does not contain the 45% number.

Significantly, the Gowan and Berry 2010 abstract does contain a stunningly significant fact omitted from CBD's testimony: the "deaths of translocated tortoises" resulted "*primarily from predation*."[134] The U.S. Army translocated Desert Tortoise miles from where they were found, not a few thousand feet as is expected with the Ivanpah relocation. Therefore, in the absence of any authority regarding the success of translocation at Fort Irwin and given that to record reflects death by predation, not translocation, and given the mitigation measures the Applicant will include like the Raven Management Plan to reduce the likelihood of predation[135], the Committee should give the Fort Irwin testimony, in general, and the 45% number, in particular, no weight.

10. CESA Requirements for Funding and Monitoring are Met.

Staff argues that if the Applicant complies with the 1:1 mitigation ratio set by NEMO, CESA requirements for funding and monitoring would "disappear from the condition entirely."[136] However, Staff's argument fails for two reasons. First, as noted in Applicant's Opening Brief, the Ivanpah Solar Project's mitigation measures for the Desert Tortoise are adequately funded. The BLM's judicially-tested In Lieu fee program provides certainty and assurance of adequate funding to implement Desert Tortoise Recovery measures. In addition, Staff's concerns about funding disappearing "entirely" fails to recognize the substantial bonding

[132] Ex. 942, p. 3.

[133] Ex. 942, p. 3. The "Gowan and Berry" citation is to an abstract cited as "Exh. 944, Gowan and Berry 2010. In DTC Symposium 2010 Abstracts at pg. 14-15."[133] This citation is in error. The Gowan and Berry 2010 abstract is part of Exhibit 945, not 944.

[134] Ex. 945, p. 15; emphasis added.

[135] Applicant's Opening Brief, p. 108-110.

[136] Staff Opening Brief, p. 17.

requirements that will be placed on this Project by BLM because the Project will be located on federal lands. In addition to payment of the in-lieu fees, the Applicant must provide bonding for site restoration at the end of the Project life.

Second, Staff's argument ignores the extensive monitoring provisions that are included in the BLM's Biological Assessment ("BA")[137], Applicant's Desert Tortoise Translocation and Relocation Plan,[138] and Raven Management Plan,[139] as well as the monitoring provisions that will be included in the final Biological Resources, Mitigation, Implementation and Monitoring Plan ("BRMINP") for the Project. The BA establishes protocols and obligations that will become binding terms and conditions stipulated in the USFWS's Biological Opinion. Specifically, the BA for the Ivanpah Solar Project includes protocols and obligations such as:

- To monitor for survivorship and health, for a period of 1 year following their translocation/relocation, the desert tortoises will be located at least monthly by the authorized biologist during the periods of activity (spring: March – May and fall: August – October) and once during the two non-active periods (summer: June – July and winter: November –February); [140]

- For the following 2-years, they will be located at least once in the spring and once in the fall. In order to locate all translocated/ relocated tortoises, it will be necessary that they be marked and fitted with radio transmitters; [141]

- Once located, the tortoise will be examined, and all pertinent information will be recorded, such as behavior, physical characteristics, health characteristics, as well as any potential anomalies the individual desert tortoise might display, including disease; [142]

- The effectiveness of the Raven Management Plan will be monitored through the construction of all three site construction phases during which previous phases will be in operation. Reporting associated with the implementation of the plan will continue for 2 years following completion of all three sites.[143]

[137] Exhibit 311.

[138] Applicant's draft desert tortoise translocation/relocation plan is set forth in Exhibit 41, Attachment BR5-1B, Supplemental Data Response Set 2D.

[139] Exhibit 311, Appendix D.

[140] Exhibit 311; also see Ex. 311. Appendix D, Draft Desert Tortoise Relocation/Translocation Plan, p. 13.

[141] Exhibit 311.

[142] Ex. 311. Appendix D, Draft Desert Tortoise Relocation/Translocation Plan, p. 13.

[143] Ex. 311, Appendix D, Draft Raven Management Plan p. 3-9, 4-2.

Thus, Staff's contention, that CESA requirements for monitoring would "disappear from the condition entirely" as a result of Applicant's compliance with the 1:1 mitigation ratio, is erroneous. [144]

11. The Arguments that Desert Tortoises On or Near the Project Site Are "Genetically Distinct" Are Both Misleading and Irrelevant.

The Intervenors try to make much of the claim that the twenty-five Desert Tortoise identified during the 2007 and 2008 protocol surveys are "genetically distinct." Western Watersheds leads this charge, arguing that "the Northeastern Mojave population is the most genetically distinct desert tortoise population in California.…"[145] Other Intervenor's then cite to Western Watershed's assertion. Defenders of Wildlife relies on its own testimony and that of Western Watershed to highlight "the genetic distinction of the desert tortoises in question."[146] Sierra Club also cites to Western Watershed testimony, claiming the Desert Tortoise are "genetically distinct."[147] These Intervenors fail to mention that the Project site is part of a 9 million acre area spanning three states in which desert tortoise of the same basic genetic make-up exist. Nor do these Intervenors mention that there is a 1,215,000 acres of DWMAs within this Recovery Unit containing desert tortoise of the same basic genetic make-up approximately five miles from the project site.

The arguments regarding genetic distinction are both misleading and irrelevant. As explained in Applicant's Rebuttal testimony[148], to plan for the recovery of the species, the USFWS subdivided the range of the Mojave population of the Desert Tortoise into six evolutionarily significant units or "ESUs." These ESUs are shown in Applicant's Exhibit 67, Figure BIO-1. These ESUs reflect genetic distinction, consisting of populations or groups of populations that show significant differentiation in genetics, morphology, ecology, or behavior. The ESUs were then identified as Recovery Units ("RUs") for purposes of designing a reserve system. The reserves are known as Desert Wildlife Management Areas ("DWMAs").

[144] Staff Opening Brief, p. 17.

[145] Western Watersheds Project Opening Brief, p. 7.

[146] Defenders of Wildlife Opening Brief, p. 4.

[147] Sierra Club Opening Brief, p. 12.

[148] Ex. 67, pp. B-1 to B-3.

Significantly, the Ivanpah Solar Project area is within the Northeastern Mojave Recovery Unit (RU) (see Figure BIO-2), *but is not within a DWMA*. The broadly delineated Northeastern Mojave RU encompasses southern Nevada (all but the southernmost tip), southwest Utah, and the Arizona strip (Arizona north of the Colorado River).[149] The Ivanpah Project, on the western edge of this RU, encompasses a very small portion of this Recovery Unit as a whole. Per the GIS, the Northeastern Mojave Recovery Unit is about 9 million acres in size. The DWMAs within that RU comprise about 1,215,000 acres (4,917 km2).[150] *Not only is the Ivanpah Solar Project not in a DWMA, it only comprises about 3/10 of one percent (0.003) of the area within the 1,215,000 acres of DWMAs in the RU and an even smaller percentage of the approximately 9 million acre RU.*[151]

Obviously, the Project site is not a significant portion of this RU/ESU. The fact that the range of this ESU (Recovery Unit) extends into a relatively small portion of California, a political boundary, is of no biological significance. It is also of no legal significance under the federal Endangered Species Act or the Recovery Plan. Based on the designations of the RUs, tortoises at the Ivanpah Solar Project site are similar in terms of genetics, morphology and ecology to expansive areas in Nevada, Utah, and Arizona as noted.[152] Sufficient critical habitat and designated DWMAs in southern Nevada, southwestern Utah, and the Arizona strip provide for the recovery of this ESU (i.e., Northeastern Mojave recovery unit).

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[149] Ex. 67, Figure BIO-1.

[150] USFWS. 2009. "Range-Wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report," October. Table 8, Available at: http://www.deserttortoise.gov/documents/RPT_2007_Rangewide_DT_Population_Monitoring_AllisonL_102709.pdf .

[151] Ex. 67, p. B-2.

[152] The Intervenors also argue that "the desert tortoise population in the North Ivanpah Valley is also unique because it is the highest elevation at which this species is known to reside in the state." (Western Watersheds Opening Brief, p. 4; see also Defenders of Wildlife Opening Brief, p. 4, citing to Western Watersheds.) This is incorrect. The Project site is "approximately 3,150 feet in the northwest corner to about 2,850 feet in the southeast corner." (Ex. 311, p. 3-1.) However, as the witness for Defenders of Wildlife, Dr. Marlow confirmed, Desert Tortoise occur at elevations as high as 7,300 feet (1/11 RT 483) -- more than twice the elevation of the Project site.

B. Rare Plants.

1. CEQA, Not the Federal ESA or CESA, Is Applicable To Consideration of Rare Plant Issues.

Under federal or state law, there is only one threatened or endangered plant or animal species on the Ivanpah Solar Project site: the Desert Tortoise. No other federal or state threatened or endangered plant species is on the site.

The CBD Opening Brief states there are "four rare and imperiled plants found at the project site".[153] The term "imperiled" has no legal significance.

As for the term "rare", under CEQA, a species not listed as endangered, threatened or a candidate species may be considered "rare" if the species can be shown to meet the criteria in subdivision (b) of Section 15380 of the CEQA Guidelines.[154] Specifically, Section 15380(b)(2)(A) provides that plant species may be considered rare if, "Although not presently threatened with extinction, the species is existing in such small numbers *throughout all or a significant portion of its range* that it may become endangered if its environment worsens".[155] Accordingly, CEQA is applicable to consideration of potentially "rare" plants, but neither the Federal ESA or CESA are applicable to such plants. And if the CEQA definition is properly applied, only one plant species, at most, is arguably rare. (See Applicant's Opening Brief, pp. 112-129.)

CEQA emphasizes avoidance and minimization of potential impacts to plant species. Applicant's Biological Mitigation Proposal sets forth in detail the Applicant's proposals to avoid and minimize impacts to plant species.[156] As discussed below, some of the Intervenors ask the Commission to apply the wrong CEQA standard to these plant issues.

2. CEQA Requires Avoidance or Minimization of Potential Impacts To Plants, Not "Complete Avoidance."

A recurring theme in the Intervenors Opening Briefs is the suggestion that CEQA requires complete and total avoidance of all impacts.[157] This is a serious misreading of CEQA.

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[153] CBD Opening Brief, p. 27.

[154] 14 C.C.R. § 15380.

[155] Emphasis added.

[156] Ex. 88, *passim*.

[157] See, for example, Western Watersheds Project Opening Brief, pp. 9-10; Sierra Club Opening Brief, p. 1; and Basin and Range Brief from 2/4/10, p. 2, 3, 4, 6.

"CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible."[158] Similarly, when making required findings, the agency must consider whether the proposed project with implementation of mitigation measures will "avoid or substantially lessen" the significant environmental effects of the project.[159]

In marked contrast, the Intervenors seek to impose a much stricter standard. Specifically, the Intervenors argue that the project must avoid – and avoid only – all potential impacts, significant or otherwise:

- "Only *avoidance* will help maintain long-term viability of these rare plant populations."[160]
- "We support *avoidance* rather than complicated mitigation schemes…."[161]
- "Since conserving habitat is the single best way to conserve species, we recommend the project *avoid* Mojave Desert ecosystems altogether."[162]
- "In terms of rare plants, I think the desired outcome is avoidance."[163]

CEQA clearly states that the duty is to avoid *or* minimize impacts. To the extent the Intervenors' arguments seek "complete" avoidance or avoidance only, such arguments are contrary to CEQA's basic directive and should be given no weight.

3. Staff and Intervenors Focus On "Occurrences" of Plants, Rather Than Actual Plant Population Data, Thereby Overstating the Potential Rarity of Plant Species.

Staff's "Biological Resources Appendix A - Table A-1" presents the Projects potential effects on plant "Occurrences."[164] This table is labeled, "Percentage of Statewide Documented Element Occurrences for Special-Status." The footnote to this table explains the concept of "Element Occurrences" as follows:

> The term "Element Occurrence (EO)" refers to populations or groups of individuals occurring in close proximity to each other, and is defined by the CNDDB as individuals of a particular species *occurring within one-quarter mile of each other*. * * * Data provided to CNDDB by the applicant (CH2M Hill

[158] 14 C.C.R. § 15021.

[159] 14 C.C.R. § 15091.

[160] Basin and Range Watch Opening Brief, p. 5.

[161] Basin and Range Watch Opening Brief, p. 2.

[162] Basin and Range Watch Opening Brief, p. 4.

[163] 1/12 RT 251 (CNPS Witness Mr. Andre).

[164] Ex. 315, p. 4-8.

2008c, Table 5-1) were mapped by CNDDB using this convention into the number of EOs shown in the column "Project Site Occurrences as reported by CNDDB 2/2010." *These numbers should not be confused with numbers of individual plants*.

Thus, the metric used by CNDDB and staff is an "Occurrence." All plants within a one-quarter mile radius are treated as a single "Occurrence" in this database, no matter if there is one plant or tens of thousands of plants in that one-quarter mile Occurrence.

As Staff conceded on Cross examination, a single "Occurrence" could be one plant or it could be thousands of plants:

> BY MR. HARRIS:
>
> Q I want to make sure I'm clear. So an occurrence is not an individual plant; is that correct?
>
> A It could be in some cases. That would be an occurrence that's not in very good shape.
>
> Q So an occurrence -- a plant's a plant. So occurrence is at least one plant; is that correct?
>
> A Correct. Although the occurrences in the CNDDB -- there is a field in there for whether that occurrence is extirpate. So if you have an occurrence and it's marked as extirpate, they're certain they've confirmed there aren't any plants there anymore, but it's their record.
>
> MR. HARRIS: So the occurrence is at least one. And you said it could be hundreds. Could an occurrence be thousands of plants?
>
> MS. MILLIRON: I believe it could in the case of the nine-awned pappus grass. I believe there were thousands of individuals found in that one. I'm not sure how many occurrences that was grouped into for the CNDDB, but I would imagine that would be a case where you might have thousands.
>
> MR. HARRIS: So I almost said I won't compare apples and oranges, but it seems like the wrong metaphor here. Occurrences in individuals plant is the limiting factor on how many plants are in the current than the quarter mile Ms. Chainey-Davis referred to? Did I get that right, Chainey-Davis?
>
> MS. CHAINEY-DAVIS: Yes.

> MR. HARRIS: So if there were -- pick a number -- 3,000 of a particular plant all within one quarter mile, that would be a single occurrence; is that correct?
>
> MS. MILLIRON: I believe so. I haven't done any mapping using that method, but I believe that's correct....
>
> MS. CHAINEY-DAVIS: We did look at -- the reason that we didn't use population occurrence, population number, the number of plants found in an individual occurrence is because it's variable in -- in other words, it's not available for every occurrence in CNDDB.

The Staff confirms the limitations of the Occurrence metrics: "Due to incomplete data, contributors to the CNDDB sometimes do not note the number of individuals when reporting CNDDB EOs and herbaria records, and the occurrence size in terms of individual plants cannot be ascertained."[165]

Before the Ivanpah Solar Project spent millions of dollars and thousands of hours walking the desert in tight transects looking for biological resources, no one had surveyed any other portion of the desert with such intensity. That intensity results in superior information about this project site. On the other hand, the use of "Occurrences" results in under-reporting of plant population data.

Under-reporting is also a significant infirmity with the CNDDB information. The CNDDB is a voluntary database system. There is no evidence in the record suggesting that biologists and botanist have any obligations to report findings of their field surveys; that is, while information is provided to CNDDB as a professional courtesy, botanists and other professionals are under no legal obligation to use the service. In fact, CNDDB is a subscription only service.[166]

Similarly, many lands are simply unreported or unsurveyed, especially in the interior deserts. Simply because a plant species has not been included within the database -- because

[165] Ex. 315, p. 4-9.

[166] "A CNDDB subscription, now at $600 (and $400 to resubscribe annually) for all clients, includes the *RareFind* application, all of the digital GIS data, and password-protected access to the BIOS Data Viewer. Clients can either use *RareFind* alone, or link it with GIS software such as ArcGIS, ArcView, etc., for greater flexibility. All uses of data from the CNDDB are subject to the terms and conditions contained in the **License Agreement**." http://www.dfg.ca.gov/biogeodata/cnddb/cnddb_info.asp

large areas of the desert have not been surveyed by the small number of people qualified to report data to the CNDDB -- does not make that species rare.

