

July 7, 2010

[Jim\\_Stobaugh@blm.gov](mailto:Jim_Stobaugh@blm.gov)

Re: Staff Assessment and Draft Environmental Impact  
Statement for the Proposed Genesis Solar Energy Project

Dear Mr. Stobaugh:

This letter constitutes the comments on the Proposed Genesis Solar Energy Project and accompanying draft environmental impact statement (DEIS) of the Natural Resources Defense Council (NRDC), The Wilderness Society (TWS), and Defenders of Wildlife, national environmental membership organizations with long histories of advocacy on behalf of the lands and resources administered by the Bureau of Land Management (BLM). More recently these organizations have been intensively involved in the Bureau's work to develop a comprehensive solar program as well as its efforts to “fast track” the permitting of individual utility-scale solar projects in California so that they may be eligible for grant funding under the American Recovery and Reinvestment Act of 2009 (ARRA).

Introduction: Our organizations recognize the need to develop the nation's renewable energy resources and to do so rapidly in order to respond effectively to the challenge of climate change. Unique natural resources here in California are already being affected by climate change, including, for example, the pikas of the High Sierra Nevada and the Joshua trees in the Mojave Desert. We also recognize that renewables development can help create jobs in communities that are eager for them, because of the nation's economic crisis. For these and other related reasons, our organizations are working with regulators and project proponents to move renewables projects forward. That said, renewable development is not appropriate everywhere on the public lands and must be balanced against the equally urgent need to protect unique and sensitive resources of the California Desert Conservation Area (CDCA). California is lucky indeed that we have sufficient renewable resources, including solar resources, to do their development in an environmentally and fiscally sensitive way.<sup>1</sup>

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<sup>1</sup> California's Renewable Energy Transition Initiative found, for example, that the state potentially could access 500 GW of renewable energy, an order of magnitude greater than the state's peak demand and far beyond the ability of our electric grid could handle, although not all of this potential is located in environmentally desirable places.

As we and our colleagues at sister organizations have repeatedly stated, the best way to develop the solar resources of the CDCA is through comprehensive, pro-active planning by both the federal government and the state to identify the most appropriate areas for such development -- *i.e.*, solar development zones -- and to guide development to those zones. *See, e.g.*, letter dated June 29, 2009 to Interior Secretary Salazar and California's Governor Schwarzenegger and signed by 11 organizations, including our own, attached as Exhibit 1.

We support the BLM's adoption of zone designation for its forthcoming solar programmatic EIS because of the benefits inherent in this approach, including but not limited to clustering development of large-scale projects in appropriate places, rather than permitting them to be located across the landscape in numerous locations. We also applaud the agency's -- and the Interior Department's -- commitment to work closely with the State of California in the development of the Desert Renewable Energy Conservation Plan which, as you may already know, will designate not only renewable energy development zones, but also zones for conservation. In addition, it will include a comprehensive mitigation strategy. The integration and completion of both of these efforts offers the promise of a balanced plan that will facilitate development of renewable resources in the desert while protecting desert resources.

Despite our fundamental belief in the critical importance of agency-guided development of renewables, rather than developer-initiated development, we have, as indicated, been investing a great deal of time and effort into the fast track projects. We have done so in response to the emphasis that Interior, the BLM and the developers place on meeting ARRA deadlines as well as the potential role these projects could play in meeting the renewable generation and economic goals of the state and federal governments. We have also done so because we wanted to make the projects, and especially the utility-scale solar projects, as environmentally sensitive as they can be and because we wanted to ensure, to the extent possible, that their accompanying environmental documents are as sound as they can be. It is now apparent to us that not even the best of the environmental documents being produced for the fast track projects and/or the best projects should be models or precedents for the future.

