CENTER *for* BIOLOGICAL DIVERSITY

VIA EMAIL AND U.S. MAIL

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Eldorado-Ivanpah Transmission Project
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Re: Draft Environmental Impact Report and Draft Environmental Impact Statement for the Southern California Edison Eldorado-Ivanpah Transmission Project, California and Nevada

Dear Mr. Meckfessel and EITP CPUC Project Lead:

These comments are submitted on behalf of the Center for Biological Diversity regarding the Draft Environmental Impact Report and Draft Environmental Impact Statement ("DEIR/DEIS") for the Southern California Edison Eldorado-Ivanpah Transmission Project, California and Nevada ("EITP" or "proposed project").

The Center for Biological Diversity ("Center") is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 255,000 members and activists throughout California and the United States, including members that live and/or visit the vicinity of the proposed Eldorado-Ivanpah Transmission Project and the solar generating projects to which it is linked. These scoping comments are submitted on behalf of our board, staff and members.

The development of renewable energy generation and adequate transmission capacity for that renewable energy is a critical component of efforts to reduce greenhouse gas emissions, to avoid the worst consequences of global warming, and to assist California in meeting emission reductions set by AB 32 and Executive Order S-03-05. The Center strongly supports the development of renewable energy production, and the generation of electricity from solar power, in particular and truly necessary transmission upgrades to support that power production.

However, like any project, proposed solar power projects and transmission projects to support that power generation must be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitats, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency loss associated with

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extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

The need for the proposed Eldorado-Ivanpah Transmission Project (which also includes a new substation) is entirely based on the assumption that the public lands in the Ivanpah Valley area provide an appropriate site for extensive large-scale solar development. However, no land use planning has been completed by the BLM, the Counties, the CPUC, or any other agency that would support such a conclusion. Moreover, although none of the proposed large-scale solar projects in the Ivanpah Valley in California and near Primm, Nevada have as yet been approved or completed environmental review, the environmental review of each of those projects and the EITP are being undertaken separately and the analysis is therefore being segmented in violation of both CEQA and NEPA. These comments incorporate by reference comments and all other documents that the Center has provided to the BLM and the California Energy Commission ("CEC") regarding those connected projects including, but not limited to, the Ivanpah SEGS project, the Silver State solar projects, and the BLM Solar PEIS.

All of the proposed projects will have major impacts to the biological resources of the area, significantly affecting many sensitive plant and wildlife species, and eliminating broad expanses of relatively undisturbed Mojave Desert habitat on both sides of the border. Of particular concern to the Center, the proposed solar projects and this proposed transmission project taken together will have significant impacts to a suite of species including to the federally and state listed threatened desert tortoise and its critical habitat that are not being considered in a comprehensive way. Rather, the agencies are looking at connected projects in a piecemeal fashion, planning is lagging behind site-specific proposals, and the projects as proposed will sprawl across this desert landscape maximizing impacts from edge effects and habitat fragmentation in violation of the law and the most basic land use planning principles.

The following comments address these issues as well as other inadequacies of the environmental review in the DEIR/DEIS.

I. Project Fails to Comply with NEPA, CEQA, and Planning Requirements

A. Project Description is Inaccurate: Connected, Cumulative, and Similar Actions Should Be Considered in the Same Environmental Review to Avoid Unlawful Segmentation

1. Legal Background

a. NEPA

The DEIR/DEIS does not consider the project as a whole and by analyzing connected projects piecemeal the BLM and the CPUC are undermining rational planning and unlawfully segmenting the environmental review. Attached are two maps produced by the Center: the first shows the Ivanpah Valley as it is now and the second shows the Ivanpah Valley with the proposed solar, wind and transmission facilities primarily on public lands. The change that

would occur from a largely natural area to a largely industrial zone is both significant and unexamined by in the DEIR/DEIS.

NEPA's implementing regulations explain that agencies should consider connected, cumulative, and similar actions in the same impacts statement. "Connected actions" must "be considered together in a single EIS." *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir. 1985); 40 C.F.R. § 1508.25(a)(1). Connected actions are those actions that:

> i. Automatically trigger other actions which may require environmental impact statements.
> ii. Cannot or will not proceed unless other actions are taken previously or simultaneously.
> iii. Are interdependent parts of a larger action and depend on the larger action for their justification.

40 C.F.R. § 1508.25(a)(1). Where two actions are "inextricably intertwined" they are connected actions that must be considered together. *Thomas*, 753 F.2d at 759; *Save the Yaak Committee v. Block*, 840 F.2d 714, 720 (9th Cir. 1988). Likewise, cumulative actions "which when viewed with other proposed actions have cumulatively significant impacts [] should [] be discussed in the same impact statement." 40 C.F.R. § 1508.25(a)(2). Similar, reasonably foreseeable actions also should be considered together in the same environmental review document when the actions "have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography," and the "best way to assess adequately [their] combined impacts […] or reasonable alternatives" is to consider them together. 40 C.F.R. § 1508.25(a)(3).

The requirements that connected actions, cumulative, and/or similar actions be evaluated together prevents an agency from dividing a single project into segments that individually seem to have limited environmental impact, but as a whole have considerable impact. *See Thomas v. Peterson*, 753 F.2d at 758. It is important for federal agencies to consider connected actions together in a single NEPA process as opposed to segmenting review. *Daly v. Volpe*, 514 F.2d 1106, 1110 (9th Cir. 1975) (where actions are interconnected in terms of fulfilling a joint purpose it may be necessary to conduct a single NEPA review); *Sierra Club v. U.S. Dept. of Energy*, 255 F. 2d 1177, 1184 (D. Colo. 2002).

Here, the agencies should not proceed any further in the NEPA process for the proposed EITP without an analysis the direct and indirect impacts of the proposed project in conjunction with other proposed projects in this area, including at minimum the proposed Ivanpah SEGS project and the proposed Silver State solar project in Nevada along with the proposed Eldorado-Ivanpah Transmission Project ("EITP") transmission line upgrade and substations that are necessary for those industrial power plants.