Accordingly, in making its independent determination as to whether a plant in the CNDDB is "rare" as that term is defined under CEQA, the Commission must take into consideration the limitations and inaccuracies of the "Occurrence" reporting system used by CNDDB.

4. The Commission Cannot Let the CNPS Substitute Its Judgment on Legal Issues for That of the Commission.

As set forth in the Applicant's Opening Brief, "rare" is a CEQA term of art.[167] The determination of whether a plant species meets the CEQA definition of rare is a conclusion of law, and the Commission decides questions of law based on the exercise of its independent judgment.

As discussed above, the use of "Occurrences" rather than plant populations overstates potential rarity. The use of the CNDDB is further limited. The CNDDB is a voluntary data base, and no one has any legally binding duty to report information to the CNDDB. Further, except where Project proponents have walked the desert in tight transacts, there are significant data gaps. It stands to reason that the number of known "Occurrences" will increase with increased data.

The CNPS argues, in conclusory fashion, that all plants on the CNPS lists should be considered CEQA rare. This is a conclusion unsupported by sound legal reasoning. Moreover, the CNPS is not an unbiased, objective party, as shown by their Intervenor status. In giving weight to CNPS arguments, the Commission must factor in the CNPS bias.

As a matter of policy and principle, the Commission cannot cede its exercise of its independent legal judgment to any entity, particularly a non-governmental entity with a clear agenda and no public process as a check on that agenda.

CNPS has clearly articulated the "avoidance only" agenda in its oral testimony: "In terms of rare plants, I think the desired outcome is avoidance."[168]

CNPS's Policy documents, introduced by CNPS in this proceeding, demonstrate the strident, "avoidance only" approach to plant species:

[167] Applicant's Opening Brief, pp. 112-129.

[168] 1/12 RT 251 (CNPS Witness Mr. Andre).

> Of the five mitigation types in the California Environmental Quality Act [cited by CNPS as permissible under Section 15370], the *California Native Plant Society fully supports those which avoid net reduction of population size* or species viability. For most plant species this requires the protection of habitat essential to the survival of the species. *In some instances, this also requires that impacts be fully avoided in order to prevent a significant impact* (i.e., a net loss of plant numbers, habitat, or genetic variability essential to the future existence and recovery of the species).[169]

This CNPS publication, in the first sentence of its "Conclusion," is equally unambiguous: "The Society supports project alternatives that *completely avoid* significant project impacts to rare and endangered plant species and their habitats."[170]

Other CNPS statements are similarly, and consistently strident: "Of the mitigation measures listed in the California Environmental Quality Act, the Society fully endorses only that of avoiding the impact."[171] CNPS also uses the term "rare" freely and without regard to legal significance, assigning the same meaning to federal and state law terms of art that are not one in the same.[172]

The CNPS comes to this proceeding with an agenda – an "avoidance" only policy focus – despite their own documents admission that CEQA requires consideration of more than just avoidance. Such a total disregard for what CEQA requires in its public documents illustrates plainly why the Commission cannot simply defer to this advocacy group's view on questions of law interpreting CEQA.[173]

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[169] Ex. 1002, p. 2.

[170] Ex. 1002, p. 5.

[171] Ex. 1002, p. 8.

[172] For example, CNPS publications suggest no distinction at all between defined terms in the federal Endangered Species Act and CEQA: "Rare Species: for the purpose of this policy, and to avoid undue repetition, the word "rare" is used to include "rare", "threatened", and "endangered" plant species as defined in Section 3(4)(15) of The Federal Endangered Species Act of 1973, and The California Environmental Quality Act Guidelines, Section 15380 (1986)." Ex. 1002, p. 14. As a matter of law, these terms are not interchangeable.

[173] If the Commission did defer to CNPS by finding, as CNPS suggests, all List 1 and List 2 Plants are "rare" as that term is defined by CEQA, the Commission would effectively have ceded its responsibilities to make legal determinations to a private, non-governmental entity that is free to add to its lists without any public process, let alone any due process. The Commission must not offer this non-governmental entity, or any other entity, the power to force the Commission to find a plant rare based on an advocacy group's own desires to see only the avoidance mechanism spelled out in CEQA implemented.

C. Substantial Evidence Supports the Conclusion that Impacts to Other Plant and Animal Species Are Less Than Significant.

The Intervenors claim potentially significant impacts to other plant and animal species. CBD in particular claims the FSA fails to disclose and analyze the Project's potential impacts on several species. As discussed below, the FSA is not the "record as a whole." Intervenors' claims that the FSA is missing information, without consideration of the other exhibits and testimony, falsely creates the appearance of data gaps where none exist in the hearing record.

1. There Is Substantial Evidence In The Record Supporting The Conclusion That The Project Will Have No Significant Impacts On Bighorn Sheep.

CBD argues that its expert's questions about potential impacts to bighorn sheep means that the FSA, "fails to identify or analyze impacts to bighorn sheep."[174] This is incorrect on several levels.

To begin, the FSA did in fact "identify and analyze" potential impacts to bighorn sheep. The Project's potential effects on bighorn sheep are discussed extensively in the FSA.[175] The Staff concludes that "Given the proximity of the Clark Mountains, it is likely that bighorn sheep move down into the upper elevations of the Ivanpah Valley, including the ISEGS project area, to forage."[176] While CBD may dispute this conclusion, potential impacts were identified and analyzed and there is substantial evidence in the record supporting the finding of no significant impacts.

Second, the FSA is not the whole of the record. The Applicant's experts also provided testimony that supports the conclusion that the potential impacts to bighorn sheep are less than significant.[177] This testimony is also part of the evidence in the record as a whole.

2. Bird, Insect, "Other Wildlife" and Plant Studies Requested By the Intervenors Are Not Required By Any Applicable LORS.

CBD argues that the Ivanpah Solar Project should have conducted certain bird surveys, including for the Golden Eagle.[178] CBD also argues that similar surveys and investigations

[174] CBD Opening Brief, pp. 21-23.

[175] See, for example, Ex. 300, pp. 6.2-25 to 6.2-26; pp. 6.2-46 to 6.2-47, and 6.2-73.

[176] Ex. 300, p. 6.2-26.

[177] Ex. 65, p. 45; Ex. 67, p. B-4; Ex. 83, *passim*; Ex. 1, p. 5.2-52

[178] CBD Opening Brief, pp. 23-26.

should; have been conducted for "insects and other wildlife"[179] and seasonal surveys for certain plants.[180] There are no such requirements, and this appears to be nothing more than an attempt to manufacture the *appearance* of a data gap where none exists. None of the information requested is required by any applicable LORS.

Considering the elements of "LORS" in turn, there are certainly no "laws" that require such surveys and studies. If there were, the Intervenors would have certainly identified such laws. No such laws exist. Similarly, there are no applicable "ordinances" or "regulations" that require such surveys. Again, if applicable, they would have certainly been identified by the Intervenors. They were not.

Finally, there are no "standards" that require such surveys. No experts testified that such surveys are recommended, let alone required. While the Intervenors invite the Commission to create a new "standard," this invitation should be rejected as a transparent attempt to create the illusion of a data gap where no qualified experts, following generally accepted standards of professional conduct, would recommend the gathering of such unnecessary data. However, even were an expert to recommend such surveys, CEQA does not require every test, research, study, or experimentation "recommended or demanded by commenters" be performed.[181]

D. Statutory Requirements

1. The Commission Must Abide by Existing Statutory Requirements, and Implement the Lake and Stream Bed Alternation Agreement Process and The Incidental Take Process Only After the Commission's Certificate Has Been Issued.

As discussed in Section VI below, the language of Public Resources Code Section 25500 provides a clear and unambiguous statutory mandate that the certificate issued by the Commission is in lieu of "any permit…required by any state, local, or regional agency."[182] In the exercise of this authority, the Commission "stands in the shoes" of the agencies it preempts and follows statutorily imposed processes, including the Fish and Game Code provisions for the

[179] CBD Opening Brief, p. 26.

[180] CBD Opening Brief, p. 26-30.

[181] 14 C.C.R. § 15204; also see *Gray v. County of Madera*, 167 Cal. App.4th 1099, 1115 (2008) citing to *Association of Irritated Residents v. County of Madera*, 107 Cal. App. 4th 1383, 1396 (2003)("CEQA does not require a lead agency to conduct every recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required.")

[182] Cal. Pub. Resources Code § 25500.

issuance of a Lake and Streambed Alteration Agreement ("LSAA") and for the issuance of incidental take authorization pursuant to CESA.

In its Opening Brief, Staff relies on Executive Order S-14-08 to justify its belief that the Commission may incorporate the requirements of a LSAA and incidental take protection *into the Conditions of Certification* of the Commission's Final Decision. Staff's Opening Brief states:

> Pursuant to the Governor's November 2008 Executive Order, CDFG staff and Energy Commission staff have worked to incorporate the "incidental take" requirements and the "streambed alteration agreement" requirements of the Fish and Game Code into the Energy Commission's "in lieu" permit by incorporating proposed mitigation *conditions* into the FSA. (1/11/10 Tr. p. 260-264.)[183]

Thus, Energy Commission Staff argues that the Commission may satisfy the substantive requirements of a LSAA or incidental take protection, which fall within the Commission's exercise of its "in lieu" permitting authorities, *through the Conditions of Certification*.

Staff's reading of the Executive Order is incorrect. As set forth in Applicant's Opening Brief,[184] the LSAA notification process cannot begin until proof of compliance with CEQA is presented. [185] Fish and Game Code § 1602(a)(1)(D) requires "A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code." Similarly, CESA requires compliance with CEQA before the incidental take authorization may be issued. Under the regulations implementing CESA, an incidental take permit can only be issued upon review of a CEQA-compliant approval: "the environmental impact report, mitigated negative declaration or negative declaration, or other environmental documentation prepared pursuant to a regulatory program certified pursuant to Public Resources Code section 21080.5 (and listed in title 14, California Code of Regulations, section 15251), prepared by the lead agency."[186]

Thus, in exercising its "in lieu" permitting authority, the Commission must first demonstrate compliance with the substantive requirements of CEQA through issuance of the Commission's Final Decision before the LSAA notification process begins and before the incidental take authorization can be issued. As discussed below, this substantive requirement of

[183] Staff Opening Brief, p. 11; emphasis added.

[184] Applicant's Opening Brief, pp. 62-65.

[185] Even though these processes must occur post-Certification, they will still be administered under the Commission's in lieu authorities as part of its Compliance process.

[186] 14 C.C.R. § 783.5; emphasis added.

law, CEQA compliance before agency action, is unaffected by the Executive Order cited by Staff.

a. The Plain Language of Executive Order S-14-08 Does Not Evidence An Intent to Require The Commission to Convert the Incidental Take And Stream Bed Alteration Agreements Processes Into Conditions Of Certification Without the Prerequisite of Demonstrating CEQA Compliance.

Staff's reliance on Executive Order S-14-08 to justify the incorporation of "'incidental take' requirements and the 'streambed alteration agreement' requirements of the Fish and Game Code" into the proposed Conditions of Certification for the Project is fundamentally flawed

To begin, the Staff's reading of the Executive Order is not supported by the plain language of the Executive Order, S-14-08, issued by Governor Schwarzenegger for the purpose of expediting the siting process for renewable energy facilities.[187] S-14-08 directs the Energy Commission to work with the Department of Fish and Game to expedite siting of renewable facilities. Specifically, S-14-08 states:

> Pursuant to the MOU, DFG and CEC shall immediately create a "one-stop" process for permitting renewable energy generation power plants. Instead of filing multiple sequential applications, the DFG and CEC shall create a concurrent application review process, which shall be filed directly at the state level. To facilitate this process, a special joint streamlining unit shall be created and shall reduce permit processing times by at least 50% for projects in renewable energy development areas, as such areas are defined by the REAT beginning on February 1, 2009.

Nothing in the plain language evidences an intent to take post-certification processes, like the issuance of a LSSA or incidental take protection, and require these post-certification processes be "incorporated" into the Commission's Conditions of Certification.

The Executive Order calls for an MOU. The MOU[188] is in place and contains no language requiring a process for the CDFG's recommendations on LSSA or incidental take authorizations to be incorporated into the Commission's Conditions of Certification, pre-CEQA compliance. There is also no indication in the MOU of any project-level "concurrent application review process." Instead, the MOU focuses on the creation of the Renewable Energy Action

[187] Governor Schwarzenegger Executive Order S-14-08, (November 17, 2008), available at: http://gov.ca.gov/executive-order/11072/.

[188] Available at http://www.energy.ca.gov/siting/2008-11-17_MOU_CEC_DFG.PDF.

Team ("REAT") and their programmatic duties, not project-specific, permit processing duties. The plain language of the Executive Order states that the agencies should "streamline" their processes; however, it does not give purport to give the agencies the authority to by-pass or disregard provisions of substantive law, like the requirement that CEQA must be satisfied before a LSSA notice can be filed. In short, the plain language of the Executive Order encourages the agencies to "streamline" permit processing, but the streamlining must be consistent in all respects with the provisions of substantive law, including the requirement for CEQA compliance before a LSSA notice can be filed.

b. An Executive Order Does Not Suspend The Requirements of Substantive Law Absent a Proclamation of Emergency.

An Executive Order cannot suspend any statute, order, rule, or regulation without an accompanying Gubernatorial proclamation of a state of emergency. Based on the fundamental principles of Separation of Powers, it is well-settled law that an Executive Order is aimed at the Executive Branch agencies responsible for implementing the law:

> An executive order, then, is a formal written *directive* of the Governor which by *interpretation*, or the *specification of detail*, *directs and guides* subordinate officers in the enforcement of a particular law.[189]

The Governor may "direct" and "guide" Executive agencies in enforcement of the law. These ideals are consistent with the general principles of the Executive Branch enforcing the law. However, except under very limited circumstances not applicable in this case, the Governor may not suspend, amend or change a law that has been enacted by the Legislature.[190]

The exception to this general rule is found in the California Emergency Services Act,[191] which grants the Governor "during a sudden and severe energy shortage" the power to "suspend" statutes and regulations "where the Governor determines and declares that strict compliance with any statute, order, rule, or regulation would in any way prevent, hinder, or delay the mitigation of the effects of the emergency."[192] Any exercise by the Governor of this extraordinary power must

[189] See 63 Ops. Cal. Atty. Gen 583, at pp. 584-585 (1980).

[190] Cal. Const. Art 3 §1.

[191] Cal. Govt. Code § 8550 *et seq.*

[192] Cal. Govt. Code § 8571.

be accompanied by a written proclamation.[193] In this case, the Executive Order at issue was not accompanied by a proclamation declaring an emergency, and thus does not enjoy the power to suspend substantive law.

As Executive Order S-14-08 was not issued pursuant to the California Emergency Services Act, it cannot be read as allowing the Commission to disregard, truncate, or otherwise circumvent provisions of any statute, order, rule, or regulation. Instead, in implementing this streamlining order, the Commission must follow the substantive provisions of the Fish and Game Code that require environmental documentation pursuant to CEQA before the LSAA process can begin and before incidental take can be authorized.

V. LORS OVERRIDE

A. The Commission Has Two Separate But Important "Override" Authorities.

The Energy Commission has two separate and distinct authorities to approve projects notwithstanding conformity with particular laws, commonly referred to as the Commission's "Override" authorities. Although the statutory scheme requires separate and different findings, both types of Overrides require a similar balancing of benefits and impacts, as well as the consideration of feasible alternatives.[194]

First, the Commission has the authority under Public Resources Code Section 21080.5 to approve a project notwithstanding potentially significant environmental effects through a statement of overriding considerations, also known as the "CEQA Override" authority. This first authority is discussed in detail in Applicant's Opening Brief.[195] The Applicant's Opening Brief demonstrated that the Commission should conclude that the Project will have no significant adverse environmental effects. However, even if the Commission concludes differently, the Commission should find, as it did in the Metcalf Energy Center Final Decision, that the evidence conclusively establishes the benefits attributable to the Project, and does not persuasively suggest that the Ivanpah Solar Project as mitigated would create an impact so significant as to prevent it being constructed and operated. Therefore, the Commission should be compelled by the weight of the evidence of record to find and conclude, in the alternative, that the Ivanpah Solar Project

[193] Cal. Govt. Code § 8526.

[194] Metcalf Energy Center, Final Decision, p. 461.

[195] Applicant's Opening Brief, Section II.F, pp. 144-151.

provides, on balance, a level of benefits sufficient to support findings of "overriding considerations" pursuant to its CEQA Override authority.