The fast track project sites were chosen without the benefit of siting criteria developed either by desert activists, environmental organizations, scientists and others. *See* Renewable Siting Criteria for California Desert Conservation Area, attached to June 29, 2009 letter referred to above, or by the Bureau. The Bureau in fact has yet to publish any siting guidance that would help field staff, developers and others identify appropriate sites -- *i.e.*, those with relatively low resource values and fewer resource conflicts. Moreover, the projects themselves were designated by Interior and the BLM as fast track projects without consideration of potential environmental issues. And, equally important, the timetable established for review of these projects did not take into account their scale, the agency's lack of experience with the technologies involved, and the agency's lack of experience permitting these kinds of projects.

Regardless of the outcome of the environmental review process for this or any other fast track project, we urge the BLM and the Interior Department to acknowledge publicly the deficiencies of the current process and to commit publicly to improving it. More specifically, we urge both entities to affirm that neither the current process, nor any of the project sites, nor any of the environmental documents, establish any legal or procedural precedents for future decision-making, siting or environmental review.

The Genesis Solar Energy Project: This proposed Project site is located on largely undisturbed desert land within the Multispecies Wildlife Habitat Management Area (WHMA) designation for

the eastern Colorado Desert region of the CDCA and, if constructed, will result in almost 2,000 acres of desert habitat loss, including potential habitat for desert tortoise and the Mojave fringe-toed lizard. In addition, unless the dry-cooling alternative is adopted, the Project will utilize approximately 1,644 acre-feet of groundwater per year, resulting in significant groundwater impacts. We therefore have significant concerns about the impacts to desert plant and wildlife communities which we urge the BLM to address fully.

Biological Resources: The Project area is potential habitat for a number of special-status plant and animal species and the DEIS fails to fully consider impacts to many of these species, including desert tortoise, Mojave fringe-toed lizard, Couch's spadefoot toad, Nelson's bighorn sheep, and groundwater dependant plant species.

First, the applicant indicates that the Project area is unoccupied by desert tortoise and that the majority of the site is not suitable habitat for desert tortoise. DEIS at C.2-34. However, agency staff concluded that the entire site contains suitable desert tortoise habitat and that the site could be potentially occupied by desert tortoise in the future. *Id.* at C.2-34. The document concludes that "although the project contributes a relatively small percentage of lower quality habitat, it contributes to a significant cumulative effect to an imperiled species." *Id.* at C.2-120. Furthermore, the NECO plan includes a desert tortoise recovery objective to "mitigate effects on desert tortoise populations and habitat outside DWMA's to provide connectivity between DWMA's." Given the threats posed by global climate change, maintaining habitat connectivity is particularly important. *Id.* We urge the BLM to ensure that impacts to desert tortoise habitat and connectivity are minimized.

Second, the Project will have significant impacts on Mojave fringe-toed lizards, including directly impacting 28 acres of stabilized/partially stabilized sand dune habitat and 38 acres of playa/sand drifts over playa, and indirectly impacting 453 acres of habitat downwind of the Project site. *Id.* at C.2-68. We urge BLM to consider in its alternatives analysis an alternative Project site that avoids significant impacts to Mojave fringe-toed lizard habitat.

Third, the Project is located at the western border of the Couch's spadefoot toad range. *Id.* at C.2-78. The DEIS states that "[n]o Couch's spadefoot toads were observed during surveys; however, because of the short time this species is above ground, and because the surveys were not conducted during the proper season (i.e., after summer rains), the lack of observations does not suggest the species is absent from the Project site." *Id.* at C.2-36. Without an accurate assessment of Couch's spadefoot toad on the property, it is not possible to conclude that the proposed mitigation (BIO-27) would reduce Project impacts to less than significant levels. We urge BLM to adequately document and consider the impacts of the Project on the Couch's spadefoot toad.

Fourth, the DEIS concludes that "[n]o sign or evidence of Nelson's bighorn sheep were found during field surveys and bighorn sheep are not expected to occur in the Project area. The Project Area is not within a known bighorn sheep corridor as identified in the NECO Plan." *Id.* at C.2-42. However, the applicant's surveys of the main Project site were conducted within a very narrow timeframe during the spring of 2009. Additional studies should be conducted before concluding that the Project will not impact bighorn sheep.