The EITP is necessary for this proposed project and it is clear that the EITP is both a cumulative and a connected project and that all of these projects should have been considered by BLM in a single environmental review. Indeed the stated purpose of the EITP is to facilitate access to the California energy market for the proposed Ivanpah project and solar projects in Southern Nevada. Although the purpose and need statement for BLM in the EITP is

unreasonably narrow, it is clear that the purpose of the EITP project is to connect the proposed solar projects with the California market. As the EITP DEIR/DEIS states, an objective of the project is "[t]o connect renewable energy sources in the Ivanpah Valley area." EITP DEIR/DEIS at 1-11 (Joint State and Federal Objectives). Similarly, as the project proponent for the EITP, Southern California Edison ("SCE"), recently stated in a filing with the California Public Utilities Commission ("CPUC"):

> Project Overview
>
> 1. EITP, which primarily consists of a new substation and 35-mile transmission line upgrade, will interconnect up to 1,400 MW of new renewable generation (primarily solar) near the southern California-Nevada border, including Brightsource Energy's 400 MW Ivanpah Solar Energy Generating System (ISEGS), which is currently under regulatory review at the California Energy Commission (07-AFC-05).
> 2. EITP will provide the electrical facilities and capacity to facilitate access and delivery of new solar generation in California and Nevada.
> 3. EITP will allow new solar projects in southwestern Nevada to interconnect into the western states market.

SCE, Eldorado-Ivanpah Transmission Project (EITP) Backgrounder - May 2010, Submitted as Appendix A to SCE's (U 338-E) Notice of Ex Parte Communication filed May 28, 2010.

The proposed Silver State solar project is also a connected action that will have significant impacts on the same local biological resources in the Ivanpah Valley as the proposed Ivanpah project and the EITP. Moreover, both the Ivanpah and the Silver State solar projects are also connected projects both literally and figuratively because they will connect to the EITP lines and substations when they are upgraded and are both dependent on the EITP for access to the California markets.

In light of the CEQ guidelines and the case law, the proposed solar power plants and the proposed EITP should have been considered together in a single environmental review. Had the agencies done so, the BLM would have properly framed the questions before it and have fully considered the impacts to the Ivanpah Valley from the *de facto* solar zone that is being created in this area on public lands without any land use planning being undertaken and without consideration of the overall impacts of the proposed wide-spread, sprawling, large-scale industrialization of the Valley as a whole.

At minimum, the agencies should consider all of the impacts of the proposed project, along with impacts of the transmission upgrade and substations and the proposed Silver State project as direct impacts of connected projects. Even assuming for the sake of argument alone that the impacts could be described as indirect effects or "secondary" or "induced" effects attributable to the transmission line upgrade and the projects that are dependent on and facilitated by that upgrade, the need for adequate coordinated environmental review is no less. *See City of Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975) (requiring agency to prepare an EIS on effects of proposed freeway interchange on a major interstate highway in an agricultural area and to

include a full analysis of both the environmental effects of the exchange itself and of the development potential that it would create).

By failing to combine or even coordinate this NEPA process with the approval process for all of the similar, cumulative, and connected actions the agencies have undermined full and fair public review of the impacts of the project in violation of NEPA. BLM must disclose and consider all of the connected, cumulative and similar projects' significant impacts together. To do otherwise would be unlawful. Cumulative impacts analysis in multiple EISs is not sufficient where projects are so closely connected as here and will result in a new industrial zone being created on public lands that now serve multiple uses including providing high-quality occupied habitat for a threatened species.

b. CEQA

The DEIR/DEIS failed to consider the "project as a whole" and instead has unlawfully segmented environmental review by failing to analyze the impacts of the proposed solar power plants in conjunction with the proposed powerline upgrade, communications line, and two new substations that make up the Eldorado-Ivanpah Transmission Project ("EITP") which is necessary for the power plant proposals. Two of the proposed solar power plants are currently under review by BLM -- Ivanpah SEGS and Silver State/Nextlight—and the Ivanpah SEGS project is also under review by the California Energy Commission ("CEC"). Together these proposed projects would impact thousands of acres of high-quality occupied desert tortoise habitat and additional proposals are planned for this same area covering thousands of additional acres (See attached maps from CBD). The proposed power plant projects and the Eldorado-Ivanpah transmission project are clearly interrelated and, indeed, the power plant projects could not proceed without the transmission project upgrade.

The definition of "project" is "given a broad interpretation in order to maximize protection of the environment." (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1180 (internal quotation omitted); see *also, Muzzy Ranch Co. v. Solano County Airport Land Use Com*. (2007) 41 Cal.4th 372, 381-83; Fullerton *Joint Union High Sch. Dist. v. State Bd. of Educ*. (1982) 32 Cal.3d 779, 796-97; *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 277-81.) A "project" is "the whole of an action" directly undertaken, supported, or authorized by a public agency "which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Public Resources Code § 21065; CEQA Guidelines § 15378(a).) Under CEQA, "the term 'project' refers to the underlying activity and not the governmental approval process." (*California Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist*. (2009) 178 Cal.App.4th 1225, 1241, (quoting *Orinda Assn v. Bd. of Supervisors* (1986) 182 Cal.App.3d 1145, 1171-72.) (CEQA Guidelines, § 15378(c) ["The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval."].)

Thus, even assuming for the sake of argument alone that the regulatory structure may make it difficult for the CPUC and CEC to collaborate on a single coordinated environmental review, at minimum, the CPUC should have provided for coordinated environmental analysis of

the powerline upgrade and substations with the CEC and BLM. Instead the projects are being reviewed piecemeal. The cumulative impacts discussion of the power plant proposals cannot cure this omission.

It is well settled that CEQA forbids "piecemeal" review of the significant environmental impacts of a project. A public agency may not divide a single project into smaller individual projects in order to avoid its responsibility to consider the environmental impacts of the project as a whole. (*Orinda Assn. v. Board of Supervisors* (1986) 182 Cal. App. 3d 1145, 1171.) This rule derives, in part, from section 21002.1, subdivision (d), which requires the lead agency--in this case, the Commission--to "consider[] the effects, both individual and collective, *of all activities involved in [the] project.*" (Emphasis added.) Courts have considered separate activities as one CEQA project and required them to be reviewed together where, for example, the second activity is a reasonably foreseeable consequence of the first activity (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283-84); or both activities are integral parts of the same project (*Whitman v. Board of Supervisors* (1979) 88 Cal.App.3d 397, 414-415).

Because the DEIR/DEIS fails to properly consider the whole of the action, including the impacts from the large-scale industrial power plants that depend on the EITP upgrade, the direct and indirect impacts of the proposed project were underestimated from the outset and the DEIR/DEIS fails to provide adequate identification and analysis of environmental impacts of the project as a whole in violation of CEQA.