Second, the Commission has the authority pursuant to Public Resources Code Section 25525 to approve a powerplant notwithstanding noncompliance with any applicable state, local, or regional standards, ordinances, or laws or "LORS," referred to as the Commission's "LORS Override" authority. The FSA Addendum finds, and the Applicant agrees, that "the Mitigated Ivanpah 3 project would conform with all applicable LORS."[196] Accordingly, there is no need for the Commission to exercise its LORS Override authority in approving the Ivanpah Solar Project.

Notwithstanding the substantial evidence in the record confirming that the Ivanpah Solar Project complies with applicable LORS, some parties have alleged non-compliance with applicable LORS.[197] Thus, out of an abundance of caution, the Applicant provides the following summary of the applicable law and substantial evidence supporting the conclusion that if, hypothetically, the Commission did find a non-compliance with applicable LORS, the Commission should exercise its LORS Override authority pursuant to Section 25525 and approve the Project notwithstanding any alleged noncompliance.

B. The Statutory Basis For The Commission's Authority To Approve A Project Notwithstanding Nonconformity With Applicable LORS Is Clear In Existing Law.

The Commission's authority to Override nonconformity with any applicable state, local, or regional LORS must be considered in the context of the Commission's exclusive jurisdiction to site powerplants in the State of California. Specifically, the scope of the Commission's exclusive siting jurisdiction is set forth in Public Resources Code (PRC) Section 25500:

> In accordance with the provisions of this division, the commission shall have the *exclusive power to certify all sites and related facilities in the state*, whether a new site and related facility or a change or addition to an existing facility. *The issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency*, or federal agency to the extent permitted by federal law, for such use of the site and related facilities, and *shall supersede any applicable statute, ordinance, or regulation of*

[196] Ex. 315, p. 1-2; 1-8; and within the individual disciplines discussed in Exhibit 315, *passim*.

[197] CBD Opening Brief, pp. 56-58; Sierra Club Opening Brief, p. 21; Staff's Opening Brief, p. 18. (Staff argues that LORs override is required if the Commission does not adopt Staff's proposed condition BIO-17.)

> *any state, local, or regional agency*, or federal agency to the extent permitted by federal law.[198]

This section gives the Commission the authority to issue a certificate that preempts all local laws. The statewide interests that form the foundation for the State's retention of exclusive siting jurisdiction are discussed in the next section below.

In addition to this exclusive siting authority, the Commission has separate authority for overriding inconsistencies with LORS. Specifically, Section 25525 provides the following standard for overriding LORS such as general plans and zoning:

> The commission shall not certify any facility contained in the application when it finds, pursuant to subdivision (d) of Section 25523, that the facility does not conform with any applicable state, local, or regional standards, ordinances, or laws, unless the commission determines that such facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving such public convenience and necessity. In making the determination, the commission shall consider the entire record of the proceeding, including, but not limited to, the impacts of the facility on the environment, consumer benefits, and electric system reliability. * * *[199]

Thus, notwithstanding any alleged non-compliance with any applicable LORS, for the past quarter century, the law in California on this point has been clear: powerplant licensing is a matter of statewide concern requiring a decision by an agency, specifically this Commission, responsive to the interest of all of the people of California.

C. The Legislative History Confirms That Siting Of Powerplants Is An Issue Of Statewide Concern.

Unlike most development projects in the State of California, powerplant siting remains the exclusive jurisdiction of the State of California to further important State interests. Simply put, the State of California has retained powerplant siting jurisdiction precisely because there are important statewide interests at stake in the process.

The Warren-Alquist Act (PRC 25000 *et seq*., the "Act") includes a strong statement of Legislative intent that confirms that the siting of powerplants is a matter of statewide, rather than local, interest. Section 25001 was the very first statement of Legislative intent articulated in the

[198] Public Resources Code ("PRC") Section 25500; emphasis added.

[199] PRC Section 25525; emphasis added.

original 1974 Act. Specifically, PRC Section 25001 regarding the "essential nature of electrical energy" states the following:

> The Legislature hereby finds and declares that electrical energy is essential to the health, safety and welfare of the people of this state and to the state economy, and that it is the responsibility of state government to ensure that a reliable supply of electrical energy is maintained at a level consistent with the need for such energy for protection of public health and safety, for promotion of the general welfare, and for environmental quality protection.[200]

Thus, the 1974 Act recognizes the essential nature of electricity and the corresponding state interest protection of public health and safety, the general welfare, and the environment.

Beyond this first principle articulated by the Legislature, the Act is also replete with other such statements of Legislative intent that define powerplant siting as an issue of statewide concern. For example, Section 25005 declares that the "prevention of delays and interruptions in the orderly provision of electrical energy, protection of environmental values, and conservation of energy resources require expanded authority and technical capability within state government."

Similarly, Section 25006, titled "State policy; responsibility for energy resources" states as follows:

> It is the policy of the state and the intent of the Legislature to establish and consolidate the state's responsibility for energy resources, for encouraging, developing, and coordinating research and development into energy supply and demand problems, and for regulating electrical generating and related transmission facilities.

Thus, a founding principle underlying the creation of this Commission is that the siting of powerplants is of such statewide importance that the State of California has retained the exclusive jurisdiction to certify all powerplant sites and related facilities in the State of California.

[200] Cal. Pub. Res. Code Section 25501.

D. The Commission's Authority To Override LORS And Approve A Project Notwithstanding Such Nonconformity Is An Integral Part Of The State's Authority To Protect Public Health And Safety, The General Welfare, And The Environment.

The Commission's LORS Override authority has been an integral part of the Act from its inception in 1975. The Commission has exercised its LORS Override authority only a few times since the Commission was created in 1975. The Commission's practice of not using this authority without careful consideration is fitting and appropriate.

It is equally true, however, that the Legislature would not have given the Commission this LORS Override authority if the Legislature did not intend that the Energy Commission should use it when necessary to protect the statewide interests discussed above. Basic canons of statutory construction dictate that the language of the statute must be read in the context of the entire statutory scheme created by the Legislature. In this case, that statutory scheme clearly indicates that the Legislature and the Governor intended the Commission's LORS Override authority to be exercised in appropriate circumstances.

The specific facets of the public convenience and necessity served by the Ivanpah Solar Project are discussed both in the Applicant's Opening Brief and in the other sections of this Reply Brief. Further, the subsections of this Section confirm that there are no more prudent and feasible means of achieving such public convenience and necessity. Given the local, regional, and statewide interest in safe, reliable and renewable sources of electricity, there can be no doubt that certifying the Ivanpah Solar Project will further the statewide interests identified in the Act. Under these circumstances, deference to the Intervenors' interpretation of applicable LORS would be contrary to the letter and fundamental purposes of the Warren-Alquist Act and the interest of Californians statewide. This Commission has both the authority and duty to Override such erroneous interpretations of applicable LORS where, as here, the statutory LORS Override standards are met.

E. The Ivanpah Solar Project Satisfies The Standards for A LORS Override Set Forth in the Warren-Alquist Act.

The Commission's LORS Override authority is both flexible and broad. This authority to certify a project notwithstanding non-compliance with applicable LORS is set forth in Public Resources Code Section 25525, quoted in its entirety above.

Section 25525 requires essentially two findings for a LORS Override. The first is that the project "is required for public convenience and necessity." The second is that "there are not more prudent and feasible means of achieving such public convenience and necessity."(emphasis added) These two findings provide the Commission with a broad, flexible and common-sense standard to apply in considering an LORS Override.

California case law on the definition of public convenience and necessity is drawn in large part on judicial interpretations of Public Utilities Code Section 1001, which require regulated utilities to obtain a certificate of public convenience and necessity from the California Public Utilities Commission to construct certain facilities to be paid for ultimately by the public. Judicial interpretations of Section 1001 note that the phrase "public convenience and necessity" has broad and flexible meaning (*San Diego & Coronado Ferry v. Railroad Commission* (1930) 210 Cal. 504 [292 P. 640, 643]). In this context, "necessity" is not used in the sense of something that is indispensably requisite. Rather, any improvement which is highly important to the public convenience and desirable for the public welfare may be regarded as necessary. It is a relative rather than absolute term whose meaning must be ascertained by reference to the context and the purposes of the statute in which it is found. (See, San Diego Ferry at p. 643.)[201]

Consistent with this latitude, the meaning of the term "necessary" must "be ascertained by reference to the context, and to the objects and purposes of the statute in which it is found" (Id., p. 643). Thus, the definition of public convenience and necessity is found primarily in the context of the statutory objectives of the Act. While it is within the discretion of the Energy Commission to determine the factors material to whether a power facility is "required for the public convenience and necessity" under Section 25525, the factors the Commission considers in assessing the public convenience and necessity (and prudence and feasibility) must be reasonably related to the goals and policies of the Commission's enabling legislation. In addition to the policies expressly set forth in the Act and in other applicable statutes, policies established in the Commission's regulations and policy reports may also be considered, because any such policies must themselves be reasonably related to the statutory policies.

In 1999, as part of Senate Bill ("SB") 110, the Legislature added the second sentence to Section 25525, making three issues of paramount concern: environmental impacts, consumer

[201] Metcalf Energy Center, Final Decision, p. 464.

benefits, and electric system reliability. Specifically, SB 100 amended Section 25525 by adding the following:

> In making the determination, the commission shall consider the entire record of the proceeding, including, but not limited to, the impacts of the facility on the environment, consumer benefits, and electric system reliability. * * *[202]

This sentence provides some important context for the Commission's framing of a LORS Override. The most important feature of this sentence is that the Legislature has given the Commission guidance regarding the meaning of "public convenience and necessity." The amendment makes plain that this determination includes, although is not limited to, consideration of the impacts of the project on "the environment, consumer benefits and electric system reliability." [203]

Thus, in light of the amendment and the standards discussed above, the statutory objectives of the Warren-Alquist Act relevant to the LORS Override are the reliable, cost-effective and environmentally sound provisions of electrical energy that is essential to the health, safety and welfare of the people of the State and the State economy (See e.g., Public Resources Code Section 25001, 25525). Thus, a project is "required for the public convenience and necessity" if it improves electric system reliability, provides consumer benefits, improves the environment or any combination of these things. In fact, the mere willingness of an investor to risk capital to construct a powerplant in response to competitive market forces may constitute a

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[202] PRC Section 25525; SB 110 (Stats. 1999, Chapter 581); emphasis added.

[203] The amendment also instructs the Commission to consider "the entire record." The entire record in the proceeding is the "hearing record" as defined by Section 1702(h) of the Commission's regulations (20 C.C.R. § 1702(h)). Section 25525 requires a determination of the relative weight of all of the evidence in the record. This relative weighing is the same weighing that a court conducts pursuant to the "substantial evidence" test, as more particularly described in the Act (PRC Section 25531) and related case law.

While the hearing record includes public comment and other matters expressly set forth in Section 1702(h) and the committee may rely in part on any portion of the hearing record in making a finding, only those items properly incorporated into the hearing record pursuant to Section 1212 [Rules of Evidence] or 1213 [Official Notice] are sufficient in and of themselves to support a finding (20 C.C.R. § 1702(h)).

The relevant legal standards require that the evidence in the record be real evidence supporting a party's position in the case. Mere conjecture is not evidence. Rather Section 25525 requires an analysis of the evidence in the record that any of the proposed alternatives provide the same public convenience and necessity in a more reasonable and prudent manner than the proposed project.

Of course, the Applicant has the burden of supplying real evidence in the record to support an Override. As for other parties, those who oppose an Override must make an election either to accept the Applicant's evidence supporting Override or to come forward with specific evidence to be placed in the record of specific alternatives that reasonably and feasibly achieves that same public convenience and necessity. In this case, the Applicant's evidence supporting Override constitutes substantial evidence to support a Commission Override.

basis for determining that a facility is required for the public convenience and necessity.[204] The mere willingness of a private company to increase the supply of electricity to California at its own expense and risk is sufficient to meet the statutory test. Certainly where the proposed facility also offers tangible and substantial public benefits of the nature discussed above, while in addition being proposed to be built at the sole risk and cost of the developer, then the Commission can easily find it is "required for the public convenience and necessity." As summarized next and discussed throughout this Brief, the Ivanpah Solar Project indisputably provides enormous public benefits of the nature relevant to the LORS Override.

F. The Ivanpah Solar Project Plainly is "Required for the Public Convenience and Necessity" Within the Meaning of Section 25525.

By the foregoing standard, there can be no doubt based upon this record that the Ivanpah Solar Project is "required for the public convenience and necessity." Indeed, the Ivanpah Solar Project offers *all* of the types of benefits discussed above; it substantially increases electric reliability, lowers consumer costs *and* promotes environmental protection.

The Ivanpah Solar Project will contribute significantly to the improvement of the environment. The challenge the world faces is immense. According to the International Energy Agency, to stabilize CO2 in the atmosphere at 450 ppm - the consensus target adopted by the scientific community –we will need to build the equivalent of 4,900 gigawatts of new carbon free power plants over the next 20 years. The data is clear – we will only be able to address climate change if we build renewables at scale.[205] That's 245 new carbon free power plants, each the size of a nuclear plant, every year. Governor Schwarzenegger recently signed an Executive Order requiring California's utilities to obtain one third of their energy from renewable resources.

The Ivanpah Solar Project will avoid more than 13 million tons of CO2 emissions over its lifecycle, as well as 85 percent of the air emissions from an equally-sized natural gas plant. The plants will employ dry-cooling, which will reduce water usage by more than 90 percent, allowing the Ivanpah Solar Project to use approximately 30 times less water than competing technologies

[204] Re Pacific Gas and Electric Company (1990) 39 Cal.P.U.C.2d 69, 82.

[205] This is not to say that we should not invest in energy efficiency and distributed renewable generation. California has correctly made energy efficiency our highest priority resource in meeting our clean energy goals. Distributed renewable energy sources, such as rooftop solar, also have an important role, and deserve significant resources. Yet even if we run the table and implement energy efficiency and rooftop solar to the maximum extent reasonably practicable, we still need to build thousands of gigawatts of utility-scale renewable plants to stabilize CO2 in the atmosphere at 450 ppm.

using wet cooling. The Project will use roughly 100 acre feet of water – the equivalent of approximately 300 homes' annual water usage. While dry-cooling comes at an additional cost and an impact on efficiency, this proven technology helps conserve precious desert water. The Ivanpah Solar Project's environmental considerations to reduce development impacts also include a low-impact development design and use of a existing high-voltage transmission pathway that transects the site. The low impact development design retains much of the existing vegetation, and utilizes BrightSource's proprietary hanging heliostats, which minimize the need for grading and concrete pads required for some competing technologies.

The State of California has made the Renewable Portfolio Standard and greenhouse gas ("GHG") policy the cornerstone of the State's energy policy. These important State interests are articulated in numerous documents published by the State. Just a representative sample of these documents includes the following:

- AB 32, The Global Warming Solutions Act of 2006.
- The AB 32 Scoping Plan. CARB, December 2008.
- The Integrated Energy Policy Report (IEPR), 2002-2009.
- Climate Action Team Report to Governor Schwarzenegger and the Legislature. CalEPA, March 2006.
- Integration of Renewable Resources. CalISO, Nov. 2007.
- Draft Final Opinion on Greenhouse Gas Regulatory Strategies: Joint Agency Proposed Final Opinion. CPUC/CEC 2008.
- Framework for Evaluating Greenhouse Gas Implications of Natural Gas-Fired Power Plants in California. CEC (MRW and Associates) May 2009.

California's renewables "gap" for meeting 33% RPS by 2020 has been variously cited at between 59,000 GWh (RETI Phase 1b Report) and 75,000 GWh (CPUC 33% RPS Implementation Analysis).[206] These and other state policy documents demonstrate the public interest in environmental protection.

The Ivanpah Solar Project will also improve the reliability of the California electrical system. With the right infrastructure in place, our state systems will enjoy a reliable mix of wind, geothermal, hydroelectric, and solar power with a minimum of conventional power plants.

[206] Ex. 85, p. A-9.

The Ivanpah Solar Project is a keystone to this renewable energy mix, providing quantities of power at peak, and complementing the production profiles of wind and other resources.

The purpose of the Ivanpah Solar Project is to combine California's unique solar characteristics with advanced and environmentally-responsible utility-scale solar technology to reliably deliver cost-effective, clean energy to one of the biggest energy markets in the world. The BrightSource Energy Luz Power Tower 550 (LPT 550) technology has been proven at our 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.

