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Subject: ABJC Comments on DEIS for Lucerne Valley Solar Project
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Attachments: [2422-010d ABJC Comments on DEIS 5-20-10.pdf](#)

Good Afternoon Mr. Thomsen,

Attached please find Adams Broadwell Joseph & Cardozo Comments on the DEIS for the Lucerne Valley Solar Project. I will send the attachments in 4 separate emails.

Please don't hesitate to contact Robyn Purchia at (916) 444-6201 should you have any questions. Thank you.

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May 20, 2010

VIA EMAIL AND OVERNIGHT MAIL

Greg Thomsen
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California Desert District Office
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Moreno Valley, CA 92553
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Re: Draft Environmental Impact Statement for Lucerne Valley Solar Project

Dear Mr. Thomsen:

We are writing on behalf of the **International Brotherhood of Electrical Workers, Local 477** to comment on the Bureau of Land Management's ("BLM") Draft Environmental Impact Statement ("DEIS"), prepared pursuant to the National Environmental Protection Act ("NEPA"),¹ for Chevron Energy Solutions' ("CES" or "Applicant") proposed 45-MW Lucerne Valley Solar Project ("Project" or "Proposed Action"). The Project requires an amendment to the California Desert Conservation Area ("CDCA") Plan, a right-of-way ("ROW") to construct, operate and decommission the facility, rerouting of Zircon Road, a streambed alteration agreement, certification of waste discharge requirements and incidental take permits, among other agency actions. As explained more fully below, the DEIS does not comply with the requirements of NEPA, or the California Environmental Quality Act ("CEQA") for required discretionary approvals by California State agencies. Therefore, the BLM may not approve the CDCA Plan amendment or ROW until an adequate joint DEIS/Environmental Impact Report ("EIR") is prepared and circulated for public review and comment.

The members of Local 477 build, maintain and operate conventional and renewable energy power plants in San Bernardino County. Individual members of

¹ National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. (2010).
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Local 477 work in areas affected by environmental degradation and public health and safety risks from industrial development. Members also live in and use areas that will suffer the impacts of projects related to power plant development, including noise and visual intrusion, water and soil pollution, and destruction of archaeological or wildlife areas. Environmental degradation jeopardizes future jobs by causing construction moratoriums, eliminating protected species and habitat, using limited fresh water and putting added stresses on the environmental carrying capacity of the State. This reduces future employment opportunities. In contrast, well designed projects that reduce environmental impacts of electrical generation improve long-term economic prospects.

The DEIS for this Project is wholly inadequate, because it fails to consider, among other impacts, the cumulative effects in the region that will cause environmental degradation. As of January 2010, 244 renewable energy projects were proposed for development in California.² At least three of the proposed projects may be located within six miles of the Project,³ totaling 31,752 acres of land devoted to solar projects in a six-mile radius.⁴ The proposed Project will unavoidably tax the State of California's limited air, water, land, biological and cultural resources and transmission capacity to a potentially significant cumulative extent. The final toll taken by this historic energy boom on California's environment, public health and natural resource base may not be known for several years or longer, but currently available and substantial evidence shows that the effects will be severe. Based on these concerns, Local 477 and its members have a strong interest in ensuring that this Project complies with all applicable federal, State and local laws and regulations.

As these comments will demonstrate, the DEIS is fatally deficient and must be substantially revised and recirculated for further public review and comment before it may be finalized.⁵ We have prepared these comments with the assistance of Dr. Oliver Seely (water use), Jim Cornett, M.S. (biological resources impacts),

² Press Release, Office of the Governor, Governor Schwarzenegger Announces 244 Proposed Renewable Energy Projects Throughout the State (Dec. 29, 2009), *available at* <http://gov.ca.gov/press-release/14092/>.

³ BUREAU OF LAND MANAGEMENT, DRAFT ENVIRONMENTAL IMPACT STATEMENT AND CALIFORNIA DESERT CONSERVATION AREA PLAN AMENDMENT FOR THE PROPOSED CHEVRON ENERGY SOLUTIONS LUCERNE VALLEY SOLAR PROJECT 3.18-9 (vol. 1 Jan. 2010) [hereinafter DEIS].

⁴ DEIS, p. 4.12-12 (calculating 31,236 acres (three solar projects) + 516 acres (Applicant's Project)).

⁵ 40 C.F.R. § 1502.9(a) (2009) ("If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.").

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T'Shaka Toure, M.S. (hydrology impacts) and Matt Hagemann, P.G. (hazardous soils). Their comments and qualifications are appended hereto as Attachment A ("Seely Comments"), Attachment B ("Cornett Comments"), Attachment C ("Toure Comments") and Attachment D ("Hagemann Comments"). Please note that their comments supplement the issues addressed below and should be addressed and **responded to separately**.

I. NEPA'S PURPOSE AND GOALS

NEPA has two basic requirements, neither of which the DEIS satisfies. First, NEPA requires that agencies take a "hard look" at the environmental consequences of a proposed action.⁶ A hard look is defined as a "reasoned analysis containing quantitative or detailed qualitative information."⁷ The level of detail must be sufficient to support reasoned conclusions by comparing the amount and the degree of the impact caused by the proposed action and the alternatives.⁸ Second, NEPA review makes information on the environmental consequences of a proposed action available to the public, which may then offer its insight to assist the agency's decision-making.⁹

An EIS is an "action-forcing device" which ensures that NEPA's requirements are infused into the ongoing programs and actions of the federal government.¹⁰ It is more than just a disclosure device, but a device used by federal agencies to plan actions and make decisions.¹¹ An EIS must provide a full and fair discussion of every significant impact, as well as inform decision-makers and the public of reasonable alternatives which would avoid or minimize adverse impacts.¹² It should be "concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses."¹³ A concise and clear EIS that is supported by evidence ensures that federal agencies are informed of environmental consequences **before** making decisions and that the information is available to the

⁶ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); *Dubois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1284 (1st. Cir. 1996).

⁷ BUREAU OF LAND MANAGEMENT, NEPA HANDBOOK 55 (Jan. 2008) [hereinafter NEPA Handbook].

⁸ NEPA Handbook p. 55; *see also* 40 C.F.R. § 1502.1 (2009).

⁹ *See Robertson*, 490 U.S. at 350; *Dubois*, 102 F.3d at 1284.

¹⁰ 40 C.F.R. § 1502.1.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

public.¹⁴ As the Council on Environmental Quality (“CEQ”) explains in its regulations, “[e]nvironmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.”¹⁵

The DEIS for the proposed Project fails to comply with these basic requirements. First, the lack of complete, accurate and consistent information in the DEIS precludes an informed comparison of the alternatives and an analysis of the Proposed Action. Second, the BLM failed to take a hard look at all of the Project’s impacts. Third, the BLM impermissibly limited its alternatives analysis by relying on an arbitrarily narrow purpose and need statement. Finally, the BLM violated NEPA’s integration requirement by not conducting joint review under both NEPA and CEQA. For these reasons, the DEIS precludes a meaningful analysis of the Project, and the BLM must prepare and recirculate a joint DEIS/EIR before making a decision.¹⁶

II. INFORMATION IN THE DEIS IS INCOMPLETE, INCONSISTENT AND INACCURATE

A complete and consistent description is necessary for the public and decision makers to understand the effects of the proposed action and its alternatives.¹⁷ A clear description results in more focused and meaningful public input and BLM participation, a more complete identification of issues, development of reasonable alternatives, sound analysis and interpretation of effects, focused analysis and a sound and supportable decision.¹⁸ It follows that information in the DEIS that is incomplete, inconsistent and/or inaccurate will skew the environmental consequences analysis and prevent informed public input. Courts have held that “[w]here the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the

¹⁴ *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 758 (9th Cir. 1996).

¹⁵ 40 C.F.R. § 1502.2(g).

¹⁶ *Id.*

¹⁷ *See* 40 C.F.R. § 1502.15; *see also* *Laguna Greenbelt v. U.S. Dep’t of Transp.*, 42 F.3d 517, 528-29 (9th Cir. 1994) (reviewing plaintiff’s claim that inconsistent definition resulted in misleading analysis of project’s positive and negative effects).

¹⁸ NEPA Handbook p. 43.

alternatives, revision of an EIS [was] necessary to provide a reasonable, good faith, and objective presentation of the subjects required by NEPA.”¹⁹

The DEIS contains incomplete, inconsistent and inaccurate information that precludes a meaningful comparison of the alternatives and understanding of the Proposed Action. This violates the basic requirements of NEPA. The BLM must revise the DEIS to provide a reasonable, good faith and objective presentation of the affected environment and environmental consequences of the Proposed Action and its alternatives.

A. The DEIS fails to disclose BLM’s consultation and potential permit under the Endangered Species Act

The DEIS completely fails to disclose BLM’s required consultation under the Endangered Species Act (“ESA”) with the United States Fish & Wildlife Service (“USFWS”) for the federally and State threatened desert tortoise. The DEIS also completely fails to analyze the USFWS’s potential issuance of a biological opinion and incidental take permit under Section 7 of the ESA. Therefore, the DEIS is wholly inadequate. The BLM must disclose and analyze these activities in a revised DEIS that is circulated to the public for review and comment.

The ESA prohibits “take” of threatened and endangered species.²⁰ “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”²¹ “Harm” includes “the destruction or adverse modification of habitat resulting in potential injury to a species, including injury from impairment of essential behavioral patterns, such as breeding, feeding or sheltering.”²² Under ESA Section 7, a federal agency must initiate consultation with the USFWS “at the earliest possible time” whenever the agency proposes to undertake an action that “may affect” a listed species or species’ critical habitat.²³ If a “may affect” determination is made, which is certain for the proposed Project, then the USFWS must develop and issue a biological opinion containing terms and conditions to ensure that the activities are not likely to

¹⁹ Natural Res. Def. Council v. U.S. Forest Serv., 421 F.3d 797, 811 (9th Cir. 2005) (citing Animal Def. Council v. Hodel, 840 F.2d 1432, 1439 (9th Cir. 1988)).