2. Project Description is Inaccurate

Here, the BLM should not proceed any further in the NEPA process for the proposed transmission lines and substation without coordinating this NEPA process with the approval process for all of the connected actions. This would allow all of the projects' significant impacts to be fully considered together.

In particular, the BLM should consider together the additive impacts to biological resources, including the desert tortoise and its habitat, from the proposed solar projects and the proposed transmission line and substation to ensure that the true extent of impacts are fully disclosed and analyzed. BLM should not treat this critical analysis as a cumulative impacts question alone. Because the currently proposed projects are linked and interdependent they should be evaluated together under NEPA. Most importantly, each of these projects will have significant direct impacts on desert tortoise populations in the Northeastern Mojave Recovery Unit.

BLM must look at those impacts in a comprehensive way that would allow it to formulate meaningful alternatives that could avoid many of the impacts of these linked projects and where impacts remain that cannot be avoided through alternatives, provide for comprehensive minimization and mitigation measures that will ensure that impacts to this recovery unit are appropriately mitigated. Ultimately, BLM must ensure that the approval of these linked projects does not impair the recovery of the desert tortoise populations in the Northeastern Mojave Recovery Unit.

In comments during the scoping process, CBD requested that BLM conduct such a comprehensive analysis, but the DEIR/DEIS failed to do so. The DEIR/DEIS contains "whole of action / cumulative action" sections, but it simply summarizes findings made for the ISEGS projects. As the DEIR/DEIS executive summary notes, "these sections do not include a new analysis of impacts but rather a synopsis of the CEC's and the BLM's determinations." DEIR/DEIS ES-8. Including in the IETP DEIR/DEIS a synopsis of the ISEGS DEIS is not an acceptable substitute for an EIS which considers the impacts of all the Ivanpah Valley projects. Only an EIS analyzing the impacts of all connected projects together can outline their full additive impacts and develop a suitably wide range of alternative configurations of the projects.

B. Purpose and Need Is Too Narrow

The BLM and the CPUC cannot base the need for this project on other proposed projects that have not been approved, may never be approved, and which are not consistent with any existing land use planning. To do so would not only violate the principle that the decisions on those proposed solar facilities must only be made *after* careful environmental review but could also result in much wasted time and effort and the premature approval of a transmission project that would simply be a "bridge to nowhere." Moreover, if approved as proposed without proper land use planning analysis, the result may be a sprawling industrial zone that maximizes rather than minimizes impacts to the environment.

Agencies cannot narrow the purpose and need statement to fit only the proposed project and then shape their findings to approve that project without a "hard look" at the environmental consequences. To do so would allow an agency to circumvent environmental laws by simply "going-through-the-motions." It is well established that NEPA review cannot be "used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5; *Metcalf v. Daley*, 214 F.3d 1135, 1141-42 (9th Cir. 2000) ("the comprehensive 'hard look' mandated by Congress and required by the statute must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.")

The DEIR/DEIS simply assumes that new solar power generation will be approved and constructed in the Ivanpah Dry Lake Area and that therefore the transmission project is needed to service those new generation sites. DEIR/DEIS ES-1. Moreover, the DEIR/DEIS assumes the proposals will be approved without any change to the footprint and that alternative siting will not be adopted.

However, those project approvals are not foregone conclusions, for example, the new Ivanpah substation, is intended to service and is proposed within the footprint of, the proposed Ivanpah SEGS although alternative configurations and off-site alternatives have also been proposed. As noted above neither the ISEGS, the proposed NextLight Silver State solar projects in Nevada, nor other potential projects in the area have yet been approved. The DEIR/DEIS notes that a "Purchase Power Agreement" has been executed to connect the ISEGS project to the IETP. DEIR/DEIS ES-8. However, although this indicates the intention of the project proponent, it does not mean that the project will be approved or constructed as proposed.

C. The Range of Alternatives Is Unlawfully Narrow

1. Legal Standards

a. CEQA

Pursuant to CEQA, the "policy of the state" is that projects with significant environmental impacts may not be approved "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects…" Pub. Res. Code § 21002; CEQA Guidelines § 15021(a)(2). A Project should not be approved if environmentally superior alternatives exist "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." CEQA Guidelines §§ 15021(a)(2), 15126.6; Pub. Res. Code § 21002. The Project must be rejected if an alternative available for consideration would accomplish "most [not all] of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." CEQA Guidelines § 15126.6(c).

Accordingly, the EIR/EIS must consider a range of alternatives that would achieve the basic objectives of the project while avoiding or substantially lessening significant environmental effects, and it is essential that the "EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." CEQA Guidelines § 15126.6(d). Alternative sites must also be considered where relocating the project would substantially lessen the significant impacts of the project. Guidelines Section 15126.6(f)(2). *See Citizens of Goleta Valley v County of Santa Barbara* (1988) 197 Cal.App.3d 1167, 1178; *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1456 (whether an alternative site may be feasible even where it requires a change in land use designation; to determine feasibility requires detailed analysis of the alternatives; and even if an alternative is less profitable than the project as proposed it may still be a feasible alternative).

b. NEPA

NEPA similarly requires that a range of meaningful alternatives be explored in the environmental review process. 42 U.S.C. §§ 4332(C)(iii),(E). The agency must "study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E); *see also* CEQ Forty Questions, 46 Fed. Reg. at 18027 ("Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are *practical or feasible* from the technical and economic standpoint and using common sense, rather than simply *desirable* from the standpoint of the applicant." (emphasis in original)).

c. California Desert Conservation Area Plan

In addition, pursuant to the BLM's California Desert Conservation Area plan which covers much of the area the project impacts in California, impacts to wildlife from conflicting

land uses should be avoided. CDCA Plan at 28. Impacts to sensitive plant species recognized by BLM should also be avoided. CDCA Plan at 37. Avoidance can best be accomplished through alternative project siting and/or project design. Most importantly, in this instance, and as detailed below, the EIR/EIS must look at alternative sites that could avoid impacts to desert tortoises, critical habitat, DWMAs and other essential desert tortoise habitat. The EIR/EIS should also fully explore other alternatives that would achieve the same level of transmission reliability and support for solar energy production—which should be the basic objective of the project—but without the significant impacts of the proposed project and the projects that are linked to it.