The Ivanpah Solar Project provides reliability benefits by load following and by being available on peak. The Project's generation is "peak coincident," meaning it delivers power when large air conditioners and other loads require additional generation resources. As the penetration of variable (or "intermittent") resources increases in the electrical system, reliability can only be maintained either through multiple renewable technologies in multiple geographic locations reinforcing each other, or through conventional peaker plants, often located in low income areas where environmental justice is a concern. It is not viable from a planning or operating perspective to meet RPS goals of 20 to 33% by relying on a single technology. It is not a matter of the Ivanpah Solar Project "or" distributed PV. For California to meet its goals, it must rely on central station solar power and distributed PV and many other resources.[207]

The Ivanpah Solar Project and other central-station solar power will have scheduling coordinators required to forecast their operation, including weather impacts, so that the grid operator is constantly informed of what the central-station solar power plant will be doing and why, allowing the grid operator to react appropriately. Central station plants (solar or otherwise) are designed to be able to move power across the grid through the integrated transmission system.[208]

Unlike distributed resources, central-station solar power like the Ivanpah Solar Project will be informing the grid operator of forecasted weather conditions and the powerplant's planned response, including informing the grid operator of when the plant will be returning to full output. The grid operator would not be surprised by central station solar power, either when output is reduced or when output resumes, as it would with distributed PV. Additionally, solar-

[207] Ex. 85, p. A-20.

[208] Ex. 85, p. A-21.

thermal generation output is not as volatile as PV due to thermal mass, possible storage and/or supplemental gas firing.[209]

As a 400 MW central station plant, the Ivanpah Solar Project provides the transmission system operator with flexibility to move the power to where it is needed on an integrated utility system. Distributed PV cannot provide this system flexibility. Central station plants, including solar thermal plants, are necessary for reliable system operation because they contribute both real power (in MWH), but also help by providing other important utility requirements such as reactive power, voltage and frequency support, reserves and other such requirements.[210]

The Ivanpah Solar Project also provides substantial consumer benefits. California's largest utilities have recognized the value of this technology to their ratepayers. BrightSource has signed contracts for over 2.6 gigawatts of solar power with Pacific Gas & Electric Company (PG&E) and Southern California Edison Company (SCE). The California Public Utilities Commission (CPUC) has approved the PG&E contracts, the first two of which are for two of the three plants comprising the Ivanpah Solar Project, and is currently reviewing the SCE contracts, including the contract for the third of the Ivanpah Solar Project plants. BrightSource's PG&E and SCE contracts represent approximately one-third of all of the announced solar thermal utility-scale contracts in the nation. These projects were selected after a rigorous competitive RFO process and represent the best possible value to ratepayers of all the many projects that were reviewed.

The Ivanpah Solar Project was identified as a "fast-track" priority by the U.S. Department of Interior for obtaining federal stimulus benefits for California under the 2009 American Recovery and Reinvestment Act (ARRA). The Project has also been selected as one of 16 short-listed applicants to receive a loan guarantee under the U.S. Department of Energy (DOE) 1703 program, established by the 2005 Energy Policy Act, and is the only utility-scale solar project so selected.

In summary, the Ivanpah Solar Project will provide substantial environmental, consumer and reliability benefits to California. Any one of the foregoing benefits taken alone would support a finding by this Commission that the Ivanpah Solar Project is required for the public convenience and necessity. The fact that these benefits are produced by a project being

[209] Ex. 85, p. A-22.

[210] Ex. 85, p. A-22.

undertaken entirely at private risk makes the conclusion even more obvious. When all these benefits are taken together, the record overwhelmingly supports the "public convenience and necessity" finding required for the LORS Override.

G. There is No "More Prudent and Reasonable Means of Achieving Such Public Convenience and Necessity" Than the Ivanpah Solar Project.

The second key finding necessary to a LORS Override requires the Commission to consider whether there are "no more prudent and feasible means of achieving such public convenience and necessity." There are several key words and phrases for the Commission to consider regarding this language.

First, the term "prudent and feasible" requires a consideration of, but not deference to, local LORS. The Commission should consider all relevant factors – those reasonably related to the statutory purposes that guide the Commission – in determining whether "there are … more prudent and feasible means of achieving the public convenience and necessity," and weigh them.

Second, two words near the end of the first sentence of Section 25525 carry significant import, the words "more" and "such" in the following excerpt: "…and that there are not more prudent and feasible means of achieving such public convenience and necessity."

The Legislature's choice of the word "more" is significant. Specifically, the alternatives to be considered by the Commission must provide a "more" prudent and feasible means of achieving the same public convenience and necessity as the proposed project. This is significant because the Legislature could have elected to state that the alternatives considered by the Commission must be "equally" prudent and feasible or even "less" prudent and feasible; the Legislature did not do so. Accordingly, in reviewing alternatives, the Commission must analyze those alternatives in light of their ability to be *more* prudent and feasible than the proposed project.

Similarly, the word "such" modifying "public convenience and necessity" is important. The deliberate use of the word "such" signals that the Commission should examine alternatives to the project that accomplish *the same public convenience and necessity as the project.* The Legislature could have worded Section 25525 to require a comparison of "any" public convenience and necessity or even, generically, "the" public convenience and necessity; the Legislature did not.

Instead, the Legislature intended that only those alternatives to the project that accomplish the same public convenience and necessity as the project are to be considered in implementing Section 25525. Thus, one cannot simply substitute the project's definition of public convenience and necessity for some other, more generalized notion of public convenience and necessity unrelated to the basic objectives of the project. Instead, the notion of public convenience and necessity is project-specific; likewise, alternatives to the project must consider that same project-specific public convenience and necessity.

As discussed in the Alternatives section of Applicant's Opening Brief, there are no more prudent and feasible means of achieving the same public convenience and necessity as the Ivanpah Solar Project.[211] There is, then, substantial evidence in the record to support the conclusion that the Alternatives are not more prudent and feasible means of achieving the public convenience and necessity than the Ivanpah Solar Project.

Plainly, to rebut these analyses and conclusions, project opponents must do more than offer "someplace else" as an alternative. Fairness, prudent public policy and the law demand that they identify specifically their proposed alternative and offer credible and substantial evidence proving that it represents a "*more* feasible and prudent means of achieving such public convenience and necessity" than the Ivanpah Solar Project. Despite the number of Intervenors, the reason is simple: they cannot make this showing because there is no such preferable alternative in the real world.

H. The Substantial Evidence In The Record As A Whole Supports The Commission's Exercise Of Its LORS Override Authority, If Deemed Necessary, And The Certification Of The Ivanpah Solar Project.

Notwithstanding the substantial evidence in the record that the Ivanpah Solar project complies with applicable LORS, if the Commission should find to the contrary, the substantial evidence in the record will support a decision by the Commission to Override the purported nonconformity with applicable LORS and to certify the Ivanpah Solar Project. As set forth in the record, the Project is required for "the public convenience and necessity," as those terms are defined in California law. As described in this Brief, the Ivanpah Solar Project is the most feasible and prudent means of achieving the public convenience and necessity set forth in the Project Objectives. Further, as described in this Brief and the supporting information in the

[211] Applicant's Opening Brief, Section II.A, pp. 37-59.

record, there are no "more prudent and feasible" means of achieving this public convenience and necessity.

Indeed, when one steps back and looks at the big picture, the Ivanpah Solar Project is precisely the situation for which the Energy Commission generally, and the LORS Override authority specifically, were created in law more than a quarter century ago.

The Applicant has proposed to build renewable generation at its own risk and expense. The Project has been shown to comply with all applicable laws, ordinances, regulations and standards. However, in the unlikely event the Commission finds a nonconformity, it is difficult to imagine a circumstance in which the Energy Commission would be more justified in exercising its LORS Override authority than in this proceeding.

VI. RESPONSE TO CENTER FOR BIOLOGICAL DIVERSITY

A. The Commission's Issuance Of Incidental Take Approval Pursuant To The Commission's In Lieu Permitting Authority Is Not A Deviation From The Commission's Past Practices.

CBD suggests that the Commission's issuance of Incidental Take approval pursuant to the Commission's in lieu permitting authority set forth in Public Resources Code Section 25500 et seq. is somehow novel -- a deviation from the Commission's past practices.[212] This is incorrect.

There has been no recent, tectonic shift in the legal relationship between the legal duties and responsibilities of the Commission and CDFG. In fact, since 1974, the Commission's exclusive, in lieu siting authority has been the law of California, and that law has not changed. While there may be a dawning realization for some Parties that the Commission's certification is issued in lieu of any and all other state law approvals, including those of CDFG, this is not news to the Commission.

Nor have the practices of the Commission changed with respect to CDFG. The Commission has always consulted with other agencies, including CDFG, which would have permit authority over the Project, but for the Commission's exclusive siting authority. This practice continues.

[212] CBD Opening Brief, pp. 65-66.

B. The Commission Has Always Closely Coordinated With CDFG and Will Continue to Do So.

Notwithstanding the Commission's exclusive authority on State law matters, the Commission has always, as a matter of comity, sought the review of other agencies that would have permitting jurisdiction but for the Commission's authority. While the Commission has the ultimate state law authority, Applicants regularly provide information to other agencies for their review, allowing those other agencies to provide input to the Commission. Applicants often provide this information in the form of "draft" permit applications, such as that provided by the Applicant to the CDFG in this proceeding, as that is the form that such agencies are familiar with, and as the forms perform a similar function to actual permit applications. This form ensures that the relevant information has been provided in a manner that the agencies can efficiently review. This practice remains unchanged.

CBD argues that the Applicant's submission of a draft Incidental Take Permit to CDFG somehow suggests that the Commission's authority under state law is not exclusive.[213] This is incorrect. The Applicant's submission of a draft application simply follows existing practice built on comity; CEC seeks CDFG's input, but the ultimate authorization and enforcement of the incidental take provisions remains with the Commission.

Applicant expects to follow the usual and customary processes with the CDFG on CESA issues and Lake and Streambed Alteration Agreements (LSAA). Indeed, following these usual processes will ensure that the Applicant has, for example, the ability to invoke the arbitration provisions of the LSAA process, if necessary. However, as explained in the next section below, the CESA and LSAA provisions are, at the end of the day, legally enforceable through the Commission's Conditions of Certification, not any separate state law processes.

C. The Commission's Conditions of Certification Have Always Served as the Legal Mechanism for Enforcement of CESA and Other State Laws.

Following the Commission's close consultation with CDFG, the provisions of CESA are made legally enforceable as to licensed power plants through the Commission's Conditions of Certification. This has always been the case and has not changed.

CEQA requires that mitigation measures be made legally enforceable via condition. As California Courts have explained:

[213] CBD OB, pp. 65-66.

> In addition [to making findings based on substantial evidence], the agency 'shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures' ([Pub. Resources Code,] § 21081.6, subd. (b)), and must adopt a monitoring program to ensure that the mitigation measures are implemented (§ 21081.6, subd. (a)). *The purpose of these requirements is to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." (Federation of Hillside & Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1260-1261 [100 Cal. Rptr. 2d 301],fn. omitted.)[214]

These CEQA provisions are satisfied by the Commission's Conditions of Certification, not a separate state law process.

Ironically, CBD's brief recognizes that the Commission's Conditions of Certification have always been the appropriate mechanism for enforcement of state law. Specifically, CBD notes that the Commission has in the past required that "***the mitigation implementation and monitoring plan***[215] identify 'All biological resources mitigation, monitoring and compliance measures *required in other state agency terms and conditions, such as those provided in the CDFG Incidental Take Permit* and Streambed Alteration Agreement and Regional Water Quality Control Board permits.'"[216] The "*mitigation implementation and monitoring plan"* referenced by CBD is more commonly referred to as the "Biological Resources Mitigation Implementation And Monitoring Plan" or the "BRMIMP".

The BRMIMP is part of the Commission's standard Biological Resources Conditions. Every Commission Decision that has potential biological impacts includes a Condition requiring the development of a BRMIMP. The standard BRMIMP condition also generally requires that the BRMIMP be developed "in consultation with the CDFG, the USFWS, and any other appropriate agencies"[217]; however, while those other agencies will have to "review and comment" on the BRMIMP, only the CEC Compliance Project Manager (CPM) has both "review and approval" authority. The subtle, but important distinction between "review and

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[214] *Environmental Council of Sac v. City of Sacramento*, 48 Cal. Rptr.3d 544, 556 (2006); emphasis in original.

[215] Emphasis added here.

[216] CBD Opening Brief, p. 65; emphasis in original.

[217] See, as one example, the BRMIMP Condition "BIO-5" in the Commission's Final Decision for the Walnut Energy Center, p. 170 (02-AFC-4).

approve" by the Commission and "review and comment" by all other state law entities is a foundation of the Commission's certification process.

Significantly, if there is a purported violation of CESA, given the Commission's exclusive authority under the Public Resources Code, the *legal mechanism* for enforcement of any noncompliance is through an enforcement action by the Commission – not an enforcement action via the CDFG's processes.[218]

The Commission has in this case, followed its usual and customary practices, closely coordinating with CDFG, but ultimately imposing the Conditions of Certification that make all state law requirements legally enforceable. While the Commission's past practices may be "news" to CBD, they are not "new." The Commission will follow the usual and customary course upon project approval. Nothing has changed.

D. The Commission's Authority to Issue a Certificate In Lieu of an Incidental Take Permit by the CDFG is Supported by the Warren-Alquist Act and CESA.

CBD's assertion that the Commission's issuance of a certificate cannot act in lieu of an incidental take permit pursuant to CESA is fundamentally flawed. First, the CBD's assertion ignores clear and unambiguous language in both the Warren-Alquist Act and the California Endangered Species Act that recognize the Commission's in-lieu permitting authority. Second, even *assuming arguendo* that one finds an ambiguity in the statutory provisions that requires the application of canons of statutory interpretation, CBD fails to properly apply these rules to the proceeding at hand. Proper application of those canons, as discussed below, confirms the Commission's exclusive authority on all state law matters.

E. CBD Fails to Abide by the Most Fundamental Rule of Statutory Construction, and Ignores the Clear and Unambiguous Language of the Warren-Alquist Act and CESA.

In making its argument that the Commission's in-lieu permitting authority does not extend to the issuance of incidental take permits under CESA, CBD fails to abide by the most fundamental rule of statutory construction. The fundamental rule of statutory construction requires that the intent of the legislature be determined in order to "effectuate the purpose of the law."[219]

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[218] 14 C.C.R. § 15091.

[219] *Rosenthal v. Hansen*, 34 Cal. App. 3d 754, 760 (1973), citing to *People v. Superior Court*, 70 Cal.2d 123, 132

The intent of the legislature is found "in the words of statutes. . . not elsewhere."[220] Where statutory language is clear and unambiguous, the "plain meaning of the statute must govern"[221] as "there is no need for [statutory] construction, and courts should not indulge in it." [222] Statutory language is ambiguous only "if it is susceptible of two reasonable interpretations."[223] Thus, "if the words of the statute, given their ordinary and popular meaning, are reasonably free from uncertainty, the courts will look no further to ascertain the legislative intent."[224]

CBD errs in failing to recognize the clear and unambiguous statutory mandate in the Warren- Alquist Act that the Commission's issuance of a certificate is in lieu of "*any permit*…required by *any state, local, or regional agency*."[225] Moreover, the CBD's interpretation of Section 2081 of the California Fish and Game Code fails to harmonize the incidental take permit provision with the whole system of statutes in CESA, which specifically provide that the CDFG will participate as a trustee agency in, but not issue incidental take permits for, the Commission process for certification.

1. The Warren-Alquist Act's Express Statement Of The Commission's In-Lieu Permitting Authority Is Clear And Unambiguous.

Section 25500 of the Public Resources Code, which was enacted by the Legislature pursuant to the Warren-Alquist Act, provides:

> In accordance with the provisions of this division, the commission *shall have* the exclusive power to certify all sites and related facilities in the state . . . The issuance of a certificate by the commission *shall be in lieu* of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law. . . and *shall supersede* any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law. [emphasis added]

(1969); *Mercer v. Perez*, 68 Cal.2d 104, 112 (1968).

[220] *Prof'l Eng'rs in Cal. Gov't v. State Pers. Bd*., 90 Cal. App. 4th 678, 687 (2001).