Finally, of significant concern regarding impacts to groundwater dependant vegetation is the significant uncertainty surrounding the groundwater calculations.

[T]he calculations and assumptions used to evaluate potential Project impacts to groundwater levels are imprecise and have limitations and

uncertainties associated with them. Given this uncertainty, the magnitude of potential Project impacts that could occur to groundwater dependent plant communities cannot be determined precisely.

DEIS at C.2-98. Water in arid areas, even brackish water, is an incredibly valuable resource, not only to the groundwater dependant plant species, but also to animal populations that depend on these plants. We expect to see greater certainty related to impacts to groundwater and by association overall biological resources in the final EIS.

Water Resources: This Project proposes to utilize approximately 1,644 acre-feet of groundwater per year which would impact groundwater levels in the area. *See id.* at C.9-5. This project is the *only* fast track project on public lands in California proposing to use wet cooling. The Project would also disrupt the natural flow of surface water from Palen Wash onto Ford Dry Lake by re-routing ephemeral drainages through engineered channels. *See id.* at C.9-63.

Because of impacts to groundwater resources, we urge the BLM to adopt the dry-cooling alternative. In addition, we urge BLM to further analyze the Project's effects on groundwater levels.

The DEIS states that because

[t]he cumulative change in storage over the construction and operational period (33 years) would amount to approximately 57,000 af, which would equate to less than 0.5 percent of the total amount of the estimated total recoverable groundwater in storage (15,000,000 af)...the project's contribution to the cumulative impact to basin balance is less than cumulatively considerable.

DEIS at C.9-72. However, this calculation overlooks the biological and hydrological impacts of aquifer overdraft. BLM also fails to support its concluding statement that cumulative effects of groundwater depletion would be insignificant. *See id.* at C.9-72. Finally, the potential for long-term drought or climate change effects on groundwater recharge and groundwater-dependent resources have not been evaluated. We urge BLM to consider these factors.

It is an engineering challenge to redesign desert washes. The proposed action would remove these waterways, eliminating their hydrological and biological functions and impeding wildlife movement through the washes, *id.* at C.9-56, C.2-66, and re-route them through three engineered channels. *Id.* at C.9-57, C.2-66. Engineered channel design is based on current conditions and the 100-year flood and is not finalized. *Id.* at C.2-66. An increase in the frequency or duration of extreme rainfall events may change upstream and downstream surface water features, soil moisture and the frequency and characteristics of the 100-year flood. BLM must evaluate the effects of climate change on surface water hydrology, the reasonableness of the assumptions behind the 10-, 25- and 100-year flood modeling, the efficacy of the engineered channels and the ecological and mitigation values of the waterways to be acquired and protected in a climate-changed environment and use this information to produce more reliable findings of significance. This information can also remedy deficiencies in the drainage report and improve any FLO-2D analysis and drainage channel design. Because of the impacts to natural drainage channels, we urge BLM to consider additional alternatives, including an alternative site that avoids desert washes or an engineering alternative on the current site that avoids reengineering the drainage channels.

Water Availability: Groundwater analysis suggests that any groundwater produced at the site would be Colorado River water. DEIS at C.9-46. The Boulder Canyon Project Act, 43 U.S.C. § 617 *et seq.*, and the Supreme Court Decree in *Arizona v. California*, 547 U.S. 150 (2006), require anyone who uses Colorado River water to have a contract with the Secretary of the Interior for the use of such water. All Colorado River water apportioned for use in California is already under contract. New users, such as the applicant, could seek a water delivery subcontract with the City of Needles (via the Lower Colorado Water Supply Project), a water transfer or exchange agreement with an existing contractor in California or seek a water supply that is not connected to the Colorado River.