²⁰ 16 U.S.C. § 1538 (2010).

²¹ 16 U.S.C. § 1532(19).

²² 50 C.F.R. § 17.3 (2009).

²³ 50 C.F.R. § 402.14(a).

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jeopardize protected species.²⁴ Furthermore, USFWS's issuance of a biological opinion requires environmental review under NEPA.

Here, despite protected species on the proposed Project site, there is no indication in the DEIS or its appendices that the BLM has initiated consultation under Section 7 of the ESA, or that the DEIS reviews the environmental effects of the USFWS's issuance of a biological opinion and incidental take permit. A total of seven desert tortoises were detected during surveys conducted in March and April on the Project site.²⁵ Incidental desert tortoise observations were also made during plant surveys conducted in May, and thirty-eight desert tortoise burrows were identified within the site and buffer zone.²⁶ The DEIS recognizes that the Project will cause both short- and long-term, as well as direct and indirect impacts, to federally protected tortoises.²⁷

Direct and indirect impacts to desert tortoises will be severe. For example, the tortoises could be susceptible to mortality from collisions with vehicles entering and leaving the site.²⁸ Clearing of the site and construction of the security fence could introduce feral dogs and the presence of raptors.²⁹ Vibrations of heavy equipment could cause burrows to collapse, burying the tortoises alive and destroying their habitat.³⁰ Tortoises forced to construct new burrows would be exposed to death by dehydration or upper respiratory tract disease.³¹ In addition, the spread of invasive plant species on the site, especially Sahara mustard, would cause an indirect loss to foraging habitat.³²

Because desert tortoises have been found on the site, and the Project will clearly impact the species, the BLM must undertake Section 7 consultation.

²⁴ See 16 U.S.C. § 1536.

²⁵ DEIS p. 3.6-21; CHAMBERS GROUP, INC., COMPREHENSIVE BIOLOGICAL RESOURCES ASSESSMENT FOR THE CHEVRON SOLAR PROJECT SITE 41 (July 2009) (quoting DEP'T OF FISH & GAME, A FIELD GUIDE TO LAKE AND STREAMBED ALTERATION AGREEMENTS SECTIONS 1600-1607 (1994)) [hereinafter Comprehensive Biological Assessment].

²⁶ DEIS p. 3.6-21.

²⁷ *Id.* at pp. ES-10, 4.6-13.

²⁸ *Id.* at p. 4.6-13.

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

The DEIS states that the *Applicant* has completed consultation with the USFWS and the California Department of Fish & Game (“CDFG”) and that all terms and conditions associated with these consultations would be implemented.³³ However, the DEIS and its appendices provide no evidence to support this statement, and no evidence that the *BLM* has consulted with the USFWS. In addition, the DEIS fails to disclose any of the terms and conditions the USFWS and CDFG require the Applicant to implement. Because the terms and conditions seem to include moving tortoises from the site, the DEIS must include a Translocation Plan with specific information including, but not limited to, the location of the translocation area, how the tortoises will be moved, when they will be moved and who will monitor their relocation.

In sum, the DEIS must disclose the status of BLM consultation with the USFWS, the terms and conditions imposed by the USFWS and the Translocation Plan. Without this information, it is impossible for the public to meaningfully assess the environmental effects and mitigation for impacts to the desert tortoise. Furthermore, without full public disclosure and opportunity for comment, USFWS will be required to conduct further environmental review under NEPA.

B. The BLM must accurately describe the amount of water the Proposed Action and alternatives will need during operation

The BLM must accurately describe the amount of water the Proposed Action and action alternatives will need. The DEIS does not contain any evidence, discussion, or information to support the determination that the Proposed Action would only require, at most, 45,000 gallons of water per year during operation.³⁴ The BLM must revise the DEIS to support its findings for both construction and operational water use, or acknowledge that the Project will likely require much more than 45,000 gallons of water per year during operation.

Photovoltaic (“PV”) solar panels require periodic rinsing to maintain their efficiency.³⁵ The amount of water needed for cleaning depends on a variety of factors such as dust fall, dust compaction, water waste, etc. Because the Project’s solar panels will likely need cleaning at least twice per year, Dr. Oliver Seely

³³ *Id.*

³⁴ *Id.* at pp. ES-8, 2-23, 4.5-4.

³⁵ Oliver Seely, *Some Observations on Photovoltaic Cell Panels*, <http://www.csudh.edu/oliver/smt310-handouts/solarpan/solarpan.htm> (Attachment E).
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estimated that the Proposed Action would require approximately 270,000 gallons per year for maintenance.³⁶ Dr. Seely's estimated water use is **six times** more than what the BLM determined the Project would require in the DEIS.³⁷

Dr. Seely's estimate is further supported by the estimated water use for other PV solar projects in the region. For example, the Mitigated Negative Declaration for the Boulevard Associates Kramer Junction Project states that the 20-MW PV solar facility "shall consume a 'minimal amount' of water for the occasional cleaning of panels as they become dusty throughout the year."³⁸ This "minimal amount" is approximately 150,000 gallons of water per year.

Stephanie Tavares, an environmental reporter for the *Las Vegas Sun*, compared the proposed operational water use for various PV solar projects.³⁹ She determined that 16,689 gallons of water per MW was required yearly to clean PV solar plants. Based on this assumption, the proposed Project would need approximately 751,005 gallons of water per year for maintenance.⁴⁰

As Dr. Seely's analysis in Attachment A and additional factual data indicate, the BLM likely underestimated the Project's proposed operational water use. Because the BLM underestimated the operational water use, the BLM may have also underestimated the Project's construction water use. The BLM must either support its initial determinations with factual evidence, or recalculate the Proposed Action's water use, as well as the water use necessary for each of the alternatives. Only then will the BLM's analysis of the environmental impacts become meaningful.

³⁶ Seely Comments p. 1.

³⁷ *Id.*

³⁸ SAN BERNARDINO COUNTY, KRAMER JUNCTION SOLAR ENERGY CENTER BOULEVARD ASSOCIATES, LLC 6 (March 2010), *available at* http://www1.sbcounty.gov/landuseservices/Public%20Notices/Projects/Boulevard%20Associates/Initial%20Study_final%2003042010.pdf (see excerpts in Attachment F).

³⁹ Stephanie Tavares, *Dirty detail: Solar Panels Need Water*, LAS VEGAS SUN, Sept. 18, 2009 (Attachment G).

⁴⁰ 16,689 x 45 = 751,005.

C. The DEIS's description of the Project's water source is incomplete

The specific *source of construction and maintenance water for the Project is not disclosed* in the DEIS. The DEIS states that water may be provided through a contract with one of the local large industrial or municipal water companies,⁴¹ from new or existing onsite wells,⁴² or the Mojave Water Agency.⁴³ The Project's environmental consequences will vary depending on the water source. Thus, the BLM must provide a complete and consistent description of the Project's water source so that the public may meaningfully assess the Project's impacts.

At this point, the BLM has completely failed to inform the public about the source of water and the environmental and public health effects from using such water for the Project. Water from an offsite source may require new infrastructure, modifications to existing infrastructure and/or additional federal, State and local approvals. The closest water company to the Project site is the Jubilee Mutual Water Company located approximately five miles away.⁴⁴ The Golden State Water Company also provides water to the Lucerne Valley area and is located approximately 20 miles away.⁴⁵ If the Jubilee Mutual Water Company and the Golden State Water Company do not have sufficient capacity to serve the Project, water may be provided from another water company in the desert area. Using water from any of these sources raises a myriad of potentially significant effects and legal issues that have not yet been addressed, including impacts on groundwater from increased extraction, impacts on State water from California's State Water Project, impacts on biological resources, land use, and air quality from construction of pipelines, availability and reliability of water supplies, legal entitlements, need for further right-of-ways, effects from trucking water to the site and others.

If the Project will receive water from new or existing onsite wells, the location of the wells, how the water will be pumped from the wells, when the water will be

⁴¹ DEIS pp. 2-23, 4.5-4.

⁴² *Id.* at p. 3.5-6.

⁴³ *See id.* at p. 3.5-3.

⁴⁴ *See* SAN BERNARDINO COUNTY, GENERAL PLAN, FIGURE 2-14C WATER PURVEYORS – DESERT REGION (Attachment H).

⁴⁵ Cornett comments p. 5.
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pumped from the wells, the effects of pumping water from the wells and the required federal, State and local approvals must be disclosed to the public.

The *Mojave Water Agency Watermaster Annual Report for Water Year 2008-09* identifies declining water levels in many of the Mojave Basin Area's subareas.⁴⁶ For example, the water levels in the Baja Subarea to the north and the Alto Subarea to the east are both experiencing declining water levels due to over pumping and limited recharge opportunities.⁴⁷

The DEIS recognizes that overdraft conditions already frequently occur because of overuse of the groundwater aquifer.⁴⁸ Well levels around the Project site fluctuate.⁴⁹ **Existing water providers within Lucerne Valley currently rely on groundwater from groundwater wells.⁵⁰ In addition, the groundwater basin provides two-thirds of the potable and non-potable water needs for users in the region.⁵¹** Thus, the Project's need for large amounts of construction and operational water would likely exacerbate overdraft conditions and cause an overall decline in water levels in the region.

Clearly, the BLM has not even begun to describe the Project's proposed water supply and the Project's affects on water resources. The BLM must provide a complete and consistent description of the Project's water source with an assessment of the Project's impacts on that source and disclose it to the public.