2. Range of Alternatives is Too Narrow

a. DEIR/DEIS Purpose and Need Statement Unlawfully Cabins Alternatives

The statement of purpose and need and the alternatives are closely linked since "the stated goal of a project necessarily dictates the range of 'reasonable' alternatives." *City of Carmel*, 123 F.3d at 1155. The Ninth Circuit recently reaffirmed this point in *National Parks Conservation Assn v. BLM*, 586 F.3d 735, 746-48 (9th Cir. 2009) (holding that "[a]s a result of [an] unreasonably narrow purpose and need statement, the BLM necessarily considered an unreasonably narrow range of alternatives" in violation of NEPA).

The reason for the requirement that the purpose and need statement not be unreasonably narrow, and NEPA in general is, in large part to "guarantee[ ] that the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 349 (1989).

The agency should not attempt to limit its analysis or avoid robust public input but unduly narrowing the scope of the analysis, because "the very purpose of a draft and the ensuing comment period is to elicit suggestions and criticisms to enhance the proposed project." *City of Carmel-by-the-Sea*, 123 F.3d at 1156. The agency cannot circumvent relevant public input by narrowing the purpose and need so that no alternatives can be meaningfully explored or by failing to review a reasonable range of alternatives.

As the Center pointed out in our comments on the Scoping Process the purpose and need statement in the Scoping was unlawfully narrow and thereby cabined the choice of alternatives. Unfortunately, the DEIR/DEIS fails to cure this error. As discussed above, the project description remains inaccurate, and the DEIR/DEIS still fails to comprehensively consider the connected impacts of the Ivanpah Valley projects. As a result, the DEIR/DEIS fails to analyze the full range of alternatives to the proposed project including alternative configurations for the projects.

The BLM can, and indeed must, undertake full consideration of alternatives under NEPA when reviewing a plan amendment and proposed project and (as discussed extensively in the Center's 2/10/2010 comments to the ISEGS SDEIS), there are several potential feasible alternatives (several that would have fallen well within BLM's jurisdiction) including a plan amendment to promote conservation of the desert tortoise and protect the high-quality tortoise habitat in the Ivanpah Valley from industrial development. The BLM fails to adequately

consider any off site alternatives for solar renewable energy generation that could avoid impacts to the resources of these public lands.

b. DEIR/DEIS Does Not Analyze Any Alternative Which Would Avoid or Reduce Impacts to the Desert Tortoise

As the BLM is well aware, it is increasingly difficult to find intact, high quality desert tortoise habitat that could arguably "mitigate" for the loss of any high quality occupied desert tortoise habitat in the Northeastern Mojave Recovery Unit. Therefore, *avoiding* impacts to this essential habitat and maintaining the largest possible areas of intact, high quality habitat is absolutely critical for recovery of the species.

An important problem deriving from the DEIR/DEIS's failure to consider connected impacts is that the DEIR/DEIS does not analyze any alternative which would avoid or reduce impacts to the desert tortoise. DEIR/DEIS 4-8. The EIR/EIS must address the impacts of this project and other linked projects to the *survival and recovery* of desert tortoise in this recovery unit and take seriously the development of meaningful alternatives to this project and the linked solar generating projects that will avoid impacts to the species and its habitat.

As described in the DEIR/DEIS, the EITP would cut through a high density desert tortoise habitat, causing adverse impacts "both short and long term, both localized and extensive." DEIR/DEIS 3.4-75. One of the key strategies for mitigating harm to the desert tortoise population in the Ivanpah valley project area is to relocate tortoises from the substation site as well as the Ivanpah solar project site. The DEIR/DEIS notes that the solar project proponent proposes to relocate at least 25 tortoises. DEIR/DEIS 3.4-102. However, the DEIR/DEIS notes that there will be "reduced survivorship for translocated individuals," due to fragmentation of habitation, increased road traffic, and increased predation from a raven and coyote presence increased by the construction process. DEIR/DEIS 3.4-102. This mitigation is inadequate, therefore, because it does not provide for mitigation of the threats posed to tortoises once relocated.

Moreover, the EITP would contribute to a series of connected impacts deriving from the generating facilities the transmission line connects to. The DEIR/DEIS notes that "One potential impact from reasonably foreseeable future projects, including the EITP, could be habitat loss over a large area, approximately 120,000 acres of habitat disturbance/loss. DEIR/DEIS 5-47, 5-48.

However, as discussed above, EITP DEIR/DEIS fails to analyze these connected impacts in any depth, instead simply compiling a "synopsis" information from the environmental documents of other projects, rather than conducting analysis of the interconnected and interacting impacts of all the Ivanpah Valley projects together. As a result, the DEIR/DEIS fails to develop any alternatives to the current overall development scheme to avoid or reduce impacts to desert tortoise. DEIR/DEIS 5-18.

Similarly, the ISEGS Supplemental DEIS considered two additional alternatives but ignored other feasible alternatives including off site alternatives and an alternative plan

amendment that would consider this area for protection as an ACEC or an addition to the existing DWMA. Such alternatives are clearly feasible.

The DEIS for the Silver State project provided even less analysis of alternatives and failed to consider avoiding or significantly reducing impacts to the Desert tortoise. The Silver State project is sited in excellent occupied tortoise habitat, and would result in significant impacts on tortoise populations. Yet despite the high stakes, the DEIS contains little analysis. An example of the frivolous and incomplete cumulative impacts analysis done for desert tortoise can be summed up by the incredulous statement, "One potential effect from future projects, including the Proposed Action, could be habitat loss over a large area." "*Potential"? "Could be"?* The DEIS fails miserably in fulfilling its obligations under the NEPA in this analysis.

Because the EITP, ISEGS, and Silver State environmental review documents fail to provide adequate identification and analysis of impacts, inevitably, they also fail to identify adequate mitigation alternatives. "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided." *Methow Valley*, 490 U.S. at 351-52.

Although both the reduced footprint alternative and the I-15 alternative for the ISEGS project would likely reduce some on-site impacts to rare species, other alternatives are clearly available and feasible that would further and more significantly reduce the impacts of the Silver State project as well. The Center provided the BLM additional information on those alternatives in our comments on the ISEGS and the Silver State projects. Moreover, no alternatives are provide to the project as a whole, for example, re-locating all of these projects in areas of the Ivanpah valley that are less sensitive, relocating all of the projects to already disturbed lands, and/or relocating the projects closer to the end use for the energy.