[221] *People v. Dieck*, 46 Cal. 4th 934, 940 (2009).

[222] *People v. Overstreet*, 42 Cal. 3d 891, 895 (1986).

[223] *People v. Dieck*, 46 Cal. 4th 934, 940 (2009) (". . . a statutory provision is ambiguous if it is susceptible of two reasonable interpretations").

[224] *County of Orange v. Flournoy*, 42 Cal. App. 3d 908, 912 (1974).

[225] Cal. Pub. Resources Code § 25500.

The "ordinary and popular meaning"[226] recognized for "in-lieu of" is "in the place of."[227] Thus, issuance of a certificate by the commission shall be "in the place of" any permit required by any state, local or regional agency.[228] Therefore, for a project where an incidental take permit would normally be issued by the CDFG, the express language of the Public Resources Code provides that "issuance of a certificate by the Commission" shall stand "in the place of" the permit. This phrase is not susceptible to any other meaning as there are no qualifiers or limitations on the power of the Commission, other than preemption by the federal government. The plain language of the statute is clear and unambiguous, and must govern.[229]

The Commission's issuance of a certificate must be in-lieu of an incidental take permit by the CDFG pursuant to the legislative intent of Public Resources Code Section 25500. [230]

2. Contrary to Legislative Intent, the CBD's Narrow Interpretation of the Fish and Game Code Fails to Give Significance to Every Section of CESA.

Section 2081 of the California Fish and Game Code grants the CDFG authority to "authorize, by permit, the take of endangered species, threatened species, or candidate species" if certain conditions are met.[231] CBD asserts that this language precludes "any other agency [besides CDFG] to authorize prohibited acts through incidental take statements,"[232] and that in "CESA the legislature made no mention of exceptions wherein such authorization could be provided by any other agency or commission."[233] However, this narrow interpretation of the Fish and Game Code provided by the CBD ignores other applicable provisions of CESA. The law requires that "every statute should be construed with reference to the whole system of law of

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[226] *County of Orange v. Flournoy*, 42 Cal. App. 3d 908, 912 (1974).

[227] http://www.merriam-webster.com/dictionary/in%20lieu.

[228] Cal. Pub. Resources Code § 25500.

[229] *People v. Dieck*, 46 Cal. 4th 934, 940 (2009).

[230] In drafting its response to the CBD's Opening Brief, Applicant noticed an error on page 89 of its Opening Brief. The sentence, as corrected, should read: "Second, and in the alternative, if the Commission finds that the federal authorization is inconsistent with the state requirements for an incidental taking, then the Commission will make a finding of "inconsistency" and the applicant must obtain a separate state authorization from the Commission for the incidental take."

[231] Cal. Fish & Game Code § 2081(b).

[232] CBD Opening Brief, p. 63.

[233] CBD Opening Brief, p. 63.

which it is a part so that all may be harmonized and have effect."[234] Thus, contrary to CBD's arguments, Section 2081 must be construed in context with CESA as a whole.

Under CESA, the CDFG is required to collect a "permit application fee from the owner or developer of an eligible project…to support its permitting of eligible projects pursuant to this chapter."[235] The extent to which the CDFG is involved in the permitting of an eligible project is explained further in Subsection 2099.5(b) and 2099.5(c) of the California Fish and Game Code. For example Subsection 2099.5(b), which applies to eligible projects outside of the Commission's site certification process, provides in relevant part:

> The department shall collect the permit application fee . . . for eligible projects for which an application has already been submitted, within 30 days of the operative date of this section. *The department shall utilize the permit application fee to pay for all or a portion of the department's cost of processing incidental take permit applications pursuant to subdivision (b) of Section 2081 and Section 2080.1.* If the permit application fee is insufficient to complete permitting work due to the complexity of a project or timeline delays, the department may collect an additional fee from the owner or developer to pay for its actual costs, not to exceed an additional seventy-five thousand dollars ($75,000).

Thus, for certain eligible projects, the department is required to "utilize the permit application fee" as funding to "process[ ] incidental take permits pursuant to subdivision (b) of Section 2081 and Section 2081.1," and allows the department to collect "an additional fee" if the permit application fee is "insufficient to complete permitting work."[236]

In comparison, the CDFG's responsibilities under Subsection 2099.5(c) are vastly different. Subsection(c), which applies to eligible projects undergoing the Commission's site certification process, provides:

> For an eligible project seeking site certification, pursuant to Chapter 6 (commencing with Section 25500) of Division 1 of the Public Resources Code, by the Energy Commission, as defined in Section 2099, the owner or developer shall pay the permit application fee directly to the department. *The permit application fee paid to the department shall fund the department's participation in the Energy Commission's site certification process as the state's trustee for natural resources.* The permit application fee shall be in addition to any application fees

[234] *Select Base Materials, Inc. v. Board of Equalization*, 51 Cal. 2d 640, 644 (1959).

[235] Cal. Fish & Game Code § 2099.5.

[236] Cal. Fish & Game Code § 2099.5(b).

collected directly by the Energy Commission. The permit application fee shall be due and payable within 30 days of the operative date of this section.[237]

The clear language of Subsection 2099.5 emphasizes that the role of the CDFG in the Commission's site certification is as a trustee agency, not a permitting agency as under Subsection 2099.5(b). Furthermore, unlike the fees collected pursuant to Subsection (b) to process incidental take permits, the department is required to use fees collected pursuant to Subsection (c) to "fund the department's *participation* in the Energy Commission's site certification process."[238] This provision of CESA, specifically recognizes that the CDFG will not process incidental take permits for projects in the Commission's site certification process, as a certificate issued by the Commission will act in lieu of the CDFG's permit. CDFG "participates" as a trustee agency in the Commission's preemptive, exclusive certification process.

3. The Plain Language of the Warren-Alquist Act and CESA Must Govern.

Where statutory language is clear and unambiguous, the "plain meaning of the statute must govern."[239] The language of the Warren-Alquist Act is clear and unambiguous -- the Commission has authority to issue a certificate in-lieu of any permit required by any other state, local, or regional agency. The language of the CESA is equally clear in recognizing that the CDFG's role in the Commission's site certification process is as participant, not as a permitting authority. Therefore, the plain language of each act recognizing the authority of the Commission to issue a certificate in lieu of all permits, including incidental take permits, controls.

F. CBD's Application of the Rules of Statutory Construction Is Fundamentally Flawed.

As stated above, where statutory language is clear and unambiguous "there is no need for [statutory] construction, and courts should not indulge in it." [240] Despite the clear and unambiguous language of both the Warren-Alquist Act and CESA, CBD attempts to rely on

[237] Cal. Fish & Game Code § 2099.5(c).

[238] Cal. Fish & Game Code § 2099.5(c); emphasis added.

[239] *People v. Dieck*, 46 Cal. 4th 934, 940 (2009).

[240] *People v. Overstreet*, 42 Cal. 3d 891, 895 (1986).

statutory construction to support its arguments.[241] Specifically, CBD makes two arguments: first, that as the terms of CESA and the Warren-Alquist Act conflict, the terms of CESA control as it was enacted later; and second, that the terms of CESA control over the Warren-Alquist Act because "CESA is the more specific statute."[242] However, these arguments are flawed for the reasons set forth below.

1. The Provisions of the Warren-Alquist Act and CESA Do Not Conflict.

In an attempt to create an inconsistency between the Warren Alquist Act and CESA, CBD claims that "only the Department of Fish and Game may allow for exceptions to the prohibition on take," and that the "Commission's issuance of a certificate cannot act in lieu of an incidental take permit under the California ESA."[243] CBD then asserts that "[t]o the extent that there is any conflict between the two statutes, because CESA is the later statute its terms must control,"[244] essentially arguing that the Warren-Alquist Act is *repealed by implication* from the language of CESA.

However, "repeal by implication is recognized only where there is no rational basis for harmonizing two potentially conflicting laws."[245] CBD cites to *Sierra Club v. California Coastal Commission* ("*Sierra Club"*) to support the argument that the provisions of CESA somehow "takes precedence" over the terms of the Warren-Alquist Act.[246] In *Sierra Club,* one issue before the California Supreme Court was the construction of two statutes relating to the proper scope of the California Coastal Commission's jurisdiction in considering impacts from development outside the coastal zone when approving development permits. Yet CBD's reliance on *Sierra Club* ignores a pivotal statement by the California Supreme Court in that decision. Specifically, the Court held that "interpretations which would require that one statute be ignored" must be "avoid[ed]."[247] Additionally, the Court stated:

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[241] CBD Opening Brief, p. 64.

[242] CBD Opening Brief, p. 64.

[243] CBD Opening Brief, p. 62.

[244] CBD Opening Brief, p. 64.

[245] *California Assn. of Health Facilities v. Department of Health Services,* 16 Cal. 4th 284, 297 (1997).

[246] CBD Opening Brief, p. 64, citing *Sierra Club v. Cal. Coastal Comm'n*, 107 Cal. App. 4th 1030, 1045.

[247] *Sierra Club v. Cal. Coastal Comm'n*, 107 Cal. App. 4th 1030, 1045 (2003) citing *Schmidt v. Southern Cal. Rapid Transit Dist.,* 14 Cal.App.4th 23, 27; also see *Broughton v. Cigna Healthplans* (1999) 21 Cal.4th 1066, 1086 ["Our duty is to harmonize [statutes] if reasonably possible"].

> We cannot adopt the Sierra Club's interpretation of section 30200 without largely ignoring section 30604, subdivision (d). The reverse does not hold true; if we interpret section 30604, subdivision (d) as governing the Commission's jurisdiction, section 30200 still controls the responsibility of other agencies (such as the City) to consider the impact of their actions (such as approval of development on the bluff top) on coastal resources.

The same analysis is applicable in this proceeding. CBD's interpretation of the Fish and Game code would require that Public Resources Code Section 25500 be *ignored*. Moreover, CBD's interpretation would ignore the explicit recognition in Subsection (c) of Fish and Game Code Section 2099.5 that the CDFG plays a different role under CESA for projects in the Commission's site certification process.

As recognized by the California Supreme Court, an interpretation ignoring the provisions of other statutes must be avoided. Indeed, "every statute should be construed with reference to the whole system of law of which it is a part so that all may be harmonized and have effect."[248] Both acts must be read together -- the Warren-Alquist Act governs for projects in the Commission's site certification process, and the Fish and Game Code governs the CDFG's responsibility to issue incidental take permits for all other projects outside of the Commission's site certification process. Therefore, as there are no conflicts between the Warren-Alquist Act and CESA, CBD's assertion that "the later act controls" is incorrect.[249]

2. The CBD's Narrow Interpretation of the Fish and Game Code Ignores Provisions of the Warren-Alquist Act, and Would Lead to An Absurd Result.

Subsection (c) of Section 2099.5 of the Fish and Game Code (for projects in the Commission's site certification process) is an express recognition of the Commission's in lieu permitting authority granted by Public Resources Code Section 25500 as applied to CDFG. To hold otherwise, as requested by the CBD, would lead to absurd results.

If, as CBD asserts, the language of Fish and Game Code Section 2081 precludes the Commission from acting in-lieu of the CDFG, then Fish and Game Code Section 2099.5(c) would operate to prevent the CDFG from using the permit application fee to fund the processing of an application for an incidental take permit for projects in the Commission's site certification

[248] *Select Base Materials, Inc. v. Board of Equalization*, 51 Cal. 2d 640, 644 (1959).

[249] CBD Opening Brief, p. 64.

process. Instead, solely for projects in the Commission's site certification process, the CDFG would only be able to use the funds for "participation", leaving no mechanism for the CDFG to fund the processing of an incidental take permit for these projects. CBD's narrow interpretation of the Fish and Game Code should be disregarded, as "it is a settled principle of statutory interpretation that the language of a statute should not be given a literal meaning if doing so would result in absurd consequences which the Legislature did not intend."[250] Two statutes that are "seemingly conflicting or inconsistent" must be reconciled where possible.[251] Even if one were to accept that there is an inconsistency between the two statutes, recognizing the Commission's authority to issue a certificate in-lieu of the CDFG's incidental take permit is the only way to harmonize the clear language of Public Resources Code Section 25500, and California Fish and Game Code Sections 2081 and 2099.5.

3. CBD's Analysis Fails to Recognize that the Warren-Alquist Act is the More Specific Statute.

The rules of statutory construction provide that "[t]he repugnancy between two statutes should be very clear to warrant a court holding that the one later in time repeals the other, when it does not in terms purport to do so." [252] As explained above in Section VI.F.1, the provisions of the Warren Alquist Act and CESA do not conflict; thus, there is no "repugnancy" between the two such that CESA should be found to repeal the Warren-Alquist Act, especially given that CESA does not "purport to do so."

CBD also argues that "CESA is the more specific statute" as it "pertain[s] solely to species preservation issues."[253] However, based on case law, CESA is the more "general" statute. General statutes "are those which relate to or bind all within the jurisdiction of the law-making power." [254] CESA provides, in relevant part that:

> No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native

[250] *Younger v. Superior Court,* 21 Cal. 3d 102, 113 (1978).

[251] *Orange Unified Sch. Dist. v. Rancho Santiago Cmty. College Dist.*, 54 Cal. App. 4th 750, 757 (1997).

[252] *People ex rel. Board of State Harbor Comm'rs v. Pacific Improv. Co.,* 130 Cal. 442, 445-446 (1900).

[253] CBD Opening Brief, p. 64.

[254] *Cody v. Murphey,* 89 Cal. 522, 524 (1891).

> Plant Protection Act (Chapter 10 (commencing with Section 1900) of this code), or the California Desert Native Plants Act (Division 23 (commencing with Section 80001) of the Food and Agricultural Code).[255]

Thus, as CESA "relate[s] to or bind[s] all within the jurisdiction of law making power"[256] from the unauthorized take, possession, purchase, or sale of an endangered or threatened species, CESA satisfies the definition of a general statute. Further, as recognized by CBD, CESA mandates that "all state agencies, boards, and commissions shall seek to conserve endangered species and threatened species, and shall utilize their authority in furtherance of the purpose of this chapter."[257] The general nature of CESA cannot be disputed.

In comparison, the provisions of the Warren Alquist Act do not "relate to or bind all within the jurisdiction or law making power." [258] Instead, the applicability of the provisions of the Warren Alquist Act are limited to one state agency, the Energy Commission, and proponents of thermal power plants of 50 megawatts or more seeking site certification from the Commission.[259] Thus, to the extent that a more specific statute may control a general statute, the terms of the Warren Alquist Act, as the more specific statute, "takes precedence over" CESA.[260]

G. The Committee Should Give No Weight to CBD and Sierra Club's Attachments to Their Briefs and the References to Such Attachments in Their Opening Briefs.

Both CBD and the Sierra Club attached to their Opening Briefs, copies of their respective February 11, 2010 comments to BLM on the DEIS. CBD cites to its BLM Comments in its Opening Brief.[261] Likewise, Sierra Club's Opening Brief cites to the Sierra Club's BLM comments.[262]

These Comments are not part of the Commission's hearing record.

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[255] Cal. Fish & Game Code § 2081.

[256] *Cody v. Murphey*, 89 Cal. 522, 524 (1891).

[257] CBD Opening Brief, p. 63, citing Cal. Fish & Game Code § 2055.

[258] *Cody v. Murphey*, 89 Cal. 522, 524 (1891).

[259] Warren-Alquist State Energy Resources Conservation and Development Act, Public Resources Code Section 25500 et seq.; also see http://www.energy.ca.gov/siting/index.html.

[260] CBD Opening Brief, p. 64,

[261] CBD Opening Brief, P. 58; in the text and fn 27.

[262] Sierra Club Opening Brief, p. 17.

To the extent these documents had any relevance to the Commission's proceedings, CBD and Sierra Club -- having accepted the responsibilities as Intervenors -- had an affirmative duty to bring these matters into the Commission's hearing record if they considered them relevant. CBD and Sierra Club failed to introduce these items, even though they were obviously available well in advance of the March 22, 2010 hearing, having been filed with BLM on February 11, 2010.

No witness sponsored these documents into evidence. No witness was made available to attest to the truth of the matters asserted therein. No witness was made available for cross examination. The failure to take the steps necessary to incorporate any relevant provisions into the Commission's hearing record is particularly egregious, given that CDB and Sierra Club are both represented by counsel.

Because the documents are not part of the hearing record, there is no need for the Applicant to move to strike these documents. We respectfully remind the Commission that these documents are not in record and therefore should be given no weight whatsoever.