D. The DEIS's description of the Project's impacts to drainage systems is incomplete and inconsistent

The description of the Project's impacts to drainage systems is incompletely and inconsistently described in the DEIS. The DEIS states that the Project would utilize and maintain natural onsite drainages to minimize potential risk associated

⁴⁶ Memorandum from Valerie L. Wiegenstein, Watermaster Services Manager, Mojave Basin Area Water Master to Clerk of the Superior Court of Riverside County re Watermaster Annual Report for Water Year 2008-09 24-25 (May 2010) (see excerpts in Attachment I) .

⁴⁷ *Id.*

⁴⁸ DEIS p. 3.5-5.

⁴⁹ U.S. GEOLOGICAL SURVEY, NATIONAL WATER INFORMATION SYSTEM, GROUNDWATER LEVELS IN TOWNSHIP 04N, RANGE 02E (Attachment J).

⁵⁰ DEIS p. 3.15-10.

⁵¹ *Id.* at p. 3.5-5.

with likely geologic hazards.⁵² The DEIS also states, however, that “[t]he Proposed Action could modify on-site drainages.”⁵³ The Comprehensive Biological Resources Assessment recognizes that “[d]rainage systems in the Project site will be temporarily and permanently impacted by the proposed solar project.”⁵⁴ The BLM must revise these inconsistencies and provide a complete description of the Proposed Action’s impacts to natural drainage systems.

Specifically, if drainage systems will be modified, the DEIS must disclose what modification will occur, which drainages will be impacted and to what extent the drainages will be modified.⁵⁵ This is fundamental information that is required to provide the public an opportunity to meaningfully compare the Proposed Action with the alternatives. For example, to compare alternatives, the public must know whether the Proposed Action would modify the same drainages as Alternative 4. In addition, there may be an alternate site design that will impact drainages less.⁵⁶

The DEIS must also describe what fill material the Applicant will use to modify the drainages.⁵⁷ If cement is used for bank stabilization and protection for transition and curve segments, the Project will significantly impact the ability of wildlife to utilize the surrounding area.⁵⁸ If the Applicant will use natural substrate (i.e. compacted earthen material along with rip rap), however, impacts to biological resources may be reduced.⁵⁹

The BLM’s failure to provide even basic information on impacts to drainages precludes meaningful public input on the Proposed Action’s affect on drainages and on alternatives to the Proposed Action. The BLM must provide this information so that it can take a hard look at impacts to the drainages and provide mitigation where feasible. Feasible mitigation measures include compensation to restore and enhance bioswales and downstream drainages.⁶⁰

⁵² *Id.* at pp. ES-6, ES-7.

⁵³ *Id.* at p. 1-12.

⁵⁴ Comprehensive Biological Assessment p. 59.

⁵⁵ Toure comments p. 2.

⁵⁶ *See id.* at p. 5.

⁵⁷ *Id.* at p. 2.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.* at p. 3.

E. The BLM must describe storm drainage

The BLM failed to describe whether storm water will be drained from the site through newly constructed drainages or through natural onsite drainages. This information is necessary for a complete analysis. For example, if the Applicant will construct designated storm drains, additional grading will be necessary.⁶¹ In addition, if natural onsite drainages are used, the DEIS should discuss their carrying capacity and the possibility of overflow.⁶² The BLM must provide this information so that all of the Project's impacts can be assessed.

F. The BLM must prepare a Hydrology Report and finalize the Storm Water Pollution Prevention Plan

The BLM must provide the public with a complete and final Hydrology Report and Storm Water Pollution Prevention Plan ("SWPPP") before approving the Project. Information normally contained in these reports helps the public understand and assess the water table, the natural flow pattern onsite and offsite and the Applicant's measures to address flooding.⁶³ Without the basic information contained in these reports, the public cannot meaningfully assess the Project's impacts.

G. The DEIS's description of the Project's Restoration Plan is incomplete

The BLM must provide a complete and consistent description of the Project's Restoration Plan before it issues a decision. The Biological Assessment references "an approved" Restoration Plan.⁶⁴ However, the DEIS and its appendices contains no Restoration Plan to enable the public to meaningfully review the Project's effects.

The BLM must disclose the Applicant's Restoration Plan so that decision makers and the public will understand all of the Proposed Action's impacts. For example, if restoration of the site requires revegetation, the Project may impact

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ CHAMBERS GROUP, INC., DRAFT BIOLOGICAL ASSESSMENT FOR THE CHEVRON SOLAR PROJECT SITE 22, 24 (Sept. 2009) .
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native vegetative communities.⁶⁵ Project sites in California are often revegetated with creosote bushes from Texas.⁶⁶ Creosote bushes from Texas, however, are biologically different from California creosote bushes, and may overtake the native species.⁶⁷ Information about what plants will be used for revegetation, how drainages will be restored, whether wildlife will be reintroduced and what other restoration activities will be implemented, is necessary for a meaningful impacts analysis.

H. The DEIS inconsistently describes the Project site as both occupied and vacant

The DEIS inconsistently describes the Project area as both occupied and vacant and fails to clearly identify the location of structures. The DEIS states that “[t]here are several *occupied* buildings of unknown origin that are likely not permitted and graded dirt access roads, indicating there are residents living on the property illegally.”⁶⁸ The DEIS also states, however, that “[t]he site is undeveloped and *vacant* and has never been officially used for any commercial, agricultural, or industrial purposes.”⁶⁹ The BLM must revise this inconsistency to allow for a meaningful comparison of the alternatives and assessment of the Proposed Action.

If there are occupied buildings on the Project site, the BLM must disclose where the buildings are, what hazardous materials the buildings contain and whether the occupants of the buildings will leave the Project site before construction. Only with this information can the public and decision makers conduct a meaningful comparison of the alternatives and the Proposed Action’s environmental impacts.

For example, if there are existing structures south of Zircon Road, development of Alternative 5 would not require the destruction and removal of these structures. However, if the buildings are located north of Zircon Road, destruction of the buildings would be necessary under every action alternative, and workers may be exposed to asbestos, lead paint and other hazardous materials. In addition, if residents of the buildings will remain on the Project site during

⁶⁵ Cornett comments p. 5.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ DEIS p. 3.14-4 (emphasis added).

⁶⁹ *Id.* at p. 4.14-3 (emphasis added).

construction and/or operation, the DEIS should assess visual and noise impacts to onsite sensitive receptors. Depending on the location of the occupied buildings, Alternative 4 may reduce visual impacts to these onsite sensitive receptors.

The BLM must provide a consistent description of the Project site, so that a meaningful comparison of the alternatives and an assessment of the Proposed Action's environmental consequences are possible. The DEIS's description of the site as both occupied and vacant precludes a meaningful analysis. In addition, the DEIS's failure to describe the location of buildings precludes a meaningful analysis. The BLM must revise the DEIS to provide a consistent description that adequately compares the alternatives and evaluates the environmental impacts.

I. The DEIS's description of the Project site as mining land and an area with little or no mining activity is inconsistent

The description of the Project area is inconsistently described as both mining land and an area with little or no mining activity. The DEIS states that "[t]he Proposed Action would be located approximately eight miles east of the junction of Barstow Road and Old Woman Springs Road on partially disturbed *mining land*."⁷⁰ The DEIS also states, however, that "[t]he Proposed Action is located in an area with *little or no mining activity*, and no minerals are found on the site."⁷¹ The BLM must revise this inconsistency to avoid misleading statements and allow for a meaningful comparison of the alternatives and assessment of the Proposed Action.

The inconsistent description of the area as mining land with little or no mining activity is misleading to the public and affects the BLM's analysis of environmental consequences. The DEIS recognizes that Lucerne Valley has a rich mining history and that it is possible that mining claims occur within the Project area.⁷² The BLM's description of the site as having "little or no mining activity" is clearly inconsistent and misleading.

Furthermore, the BLM relies on this misleading statement to support its own conclusion that the Project would not restrict access to mineral resources and result in an irreversible and irretrievable commitment of mineral resources.⁷³ The

⁷⁰ *Id.* at p. 4.10-1 (emphasis added).

⁷¹ *Id.* at p. 4.18-5 (emphasis added).

⁷² *Id.* at p. 3.7-7.

⁷³ *Id.* at pp. 4.17-2, 4.17-3, 4.18-5.

misleading statement, therefore, precludes informed decision-making. The description of mineral resources on the site needs to be adequately determined and consistently described so that all of the impacts will be disclosed to the public and decision makers.

J. The DEIS's description of impacts to Joshua trees is inaccurate

The DEIS mischaracterizes the Project's significant impacts to Joshua trees. The DEIS states that no long-term direct impacts to Joshua trees are anticipated because these plants would be flagged for salvage and removed.⁷⁴ However, the DEIS provides no support for this statement.

Jim Cornett found that Joshua trees experience high rates of mortality during salvaging.⁷⁵ Mortality typically exceeds 50% and sometimes reaches 100%.⁷⁶ As set forth in Attachment B, the BLM must reassess the long-term significant impacts to Joshua trees.

K. The DEIS's description of impacts resulting from cutting and grubbing site vegetation is incomplete and inaccurate

The DEIS incompletely describes and mischaracterizes impacts resulting from mowing and grubbing activities. The DEIS states that long-term effects to vegetation from mowing would depend on the scale, intensity and duration of the activity.⁷⁷ It is unclear from the DEIS what "activity" will affect vegetation long-term, and why the BLM could not conclude that the impact would be significant.

The DEIS must contain a complete description of what activity will affect vegetation in the long-term. If the effects depend on the scale and intensity of mowing activities, impacts should be easy to assess. According to the DEIS, mowing will occur on 420 acres and will reduce vegetation to between six and twelve inches in height.⁷⁸ Because the scale and intensity of mowing activities is clearly defined, a biologist should be able to determine the long-term impacts to vegetation easily.

⁷⁴ *Id.* at pp. ES-8, 4.6-2, 4.6-3, 4.6-6.