BLM must look at those impacts in a comprehensive way that would allow it to formulate meaningful alternatives that could avoid many of the impacts of these linked projects and where impacts remain that cannot be avoided through alternatives, provide for comprehensive minimization and mitigation measures that will ensure that impacts to this recovery unit are appropriately mitigated. Ultimately, BLM must ensure that the approval of these linked projects does not impair the recovery of the desert tortoise populations in the Northeastern Mojave Recovery Unit.

c. DEIR/DEIS Ignores Distributed Generation Alternatives

Related to the CPUC and the BLM's unlawful segmentation of project analyses is the agencies' failure to assess distributed generation alternatives. Since the IETP DEIR/DEIS ignores the connected impacts of the Ivanpah Valley projects and focuses narrowly on the impacts of the proposed transmission line and substations, it neglects discussion of distributed generation alternatives to the Valley projects.

As the CPUC and the BLM are well aware, a distributed solar energy alternative is also a feasible alternative.[1] Indeed, the most recent data and information available also shows that a distributed solar energy alternative would be comparable in terms of cost and capacity factor — indeed it may be less costly than the proposed project. *See* RETI 2B Final Report 7-23. As detailed in the attached Comments of Bill Powers, P.E., distributed alternatives are feasible and should have been evaluated in the DEIR/DEIS.[2]

There are many opportunities for development of renewable energy in closer proximity to urban load center where there are areas appropriately zoned for industrial development. Moreover, additional opportunities are emerging every day for siting large-scale industrial renewable energy projects on previously damaged or disturbed lands. Indeed, approximately 30,000 acres of former agricultural lands in the Westlands Water District may soon be available to provide 5,000 MW of utility-scale solar development.

Alternative renewable energy projects are being proposed, built, and brought on line in many areas beyond of the California desert as well. While clearly some solar development will go forward in the California desert, hopefully it will be approved after appropriate land use planning and environmental review have been completed. Even if some large-scale solar development will occur in the Ivanpah Valley in the future, this area should not bear a disproportionate burden of the impacts of these industrial-scale solar facilities going forward.

Under CEQA, none of these projects can go forward without appropriate consideration of other feasible alternatives that could avoid the significant impacts of the projects such as a distributed renewable energy alternative which could avoid significant impacts to desert tortoise and occupied habitat, rare plants, soils, and other resources of these public lands. Other alternatives such as alternative siting configurations for the EITP and proposed large scale solar projects that could avoid or minimize habitat fragmentation must also be explored.

Importantly, analyzing a distributed PV alternative to this proposed project does not preclude cost-effective central station (industrial) solar projects being sited in any way. Indeed, some large-scale industrial solar projects that are appropriately sited on disturbed or degraded lands served by existing transmission lines may very well be comparable to distributed PV when looked at in a robust alternatives analysis.

However, the DEIR/DEIS completely fails to analyze these issues. In the discussion of alternatives, the DEIR/DEIS simply notes that if the IETP is not completed, "the applicant would need to identify alternate renewable generation sources." DEIR/DEIS 4-3. The DEIR/DEIS does not discuss distributed generation, but comments that "depending on the alternate sources identified, could result in greater environmental impacts than the proposed project, as they might require creation of a new ROW or might require ground disturbance in previously undisturbed

[1] *See, e.g.,* RETI Final Report 2B 7-23, CBD Comments on DEIS for ISEGS 39.
[2] COMMENTS OF BILL POWERS, P.E. ON ELDORADO-IVANPAH TRANSMISSION PROJECT DRAFT EIR/EIS ON BEHALF OF CENTER FOR BIOLOGICAL DIVERSITY, June 21, 2010 (attached; Mr. Powers' comments provide an update of earlier testimony provided in the CEC process and to the BLM for the Ivanpah SEGS project and the Genesis solar project).

areas." DEIR/DEIS 4-3. These conclusory comments are completely unsubstantiated and cannot substitute for analysis of distributed generation options, which the CPUC itself has recognized elsewhere as a priority.

II. Project Fails to Adequately Analyze and Propose Mitigations for Impacts on Biological Resources

A. Threatened and Endangered Wildlife

1. Desert tortoise (Gopherus agassizii)

a. Background

Tortoises living in southern California, southern Nevada, southwestern Utah, and extreme northern Arizona comprise the Mojave population of desert tortoise, and were afforded protection under the Endangered Species Act as a threatened species in 1990. The desert tortoise lives in valleys, flat areas, and dry alluvial fans and washes. In the Mojave and Colorado deserts, tortoises are generally found below 4,000 feet in Joshua tree-Mohave yucca communities, creosote bush-saltbush scrub habitats, and some ocotillo-creosote habitats. They may live in a variety of soil types, including those of sand dunes, rocky hillsides, washes, sandy soils, and desert pavements.

Desert tortoises are found throughout the proposed project area, with the possible exception of the mountain passes. The proposed project lies within the Northeastern Mojave Recovery Unit and impacts the Ivanpah (CA) and Piute-Eldorado (NV) recovery units. Murphy et al. undertook extensive genetic analysis across the range of the desert tortoise and identified genetically unique populations within the larger listed population.[3] The desert tortoises in the project area represent a unique genetic group – the northeastern Mojave group. The uniqueness of this population is also recognized both in the 1994 Desert Tortoise Recovery Plan[4] and the draft Revised Recovery Plan as the North Eastern Mojave Recovery Unit and the Murphy et al. paper again confirms the uniqueness of this population.[5]

In California, the Ivanpah area is the only location of this unique genotype of desert tortoise in California. Because these animals represent such a unique occurrence in California, adequate avoidance, minimization and mitigation must be applied to this project pursuant to CEQA taking into account the connected and cumulative projects including the Ivanpah SEGS project.

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[3] Murphy R.W., K.H. Berry, T. Edwards and A.M. McLuckie. 2007. A Genetic Assessment of the Recovery Units for the Mojave Population of the Desert Tortoise, Gopherus agassizii. Chelonian Conservation and Biology, 2007, 6(2): 229–251.

