National Parks Conservation Association

Protecting Parks for Future Generations

February 5, 2010

Mr. George Meckfessel Bureau of Land Management Needles Field Office 1303 S. Hwy 95 Needles, CA 92363 **DOCKET 07-AFC-5**DATE 02/05/10

RECD. 08/04/10

This letter of concern is intended to comment on the Ivanpah Solar Electric Generating System (ISEGS-docket # 07-AFC-05) proposed to be built west of Ivanpah Dry Lake in Eastern San Bernardino County, California. National Parks Conservation Association's (NPCA) comments are public and intended to ensure that impacts and alternatives are thoughtfully considered within the EIS process. Comments are being submitted to comply with the 90 day review period of the DEIS opened on November 4, 2009.

NPCA is a non-profit organization dedicated to the protection and enhancement of National Parks for current and future generations. NPCA currently has membership of 320,000 individuals including 44,000 individuals in California. NPCA strives to uphold the protections provided to the resources and recreational opportunities within and directly affecting Mojave National Preserve by law through the California Desert Protection Act, National Parks Organic Act of 1916, the Endangered Species Act, and the Federal Land Policy and Management Act.

NPCA recognizes the need to combat the worst effects of global climate change through a diversified approach that includes the development of industrial-scale renewable energy generation systems, coupled with energy conservation, energy efficiency measures, and distributed generation. NPCA is supportive of the State of California's 33% Renewable Portfolio Standard (RPS) initiative for 2020, and we encourage the retirement of non-renewable energy generation when and where practicable. Our organizational position on large-scale renewable energy generation systems in desert landscapes is that they are preferentially sited on disturbed lands, utilize the least water intensive technologies, cause the least possible harm to natural systems, are built close to existing transmission corridors, and provide benefit to communities with minimal long-term environmental, health, or safety costs.

NPCA understands that the Bureau of Land Management (BLM) and California Energy Commission (CEC) accepted the application for ISEGS in concert with existing land-use designation (Multiple Use Class L), without the guidance of a systemic process to ensure that projects were sited in locations that would minimize environmental loss, or impact to National Park Service units such as Mojave National Preserve. The subsequent development of Solar



Energy Study Areas¹ in the California Desert Conservation Area (CDCA) and an eight-state Solar PEIS process demonstrates the Department of the Interior's desire to balance the incentivized boom of renewable energy generation and transmission applications with the persistence of the natural character and retention of resources, wildlife and historic corridors, and unique natural values of the region. The Solar Energy Study Areas provide at least a framework for studying the development of solar energy projects within the California Desert. It should be noted that the private land alternative offered in the DEIS is consistent with the boundaries of the BLM's Pisgah Solar Energy Study Area. The private land alternative in the DEIS is also notable for minimizing environmental impact to pristine land, threatened species, and resource impact to Mojave National Preserve.

When considering these recent planning developments, along with the environmental costs of ISEGS' preferred alternative, cumulative impacts to the Ivanpah Valley, and impacts to Mojave National Preserve, the question must be asked—is this project sited in the right place?

NPCA requests that the BLM consider the impact of approving the first large-scale solar project in California sited outside of an identified Solar Energy Study Area and in a pristine, biologically diverse location that will degrade the federally protected resources of Mojave National Preserve.

In reviewing available information relating to ISEGS, NPCA has determined that processes associated with the construction and the operation of ISEGS are incongruous with the protections awarded to the adjacent Mojave National Preserve. These include ISEGS disrupting Mojave National Preserve's scenic viewshed, the import of light pollution, disruption of the natural soundscape, blocking or limiting access to recreation in Clark Mountain exclave, diminishing wilderness and national park experiences for Mojave National Preserve visitors, adverse impacts to federally listed wildlife species and to critical wildlife habitat, adverse impacts to air quality, and continued water drawdown in the already over-allocated Ivanpah Valley.

NPCA is aware that the DEIS process represents the final opportunity to present alternatives and correct staff and consultant analysis made in this process. NPCA requests that the following issues be thoughtfully considered and addressed though the EIS process. Amendments should be offered where appropriate.

- Impacts to Mojave National Preserve have not been fully explored within the DEIS process. NPCA requests that an amendment be issued that determines both the individual and cumulative impacts to Mojave National Preserve. Subjects covered should include:
 - 1) Deterioration of air quality within the Clark Mountain exclave and other points within Mojave National Preserve. Poor air quality can adversely affect the health of outdoor recreational users, decrease and diminish visual resources, reduce and

¹http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS__REALTY__AND_RESOURCE_PROTECTION_/energy/solar_and_wind/solar_energy_study.Par.2216.File.dat/SESAs_CA_rev_Jul_23_09_letter_sm.pdf