⁷⁵ Cornett comments p. 3.

⁷⁶ *Id.*

⁷⁷ DEIS p. ES-8.

⁷⁸ *Id.*

Mr. Cornett found that long-term impacts will be significant. Desert perennials concentrate leaves, buds, blossoms, fruits and seeds in their outer branches.⁷⁹ Mowing and grubbing activities destroy those portions of the plants.⁸⁰ Grubbing also has a greater impact than grading because there is a potential for deeper penetration of the soil by the teeth of the plow.⁸¹ The BLM must accurately describe the significant long-term effects to vegetation from mowing and grubbing.

In sum, information in the DEIS is incomplete, inconsistent and inaccurate. Courts have held that “[w]here the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the alternatives, revision of an EIS [was] necessary to provide a reasonable, good faith, and objective presentation of the subjects required by NEPA.”⁸² The BLM must revise the DEIS to provide a reasonable, good faith and objective presentation of the affected environment and environmental consequences of the Proposed Action and its alternatives.

III. THE DEIS DOES NOT CONTAIN A HARD LOOK AT THE PROJECT'S IMPACTS

In an EIS, the agency must consider every significant aspect of a proposed action.⁸³ An EIS's discussion of environmental impacts forms the scientific and analytic basis for comparison of the alternatives.⁸⁴ The discussion of impacts must include both “direct and indirect effects (secondary impacts) of a proposed project.”⁸⁵ The impacts analysis must include a discussion of the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented.⁸⁶ An agency need not speculate about all conceivable impacts, but it must evaluate the

⁷⁹ Cornett comments p. 4.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Natural Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 811 (9th Cir. 2005) (citing *Animal Def. Council v. Hodel*, 840 F.2d 1432, 1439 (9th Cir. 1988)).

⁸³ *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983); *Dubois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996).

⁸⁴ 40 C.F.R. § 1502.16; *Dubois*, 102 F.3d at 1286.

⁸⁵ 40 C.F.R. 1502.16 (a), (b); *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992); *Dubois*, 102 F.3d at 1286.

⁸⁶ 40 C.F.R. § 1502.16.

reasonably foreseeable significant effects of the proposed action.⁸⁷ Reasonable foreseeability means that “the impact is sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.”⁸⁸

The DEIS does not consider all of the Project’s significant and foreseeable environmental impacts to biological resources, water resources, transmission and communication systems, mineral resources, noise, hazards and cultural resources. The BLM’s failure to take a hard look at the Project’s impacts violates the basic requirements of NEPA. The BLM must revise its impacts analysis and issue a supplemental EIS for public review and comment.

A. The BLM did not consider all of the Project’s impacts to biological resources

Jim Cornett, a certified wildlife biologist, reviewed the DEIS’s analysis of impacts on biological resources and special status species. Mr. Cornett determined that the BLM failed to take a hard look at all of the Project’s impacts. Therefore, the BLM must revise its analysis of the Project’s impacts to biological resources.

1. The BLM must evaluate the Project’s cumulative impacts to the Desert Tortoise

The DEIS recognizes that desert tortoises are present on the Project site and that construction and operation activities may impact the species.⁸⁹ Desert tortoises are listed as a threatened species under both the ESA and the California Endangered Species Act (“CESA”). Despite the protected status of desert tortoises, the BLM failed to take a hard look at the cumulative impacts caused by the Proposed Action and the action alternatives. The BLM must adequately evaluate the Project’s cumulative effects on the desert tortoise.

The DEIS concludes that there would be no cumulative effect, such as extirpation or change in status to desert tortoises, because they could move within the open spaces surrounding the various projects in the region.⁹⁰ According to Mr.

⁸⁷ *Sierra Club*, 976 F.2d at 768.

⁸⁸ *Dubois*, 102 F.3d at 1286 (citing *Sierra Club*, 976 F.2d at 767).

⁸⁹ See DEIS pp. 3.6-21, 4.6-13 – 4.6-14.

⁹⁰ *Id.* at p. 4.6-16.

Cornett, however, desert tortoises have site-restricted populations.⁹¹ The inability for desert tortoises to utilize the site where they typically feed, find shelter, or breed may cause stress and territorial battles and is most likely to result in death.⁹²

Three solar project ROWs are proposed or available within six miles of the Project,⁹³ totaling 31,752 acres of land devoted to solar projects in a six-mile radius.⁹⁴ The BLM must analyze what impact the loss of 31,752 acres of land within a six-mile radius will have on the long-term success of the species. The BLM must also rigorously compare the Proposed Action's cumulative effects with the reduced cumulative effects of Alternative 5 and the use of alternate sites.

2. The BLM must evaluate the Project's impacts to the California threatened Mojave ground squirrel

The DEIS fails to recognize the Project's significant impacts to the Mohave ground squirrel. Mohave ground squirrels are a State listed threatened species and may occur on the Project site and in the immediate Project vicinity. Construction and operation activities could significantly impact Mohave ground squirrels. The BLM must determine whether the Project may impact Mohave ground squirrels in order to mitigate impacts and comply with the CESA fully.

The CESA declares that it is the policy of this State to conserve and protect any threatened or endangered species and its habitat.⁹⁵ The CESA prohibits unauthorized "take" of protected species.⁹⁶ "Take" means "hunt, pursue, catch, capture, or kill a protected species."⁹⁷ "Take" is only permitted if the take is incidental to otherwise lawful activities and the "impacts" are minimized and "fully mitigated."⁹⁸ An incidental take permit is a discretionary project that requires environmental review under CEQA.⁹⁹

⁹¹ Cornett Comments p. 3.

⁹² *Id.*

⁹³ DEIS p. 3.18-9.

⁹⁴ *Id.* at p. 4.12-12.

⁹⁵ CAL. FISH & GAME CODE § 2052 (2010).

⁹⁶ CAL. FISH & GAME CODE § 2080.

⁹⁷ CAL. FISH AND GAME CODE § 86.

⁹⁸ CAL. FISH AND GAME CODE § 2081(b).

⁹⁹ CAL. PUB. RES. CODE § 21080(a) (2010); *see also* *Evntl. Prot. Info. Ctr. v. Cal. Dept. of Forestry & Fire Prot.*, 44 Cal.4th 459, 521 (Cal. 2008).

The Project may impact Mohave ground squirrels and trigger the “incidental take” provisions of the CESA. CDFG guidelines specify that surveys for Mohave ground squirrels be conducted on proposed project sites that support desert scrub vegetation and are within or adjacent to the Mohave ground squirrel geographic range.¹⁰⁰ The protocol mandates an initial visual survey of a project site.¹⁰¹ If no Mohave ground squirrels are detected visually, live-trapping is required for up to three sessions of five consecutive days each.¹⁰² If a Mohave ground squirrel is detected on the site, a project proponent must apply to CDFG for an incidental take permit and provide compensation, usually in the form of mitigation lands.¹⁰³

The Project site is within the Mohave ground squirrel’s range,¹⁰⁴ and the species has been observed within four miles of the Project site.¹⁰⁵ The Applicant conducted only one visual survey in May 2009, but failed to conduct any trapping studies on the Project site.¹⁰⁶ The Applicant did report that a Round-tailed ground squirrel was observed. However, Round-tailed ground squirrels are *impossible* to distinguish from Mohave ground squirrels during visual field surveys.¹⁰⁷ Thus, the biologist conducting the visual survey may have actually observed a Mohave ground squirrel.

Nevertheless, according to CDFG guidelines, because no Mohave ground squirrels were definitively identified during the visual survey, the Applicant should have conducted a trapping study. However, the Applicant failed to do so.¹⁰⁸ The failure to conduct trapping studies is inconsistent with CDFG guidelines.

Because the site provides suitable habitat for State protected Mohave ground squirrels, this species may be present on the site and significantly impacted by construction and operation activities. These activities could result in an unauthorized take under the CESA. The BLM must require the Applicant to

¹⁰⁰ Philip Lietner, *Current Status of the Mohave Ground Squirrel* 13 (2009), available at nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15148 (Attachment J).

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *See id.* at 12.

¹⁰⁵ CHEVRON, LUCERNE VALLEY SOLAR PROJECTS, PLAN OF DEVELOPMENT, BLM FILE CACA 49561 49 (Attachment K).

¹⁰⁶ DEIS pp. 3.6-18, 3.6-21; Comprehensive Biological Assessment p. 37.

¹⁰⁷ Cornett comments p. 6.

¹⁰⁸ DEIS p. 3.6-21.

conduct trapping surveys on the Project site so that it may adequately assess the Project's impacts and ensure compliance with the CESA.

In addition, the USFWS is considering listing the Mohave ground squirrel as an endangered species under the ESA. On April 27, 2010, the USFWS issued a 90-day finding on a petition to list the Mohave ground squirrel as endangered with critical habitat.¹⁰⁹ If the species is listed as endangered, BLM would need to consult with USFWS and request a biological opinion and incidental take permit before conducting any activity that may harm the species. Therefore, the BLM should consult with the USFWS regarding the Project's likely take of the species in order to ensure compliance with the federal ESA.

3. The BLM must evaluate the Project's impacts to the Western burrowing owl

The Western burrowing owl is protected by the Migratory Bird Treaty Act, considered a Bird of Conservation Concern by the USFWS and a Species of Concern in California.¹¹⁰ The burrowing owl's special status both federally and within the State mandates that the BLM take a hard look at any potential impacts the Project may have on the species. Because of BLM's failure to assume the presence of the burrowing owl on the site and the failure of the biologists to conduct a sufficient survey, the DEIS does not contain an adequate assessment of impacts to the Western burrowing owl. The BLM must revise the DEIS to contain a hard look at the Project's impacts to the species.