[4] U.S. Fish and Wildlife Service (USFWS). 1994. Desert Tortoise Recovery Plan. Desert tortoise (Mojave population). http://ecos.fws.gov/docs/recovery_plans/1994/940628.pdf

[5] U.S. Fish and Wildlife Service (USFWS). 2008. Draft Revised Recovery Plan. Desert tortoise (Mojave population).http://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/DraftRevRP_Mojave_Desert_Tortoise.pdf

Several of the Path 2 sections and alternatives fall within desert tortoise critical habitat in California which is part of the Ivanpah DWMA. Prior to 2002, the area to the north of the I-15 in California in the Ivanpah Valley was designated by BLM as Category 1 habitat for desert tortoise – the best desert tortoise habitat. The Northern and Eastern Mojave Plan changed that designation, not based on any site specific science, but on the establishment of Desert Wildlife Management Areas (DWMA's) elsewhere.[6] All critical habitat and occupied desert tortoise habitat should be avoided and the EIR/EIS should explore a more robust range of alternatives providing at least one alternative that does not impact any critical habitat.

b. Analysis of Impacts, Alternatives, and Mitigation Efforts are Inadequate

The EITP would cut through a high density desert tortoise habitat, causing adverse impacts "both short and long term, both localized and extensive." DEIR/DEIS 3.4-75. While the DEIR/DEIS provides some identification of the impacts to the desert tortoise it fails to adequately analyze the direct, indirect and cumulative impacts to the population in this area and the species as a whole. While the segmentation issue is discussed in detail above in these comments, in addition, another glaring omission is the failure to analyze the effects of the project as a whole and the resulting habitat fragmentation on the desert tortoise population.

The proposed Ivanpah Substation would occupy a total area of 38.5 acres, "the largest project-related loss of desert tortoise habitat in a single area." DEIR/DEIS 3.4-76. Over all, construction of ISEGS project will result in the loss of approximately 4,073 acres of desert tortoise habitat. DEIR/DEIS 3.4-102.

In Nevada, the entire proposed route of the 220 kV transmission line and proposed telecommunication route Path 2 falls within the proposed Piute-Eldorado Desert Wildlife Management Area (DWMA) as outlined in the 1994 desert tortoise recovery plan. Further, the majority of Path 2, segment 1 from the Boulder City limits to highway 164 falls within designated critical habitat.

One of the key strategies for mitigating harm to the desert tortoise population in the Ivanpah valley project area is to relocate tortoises from the substation site as well as the Ivanpah solar project site. The DEIR/DEIS notes that the solar project proponent proposes to relocate at least 25 tortoises. DEIR/DEIS 3.4-102. However, the DEIR/DEIS notes that there will be "reduced survivorship for translocated individuals," due to fragmentation of habitation, increased road traffic, and increased predation from a raven and coyote presence increased by the construction process. DEIR/DEIS 3.4-102. This mitigation is inadequate, therefore, because it does not provide for mitigation of the threats posed to tortoises once relocated.

Overall, as discussed above, the EIR/EIS must address the impacts of this project and other linked projects to the *survival and recovery* of desert tortoise in this recovery unit and take seriously the development of meaningful alternatives to this project and the linked solar generating projects that will avoid impacts to the species and its habitat and in particular increase habitat fragmentation in the Ivanpah valley. The desert tortoise is continuing to decline throughout its range despite being under federal and state Endangered Species Acts protection as

[6] Bureau of Land Management. 2002. The Northern and Eastern Mojave Plan.

threatened.[7] Avoiding impacts to this essential habitat and maintaining the largest possible areas of intact, high quality habitat is absolutely critical for recovery of the species.

2. Desert bighorn sheep (Ovis Canadensis nelson)

a. Background

Desert bighorn sheep are listed as a BLM sensitive species, and have a California state threat ranking of S3 (21–100 EOs, or 3,000–10,000 individuals, or 10,000–50,000 acres). DEIR/DEIS 3.4-29. In California, desert bighorn sheep are found both in the Clark Mountains and within the Mojave National Preserve. In Nevada, desert bighorn sheep are found in the McCullough and Highland Ranges, crucial bighorn sheep habitat, which both are affected by components of the proposal. There is ongoing concern regarding the fragmentation of bighorn habitat and the loss of critical movement corridors across the I-15, which this project may exacerbate by further industrializing the area. The project should look at ways to minimize any impacts to bighorn movement.

b. Analysis of Impacts and Mitigation Efforts is Inadequate

i. Bighorn Water Sources

The proposed route of the 220 kV transmission line crosses the McCullough Range, and while it does so through a highly disturbed and roaded pass, there is a critical watering guzzler located north of the pass. This watering source is critically important to the bighorn during the hot and dry periods of the year. Construction activities could disrupt the movements of bighorn north and south of the pass and result in critical stresses on the herd.

Work in this area should be conducted outside of periods where access to this guzzler is important to the bighorn. The DEIR/DEIS fails to discuss this mitigation measure. DEIR/DEIS 3.4-95. Other proposed mitigation measures, such as conducting a survey of bighorn in the area prior to construction and reporting the figure to NDOW, and halting construction if bighorn appear within 500 feet of construction until the sheep vacate, are insufficient. DEIR/DEIS 3.4-95. Construction itself may have a highly disruptive effect on the area, such that bighorn will not approach so close as 500 feet. Moreover, the measure does not specify that bighorn will be allowed to cross the construction site, only that construction stop until they vacate, which would appear to allow construction crews to chase the bighorn away which is unacceptable.

ii. Bighorn Movement

Another concern is the proposed telecommunications route Path 2 section 1, which is sited in a narrow valley between the two ranges. Bighorn movement between these ranges is routine and construction would impact around ten miles of bighorn crossing areas.

[7] U.S. Fish and Wildlife Service (USFWS). 2008. Draft Revised Recovery Plan. Desert tortoise (Mojave population).http://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/DraftRevRP_Mojave_Desert_Tortoise.pdf

Again, timing and segmenting work on the telecommunications line may be useful in mitigating impacts to the sheep. As with mitigation of effects on bighorn watering, the DEIR/DEIS fails to discuss this mitigation measure. DEIR/DEIS 3.4-95. As discussed above, the proposed mitigation measures do not specify that bighorn will be allowed to cross the construction site, only that construction stop until they vacate, which would appear to allow construction crews to chase the sheep away.

iii. Bighorn Lambing

Also of concern are the impacts of construction and helicopter support on bighorn lambing. The BLM and proponent should consult with the Nevada Department of Wildlife (NDOW) on how best to mitigate these and other impacts. While MM BIO-13 does require avoiding construction activities in lambing areas from January to May, DEIR/DEIS 3.4-95, further analysis is need to determine if other mitigation efforts could be effective in reducing impacts to bighorn lambing and survival.