Given that all Colorado River water in California is already under contract and that the Lower Colorado Water Supply Project is not a viable option for the applicant, *see* Letter from Gerald R. Zimmerman, Exec. Dir., Colorado River Board, to Alan H. Solomon, California Energy Comm'n (March 22, 2010), the applicant would have to enter into an agreement, to be approved by the Bureau of Reclamation, with another contractor, the Metropolitan Water District of Southern California ("MWD") in order to perform wet cooling at the proposed site. MWD's water supply may be vulnerable to shortages due to shortages on the Colorado River, in northern California, or from other sources of supply. Given these conditions and with the lower Colorado River over-appropriated and in the midst of drought conditions, we recommend that BLM require the applicant to utilize dry cooling for the proposed project.

Cultural Resources: The BLM must fully consider the comments submitted by the Quechan Tribe (see Quechan Tribe comments dated February 16, 2010 on the Section 106 Consultation Process for the First Solar Desert Sunlight, Palen Solar; Ford Dry Lake Solar; and Blythe Solar Projects) regarding the Section 106 process. BLM should insure that the regulatory approval schedule allows adequate time to consult with tribes before the Record of Decision is issued.

DEIS Elements: Our concerns with the draft environmental review document itself relate to five key elements: the purpose and need statement, the alternatives considered, the cumulative impact analysis, climate change and new information.

The DEIS states that the BLM's purpose and need is "to respond to" the company's Right-of-Way application. DEIS at B.2-10. The BLM should avoid both this mindset as well as too narrow a statement of purpose and need in order to help ensure that its EISs are legally defensible documents. In place of the statement that was used here, our organizations urge the adoption of the following to achieve these goals:

The purpose of the proposed action is to "facilitate environmentally responsible commercial development of solar energy projects"<sup>2</sup> consistent with the statutory authorities and policies applicable to the Bureau of Land Management, including those providing for contributions towards achieving the renewable energy and economic stimulus and renewable energy development objectives under the Energy Policy Act of 2005 (EPAAct), the American Recovery and Reinvestment Act, and Presidential and Secretarial orders as well as the Federal Land Policy and Management Act (FLPMA).

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<sup>2</sup> This quotation is from Secretary Salazar himself.

The need for this action is to implement Federal policies, orders and laws that mandate or encourage the development of renewable energy sources, including the Energy Policy Act of 2005, which encourages the Department of the Interior to seek to approve at least 10,000 MW of non-hydropower renewable energy on public lands by 2015, and the Federal policy goal of producing 10% of the nation's electricity from renewable resources by 2010 and 25% by 2025; to enable effective implementation of the economic incentives for qualifying projects intended by the American Recovery and Reinvestment Act; and to support the State of California's renewable energy and climate change objectives, consistent with BLM's mandates and responsibilities under FLMPA.

This kind of purpose and need statement would clearly satisfy applicable legal requirements, *see, e.g., Nat'l Parks Conservation Ass'n v. BLM*, 586 F.3d 735 (9th Cir. 2009), and thus help ensure that environmentally acceptable projects will not only be permitted but will also be built without unnecessary delays.

Alternatives Analysis: We applaud the inclusion of a dry-cooling alternative. Because of the shallow groundwater table, and the potential impacts the Project may have on groundwater-dependant plant communities and other biological resources in the area, we urge BLM to adopt this alternative. However, the current alternatives analysis is inadequate and we urge the BLM to include additional alternatives in its alternatives analysis, including an alternative site.