The DEIS acknowledges that suitable habitat exists on the site and that the species was observed in the area in the past.¹¹¹ During the burrowing owl survey, excrement and regurgitated pellets were observed on and near the site that were estimated to be about two to three years old.¹¹² However, no Western burrowing owls were actually observed during the surveys. Therefore, the DEIS does not contain any specific mitigation measures to ensure the protection of this species.

¹⁰⁹ Endangered and Threatened Wildlife and Plants: 90-day Finding on a Petition to List the Mohave Ground Squirrel as Endangered with Critical Habitat, 75 Fed. Reg. 22,063 (April 27, 2010), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2010_register&docid=fr27ap10-22.

¹¹⁰ U.S. FISH & WILDLIFE SERV., STATUS ASSESSMENT & CONSERVATION PLAN FOR THE WESTERN BURROWING OWL IN THE UNITED STATES pp. 4-5 (2003).

¹¹¹ DEIS pp. ES-10, 4.6-12.

¹¹² *Id.* at p. 3.6-21.

Although no burrowing owls were observed during the surveys, the species may still be present on the site. According to the CDFG, a site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow within the last three years.¹¹³ The DEIS does not state when the species was observed on the Project site in the past. However, excrement and regurgitated pellets are evidence that the species may have occupied the site within the last three years. Thus, the BLM should assume that the site is occupied by the Western burrowing owl.

The biologists may have also missed observing a burrowing owl because the surveys were deficient. According to Mr. Cornett, owl surveys are frequently conducted with binoculars and involve looking upward to identify flushed owls and listening for owl calls.¹¹⁴ The burrowing owl surveys conducted for the Project, however, seem to have been conducted in conjunction with desert tortoise surveys.¹¹⁵ If the surveys were in fact conducted at the same time, it is likely that biologists may have missed observing the burrowing owl because they were looking down. Tortoise surveys do not require the biologist to look upward towards flushing owls, listen for calls or use binoculars.¹¹⁶

It is important that the BLM specifically determine whether the Western burrowing owl is present on the site in order to mitigate potentially significant impacts. The BLM must assume that the Western burrowing owl is present on the site, or require the Applicant to redo the survey using proper methods.

4. The BLM must evaluate the Project's impacts to the Golden eagle

The Golden eagle is protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Act. The DEIS recognizes that Golden eagles are common in the Mojave Desert. However, because no Golden eagles were identified during the avian point-count survey, the DEIS does not contain an impact analysis or mitigation measures.¹¹⁷

¹¹³ DEP'T OF FISH & GAME, STAFF REPORT ON BURROWING OWL MITIGATION 2 (Oct. 17, 1995) (Attachment L).

¹¹⁴ Cornett comments p. 6.

¹¹⁵ DEIS p. 3.6-21.

¹¹⁶ Cornett comments p. 6.

¹¹⁷ Comprehensive Biological Assessment p. 16.

The USFWS is currently developing protocol for Golden eagle surveys. Because nesting sites are within ten miles of the Project site and typical prey species occur on the Project site, Mr. Cornett expects that the Project site lies within the hunting territory of the Golden eagle.¹¹⁸ The BLM should consult with the USFWS and conduct a focused survey for this species.

5. The BLM must evaluate the Project's impacts to rare plants

The DEIS does not provide a full and fair discussion of impacts to rare plants because none of the twelve special-status plants were found during the deficient onsite survey.¹¹⁹ According to Mr. Cornett, the surveys were conducted only two days apart in a year when precipitation was far below average.¹²⁰ The BLM must require the Applicant to conduct an adequate plant survey so that impacts to rare plants are identified and mitigated.

6. The BLM must evaluate the Project's impacts to mesquite plants

The DEIS does not include *any* discussion about the Project's impacts to mesquite plants. Using large amounts of well water may cause overdraft conditions, which may impact mesquite plants.¹²¹ Mesquite plants are vitally important to the region as a source of food and shelter to wildlife.¹²² Thus, direct impacts to mesquite plants may indirectly impact wildlife and sensitive species. The BLM must take a hard look at impacts to mesquite plants in order to adequately assess indirect impacts to biological resources.

7. The Project must evaluate impacts to creosote rings

The DEIS does not include *any* discussion about the Project's impacts to creosote rings. The BLM must evaluate conflicts between the Project and local

¹¹⁸ Cornett comments p. 7.

¹¹⁹ DEIS p. 4.6-11; Cornett comments p. 6.

¹²⁰ Cornett comments p. 6.

¹²¹ Cornett comments p. 7.

¹²² *Id.*

regulations.¹²³ The Plant Protection and Management Ordinance in the San Bernardino County Development Code regulates the removal of plants.¹²⁴ The Code states that creosote scrubs may not be removed from a project site if they form a ring ten feet or greater in diameter.¹²⁵ The DEIS states that the Project site is comprised of creosote scrub vegetation that may be impacted by mowing and grubbing activities.¹²⁶ Impacting creosote scrubs that form a ring ten feet or greater in diameter would conflict with the County Development Code.

The BLM must take a hard look at whether the Project will impact creosote rings and, thereby, conflict with the Development Code.

8. The BLM must evaluate the impacts of herbicide use

The BLM must take a hard look at impacts associated with herbicide use for weed abatement. The DEIS recognizes that the Project would directly affect native vegetation by allowing the increase of invasive weeds, such as Sahara mustard, to spread in the disturbed areas.¹²⁷ The Weed Control Plan submitted by the Applicant and the DEIS both note that herbicides would be used to control the weeds.¹²⁸

The BLM must not approve use of these herbicides until specific studies have been conducted indicating that they are harmless. According to Mr. Cornett, herbicides that may be approved can still cause a cancer outbreak in humans and/or serious mutations in wildlife.¹²⁹ The BLM must identify which herbicides will be used and disclose any studies that prove the herbicides are harmless, or take a hard look at the Project's impacts to human health and biological resources.

¹²³ 40 C.F.R. §§ 1506.2(d), 1502.16; NEPA Handbook p. 55; DEIS p. 3.6-2.

¹²⁴ San Bernardino County Development Code § 88.01.060.

¹²⁵ San Bernardino County Development Code § 88.01.060, (c).

¹²⁶ DEIS pp. 3.6-3, 4.6-11.

¹²⁷ *Id.* at pp. 4.6-5, 4.6-7, 4.6-11.

¹²⁸ *Id.* at p. 4.14-2; CHEVRON ENERGY SOLUTIONS, WEED CONTROL PLAN 6.7-6.8 (Jan. 2010).

¹²⁹ Cornett comments p. 5.

9. The BLM must evaluate the tortoise-proof fence's impacts to species' foraging patterns

The DEIS recognizes that construction of the exterior fence could increase the presence of natural predators and adversely affect desert tortoise breeding migrations.¹³⁰ However, the DEIS fails to recognize the fence's significant impacts to desert tortoise foraging. In a desert environment, where resources are in short supply, forcing desert tortoises to travel farther to locate food may cause significant stress on the species and mortality.¹³¹ The BLM must take a hard look at the Project's impacts to desert tortoise foraging habits.

In conclusion, the BLM clearly did not consider every reasonably foreseeable significant impact of the Project. The BLM's failure to take a hard look at biological resources precludes a meaningful analysis by the public and violates NEPA. A revised supplemental DEIS/EIR must be prepared and recirculated by the BLM prior to Project approval.

B. The BLM did not consider all of the Project's impacts to water resources

T'Shaka Toure, an expert hydrologist, reviewed the DEIS with respect to significant impacts on water resources. Mr. Toure determined that the BLM failed to take a hard look at all of the Project's impacts. The BLM must revise its analysis of the Project's impacts to water resources.

1. The BLM did not discuss impacts associated with an increased operational water use

As discussed above, it is likely that the BLM underestimated the amount of water the Applicant would need to clean the solar panels. The DEIS, therefore, contains no discussion of what impact using *at least* 270,000 gallons of water per year would have on the environment. The BLM must reassess the impacts associated with increased operational water use.

¹³⁰ *Id.* at p. 4.6-13.

¹³¹ Cornett comments p. 4.
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The first impact the BLM must reassess is whether the Project will cause an irreversible and irretrievable commitment of water resources. While the DEIS concludes that the Project will not cause an irreversible and irretrievable commitment of water resources to the point where they would not be available for other users, that conclusion was based on an arbitrarily low and unsupported water use estimate. A more reliable estimate is that the Project will use at least **six times more water** than what was disclosed in the DEIS. Therefore, it is likely that the Project may contribute to a significant overdraft of the aquifer and cause an irreversible and irretrievable commitment of water resources. The BLM must take a hard look at this significant impact.

The second impact that the BLM must reassess is whether the large amount of operational water will cause artificial flood events to occur on the Project site. It is unclear whether this water will permeate into the soil and whether onsite drainages have the capacity to convey large amounts of water offsite. Runoff water may create ephemeral ponding locations and/or flooding events.¹³² The BLM did not evaluate measures for containing large amounts of sheet flow and runoff water from this activity in the DEIS.¹³³

To mitigate impacts associated with runoff water, the BLM should require the Applicant to plant native emergent vegetation in locations where the flows will exit the Project site.¹³⁴ Native plants around the drainage outlet locations would provide beneficial cover and refugia for wildlife species.¹³⁵ The BLM should also require the Applicant to implement bioswales and/or catchment basins.¹³⁶ Bioswales and catchment basins could remove silt and pollution from surface runoff water, as well as provide another source of refugia, cover and food for wildlife.¹³⁷

The BLM must take a hard look at the Project's impacts to water users, the groundwater aquifer and flooding that result from using at least 270,000 gallons of water per year to clean the solar arrays.