B. Rare Plants

Many rare plants have been identified within the project area. In California these plants include but are not limited to the Rusby's desert mallow (*Spheralcea rusbyi* var. *eremicola*), Cave evening primrose (*Oenothera cavernae*), Mojave milkweed (*Asclepias nyctaginifolia*), and Desert pincushion (*Coryphantha chlorantha*). In addition, there are several rare plants found in Nevada within the project area:

1. White-margined penstemon (Penstemon albomarginatus)

a. Legal Standards

The white-margined penstemon is a rare plant known from only five general locales, two in southwest Nevada, including the Jean-Roach Lake area, two in southeast California, and one in Arizona near Kingman. The Jean-Roach Lake population is central and likely to be important for the transport of genetic material among populations and other ecological functions.[8] This plant is generally restricted to deep, loose deposits of aeolian sandy soils between 2560 and 3570 feet elevation.

A 2001 field survey reported finding at least 68,164 plants on 6734 acres in Nevada.[9] While the plant is not federally listed, its unique and limited habitat makes it rare and imperiled. The Nature Conservancy report summarizes the threats to the Jean-Roach Lake population as "very high". Because of the limited distribution, unique habitat and very high level of threats, the Natural Heritage Program ranks it globally as "G2", imperiled, while in Nevada and Arizona it is

[8] The Nature Conservancy. 2007. A conservation management strategy for nine low elevation rare plants in Clark County, Nevada. At: http://www.accessclarkcounty.com/depts/daqem/epd/dcp/Pages/dcp_reports.aspx .

[9] Smith, Frank J. 2001. Current knowledge and conservation status of Penstemon albomarginatus M.E. Jones (Scrophulariaceae), the white-margined penstremon. 29 pages + 3 appendices. Nevada Natural Heritage Program. Carson City, NV.

state ranked as imperiled, and in California it is state ranked as critically imperiled and very threatened.[10]

b. Analysis of Impacts and Mitigation Efforts

The proposed route of the 220 kV passes through the Jean-Roach Lake area and poses a potential threat to populations 10 and 12 as identified by Smith.[11] These roughly correspond to the area between mile markers 12-15, and 21-25 as shown on Project Overview Figure ES-1.

The DEIR/DEIS offers only scant attention to mitigation efforts for rare plants in the project area. For plants in general, the DEIR/DEIS proposes a preconstruction survey of plant life (MM BIO-1) and a recovery plan (MM BIO-2) designed to help foster revegetation. DEIR/DEIS 3.4-92.

MM BIO-3 calls for relocation of special status plants and for reclamation efforts after the fact, but does not appear to call for specific measures to avoid harm to rare plants in the first place. As the Center commented during the scoping process, activities associated with tower construction or modification, line pulling and other potentially ground disturbing activities should be sited away from inventoried occupied sites whenever possible.

2. Aven Nelson phacelia (Phacelia anelsonii)

a. Legal Standards

Aven Nelson phacelia occurs mostly in sheltered places, as along the northern side of cliffs and ledges, in rocky or sandy or gravelly soil, at elevations of up to 1500 m. There are only two known occurrences in Nevada, including one near the alignment of highway 164 along the proposed route of the telecommunications line near where path 2, sections 1 and 2 meet.[12]NatureServe ranks this plant as "G2" imperiled, while it is state ranked in Nevada as "critically imperiled".[13]

b. Analysis of Impacts and Mitigation Efforts

As discussed above, mitigation measures for harm to rare plants as currently analyzed in the DEIR/DEIS are inadequate. Activities associated with tower construction or modification, line pulling and other potentially ground disturbing activities should be sited away from inventoried occupied sites whenever possible.

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[10] Ibid, The Nature Conservancy.
[11] Ibid, Smith.
[12] http://heritage.nv.gov/atlas/atlasndx.htm
[13]http://www.natureserve.org/explorer/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=156874&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=156874&offPageSelectedElType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=156874

C. Special Status Lands

1. Mojave National Preserve

As the DEIR/DEIS notes, "National Preserves are defined as protected areas having characteristics associated with national parks but where Congress has permitted continued public hunting, trapping, and oil/gas exploration and extraction." DEIR/DEIS 3.9-10, citing NPS 2000.

The DEIR/DEIS observes that "The proposed project directly borders, but is not in, the Mojave National Preserve." DEIR/DEIS 3.4-56. The Path 2 and alternatives run along the border of the Mojave National Preserve which is home to many rare and imperiled species including the desert tortoise and bighorn sheep. In this area the project is also within the critical habitat for the desert tortoise.

All the potential impacts of the EITP and the solar zone being created and facilitated by the EITP in the Ivanpah Valley on the resources within the Mojave National Preserve must be identified and fully considered. Yet the DEIR/DEIS fails to discuss these impacts in even a preliminary fashion, confining itself to the conclusory assertion that the propose project simply "borders" the preserve. DEIR/DEIS 3.4-56. There is no discussion in the DEIR/DEIS of impacts on the Preserve and the resources therein. DEIR/DEIS 3.4-56.

2. Wee Thump Joshua Tree Forest Important Bird Area

Important Bird Areas, or IBAs, are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape.[14] The Wee Thump Joshua Tree IBA was designated because of the important and unique habitat it provides for desert cavity nesting birds.

The ancient Joshua trees, estimated to be over 250 years old, offer cavities and habitat which are largely absent from much of the surrounding regional landscape.[15] The proposed Path 2 segment 1 for the telecommunications line borders, and at places, slightly enters this IBA. The DEIR/DEIS states that the project could cause "adverse impacts" to "nesting birds within the Wee Thump Joshua Tree Wilderness Area." DEIR/DEIS 3.4-66. The DEIR/DEIS helpfully provides for work stoppages during bird breeding season if required by NDOW. 3.4-95. Further consultation with NDOW should be conducted to determine if other mitigation measures may be appropriate.

3. Unusual Plant Assemblages and Riparian Areas

The DEIR/DEIS should identify and analyze impacts to all Unusual Plant Assemblages and riparian areas throughout the project area and these resources should be fully protected. Within the CDCA all riparian areas are considered Unusual Plant Assemblages and must be fully protected. CDCA Plan at 38, 42. To the extent that the proposed project may affect any riparian

[14] http://www.audubon.org/bird/iba/iba_intro.html
[15] http://iba.audubon.org/iba/stateIndex.do?state=US-NV

areas or other UPA's alternatives must be explored that would avoid all impacts to these rare desert resources.