In defining what is a reasonable range of alternatives, NEPA requires consideration of alternatives “that are practical of feasible” and not just “whether the proponent or applicant likes or is itself capable of carrying out a particular alternative.” Even “an alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable.” Council on Environmental Quality, Forty Most Asked Questions; 40 C.F.R. §§ 1502.14, 1506.2(d). We therefore urge BLM to consider, among other alternative sites, the Gabrych Alternative – a privately owned site with one owner – in its alternatives analysis. Without an alternative site, it is difficult for the reader to evaluate the biological impacts of the Project, including impacts to desert tortoise and Mojave fringe-toed lizards. Although the project may now be sited on the best portion of the originally-proposed project site, it is not clear that this is the most appropriate, or even an appropriate, site for the project. We also urge the BLM to combine alternatives, for example by combining the dry-cooling alternative with an alternative site. We urge the BLM to include additional options in order to establish a real range of alternatives as well as to provide readers with a fuller understanding of the tradeoffs inherent in the other “action” alternatives.

Cumulative Impacts: In order to properly site renewable energy projects, it is essential that a cumulative impacts analysis be conducted to fully evaluate the implications of this type of development on public lands. There are several proposed solar and wind projects in the vicinity of the Genesis Solar Energy Project that will contribute to overall cumulative impacts to sensitive resources in this area. A list of existing and future foreseeable projects is included in the draft EIS. DEIS B.3-6 to B.3-16. In addition, the DEIS utilizes qualitative information about these existing and foreseeable projects to develop estimates and model impacts on key topics such as air quality and biological resources. More quantitative information is necessary to supplement this quantitative material.

In addition to the proposed solar and wind projects, the DEIS identifies nineteen commercial and residential development projects, several transmission line projects, a proposed landfill, and several

other projects that will also contribute to cumulative impacts. DEIS B.4-11 to B.4-16. While these projects are not all being permitted by the Bureau, all reasonable efforts must be made to obtain information regarding their potential impacts and construction timing so that a full picture of cumulative impacts can be presented in the final EIS.

Climate Change Impacts: The DEIS's discussion of climate change focuses on the reduction of greenhouse gases and the development of renewable energy resources. That is, it looks at the effects of the proposed action on climate change. It does not, however, analyze the impacts of climate change on species of concern in the project area or on their habitats. The latter impacts are clearly relevant. *See, e.g.*, Secretarial Order 3289, Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources (February 22, 2010). Such an analysis will allow the BLM to assess and reduce the vulnerabilities of the proposed action to climate change, integrate climate change adaptation into the proposed action and alternatives and produce accurate predictions of environmental consequences of the proposed actions and alternatives.

New Information: Lastly, we are concerned about the new information that will be developed after the DEIS was printed and released. In particular, there is an extensive list of information that is not yet available for public review and/or integration into the environmental analyses contained in the DEIS. For example, according to the draft the BIO-7 Biological resources Mitigation and Monitoring Plan, the BIO-17 Impact Avoidance and Minimization Measures for the American Badger and Desert Kit Fox, BIO-22 Mitigation for Impacts to State Waters, and BIO-25 Groundwater Dependant Vegetation Monitoring Plan have yet to be completed and/or presented to the public. DEIS at C.2-165, C.2-183, C.2-194, C.2-199. All of this information plus many more similar measures and plans are clearly relevant to this project and the analyses and conclusions presented in the DEIS.

BLM should make every effort to ensure that all this new information is made available to the public (and other agencies) for comment along with assessments and analyses of the information. Public input on agency proposals is one of the hallmarks of NEPA review and it is to prevent the undermining of that critical aspect that limits have been imposed on agency efforts to "load up" final EISs with excessive amounts of new information.

In conclusion, the impacts to the resources identified in these comments and to other desert resources must be fully analyzed and mitigated through the BLM process. As we have previously noted, renewable development is not appropriate everywhere on the public lands and must be balanced against the equally urgent need to protect unique and sensitive resources of the CDCA. California is lucky indeed that we have sufficient renewable resources, including solar resources, to do their development in an environmentally responsible manner.

Thank you in advance for considering our comments. If you have any questions about them, please do not hesitate to contact us.

Sincerely,



Johanna Wald  
Natural Resources Defense Council



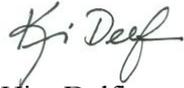
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