¹³² Toure comments p. 4.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.*

2. The BLM did not consider compliance with Section 1602 of the California Fish & Game Code

The Project requires a streambed alteration agreement from the CDFG under Section 1602 of the Fish & Game Code. However, the BLM has completely ignored this and any other State requirement. Fortunately, under NEPA, the BLM's effects analysis must identify possible conflicts between the Project and State laws and regulations.¹³⁸

The California Fish & Game Code requires project applicants to obtain a streambed alteration agreement from the CDFG before substantially diverting, obstructing, or changing a river, stream, or lake.¹³⁹ A "stream" is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life.¹⁴⁰ This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.¹⁴¹

The CDFG must issue a streambed alteration agreement before this Project can proceed. The proposed Project site contains several streams under the jurisdiction of the CDFG.¹⁴² Construction of the Project will alter the natural flow patterns of these streams where concrete pads and structures are installed, and within the solar array field.¹⁴³ Thus, development of the proposed Project will temporarily and permanently impact these streams.¹⁴⁴ The CDFG must issue a streambed alteration agreement before the Project Applicant impacts these drainage systems.

Because a streambed alteration agreement is required from the CDFG before modifications to the drainages can occur, the BLM must ensure that the Applicant complies with Section 1602 of the Fish & Game Code before approving the Project.¹⁴⁵ Failure to receive the necessary permits could jeopardize downstream

¹³⁸ 40 C.F.R. §§ 1506.2(d), 1502.16(c); NEPA Handbook p. 55.

¹³⁹ CAL. FISH & GAME CODE § 1602.

¹⁴⁰ Comprehensive Biological Assessment p. 19 (quoting DEP'T OF FISH & GAME, A FIELD GUIDE TO LAKE AND STREAMBED ALTERATION AGREEMENTS SECTIONS 1600-1607 (1994)).

¹⁴¹ *Id.*

¹⁴² *Id.* at p. 59.

¹⁴³ DEIS p. 4.5-3.

¹⁴⁴ Comprehensive Biological Assessment p. 59.

¹⁴⁵ DEIS p. 2-16; Comprehensive Biological Assessment p. 59.

drainages and wildlife, as well as violate California law.¹⁴⁶ The BLM must revise the EIS to reflect and disclose compliance with the Fish & Game Code.

3. The BLM did not consider compliance with the California Porter Cologne Water Quality Control Act

The Project Applicant must comply with waste discharge requirements (“WDRs”) of the Regional Water Quality Control Board (“RWQCB”), pursuant to the California Porter Cologne Water Quality Control Act.¹⁴⁷ However, the BLM has completely ignored this and any other State requirement. Fortunately, under NEPA, the BLM must identify this conflict and evaluate the Project’s compliance with the statute.¹⁴⁸

The State regulates discharges of material into waters of the State pursuant to the California Porter Cologne Water Quality Control Act.¹⁴⁹ Discharges into waters determined to be within the jurisdiction of the State must abide by all prescribed WDRs. The RWQCB is required to prescribe WDRs for any potential discharge into State waters.¹⁵⁰

The DEIS clearly states that the Project will discharge storm water into State waters.¹⁵¹ The Project may also discharge at least 270,000 gallons of non-storm water runoff when the solar panels are cleaned.¹⁵² Because the Project will discharge storm water and non-storm water into State waters, either the Colorado River Basin RWCQB or the Lahontan RWQCB must prescribe WDRs.

The BLM must identify that the Applicant has not applied for WDRs and no WDRs have been certified for the Project. Approval of the Project by the BLM may, therefore, promote a violation of California law by allowing the Applicant to proceed without all of the necessary permits and approvals. The BLM must evaluate the potential conflict with State law.

¹⁴⁶ See Toure comments p. 5.

¹⁴⁷ CAL. WATER CODE §§ 13000 et seq. (2010).

¹⁴⁸ 40 C.F.R. § 1502.16(c).

¹⁴⁹ CAL. WATER CODE §§ 13000 et seq.

¹⁵⁰ CAL. WATER CODE § 13263(a).

¹⁵¹ DEIS p. 3.5-2.

¹⁵² Seely comments p. 1.

4. The BLM must ensure compliance with other federal and State laws governing jurisdictional waters

According to Mr. Toure, the jurisdictional delineation does not contain sufficient information to adequately and specifically determine jurisdiction of the waters on and impacted by the Project site.¹⁵³ Specifically, the delineation relies on incomplete soil data.¹⁵⁴ Further soils surveys are required to support the findings in the jurisdictional delineation.¹⁵⁵ As disclosed, the jurisdictional delineation is faulty.

C. The BLM did not consider all of the Project's impacts associated with new transmission and communications systems

1. The BLM must consider significant impacts associated with new communications systems

The BLM must provide a full and fair discussion of the impacts associated with the installation of new communication systems. The DEIS states that new communications systems between the site switchyard and the Cottonwood Substation would be required.¹⁵⁶ While the DEIS concludes that construction of the “[c]ommunications systems would be expected to require only minimal site disturbance to implement,” there is no discussion or evidence to support this conclusion.¹⁵⁷ The BLM must provide more information about where utility poles will be placed, whether an offsite corridor must be established, and what impacts would be associated with installing new communications systems.

2. The BLM must consider all significant impacts associated with the Project's energy transmission

The BLM must provide a full and fair discussion of all impacts associated with the Project's energy transmission. As it is currently written, the DEIS provides nothing more than a list of upgrades the Project requires to transmit

¹⁵³ Toure comments p. 5.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ DEIS p. 2-16.

¹⁵⁷ *Id.* at p. 2-16.

energy to the Cottonwood Substation, and it is unclear whether those upgrades will even be sufficient. The BLM must revise the DEIS to include an evaluation of the Project's transmission needs as well as all impacts associated with conveying energy from the Project site.

The DEIS states that Phase I of the Proposed Action would interconnect to the existing Southern California Edison ("SCE") 33-kV transmission line without an upgrade to the existing line.¹⁵⁸ During Phase I, a 33-kV transmission line segment would be constructed across Foothill Road.¹⁵⁹ Phase II would require "reconductoring" (i.e. replacing the existing wire with heavier wire and reusing the existing cross arms and insulators) of the existing SCE transmission line back to the Cottonwood Substation.¹⁶⁰ It is unclear, however, whether Phase II would require additional upgrades. The DEIS acknowledges actual transmission line capacity would have to be verified by a Transmission Study.¹⁶¹ The DEIS also states that new "transmission poles" would be installed.¹⁶²

The BLM must conduct a Transmission Study and make it available to the public before approving the Project. If the BLM does not identify the transmission line capacity, it cannot know what transmission upgrades the Project will require. Failure to identify and describe all aspects of the Project also impacts the BLM's analysis of environmental consequences. This violates NEPA.

In addition, the BLM has not taken a hard look at impacts associated with the transmission upgrades it has already identified as necessary. For example, the DEIS must discuss impacts associated with reconductoring. If machinery is used to replace existing wire with heavier wire, there could be direct and indirect impacts to biological resources, traffic, visual, noise and air quality. The DEIS must also discuss all impacts with installing any new transmission poles offsite.

Agencies frequently overlook impacts associated with transmitting energy. The BLM must provide more information and discuss all of the impacts associated with connecting to the Cottonwood Substation. The impacts analysis must be supported with a Transmission Study.

¹⁵⁸ *Id.* at p. ES-4.

¹⁵⁹ *Id.* at p. ES-13.

¹⁶⁰ *Id.* at p. 2-5.

¹⁶¹ *Id.* at p. 2-20.

¹⁶² *Id.* at p. 2-19.

3. The BLM did not consider cumulative significant impacts to transmission

The BLM's analysis of cumulative impacts to transmission is cursory at best. While the DEIS recognizes that complete build out of the Proposed Action would cause a cumulative effect, it concludes that "it is unlikely that the Proposed Action would add sufficient power to electric transmission system to require high voltage transmission lines or new substations."¹⁶³ The BLM's logic is faulty, and the agency must reassess its cumulative impact analysis.

First, without a Transmission Study, the BLM cannot conclude that energy from the Proposed Action would not be sufficient enough to require significant transmission upgrades. There is no evidence or basis for that determination. Second, cumulative impacts can result from "individually minor" actions that contribute to a collectively significant impact.¹⁶⁴ Thus, even if the Proposed Action itself would not add sufficient power to require significant transmission upgrades, the Proposed Action's contribution, along with the other energy projects in the region, may be sufficient.

The BLM must take a hard look at the Project's cumulative impacts to transmission. The BLM must also provide more information about the transmission needs of the other action alternatives so that a meaningful comparison can be made.

D. The BLM did not consider all direct and indirect noise impacts to sensitive species and sensitive receptors

The BLM must take a hard look at construction and operation noise impacts to sensitive species. The DEIS notes that sensitive receptors, such as nearby residences and special management areas, may be impacted by construction and operation noise from the Project.¹⁶⁵ There is no acknowledgement in the DEIS, however, that wildlife may be impacted by construction and operation noise. Sounds that are rare or even minor may have a negative impact on wildlife and

¹⁶³ *Id.* at p. 4.11-4.

¹⁶⁴ 40 C.F.R. §1808.7.

¹⁶⁵ *Id.* at pp. 3.2-8 – 3.2-11.

sensitive species in the area.¹⁶⁶ The BLM must take a hard look at noise impacts to wildlife and sensitive species.

E. The BLM did not consider impacts from hazardous materials

Although the DEIS identified prospecting features in the Project area, the BLM failed to take a hard look at potential health risks associated with previous mining activities on the site. Matt Hagemann, an expert in hazardous materials, reviewed the DEIS with respect to hazards associated on the site from remnants of hand-dug mining pits. In his comments, he concludes that unevaluated significant impacts to construction workers and future site workers from mining debris may occur.¹⁶⁷ Those impacts include dermal contact and ingestion of dust with soils that may contain metals at concentrations that are hazardous to human health.¹⁶⁸

Mr. Hagemann recommends that the BLM conduct a Phase I Environmental Site Assessment to evaluate these potential human health risks. If the Phase I Assessment finds the mining debris to represent potential human health risks, a Phase II Environmental Site Assessment should be conducted to include sampling of the debris.¹⁶⁹ To assess the Project's impacts adequately, the BLM must conduct a Phase I Assessment and include the results in a revised DEIS that is circulated for public review.