III. Project Fails to Adequately Analyze Greenhouse Gas Emissions

A. Legal Standard

Federal courts have held squarely that NEPA requires federal agencies to analyze climate change impacts. *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007). As most relevant here, NEPA requires consideration of greenhouse gas emissions ("GHG emissions") associated with all projects and, in order to fulfill this requirement the agencies should look at all aspects of the project which may create greenhouse gas emissions including operations, construction, and life-cycle emissions from materials. Where a proposed project will have significant GHG emissions, the agency should identify alternatives and/or mitigation measures that will lessen such effects.

As part of the NEPA analysis federal agencies must assess and, wherever possible, quantify or estimate GHG emissions by type and source by analyzing the direct operational impacts of proposed actions. Assessment of direct emissions of GHG from on-site combustion sources is relatively straightforward. CEQA also requires analysis of GHG emissions as part of the environmental review. Recent amendments to the CEQA Guidelines require that the impacts of a proposed project's greenhouse gas emissions be determined and assessed. (CEQA Guidelines § 15064.4.) Any analysis regarding the Project's greenhouse gas emissions must be rigorous, site-specific, and inclusive of both short-term and long-term effects.[16]

For many projects, as with the proposed project, energy consumption will be the major source of GHGs. The indirect effects of a project may be more far-reaching and will require careful analysis. Within this category, for example, the agencies should evaluate, GHG and GHG-precursor emissions associated with construction, electricity use, fossil fuel use, water consumption, waste disposal, transportation, the manufacture of building materials (lifecycle analysis), and land conversion. *See* 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. 72 [discussing lifecycle emissions calculations and noting that "projects may spur the manufacture of certain materials, and in such cases, consideration of the indirect effects of a project resulting from the manufacture of its components may be appropriate. A lead agency must determine whether certain effects are indirect effects of a project, and where substantial evidence supports a fair argument that such effects are attributable to a project, that evidence must be considered."].)

Moreover, because many projects may undermine or destroy the value of carbon sinks, including desert soils, projects may have additional indirect effects from reduction in carbon

[16] *See* 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 83-84 available at www.ceres.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.)

sequestration, therefore both the direct and quantifiable GHG emissions as well as the GHG effects of destruction of carbon sinks should be analyzed.

B. Analysis of Sources of Greenhouse Gases and Mitigation Efforts

1. Construction

The DEIR/DEIS notes that the construction of the proposed project will generate approximately 7,000 MTCO2e (Metric Ton Carbon Dioxide Equivalent) of GHG emissions. DEIR/DEIS 3.3-15. The primary sources of GHGs during construction will be emissions from vehicles associated with construction. DEIR/DEIS 3.3-15. However, there is no discussion of avoiding or reducing these emissions by using alternative fuel for equipment or vehicles. There is also no discussion of off-setting the GHG emissions that are identified.

2. Project Operation

The DEIR/DEIS states that annual GHG emissions from project operation are estimated to be 190 MTCO2e. DEIR/DEIS 3.3-15. There will be emissions from maintenance vehicles which are estimated to be negligible, but there may also be leaks of SF6 from substation/transmission equipment. DEIR/DEIS 3.3-15.

Importantly, the DEIR/DEIS fails to state the actual amount of SF6 that is estimated to leak from equipment and provides only that 190 MTCO2E is expected in GHG emissions each year from project operation. No information is provided on the calculation. BLM has also failed to include the loss of carbon sequestration from soils in its GHG calculations or to provide a lifecycle analysis of GHG emissions that include manufacturing and disposal of project components and equipment. Moreover, as discussed above, in order to comply with NEPA and CEQA the agencies should also have included analysis of the GHG emissions from the proposed solar projects that are connected actions. The Ivanpah project in particular has significant GHG emission of approximately 25,000 MTCO2e annually which should be fully considered in this DEIR/DEIS and avoided where feasible, and minimized to the extent possible, and the remaining impacts mitigated or off-set.

The DEIR/DEIS does not analyze any alternatives to avoid or minimize the long-term emissions of SF6 from EITP operations and no mitigation measures are provided. Potential leakage of SF6 is of particular concern as it is many times more potent a greenhouse gas than CO2—indeed, its potential as a GHG has been estimated at 23,900 times that of CO2 (for a 100 year time horizon) and it can persist in the atmosphere far longer than CO2 as well—up to 3,200 years.[17]

The indirect or lifecycle effects of the EITP (as well as the connected actions—the project as a whole) may be far-reaching and require careful analysis as well. Within this

[17] P. Forster et al., *Changes in Atmospheric Constituents and in Radiative Forcing, in* CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS. CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (Solomon, S., et al. eds., Cambridge University Press 2007) at p. 212, Table 2.14.

category, for example, the agencies should evaluate both GHG and GHG-precursor emissions associated with construction, electricity use, fossil fuel use, water consumption, waste disposal, transportation, the manufacture of building materials (lifecycle analysis), and land conversion..

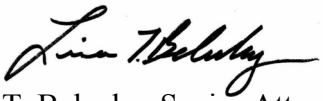
Moreover, because the project may undermine or destroy the value of carbon sinks found in desert soils, the project may have additional indirect effects from reduction in carbon sequestration, therefore both the direct and quantifiable GHG emissions as well as the indirect effects resulting from the destruction of carbon sinks should be analyzed.

IV. Conclusion

Thank you for your consideration of these comments. In light of the inadequacy of the environmental review to date, we urge the BLM and the CPUC to revise and re-circulate the DEIR/DEIS or prepare and circulate a supplemental DEIR/DEIS before making any decision regarding the proposed EITP and the connected projects—the project as a whole.

Further, in light of the inadequacy of the DEIR/DEIS, the statement in the CPUC's Joint Assigned Commissioner and Administrative Law Judge's Scoping Memo Ruling which assumed that the DEIR/DEIS and FEIR/FEIS would adequately address all of the significant environmental impacts of the project such that all of the issues regarding the environmental impacts of the project could be resolved without the need for evidentiary hearings or further evidence appears to have been premature. [18] In the event that the agencies choose not to revise the DEIR/DEIS to provide adequate analysis, the agencies should not approve the proposed project. Please feel free to contact me if you have any questions about these comments or the documents provided.

Sincerely,



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Attachments:

Comments of Bill Powers, P.E. ON ELDORADO-IVANPAH TRANSMISSION PROJECT DRAFT EIR/EIS ON BEHALF OF CENTER FOR BIOLOGICAL DIVERSITY, June 21, 2010

Center for Biological Diversity Maps: Ivanpah Valley and Ivanpah Valley Proposed Projects

[18] *See* JOINT ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE'S SCOPING MEMO RULING, filed May 28, 2009, at 9.

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