VII. RESPONSE TO COUNTY OF SAN BERNARDINO

The Application for Certification of the Ivanpah Solar Project was accepted by the Commission in August 2007. Since that time the Commission has actively solicited the participation of San Bernardino County in this proceeding. The Commission granted the County's Petition to Intervene in November 2009. County representatives attended the evidentiary hearings via teleconference. Despite numerous invitations and opportunities to actively participate in this proceeding, the County has remained largely silent. That said, Applicant continues to work with the County and has many fruitful discussions with various County representatives on issues raised in their opening briefs. Applicant is confident that these continuing discussions will result in a positive and beneficial relationship with the County and the Ivanpah Solar Project.

Fortunately, even though the County raises questions late in this proceeding, the evidentiary record fully addresses and resolves each of the concerns raised in the County's Opening Brief.

A. Hazardous Materials Management.

In its Brief, the County states that "it appears not all State requirements were thoroughly researched and reviewed," specifically referring to the State Above-Ground Petroleum Storage Act, Health & Safety Code §§ 25270 et seq."[263]

The evidentiary record shows that the County's assertions are entirely incorrect. Table 5.5-1 in Section 5.5, *Hazardous Materials Management*, of Applicant's Exhibit 1 specifically addresses the requirements of the Aboveground Petroleum Storage Act, and the actions required of Applicant to comply with both state and federal requirements.[264]

The County states that "[c]onclusions regarding air modeling needs further study, particularly with regard to aqueous ammonia and sulfuric acid," and that "there is not enough information to determine if a Risk Management Plan is required for the aqueous ammonia as per the California Health and Safety Code." [265]

Studies of aqueous ammonia, as requested by the County, are irrelevant in this proceeding as ammonia (aqueous or otherwise) is not necessary for control of air emissions for the Ivanpah Solar Project, and will not be used. Therefore, as aqueous ammonia is not being used, a Risk Management Plan for the substance is unnecessary.

Only one regulated substance, sulfuric acid, will be handled and stored at the Project site.[266] However, the type of sulfuric acid to be used does not fall under the California Accidental Release Program.[267] In addition, Staff noted that "previous modeling of spills involving much larger quantities of more toxic materials . . . has demonstrated that minimal airborne concentrations would occur at short distances from the spill."[268] Therefore, there is more than sufficient information in this record regarding sulfuric acid.

[263] County of San Bernardino Opening Brief, p. 13.

[264] Ex. 1, ps. 5.5-4 and 5.5-7.

[265] County of San Bernardino Opening Brief, p. 13.

[266] Ex. 1, .5.5-7.

[267] Ex. 1, .5.5-7.

[268] Ex. 300 at 6.4-10 and 11.

The County also states that the FSA lacks "any references at all regarding the proper management of routinely generated hazardous wastes, either from a Federal or State perspective."[269]

The management of hazardous wastes generated during construction and operation are addressed in detail in Section 5.14 (Waste Management) of the AFC[270] and pages 6.13-17 of the FSA.[271] Specifically, the FSA states:

> Regarding the management of project-related wastes generated during construction, operation, and closure/decommissioning of the proposed project, staff reviewed the applicant's proposed solid and hazardous waste management methods and determined if the methods proposed are consistent with the LORS identified for waste disposal and recycling. The federal, state, and local LORS represent a comprehensive regulatory system designed to protect human health and the environment from impacts associated with management of both non-hazardous and hazardous wastes. Absent any unusual circumstances, staff considers project compliance with LORS to be sufficient to ensure that no significant impacts would occur as a result of project waste management. [272]

Furthermore, pursuant to Conditions of Certification WASTE-3 and WASTE-4 proposed by Staff and Applicant, specific waste management plans for construction and operational wastes will be prepared for the Ivanpah Solar Project to ensure that hazardous waste is managed according to law. The County of San Bernardino Solid Waste Management Division reviewed the Application for this Project and found that the environmental analysis concerning all solid waste generated by the proposed Project is adequate.[273]

B. Socioeconomics and Environmental Justice.

The County states that "meaningful details regarding a practical reality that most of the 90 permanent jobs will likely go to Nevada residents" [274] is lacking in the FSA. It is unclear what "meaningful details" the County desires; however, Applicant notes that the socioeconomic benefits of the Project were fully analyzed by both Staff and Applicant, and are an uncontroverted part of the evidentiary record.

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[269] County of San Bernardino Opening Brief, p. 13, 14.

[270] Ex. 1 at pp. 5.14-8 to -10.

[271] Ex. 300, pp. 6.13-17.

[272] Ex. 300, pp. 6.13-17.

[273] Letter from Nancy Samsonetti to Che McFarlin, January 5, 2009.

[274] County of San Bernardino Opening Brief, p. 16,18.

C. Soil and Water Resources.

The County states that "testimony elicited" during evidentiary hearings indicate that Applicant "has not undertaken any groundwater modeling studies to determine the impacts, recharge, and pumping impacts of the Project."[275]

Applicant notes that the hearing record actually supports the exact opposite. Staff witness Christopher Dennis, testified:

> To insure the [P]roject's proposed use of groundwater does not significantly impact beneficial uses of the groundwater or other users, *groundwater modeling was conducted by the applicant*, with confirmation sensitivity analysis done by Energy Commission Staff.[276]

The Applicant conducted two groundwater investigations for the Project. The reports of both of these investigations included groundwater modeling, and are both a part of the evidentiary record.[277]

The first groundwater investigation quantified the groundwater recharge to the Ivanpah Valley groundwater basin and the current water use within the basin.[278] The findings of this investigation concluded that current water uses within the California part of Ivanpah Valley is less than the natural recharge, and that with the proposed water use for the Ivanpah Solar Project the total water use within the valley will still be less than the natural recharge.[279] Furthermore, an analytical groundwater model[280] was used to assess the groundwater level impacts of the Project's groundwater pumping. That modeling indicated that the groundwater level impacts will be very small, and they will not interfere with other groundwater users within the Ivanpah Valley.

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[275] County of San Bernardino Opening Brief, p. 20, *citing to* RT 1/13/10, 117:11-118:12.

[276] RT 1/13/10, 117:18-117:23; emphasis added.

[277] *"Ivanpah Solar Electric Generating System, Groundwater Availability, Ivanpah Valley, California"* by Timothy J. Durbin, Inc. (August 15, 2007) [Exhibit 1, vol. 2, Appendix 5.15C]; *"Assessment of Potential Groundwater Quality Impacts from the Proposed Ivanpah SEGS,"* West Yost Associates Technical Memorandum 9 (May 26, 2009) [Exhibit 14, Attachment DR79-1A].

[278] *"Ivanpah Solar Electric Generating System, Groundwater Availability, Ivanpah Valley, California"* by Timothy J. Durbin, Inc. (August 15, 2007) [Exhibit 1, vol. 2, Appendix 5.15C].

[279] *"Ivanpah Solar Electric Generating System, Groundwater Availability, Ivanpah Valley, California"* by Timothy J. Durbin, Inc. (August 15, 2007) [Exhibit 1, vol. 2, Appendix 5.15C].

[280] The analytical groundwater model was created using the U.S. Geological Survey WTAQ modeling program.

The second investigation examined the potential impacts of the Project's groundwater pumping on existing groundwater contamination within Ivanpah Valley and naturally occurring groundwater with high dissolved solids.[281] The impacts were evaluated by developing a digital groundwater model.[282] The model was used to evaluate both groundwater-level and groundwater-movement impacts. That modeling indicated that Project pumping will have no impact on existing groundwater contamination. The modeling indicated further that the Project pumping will have no groundwater-quality impacts on neighboring groundwater users.

D. Traffic and Transportation.

The County states that a "traffic safety concern of the Project is the possibility that drivers who are distracted by the view of the power towers could cause even more traffic accidents."[283] The County also states that the "FSA makes an effort to predict traffic impacts but is lacking any mitigation for cumulative impacts," and makes the following observation:

> A typical Environmental Impact Report under CEQA would include a detailed traffic study prepared by a traffic engineer, analyzing all trips generated, including those from employees, supplier, and tourist stops from the Interstate 15 freeway. If this was done, perhaps mitigation measures such as offsetting work hours, on/off-ramp and street improvements could be provided.[284]

The FSA is not the primary source for the traffic analysis conducted for the proposed Project. The CEC Staff uses prior studies to conduct their staff assessments, so the FSA is more of a summary of analysis than a source of technical information. The County should refer to prior technical documents prepared by the Applicant; for example Exhibits 1, 4, 5, and 6, which are a part of the evidentiary record.

Section 5.12 of Exhibit 1, included a detailed traffic analysis of construction traffic impacts. That analysis included estimates of trip generation, mode split, assignment, and operations impacts. The primary impacts were based on 959 onsite workers, but also included the impacts of truck deliveries (e.g., for heliostat construction, power block construction, grading,

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[281] *"Assessment of Potential Groundwater Quality Impacts from the Proposed Ivanpah SEGS,"* West Yost Associates Technical Memorandum 9 (May 26, 2009) [Exhibit 14, Attachment DR79-1A].

[282] The digital groundwater model was created using U. S. Geological Survey MODFLOW modeling program.

[283] County of San Bernardino Opening Brief, p. 22.

[284] County of San Bernardino Opening Brief, p. 22,23.

etc.). This analysis was performed by a qualified traffic engineer to support the assessment of potential impacts.[285]

A revised traffic analysis was conducted and presented in Section B of the Applicant's Traffic Testimony.[286] It is a detailed summary of the updated construction impacts, which reflects revised estimates of the number and distribution of construction work trips. The analysis included details of types of trips, and considered different traffic patterns on different days. Both freeway mainline (for I-15) and intersection traffic operations were assessed. Detailed charts and tables were provided, and are a part of the evidentiary record

The traffic impacts from the Ivanpah Solar Project which are alleged to be cumulatively significant are extremely minor and extremely limited in time and scope of occurrence. During peak construction, a period of approximately three months,[287] 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.[288] The temporary additions of 174 cars on certain Fridays will not change the Level of Service (LOS) rating during this time.

In addition, it is not known whether all of the projects will be built, and therefore, it is not known whether they will overlap with construction of the Ivanpah Solar Project. (The projects identified for cumulative analysis include the Southern Nevada Supplemental Airport, the Desert Xpress Train, the I-15 Mountain Pass Truck Lane and the FirstSolar photovoltaic project. The truck lane will be completed in 2010, but there is no firm schedule for the other projects.) Also, when those projects are approved for construction, their impacts would be mitigated by a combination of Condition of Certification TRANS-1 and the mitigation measures proposed for those specific projects.[289] TRANS-1 requires the preparation of a Traffic Control Plan (TCP). The plan would incorporate measures that the County suggested such as staggering work hours

[285] Ex. 1, Vol. 2, Appendix 1B and Ex. 65, pp. 678-680.

[286] Ex. 65 at pp 100-103.

[287] RT 12/14/09, 93.

[288] Ex. 65, p. 103.

[289] Ex. 65 at 106.

and on/off-ramp limitations. In addition, it requires that the TCP be coordinated with the County of San Bernardino and the Caltrans District 8 office.[290]

E. Visual Resources.

The County states that the "Project is also in conflict with policies and objectives of the County's General Plan"[291] in the area of visual resources. As this subject area is discussed more fully in Section IX of this Reply Brief, Applicant will not repeat the discussion here other than to note that the San Bernardino County General Plan, including its Policies and Goals, is not a LORS applicable to the Ivanpah Solar Project.

F. Worker Safety and Fire Protection.

The County states that "[r]eview by the County Fire Department indicates that the fire risks at the proposed facility would pose significant added demands on local fire protection services."[292] However, this statement is not substantiated by the evidentiary record. Conversations by both the Applicant[293] and Staff[294] with a representative of the County Fire Department indicated that the County did not foresee an impact to Department resources from the Project.

G. Recreation.

The County's Opening Brief seems to assert that the Project will be located on the Ivanpah Dry Lakebed, and that visitors currently enjoy "hiking, camping, windsailing" on the Project site.[295]

As the Commission is aware, the Ivanpah Dry Lakebed is not the site for the Ivanpah

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[290] Ex. 303 at pp. 33-35.

[291] County of San Bernardino Opening Brief, p. 25.

[292] County of San Bernardino Opening Brief, p. 39.

[293] Ex. 1, Vol. 2, Appendix 5.10A.

[294] Ex. 300, at p. 1-33.

[295] County of San Bernardino Opening Brief, p. 36. "Just considering recreational use at the Project site, the Ivanpah Dry Lakebed alone is visited by an estimated 5,000 visitors annually."

In addition, the County relies on testimony by Staff witness Bill Kanemoto to support its conclusions regarding Recreation. Notably, the document which Mr. Kanemoto cites to support his assertion regarding "high use level[s]", BLM Handbook 84100-1, does not contain this information. In other words, there are no BLM guidelines that establish a "high use level" based on number of visitors. Thus, the County's reliance on Mr. Kanemoto's Visual Resources testimony to support its conclusions regarding Recreation is misplaced.

Solar Project. The Project site is located approximately 1.6 miles away from the Ivanpah Dry Lakebed. Staff has concluded that visual impacts of the Project site from the Ivanpah Dry Lakebed are less than significant, and will therefore neither detract nor discourage any recreational experience on the Ivanpah Dry Lakebed.

The Project site, as Staff notes, represents a small portion of the overall area available for recreation in the Mojave Desert, "is not specifically permitted, used, or designated for any recreational activity,"[296] and the primary recreational use of the site appears to be "providing traffic access to other locations."[297] There is no evidence in the record of hiking, camping or windsailing on the Project site. Current uses of the Project site include cattle grazing, off-road vehicle use, and utility and transmission corridors.[298]

H. Engineering Assessment.

The County states that many "unanswered questions" remain regarding engineering aspects of the Project. The Applicant does not believe that there are any questions asked by parties that remain unanswered. County representatives participated in the evidentiary hearings and were offered numerous opportunities to raise any concerns, to ask any questions and to examine any witnesses, but apparently decided not to do so.[299]

The County is mistaken in stating that Applicant's witness, Yoel Gilon, "admitted that the applicant's technicians are still learning how these [the Project's heliostats] operate."[300] Mr. Gilon's testimony makes no reference as to the inability of "technicians" to operate heliostats. Instead, Mr. Gilon's testimony was in relation to design functions of the Project- such as the development of an absorptive coating, the development of a heliostat positioning plan in response to Staff's request, and the development of algorithms to optimize the Project. Far from being an admission of not knowing how the heliostats operate, Mr. Gilon's testimony reflected an exact understanding of the operation of the Project's technology.

The County also alleges that changes in the Project, such as the Mitigated Ivanpah 3 proposal, reflect indecision about the Project. However, "the most recent reduction of power

[296] Ex. 300, p. 1-26.

[297] Ex. 300, p. 6.18-5.

[298] Ex. 300, p. 1-23, 24.

[299] County of San Bernardino Opening Brief, p. 37, 38.

[300] County of San Bernardino Opening Brief, p. 37, *citing to* RT 12//14/09, 125:21-126:7.

towers" was not a factor of "indecision," but a direct response by Applicant to concerns voiced by Staff and other Intervenor groups that participated in the evidentiary hearings regarding methods to reduce or avoid biological impacts.

I. Land Use.

1. Despite the County's Statements, the San Bernardino General Plan is Not an Applicable LORS.

The County states that the Commission should "find that the Project does not satisfy LORS."[301] The basis for this statement is the County's belief that "the Project would not conform with some of the applicable goals and policies of the San Bernardino General Plan Conservation and Open Space Elements."[302] However, by its own express terms, the County General Plan is not a law which is applicable to the Project.

The Ivanpah Solar Project is "located entirely on public land and would be under federal jurisdiction."[303] The San Bernardino County General Plan itself notes that lands controlled by the BLM are "non-jurisdiction"[304] and "outside the governing control of the County Board of Supervisors."[305] Additionally, the General Plan specifically states "County designated Land Use Zoning Districts," and accordingly, all corresponding zoning and land use restrictions, "do not apply to Federal or State owned property."[306] Thus, because the Ivanpah Solar Project is located on federal land, the Project site is fully within "non-jurisdiction" lands and is completely outside the control of the County per the express terms of the San Bernardino County General Plan. As a result, the San Bernardino County zoning and land use restrictions and the County's General Plan policies do not apply to the Ivanpah Solar Project. Simply stated, because the Project is

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[301] County of San Bernardino Opening Brief, p. 17.