F. The BLM did not consider all impacts to cultural resources

The DEIS acknowledges that five ethnic groups historically used the Proposed Action area: the Mohave, Kawaiisu, Southern Paiute (Las Vegas and Chemehuevi groups), Vanyume/Serrano and Western Shoshone. The BLM neglected to notify all of the tribes, however, about the Proposed Action.¹⁷⁰ The BLM's failure to consult with all of the tribes that have historic ties to the Project area precludes an analysis of all of the Project's foreseeable impacts.

¹⁶⁶ Cornett comments p. 6.

¹⁶⁷ Hagemann comments p. 2.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *See* DEIS p. 3.7-8 (neglecting to notify Chemehuevi tribe among others).

For example, the BLM did not notify the Chemehuevi tribe about the Proposed Action. The Chemehuevi tribe considers all of San Bernardino County and parts of Riverside, Kern and Inyo Counties its ancestral, historical homeland.¹⁷¹ The Mojave River was a major trade route for the Chemehuevi and ancient burial sites, camp sites, “sleeping circles” and village sites may be found in the region.¹⁷² Victorville was most likely the ancient Chemehuevi village of Atongiabit.¹⁷³

Because Lucerne Valley is only twenty miles from the Chemehuevi’s ancient village and major trade route, it is likely that the Chemehuevi used the Project area and have ties to the land. The BLM must consult with the Chemehuevi, and all tribes that have ties to the land, to determine if there are historical resources that have not been identified. Failure to do so arbitrarily limits the BLM’s hard look at the Project’s impacts and conflicts with Section 106 of the National Historic Preservation Act.

IV. THE PURPOSE AND NEED STATEMENT IS ARBITRARILY NARROW AND PROMOTES PRIVATE INTERESTS

An EIS must briefly describe the underlying purpose and need to which the agency is responding in proposing the alternatives, including the Proposed Action.¹⁷⁴ The BLM’s *NEPA Handbook* mandates that the purpose and need statement for an externally generated action must describe the BLM’s purpose and need, not an applicant’s or external proponent’s purpose and need.¹⁷⁵ The “need” for the action is the underlying problem or opportunity to which the BLM is responding with the action.¹⁷⁶ The “purpose” is the goal or objective that the BLM is trying to reach.¹⁷⁷ Clearly distinguishing the purpose and the need clarifies for the public and decision makers why the agency is proposing to spend large amounts of taxpayers’ money, while at the same time causing significant environmental impacts.¹⁷⁸

¹⁷¹ Letter from Charles F. Wood, Chairman, Chemehuevi Indian Tribe, to Doug Feremenga, San Bernardino County Land Use Services Department/Planning Division 1 (Nov. 12, 2009) (Attachment P).

¹⁷² *Id.* at p. 2.

¹⁷³ *Id.*

¹⁷⁴ 40 C.F.R. § 1502.13.

¹⁷⁵ NEPA Handbook p. 35 (citing 40 C.F.R. § 1502.13).

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ RONALD E. BASS ET AL., *THE NEPA BOOK* 89 (2d. ed. 2001).

The DEIS contains an arbitrarily narrow purpose and need statement that impermissibly promotes private objectives. The purpose and need statement sets out one simple goal: “to process a ROW application.”¹⁷⁹ This narrowly defined statement implies that BLM stands to gain nothing more than a rubber-stamped document at the end of this process. It is nonsensical to think that the BLM would spend taxpayer money and impact the environment for such an inconsequential result.

The statement fits the Applicant’s goals and objectives better than the BLM’s. According to the DEIS, the Applicant has two goals: (1) promote solar technology, and (2) develop 45 MW of energy on public land to maintain a profit margin.¹⁸⁰ While it is unclear what the BLM would gain from the Project, a ROW application rubber stamped “approved” would clearly help the Applicant meet its goals. Thus, the arbitrarily narrow purpose and need statement promotes the Applicant’s objectives instead of the BLM’s.

V. THE DEIS OMITTS REASONABLE ALTERNATIVES

Under NEPA, federal agencies must consider alternatives to their proposed actions as well as their environmental impacts.¹⁸¹ The alternatives analysis has been called the “linchpin” of an EIS.¹⁸² An EIS must “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.”¹⁸³ It is “absolutely essential to the NEPA process that the decisionmaker be provided with a detailed and careful analysis of the relative environmental merits and demerits of the proposed action and possible alternatives, a requirement that [courts] have characterized as ‘the linchpin of the entire impact statement.’”¹⁸⁴ This is particularly true in cases where there may be “unresolved conflicts concerning alternative uses of available resources.”¹⁸⁵

¹⁷⁹ DEIS p. 2-32; *see also* p. 1-1 (“BLM’s purpose and need for the Lucerne Valley Solar Project EIS is to respond to CES’s application . . . for a right-of-way (ROW) grant”).

¹⁸⁰ DEIS p. 1-5.

¹⁸¹ 40 C.F.R. § 1502.14.

¹⁸² *Monroe County Conservation Council v. Volpe*, 472 F.2d 693, 697-98 (2d Cir. 1972).

¹⁸³ 40 C.F.R. § 1502.14(a).

¹⁸⁴ *Natural Res. Def. Council v. Callaway*, 524 F.2d 79, 92 (2d Cir. 1975) (citation omitted); *see also* *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10th Cir. 1992) (holding that thorough discussion of alternatives is “imperative”).

¹⁸⁵ *See* 42 U.S.C. § 4332(E); *California v. Block*, 690 F.2d 753, 766-67 (9th Cir. 1982).

The range of alternatives to be discussed is governed by a “rule of reason.” Reasonable alternatives are alternatives that are practical and feasible from a technical and economic standpoint, rather than simply desirable from an applicant’s standpoint.¹⁸⁶ “The ‘existence of a viable but unexamined alternative renders an environmental impact statement inadequate.’”¹⁸⁷ Courts have shown little reluctance in striking down an EIS that fails to include a thorough discussion of reasonable, less environmentally damaging alternatives.¹⁸⁸ Finally, an EIS must include a discussion of “natural or depletable resource requirements (and conservation potential of various alternatives and mitigation measures).”¹⁸⁹

A. The BLM must consider alternate sites

1. The BLM’s failure to consider alternate sites was arbitrary and capricious

Courts have considered whether federal agencies violate NEPA by failing to consider possible alternative sites for a proposed project adequately.¹⁹⁰ The federal agency will violate NEPA if it impermissibly determines that alternate sites do not have to be considered.¹⁹¹ In this case, the BLM’s determination that alternative sites do not have to be considered is impermissible.

The BLM’s decision not to consider alternate sites is impermissible because it is based on an arbitrarily narrow purpose and need statement. The BLM may not adopt private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives.¹⁹² Yet, that was the result

¹⁸⁶ NEPA Handbook p. 50; CEQ, FORTY MOST ASKED QUESTIONS CONCERNING CEQ’S NEPA REGULATIONS No. 2(a) (1981).

¹⁸⁷ *Resources Ltd. v. Robertson*, 35 F.3d 1300, 1307 (9th Cir. 1993) (quoting *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir. 1992)); *see* *Grazing Fields Farm v. Goldschmidt*, 626 F.2d 1068, 1072 (1st Cir. 1980) (holding even existence of supportive studies and memoranda contained in administrative record but not incorporated in EIS cannot “bring into compliance with NEPA an EIS that by itself is inadequate.”)

¹⁸⁸ *See, e.g., Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1288 (1st Cir. 1996).

¹⁸⁹ 40 C.F.R. § 1502.16(f) (emphasis added).

¹⁹⁰ *See generally* *Natural Res. Def. Council v. Evans*, 232 F. Supp. 2d 1003, 1040 (N.D. Cal. 2002) (distinguishing holding in *Natural Resources Defense Council v. U.S. Dept. of the Navy* to determine whether failure to consider alternatives sites violated NEPA).

¹⁹¹ *See* *Natural Res. Def. Council*, 232 F. Supp. 2d at 1040 (citing *Natural Res. Def. Council v. U.S. Dep’t of the Navy*, 857 F.Supp. 734, 740 (C.D. Cal. 1994)).

¹⁹² NEPA Handbook p. 50.

of the process here. The BLM must consider reasonable alternatives, even if the Applicant does not like the alternative or is incapable of implementing the Project on an alternative site.¹⁹³ Thus, as drafted, the DEIS violates NEPA's basic requirement to consider alternatives.

2. The Project site is on undisturbed lands that are prone to flooding and may contain valuable mineral resources

The proposed Project site is not ideal for long-term energy generation. This particular site lies within mostly undisturbed desert habitat that contains untouched and intact environmental resources.¹⁹⁴ Disturbed areas, such as roads and sediment berms, make up only one percent of the site.¹⁹⁵ The rest of the site is characterized by desert scrub vegetation and desert washes.¹⁹⁶ Special-status species, such as the desert tortoise, were observed on the site.¹⁹⁷ In addition, many prehistoric and historic sites have been recorded between the Proposed Action site and the Victorville area.¹⁹⁸

This particular site is also prone to flooding events. According to the National Oceanic and Atmospheric Administration, Lucerne Valley was flooded in 1958, 1960, 1965, 1967, 1969, 1972, 2001, and twice in 2005 just six days apart.¹⁹⁹ It is likely that even more flash flood events occurred, because the study is not comprehensive.²⁰⁰ In fact, modeling, not included in the DEIS, suggests that flooding of the Project site is possible during episodic rain events.²⁰¹ Residents and resource agencies have also noted that this area is subject to intense flooding events, including flash floods.²⁰²

Finally, mineral extraction may be a beneficial and valuable use of the site. Gold, copper, silver, lead, sand, gravel, stone and uranium have all been prospected,

¹⁹³ See CEQ, FORTY MOST ASKED QUESTIONS CONCERNING CEQ'S NEPA REGULATIONS No. 2(a) (1981).

¹⁹⁴ See DEIS p. 3.11-2.

¹⁹⁵ *Id.* at pp. 3.5-4, 3.6-4, 3.6-7.

¹⁹⁶ *Id.* at p. 3.5-4.

¹⁹⁷ *Id.* at p. 3.6-8.

¹⁹⁸ *Id.* at p. 3.7-8; see also Attachment P.

¹⁹⁹ See generally NAT'L OCEANIC ATMOSPHERIC ADMIN., A HISTORY OF SIGNIFICANT WEATHER EVENTS IN SOUTHERN CALIFORNIA (January 2007) (listing flood events).

²⁰⁰ *Id.*

²⁰¹ DEIS p. 4.5-2.

²⁰² *Id.* at p. 4.5-2.

produced and/or processed within five miles of the Project site.²⁰³ It is likely, given the importance of mining in Lucerne Valley's history and the presence of mineral resources around the Project site, that valuable mineral resources are located on the Project site.

Because the Project site is on undisturbed land with potentially valuable mineral resources that is also subject to intense and frequent flooding, it is not ideal for long-term energy generation. The BLM must consider other sites that will reduce the Project's impacts and support energy generation.

3. An alternate site on disturbed land not subject to frequent flooding would reduce the Project's environmental impacts and be more conducive to long-term energy generation

The BLM should consider an alternate site on disturbed land. In the desert to the north of the Project site, as well as in Kings and Fresno Counties, there is an extensive amount of abandoned farmland that would facilitate long-term energy generation while reducing the Project's impacts on environmental resources.²⁰⁴ Both areas have existing infrastructure and are near roads and existing power lines.²⁰⁵ Because both areas have successfully been used for long-term agriculture use, it is also unlikely that the frequency of flash floods would impact long-term energy generation. The BLM must evaluate siting the Proposed Action on these alternate sites, or risk failing to evaluate a viable alternative.

B. The BLM must consider an alternative site design with four sides

The BLM must consider a four-sided alternative site design for the solar facility. The Proposed Action has twelve sides and a very high boundary-to-area ratio. The design of Alternatives 4 and 5 are not specified, but the DEIS implies that the design of the alternatives would be irregular as well. The BLM should

²⁰³ *Id.* at p. 3.17-3.

²⁰⁴ David Danelski, *Solar Energy Proposal Criticized Lucerne Valley: Chevron's Plans Could Disturb Threatened Species Some Say. Other Say Old Farmland is a Better Choice*, THE PRESS ENTERPRISE (July 31, 2009) (Attachment M) [hereinafter Attachment M]; Jason Dearen & Tracie Cone, *California Environmentalists, Growers Agree on Farmland Reuse for Solar*, DETROIT NEWS (March 22, 2010) (Attachment N) [hereinafter Attachment N].

²⁰⁵ Attachment M; Attachment N.

consider a project design with four sides to reduce the boundary-to-area ratio and minimize impacts to biological resources and drainage systems.

The high boundary-to-area ratio increases the Project's impacts to biological resources. Instead of impacting a discreet parcel of land, the Project's impacts are spread out in different directions and on different parcels.²⁰⁶ The solar arrays nearly surround one parcel and envelop large areas of three other parcels.²⁰⁷

A twelve-sided configuration also impacts species movements more than a project with four sides.²⁰⁸ Because there are twelve sides, there are twelve obstructions to migratory movement; there is no clear migratory path for species to move around the Project.²⁰⁹ A project with four sides, however, would have a clearer path for species to move around.

The BLM should consider approving this alternative instead of the Proposed Action. The Proposed Action will impact desert tortoises significantly, and may also impact the Western burrowing owl and Mohave ground squirrel. Implementation of this alternative, however, may significantly reduce the Project's impacts to sensitive biological resources.

C. The BLM must consider an alternative design the reduces impacts to drainage systems

The BLM must consider an alternative design that reduces impacts to drainage systems. As discussed above, the Project will impact the natural drainage systems that run through the Project site, which will in turn impact water quality and biological resources, as well as increase the potential for flooding on the Project site. The BLM should consider a site design that avoids, or significantly minimizes, these impacts.

Mr. Toure provided diagrams of two alternative site designs.²¹⁰ Both site designs completely avoided or significantly reduced impacts to the blue-line

²⁰⁶ Cornett comments pp. 1-2.

²⁰⁷ *Id.* at p. 2.

²⁰⁸ *Id.* at p. 2.

²⁰⁹ *Id.* at p. 2.

²¹⁰ Toure Comments, Exhibits 3 and 4.

drainages that run through the Project site.²¹¹ These alternative site designs would also allow water from Project activities to be captured in bioswales and discharged into dry washes.²¹² The BLM should consider this alternative to reduce the significant impacts to water resources caused by the Proposed Action.

VI. NEPA REQUIRES THAT THE DEIS INTEGRATE ALL NECESSARY FEDERAL AND STATE ENVIRONMENTAL LAWS

If a Project requires State approval, the federal agency must cooperate with State and local agencies “to the fullest extent possible to reduce duplication between NEPA and State and local requirements.”²¹³ In California, this requires that federal agencies cooperate with State and local agencies to prepare a joint EIS/EIR under CEQA.²¹⁴ BLM policy recommends that State agencies be identified as joint lead agencies at the earliest possible stage.²¹⁵

The Project will require approval of a streambed alteration agreement from the CDFG and WDRs by the RWQCB. Thus, the Applicant will require approval under CEQA before it can proceed with Project construction. The BLM must work with the CDFG and RWQCB to facilitate this process. It is essential for the BLM to encourage preparation of a joint EIS/EIR at the earliest possible stage to avoid duplication of materials and resources and unnecessary delay.

The DEIS does not comply with CEQA. First, California courts have repeatedly held that “an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient [CEQA document].”²¹⁶ Compliance with CEQA, therefore, requires that the environmental document provide an accurate, consistent and complete description of the Project. As discussed above, the DEIS fails to do so.

Second, CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation

²¹¹ *Id.* at p. 5.

²¹² *Id.*

²¹³ 40 C.F.R. § 1506.2(b).

²¹⁴ CAL. CODE REGS. tit. 14, § 15222(a)(1) (2010).

²¹⁵ NEPA Handbook p. 114.

²¹⁶ *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 193 (Cal. Ct. App. 1977).
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measures.²¹⁷ The DEIS does not propose sufficient mitigation measures, however, to reduce or avoid the Project's impacts. For example, the DEIS states that tortoise-proof fencing and transmission poles installed for the Project could "cause increased predation of reptiles, small mammals, and small birds around the Proposed Action site because raptors would use the infrastructure for perches."²¹⁸ Predatory ravens are a leading cause of mortality for the desert tortoise.²¹⁹ The DEIS does not disclose, however, how perching will be discouraged on the tortoise-proof fence and the transmission poles. Thus, it is unclear whether the Project's impacts will be sufficiently mitigated.

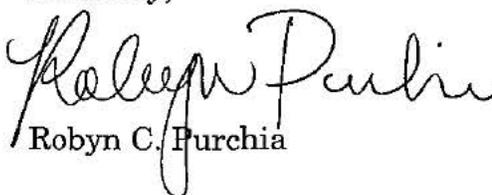
Because the CDFG and the RWQCB must issue permits *before* the Applicant can begin *any* development on the Project site, the BLM must abide by the requirements of NEPA and work with the State agencies to develop a joint EIS/EIR. This will avoid duplication of government materials and resources.

VII. CONCLUSION

The foregoing comments, together with those of the experts, establish that the DEIS simply cannot pass muster under NEPA. The only option is for the BLM to prepare a revised EIS/EIR that is recirculated for public review and comment. We respectfully urge the BLM to do so prior to taking any action on the Applicant's pending federal permit applications to ensure that the basic requirements of NEPA are met.

Please do not hesitate to call if you have any questions or require any further information in support of these comments.

Sincerely,



Robyn C. Purchia

RCP:cnh
Attachments

²¹⁷ CAL. PUB. RES. CODE §§ 21002, 21002.1.

²¹⁸ DEIS p. ES-9; *see also* 4.6-8.

²¹⁹ *Id.* at p. 4.6-13.

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
LUCERNE VALLEY SOLAR PROJECT

ATTACHMENTS

Attachment A	Seely Comments
Attachment B	Cornett Comments
Attachment C	Toure Comments
Attachment D	Hagemann Comments
Attachment E	Observations on Photovoltaic Cell Panels
Attachment F	Kramer Junction Mitigated Negative Declaration (“MND”)
Attachment G	<i>Las Vegas Sun</i> – Dirty detail: Solar panels need water
Attachment H	Water Purveyors – Desert Region
Attachment I	Mojave Basin Area Watermaster Report
Attachment J	Water Level Graphs
Attachment K	Current Status of the Mohave Ground Squirrel
Attachment L	Plan of Development
Attachment M	CDFG Staff Report on Burrowing Owl Mitigation
Attachment N	<i>Press Enterprise</i> – Solar Energy Proposal Criticized Lucerne Valley: Chevron’s Plans Could Disturb Threatened Species, Some Say, Others Say Old Farmland Is a Better Choice
Attachment O	<i>Detroit News</i> – California Environmentalists, Growers Agree on Farmland Reuse for Solar
Attachment P	Letter from Charles F. Wood, Chemehuevi Tribe