[302] County of San Bernardino Opening Brief, p. 15.

[303] Ex. 300, p. 6.5-3.

[304] 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 .

[305] 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 .

[306] 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 .

entirely on federal land, San Bernardino County is not an agency that has land use jurisdiction over this Project and the County's land use plans are not applicable LORS.

2. The Memorandum of Understanding ("MOU") Between the BLM and the County Does Not Mandate the Application of the County's General Plan Goals and Policies.

The County states that "[a]t the very least, the County's General Plan Goals and Policies should inform the Commission's deliberations since the MOU provides a cooperative process between the BLM and the County when "applicant's proposals…may result in inconsistencies with the County General Plan."[307]

However, the County's reference to the MOU is incomplete. The full text to which the County cites actually states:

> The BLM agrees to…[d]iscuss with the County requirements of federal and state statutes, regulations, policies or applicant's proposals that may result in inconsistencies with the County General Plan, and facilitate resolution of identified conflicts, as requested by either Party.[308]

Thus, the BLM only has the obligation to "discuss" potential inconsistencies of the County General Plan with federal and state statutes, regulations, or applicant's proposals. In fact, the BLM is under no obligation to ensure consistency with the County General Plan. This approach is consistent with federal case law, where Courts have noted that the federal agency must only "consider" the local plan, but is under no obligation to "bow to local law."[309]

Moreover, the MOU provides for discussion between BLM and the County when requested by either Party. In this instance, there is no evidence that the County has requested a discussion regarding the alleged inconsistencies.

3. The Project is Consistent with the General Plan.

Even *assuming arguendo* that the County's General Plan should "inform the Commission's deliberations," and that the General Plan was applicable to the federal land on which the Ivanpah Solar Project is to be built, the County's conclusions regarding its own General Plan suffers from an additional fatal flaw. The County's conclusions regarding the

[307] County of San Bernardino Opening Brief, p. 17.

[308] Ex. 1101, Section C(1)(i).

[309] *Glisson v. United States Forest Service*, 138 F.3d 1181, 1183 (7th Circ. 1998).

Project are based on a narrow reading of the text of the General Plan on its face, but ignores provisions in the County's own Development Code, which have been incorporated into the General Plan by ordinance and resolution. [310] By reading the General Plan in isolation from the other provisions that actually implement the goals and policies outlined in the General Plan, the County fails to recognize that the Project is actually consistent with the County General Plan. For example, the Project site is located within an area zoned as Resource Conservation by the County.[311] Permitted uses of land within Resource Conservations areas include electrical generating facilities.[312]

In addition, the County claims that the Project is inconsistent with Open Space policy because "visual analysis of the project found that it would not be compatible with the scenic qualities present in the viewshed of portions of Highway I-15 designated as a County scenic route." [313] However, as explained in Applicant's Opening Brief, the Project is compatible with the visual qualities generally visible to people traveling on the highway, which include the Primm Valley Golf Course, the town of Primm and its hotels and casinos, the Bighorn Generating Station, and major transmission corridors.

VIII. SOIL AND WATER

A. CBD's Arguments Concerning Grading Ignore the Substantial Evidence In the Record that the Project Will Not Have Any Significant Impacts On Soils.

CBD's argument that the "FSA is entirely unclear regarding the extent of grading" ignores both the substantial information in the FSA and the record as a whole, including the Applicant's filings.

CBD's protracted questioning on grading issues[314] during the evidentiary hearings suggests CBD may be confused on the facts. The facts about grading are quite clear in the record. Specifically, the record is clear that the Applicant's Biological Mitigation Proposal

[310] SB County Code, Title 8 *Development Code*, § 82.01.020.

[311] http://www.sbcounty.gov/landuseservices/General%20Plan%20Update/Mapping/5b-Open%20Space%20Overlay%20Maps/OpenSpaceCountywide.pdf. Significantly, the Project site is also not designated as a San Bernardino County Open Space policy area, any other San Bernardino County policy area, wildlife corridor, area of critical environmental concern, wilderness area, or wilderness study area.

[312] SB County Code, Title 8 *Development Code*, § 82.03 Table 82-4.

[313] Opening Brief pp. 24, 27, 28, *citing to* Ex. 300, pp. 6.12-37 through 39.

[314] 3/22 RT 125-132.

testimony focused on Ivanpah 3 grading and the substantial reduction in grading with the Mitigated Ivanpah 3 configuration:

> The Mitigated Ivanpah 3 design reduces the need for grading and boulder removal within Ivanpah 3. This Mitigation Proposal would eliminate roughly 150 of the 170 acres (about 88 percent) that would otherwise need to be graded to allow equipment access and boulder clearing. The areas removed by the Mitigated Ivanpah 3 design contain the most challenging terrain in regards to equipment access and ephemeral wash crossings, and includes the highest concentration of large rocks that would need relocation. Hence, as a result of the proposed reduction in size, any potential grading impacts would be further reduced.[315]

As Applicant's witnesses explained, with regard to the Mitigated Ivanpah 3 configuration, 150 of the more challenging 170 acres are removed from the Ivanpah 3 footprint. The remaining 20 acres are in "a small portion of gas line gulch, which is a large wash, that is still part of the M-3 project boundary."[316]

Further, as for grading of the overall site, Table 5.11-3R2, "Estimate of Soil Loss by Water Erosion Using Revised Universal Soil Loss Equation (RUSLE2)" sets forth the Applicant's assumptions regarding grading and soil losses. This substantial information, referred to pejoratively as "assumptions and estimates,"[317] sets forth in great detail grading and soils estimates using very conservative assumptions, meaning that the assumptions over-state potential impacts and the actual impacts will be less than those assumed. [318] The conservative assumptions, clearly articulated at the end of Table 5.11-3R2, are plenary and specific:

> 1. Soil losses (tons/acre/year) are estimated using RUSLE2 software available on line [http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_index.htm].
>
> - The soil characteristics were estimated using RUSLE2 soil profiles corresponding to the mapped soil unit.
>
> - Soil loss (R factors) were estimated using 2 year, 6 hour point precipitation frequency amount for the nearest National Weather Service

[315] Ex. 88, p. 3-12.

[316] 3/22 RT 126.

[317] CBD, pp. 31-32.

[318] 3/22 RT 124.

station to the [ISEGS][319] site [on line at http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html].

- Estimates of actual soil losses use the RUSLE2 soil loss times the duration and the affected area. The No Project Alternative estimate does not have a specific duration so loss is given as tons/year.

2. Acreages assume a 40 ft corridor for the access roadways and 50 ft corridors for the gas, water, and transmission line construction corridors. Outside of the project footprint, the gas line would have a 4 ft wide trench and the gen tie lines would have poles every 750 feet with each pole having a 4 by 4 foot excavation footprint.

Other Project Assumptions as follows:

- About 75.5% of the entire ISEGS site would be disturbed.[320]
- Overhead gen tie lines would have 23 towers outside of project footprint. Each tower would have a 4 by 4 foot footprint.
- It is assumed that the grading/excavation for all the poles will be completed within 1 month and the entire installation will be completed within 3 months.
- It is assumed that grading for each site will take 5 months and construction will take 15 months according to the construction schedule.
- It is assumed that grading for access roads will take 1.5 months and construction will take 1 additional month.
- It is assumed that grading for substation and storage and administration buildings will take 1 month and that construction will take an additional 3 months.
- It is assumed that grading of the active laydown area would take one month, then the site would be covered with temporary buildings and materials so soil loss would be negligible during a 40 month construction period (assumes Phase 1 and 2 done concurrently and Phase 3 done afterwards).
- It is assumed that the excavation for transmission poles and gas line trench would take 1 month each and that construction would take an additional 3 months.

[319] Correcting a typographical error in the original. It should be "ISEGS", not "EEP".

[320] This percentage is substantially less that than the amount of grading expected to occur. Hence, it is a conservative estimate, ensuring that actual impacts are less than those analyzed.

- It is assumed that the excavation for water line trench would take 1 month each and that construction would take an additional 1 month.

Applicant's witness correctly noted that while the Commission process does not require final detailed design until post-certification,[321] on this issue the record reflects detailed information typically reserved for detailed design.

The Applicant's testimony confirms that the soil loss analysis conservatively considered all areas where direct soil impacts could occur, and upon implementation of appropriate best management practices (BMPs) concluded that soil losses would be less than significant.

> Reducing the size of Ivanpah 3 by 433 acres and removing 109 acres of the CLA from construction impacts would result in a decrease in the soil impacts previously analyzed. The portion of the CLA subject to construction impacts would be reduced from about 377 acres to about 268 acres, or about a 29 percent reduction.
>
> Project impacts were previously determined to be less than significant. Compliance with applicable LORS would not change as a result of this Mitigation Proposal. As a result, any potential soils impacts associated with this proposal would decrease slightly and would remain less than significant.[322]

CEC Staff has also proposed Conditions of Certification that will ensure that the grading of the Project site is carried out in accordance with the environmental analysis for the Project. For example, Condition CIVIL-1 provides:

> CIVIL-1 The project owner shall submit to the CBO for review and approval the following:
>
> 1. Design of the proposed drainage structures and the grading plan;
>
> 2. An erosion and sedimentation control plan;
>
> 3. Related calculations and specifications, signed and stamped by the responsible civil engineer; and
>
> 4. Soils, geotechnical, or foundation investigations reports required by the 2007 CBC, Appendix J, section J104.3, Soils Report, and Chapter 18, section 1802.2, Foundation and Soils Investigation.

[321] 3/22 RT 124-125.

[322] Ex. 88, p. 3-9.

These documents must be submitted to the "CBO for design review and approval."[323]

Similarly, Condition CIVIL-4 provides "that the project owner shall obtain the CBO's approval of the final grading plans (including final changes) for the erosion and sedimentation control work." AQ-SC3 also imposes requirements on grading, including watering and other dust control measures.[324] SOIL&WATER-1 requires, among other things, "The project owner shall complete all engineering plans, reports, and documents necessary for both BLM's Authorized Officer and the CPM to conduct a review of the proposed project and provide a written evaluation as to whether the proposed grading, drainage improvements, and flood management activities comply with all requirements presented herein."[325]

In fact, numerous conditions impose obligations on the Applicant with regard to grading, including, but not limited to the following conditions: AQ-SC3, BIO-2, BIO-4, BIO-5, BIO-6, BIO-8, BIO-10, BIO-11, CUL-1, CIVIL-1, CIVIL-3, CIVIL-4, GEN-5, GEO-1, PAL-5, SOIL&WATER-1, WASTE-1, and WASTE-2. The foregoing is a partial list as it does not include other conditions that require the Applicant to satisfy certain obligations "prior to grading.[326]" These additional "prior to grading" conditions provide the Applicant with incentive to have a final grading plan approved by the CPM, consistent with the Commission's decision, as soon as reasonably possible. Thus, in addition to analyzing potential effects, the Commission has included the appropriate Conditions of Certification to ensure the implementation of appropriate mitigation.

The FSA correctly found that these soil and grading related impacts were less than significant.[327] The Biological Mitigation Proposal further reduced the potential impacts. As Staff concluded, that the Biological Mitigation Proposal further reduces those already less than significant impacts:

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[323] Ex 300, p. 7.1-16.

[324] Ex 315, pp. 4-8 to 4-10.

[325] Ex. 300, pp. 6.9-49 to 6.9-52.

[326] See, for example, GEN-4, requiring identification of a resident engineer (RE) "prior to grading"; GEN-5, requiring assignment of a civil engineer, a soils, geotechnical, or civil engineer experienced and knowledgeable in the practice of soils engineering "Prior to grading"; GEO-1, requiring an approved Soils Engineering Report "prior to grading"; and TSE-2, requiring the names, qualifications, and registration numbers of all the responsible engineers assigned to the Project "prior to grading."

[327] Ex 300, pp. 6.9-48 to 6.9-49.

> Because the proposed mitigation would reduce project-related impacts already analyzed by staff, and staff previously concluded that impacts would be less than significant if the recommended conditions of certification are adopted, staff believes the Mitigated Ivanpah 3 proposal would not result in significant impacts to soil and water resources. Staff's proposed conditions of certification as published in the Final Staff Assessment/Draft Environmental Impact Statement would continue to apply for ISEGS as modified by the Mitigated Ivanpah 3 proposal.[328]

Applicant agrees with these conclusions,[329] and substantial evidence supports the logical conclusion that the already less than significant impacts associated with site grading are further reduced by the Biological Mitigation Proposal.

IX. VISUAL

A. The Ivanpah Solar Project Will Not Have a Significant Adverse Visual Impact.

The Opening Briefs of the Parties to this proceeding reveal consensus on several important aspects of the visual resource analysis. First, there is consensus that the Ivanpah Project, with mitigation, will not adversely impact the views from the most heavily visited recreational viewpoints within the Ivanpah Valley. These viewpoints are the (1) Primm Golf Club, where landscaping will reduce the impacts to a less than significant level, (2) Ivanpah Dry Lake bed, and (3) the community of Primm. Therefore, from all of the key observation points that are most heavily visited by recreational users, the Ivanpah Solar Project will not have a significant visual impact.

1. Substantial Evidence Supports The Conclusion That The Visual Impacts From KOPs 3, 4 And 5 Are Less Than Significant.

Three Key Observation Points were prepared to simulate views of the Ivanpah Solar Project from I-15. KOP-5, looking northwest from I-15 at Nipton Road, 4 miles from the site, depicts views of I-15 motorists at their farthest point from the Project site, as they enter the Ivanpah Valley from the south at background distance. The FSA concluded that the visual impact from KOP-5 would be less than significant: "Moderate contrast as depicted in this background-distance view [KOP-5] would be compatible with its moderate overall sensitivity

[328] Ex. 315, pp. 6-1 to 6.2.

[329] Ex 88, p. 3-12.

and be less than significant."[330] The FSA goes on to state that while the visual impacts from KOP-5 are less than significant at this background distance, no intermediate distances were simulated. The only evidence that intermediate views for northbound drivers on I-15 are even potentially significant is the testimony of the Staff witness who decided to park his vehicle along the shoulder of the interstate which, he confessed, no sane person is likely to do. [331]

The Staff also finds the views from KOPs 3 and 4 to be potentially significant. KOPs 3 and 4 are meant to represent the view of motorists on I-15 at their closest point to the Project.[332] The Staff mistakenly described these viewpoints as "foreground" views and based its finding of significance on this assumption. In fact, these viewpoints are located approximately 1.5 miles from the closest edge of the closest heliostat field and approximately 2.3 miles from the closest solar tower. Because the standard definition of the foreground distance zone is 0 to 0.5 mile (Smardon, R. Felleman J. and Palmer, J. 1986. Foundations For Visual Project Analysis. New York: John Wiley & Sons, p. 319), it is incorrect to characterize the project as being located within the foreground of the views from these KOPs. Staff's Opening Brief states that the Staff did not describe the views from this KOP as foreground views, and "found significance from these KOPs without describing the views as foreground views. The claim is without merit. Here is how the FSA describes the impact significance from KOPs 3 and 4: "Staff concludes that from *foreground* and near-middle-ground viewpoints on I-15, the project would not be consistent with the moderate overall sensitivity level associated with its existing scenic quality, viewer concern, and viewer exposure."[333]

Both the Staff and Applicant agree that "the significance of an activity may vary with the setting."[334] The Applicant respectfully submits that the significance of impacts on the views from the side windows of vehicles traveling at high speeds on a busy interstate freeway, as they pass a 36-hole golf course located immediately adjacent to the freeway, the town of Primm, casinos, outlet malls, and various transmission lines cannot be judged from the myopic

[330] Ex. 300, p. 6.12-21. Inexplicably, Staff's Opening Brief argues that Applicant's witness, Mr. Priestley was incorrect when he stated that the FSA found the impact from KOP5 was less than significant. The FSA clearly states, in unambiguous terms, that the impact on views from KOP 5 is "less than significant."

[331] 12/14/09 RT, p. 197.

[332] Ex. 300, p. 6.12-19.

[333] Ex. 300, p. 6.12-20.

[334] Staff Opening Brief, p. 4.

perspective of a "landscape conservation-oriented frame of reference."[335] In the vicinity of KOPs 3 and 4, the attention of the majority of drivers on I-15 is likely to be on the road ahead, where the project's features will not be within the drivers' primary cone of vision. In addition, it is probably safe to assume that the majority of the travelers on I-15 are not landscape architects. Instead, as the FSA concedes, "the majority of motorists on I-15 are not highly concerned with the scenic quality of the setting." [336] Most of the motorists on northbound I-15 are traveling to Las Vegas. From this "urban frame of reference" of motorists traveling along a busy interstate freeway, "many viewers could find the project interesting to view due to its novelty. Overall, it would exhibit moderate visual quality and *preserve* scenic (though strongly altered) views."[337]

2. Substantial Evidence Supports The Conclusion That The Visual Impacts From KOPs 9 and 10 Are Less Than Significant.

The Staff's Opening Brief also states that the Ivanpah Solar Project will significantly impact the views from the Stateline Wilderness and Mojave National Preserve. This assertion is based on three incorrect assumptions.

The first incorrect assumption is that these areas have a "high use level". The record is clear, based on information provided directly by National Preserve personnel, that the eastern side of the Preserve (from which the Project may be visible at isolated points) receives on average one to two vehicles per day during most of the year, and perhaps 20 to 30 vehicles in Spring and Fall months. [338] The southern side of the Stateline Wilderness Area receives even fewer visitors.

If the Commission uses the standards of visual analysis that it has applied in other cases over the past 35 years, it will conclude that the numbers of potential viewers in the Preserve or the Wilderness Area are extremely low. In the East Altamont powerplant proceeding, to cite but one example, the Staff characterized 2,500 vehicles per day to be low-to-moderate use.[339]

Despite this overwhelming evidence, the Staff clings to the idea that 1 to 2 vehicles per day during most of the year is a "high use level". To support this proposition, the Staff's

[335] Ex. 300, p. 6-12-20.

[336] Ex. 300, p, 6.12-21

[337] Ex. 300, p. 6-12-20.

[338] 12/14/09 RT, p. 251.

[339] East Altamont FSA, p. 5-11b-8.

Opening Brief cites the testimony of Mr. Kanemoto, where he stated: Staff simply notes that according to BLM's guidelines for classifying levels of recreational use as a determinant of visual sensitivity from VRM handbook 8410-1, a high use level, and therefore high sensitivity, is defined as 10,000 visitors per year or more."[340] We have searched the BLM Manual 8410-1 and we find no such threshold anywhere in the document.

Instead, the manual merely says: "Amount of Use. Areas seen and used by large numbers of people are potentially more sensitive. Protection of visual values usually becomes more important as the number of viewers increase."[341]

The second incorrect assumption underlying Staff's assertion that the visual impacts from the Mojave Preserve and Stateline Wilderness are significant is that the Project will be "very visible" from these areas. Exhibit 69, which uses the same computerized viewshed analysis methodology that has been applied in virtually every siting case over the past ten years, demonstrates clearly that the Ivanpah Solar Project would only be visible from a small portion of the eastern slope of the Clark Mountain Unit of the Mojave National Preserve, a very small portion of the Stateline Wilderness Area and a tiny sliver of the Mesquite Wilderness Area. The Staff's Opening Brief does not dispute the accuracy of the map. Instead, the Staff's Opening Brief attacks Exhibit 69 by claiming that "Dr. Priestley has never hiked the ridges depicted."[342] Of course, it is not necessary for one to hike a ridge to demonstrate conclusively whether Exhibit 69 accurately depicts those areas inside and outside the viewshed.

But, if we assume for the sake of argument, that actual viewer experience is a prerequisite to providing an informed opinion on the visual impacts from the two ridges that represent KOPs 9 and 10, then the record is clear that the Applicant's witness, Ms. Haydon, has in fact hiked the ridge above Benson Mine (KOP 10), and that both Ms. Haydon and Dr. Priestley have viewed the Project site from the Benson Mine Road, the Colosseum Road and locations north of the Project including KOP 10.

The Staff's visual resource witness, on the other hand, *never visited any of the recreational KOPs*, including KOPs 9 and 10 and never hiked any of the ridges. Unlike Applicant's visual resource witnesses, the Staff's witness did not view the Project site from any

[340] Staff's Opening Brief at page 6, citing RT 12/14/09 at p. 179.

[341] BLM Manual 8410-1.

[342] Staff Opening Brief, p. 6.

location on the eastern flanks of the Mojave National Preserve. To the extent that first-hand viewing in the form of hiking is important, the Applicant's experts and their first-hand observations prevail.

The Staff's Opening Brief also seeks to rebut the accuracy of the map by stating that Ms. Cunningham disputed the accuracy of the map. However, when Ms. Cunningham spoke by telephone at the December 14, 2009 evidentiary hearing she had not yet seen the map. Therefore, she was not in a position to dispute the accuracy of the map. Instead, she could only relate from her personal experience that she could see the Project site from the ridge above Umberci Mine.[343] Her statement that she could see the project site from the ridge above Umberci mine is consistent with Exhibit 69.[344]

The third incorrect assumption of the Staff's assertion of significant visual impacts is the assumption that KOPs 9 and 10 are representative of views from the Stateline Wilderness and Mojave National Preserve. As noted above, this assertion is not based on actual physical observation, because the Staff's witness *did not visit* either KOP nor any portion of the Wilderness Area or National Preserve. With respect to KOP 9, Staff's Opening Brief states without citation to the record, that the "impact from the KOP is the same whether or not it is actually in the wilderness area."[345] This is plainly incorrect. KOP 9 is a near middleground view located outside of the Wilderness Area on an elevated hill just 1.1 miles from the northern boundary of Unit 3. If the KOP had been within the Wilderness Area, it would have been a middleground view more than 1.57 miles from the Project site. Clearly the views would not be the same.

With respect to KOP 10, the Staff's Opening Brief states incorrectly that the photo was provided in response to a request to provide a "photo depicting Benson Mine Road. This request came from BLM Staff to show that impact."[346] In support of this assertion, the Opening Brief cites page 179 of the December 14, 2009 transcript. However, that transcript reference does not

[343] RT 12/12/09, p. 270. Note that Ms. Cunningham said she "could see" the project from the areas she hiked. She did not state, as the Staff's Opening Brief embellishes, that the Project is "highly visible" from these viewpoints. Staff Opening Brief, p. 6.

[344] Applicant encourages the committee to give proper weight to (1) Ms. Cunningham's hike versus (2) a GIS-based map generated using advanced computer technology.

[345] Staff Opening Brief, p. 6.

[346] Staff Opening Brief, p. 6.

state that the request was for a photo from the Benson Mine Road. Ms. Haydon testified that "Our data request said to go take photos above the ridge line of Umberci Mine and Benson Mine. So that's what we were tasked to do..... ."[347]

The Staff's Opening Brief further states that it is a "hollow protest that Applicant did not take the photo exactly on the road or at the Benson Mine itself."[348] Actually, it matters a great deal where the photo is taken, especially in a system based on "Key Observation Points" that should be representative of views from "Key" locations. The Project is not readily visible from the Benson Mine or many points along the Benson Mine Road and Colosseum Mine Roads. [349] Therefore, the Staff had a choice of requesting a KOP from (1) a viewpoint, such as the Benson Mine or Colosseum Road, where visitors may actually travel but the view is less prominent, or (2) from a viewpoint where no visitors, not even the Applicant's own witness, will actually go, but where the project features would most certainly appear more prominent due to the higher elevation at this precarious perch. The Staff chose the latter.

3. Substantial Evidence Supports The Conclusion That The Project Is Consistent with All Applicable LORS.

The Staff position on the applicability of the San Bernardino General Plan is difficult to ascertain. The FSA originally stated that the San Bernardino County General Plan was an applicable law, ordinance, regulation or standard (LORS) and that the "project would not conform with applicable goals and policies of the San Bernardino General Plan Conservation and Open Space Elements."[350] The Final Staff Assessment Addendum correctly concluded that the General Plan was not a LORS applicable to the Project:

> Staff concludes the Mitigated Ivanpah 3 project would conform with applicable LORS. The project would be sited entirely on BLM-managed public lands, under federal (BLM) jurisdiction, and subject to BLM's California Desert Conservation Area (CDCA) Plan of 1980. Staff noted in the FSA/DEIS that the project would not conform with applicable visual resource goals and policies of the San Bernardino County General Plan Conservation and Open Space Elements.

[347] RT 12/14/09, P. 269. The Staff was very specific in designating where the photo was to be taken. The Staff did not request a photo taken from the Benson Mine or the Benson Mine Road. The Staff requested a photo from "Benson Mine (from hill top above mine looking down on site" Data Request 2C, p. 20. The specified steep, shale and trail-less hilltop was 450 feet above the mine and above the road.

[348] Staff Opening Brief, p. 6.

[349] 12/14/09 RT, pp. 254-255.

[350] Ex. 300, p. 6.12-42.

> However, after reviewing applicable legal requirements, Staff concludes that San Bernardino County jurisdiction only extends to off-site infrastructure installation and maintenance activities outside the BLM boundaries, which would exclude the ISEGS site located within BLM boundaries. Therefore, the Mitigated Ivanpah 3 project would conform with all applicable LORS.[351]

Unfortunately, Staff's Opening Brief then incorrectly describes the San Bernardino County General Plan as "one other noteworthy LORS" and incorrectly stated that certain General Plan goals are "intended to protect visual resources in the project area" and that the Ivanpah Solar Project is inconsistent with these goals.

In past Commission proceedings, if a particular law or ordinance is not applicable by its express terms, the Commission does not assess the consistency of the project with the Statute. Indeed, this is the "applicable" determination in the oft-used phrase "applicable LORS." Where, as here, the County General Plan is legally inapplicable to the Project, the Commission should dismiss Staff's arguments that the Project is nevertheless inconsistent with these inapplicable ordinances and that these alleged inconsistencies are relevant to the visual resources analysis.

The Staff's Opening Brief implies that the San Bernardino County General Plan is applicable to the Project, but unenforceable because it conflicts with federally designated land uses. "Applicable" yet "unenforceable" is simply "inapplicable"; the General Plan is not "applicable LORS." In fact, however, the General Plan itself states that these goals are not applicable to the Project.

Moreover, as we explain in Section VII.I of this Reply Brief, even if these goals were applicable to the Project site, the Project is consistent with these goals.

4. Substantial Evidence Supports The Conclusion That The Project's Contribution to Potential Cumulative Impacts Is Less Than Significant.

Applicant's Opening Brief fully explains why it is inappropriate to evaluate cumulative visual impacts outside the viewshed of the Project.[352] Applicant's Opening Brief also notes that the Applicant has cited a BLM Handbook as authority that the boundary of cumulative impact analysis should be based on the natural boundaries of the resource, such as the airshed, watershed or viewshed.

[351] Ex. 315, p. 6-11.

[352] Applicant's Opening Brief, PP. 132-140 and pp. 186-193.

Staff's Opening Brief states its misconception that the document in question was not identified during cross-identification and was not part of the record. This is simply incorrect. The document was clearly identified during cross examination as the BLM National Environmental Policy Act Handbook H-1790-1.[353] The witness testified that he reviewed the Handbook in preparing the FSA and that he was familiar with its contents:

> 17 MR. WHEATLAND: And did you see where it
> 18 says, for example, if a proposal affects water
> 19 quality and air quality the appropriate cumulative
> 20 effects analysis would be the watershed and the
> 21 airshed?
> 22 MR. KANEMOTO: Sure.[354]

Staff's Opening Brief also argues: "[b]ut more important, it is not clear that the guidance is applicable at all to visual resources. Even if it were, such guidance documents have no legally binding effect on any person or agency regarding how environmental analysis should best inform decision makers...." [355] We only note that the FSA itself cites the same BLM NEPA Handbook H-1790-1 *four different times* as authority for interpreting the requirements for environmental review of this Project.[356]

As the Handbook states: "This Handbook contains direction for use by BLM employees from all levels of our organization, including decision-makers, program managers, specialists, interdisciplinary team members, and any BLM contractors involved in the NEPA process." The FSA/Draft EIS for the Ivanpah Solar Project is a cooperative effort between BLM and the Commission and the Handbook is clearly applicable to this effort.

5. Substantial Evidence Supports The Conclusion The Ivanpah Solar Project's Potential Direct, Indirect, and Cumulative Impacts Are Less Than Significant.

The evidence of record in this proceeding demonstrates conclusively that the Ivanpah Solar Project as mitigated by the Biological Mitigation Proposal and with the mitigation set forth in Applicant's proposed Conditions of Certification will not have a significant direct, indirect, or cumulative impact on visual resources. The Project will be seen from various points within the

[353] RT 12/04/9, p. 229, lines 12-13.

[354] RT 12/04/09, p. 212.

[355] Staff Opening Brief, p. 8.

[356] Ex. 300, pp. 4-79, 5-2, 5-6, 5-31.

viewshed, but both Staff and Applicant agree that it will not have a significant impact from the most commonly used recreational viewpoints within the viewshed, such as the golf course (with mitigation), the Ivanpah Dry Lakebed and the community of Primm.

We recognize that the Staff continues to maintain that the views from KOPs 9 and 10 will be significantly impacted, but this conclusion is based on assumptions and methodology that depart from the Commission's well established and tested visual resource methodology. As we have explained in our Opening Brief and this Reply Brief, the Staff's conclusion is novel, to say the least:

- This is the first time that the Staff has found a visual impact at a KOP to be significant, without the Staff witness visiting the KOP at least once.
- This is the first time the Staff has selected KOPs that are uninhabited, unvisited, and inaccessible to the public, in order to base evaluations of impacts on views where the project would be more visible than from the locations where people would actually be present to see the views.
- This is the first time the Staff has found visitor use as low as 1 to 2 vehicles per day to be "high use".
- This is the first time the Staff has relied on an ordinance that it admits is not an applicable LORS to conclude that a visual impact is significant.
- This is the first time the Staff has defined the scope of cumulative visual analysis to a region outside the viewshed of the Project.
- This is the first time that the Staff has concluded that moderate change and moderate viewer sensitivity will result in a significant visual impact.

In summary, if the Commission declines to accept Staff's novel and misguided approach to this Project, the Commission can and should conclude that the visual impacts of the Ivanpah Solar Project are less than significant.

X. CONCLUSION

A. The Applicant Supports The Commission's Proposed Order to Proceed Expeditiously Toward the Publication of the Presiding Member's Proposed Decision

The Commission and the Parties have been engaged in this deliberative process for approximately two and a half years. The Committee has before it an evidentiary record that is unprecedented, encompassing more than fourteen thousand pages. The depth and breadth of the hearing record is equally unprecedented.

The Applicant agrees with the Committee's decision that there is no need for the Commission to delay the publication of the Presiding Member's Proposed Decision ("PMPD") while the BLM's NEPA processes continue in parallel.[357] As the Committee properly notes, this Application presents a case of first impression in the Joint CEC/BLM Process, and it is therefore appropriate for the PMPD to be issued to signal the Committee's initial intentions to the Parties, including the BLM, and to receive responses.

There are also important public policy reasons for the Committee to promptly issue the PMPD. In order to qualify for significant federal funding from the federal stimulus program, the American Recovery and Reinvestment Act ("ARRA"), the Ivanpah Solar Project must, pursuant to the statute, commence construction in 2010. It is state policy to do everything reasonably possible to expeditiously provide all necessary permits for projects to begin construction in 2010 to capture California's fair share of the ARRA monies. Moreover, California will clearly benefit from the nearly 1,000 "green jobs" associated with this Project before the third anniversary of this Project.

Significantly, given the limitations likely to be placed on the relocation of Desert Tortoise, a final decision from the Commission will be needed this Summer. Nothing that Intervenors have said in their opening brief or otherwise should give the commission any reason to depart from its decision to follow the course the Hearing Officer has set forth. The Applicant

[357] 3/22 RT 209.

is fully supportive of the Committee's decision to promptly issue the PMPD while the BLM's NEPA processes continue in parallel.

Dated: April 16, 2010

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STATE OF CALIFORNIA

Energy Resources Conservation
and Development Commission

Application for Certification for the IVANPAH SOLAR ELECTRIC GENERATING SYSTEM	)	Docket No. 07-AFC-5

PROOF OF SERVICE

I, Karen A. Mitchell, declare that on April 16, 2010, I served the attached *Reply Brief of Ivanpah Solar Project* via electronic mail and CD to all parties on the attached service list.

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

Karen A. Mitchell

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