- diminish night sky viewing opportunities, and adversely affect ecosystems, encouraging the spread of invasive plants.
- 2) Cumulative impacts analysis of the project's impact on aircraft overflights, and the resulting impact to Mojave National Preserve. Construction of ISEGS would include 214,000 heliostat mirrors and seven, 469-foot towers. Based on glare from heliostats, the height of the towers, and the transmission lines needed to serve the project, NPCA asks that a full examination of existing commercial, private, and military routes be made. These should be compared to proposed updated routes, and potential routes from the proposed Southern Nevada Supplemental Airport to determine the immediate and cumulative impact that noise pollution from overflights will have to multiple points within Mojave National Preserve.
- 3) **Impact of thermal plumes.** NPCA requests additional information about thermal plumes be added to the EIS. Based on the information provided, they can produce turbulence for planes flying up to 1350 feet above the project site. Will thermal plumes force airplanes to modify existing and future routes, and if so, how will this impact Mojave National Preserve? Thermal plumes have the potential to pose risks for birds, bats, and insects, and these impacts need to be fully analyzed.
- 4) Potential for the ISEGS or its associated transmission to create a fire hazard on site, or on adjacent lands.
- 5) **Impact to soundscapes.** How will the natural soundscape of the Clark Mountain exclave, and other locations within Mojave National Preserve be affected by ISEGS during construction, during operation, and cumulatively considering the multiple proposed projects for the Ivanpah Valley? Considering the level of alteration of the natural soundscape, what are the projected impacts to the lambing success of Clark Mountain and adjacent desert bighorn sheep populations?
- 6) **Light pollution.** How will light pollution from ISEGS diminish the night sky viewing from the Clark Mountain exclave, and from other locations within Mojave National Preserve?
- 7) Impacts to wildlife movement and migration corridors. What are the impacts to mammals, birds, and insects that travel between the ISEGS site and the Mojave National Preserve? The DEIS does not consider the impacts on species, such as passerines, raptors, desert bighorn sheep, mountain lion, bobcat, coyote, or gray fox that utilize large home ranges that may include both the project site, and the Mojave National Preserve. The DEIS does not identify whether the ISEGS project will modify, or destroy existing travel or migration corridors for species. The DEIS does not discuss the usage or importance of the project site on annual or seasonal migrations. The DEIS does not address whether the alteration or destruction of migration corridors will trigger mitigation. NPCA requests that this analysis be conducted and included in the EIS, with recommendations for appropriate mitigation, if the impacts can be mitigated. If they cannot be mitigated, the siting of the ISEGS should be questioned in the context of this analysis.

- 8) Cumulative impacts from loss of grazing acreage. Will the loss of grazing acreage for burros, cattle, and wild horses force those species onto the Clark Mountain area of Mojave National Preserve? Will this diminish available resources for herbivores, including desert bighorn sheep? We request that cumulative impacts including updated DesertXpress train routes be considered in the cumulative analysis on the impact to Clark Mountain exclave by the loss and fragmentation of cattle, wild horse, and burro acreage adjacent to Clark Mountain.
- Other considerations that NPCA requests be addressed in the Final EIS:
 - 1) 3:1 Mitigation ratio at a proposed \$500.00 per acre does not address the realities of land availability or purchase price of parcels within the Ivanpah Valley and adjacent region. If small parcels are acquired, they will not provide the connectivity or opportunity for recovery for Desert Tortoises. Additionally, the smaller the parcel, the higher the price. An updated figure should be required for mitigation, and impacts to wildlife corridors or migration routes should be mitigated for, or addressed and listed as unable to be mitigated.
 - 2) A more comprehensive study of the carbon impacts of ISEGS would be appropriate for this project, considering its purpose and need statement. This should account for the projected carbon budget required to build component parts, to transport parts to the site, to construct and disassemble the site, and to operate using natural gas during non-solar production conditions. This budget should also account for the release of sequestered carbon into the atmosphere by destruction of desert habitat and soils, the short-term loss of carbon absorption from vegetation on site, and the projected long-term success of revegetation at the site, providing the net loss of carbon absorption associated with that success.
 - 3) The proposed mitigation for the loss of desert bighorn sheep foraging habitat does not provide additional habitat for browsing. Providing water resources for desert bighorn does not mitigate the loss of food resources, particularly since the amount of available forage is the limiting factor for population size. NPCA agrees with multiple organizations that have stated that further study of desert bighorn migration corridors, lambing habitat, and seasonal requirements is necessary to determine the immediate and cumulative impacts to this population. The purchase and retirement of adjacent grazing allotments should be considered as mitigation if these leases are available for purchase.
 - 4) Fragmentation of habitat should be viewed regionally and cumulative impacts to the region and to Mojave National Preserve should be addressed. The connectivity of habitat is critical to any adaptation strategy seeking to address the effects of global climate change on species. An analysis of the project's immediate impact to connected habitat, and its contribution to cumulative impacts to regional connectivity should be made.
 - 5) A more comprehensive study of alternatives is required. Alternatives should incorporate more up-to-date information about Solar Energy Study Areas, private

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land alternatives, and sites that offer less impact to imperiled species and degradation to the resources of Mojave National Preserve. Any preferred action alternative should discuss how ISEGS in its current location is a superior alternative to alternate locations. The No Action alternative must include comprehensive information about proposed projects that provide similar benefits to ISEGS at reduced environmental cost. The alternatives should list statewide proposed projects, locations, and generation capacity. This allows the public to understand where we stand relating to the need to meet RPS goals, and thus the need to develop ISEGS.

- 6) The EIS should address how the project will fully comply with County, State, and Federal laws and regulations.
- 7) We request that the California Desert Protection Act of 1994 (CDPA) be added to the list of Laws, Ordinances, Regulations, and Standards (LORS) that are used to determine federal, state and county compliance with established law. This pertains to all applicable sections, but specifically to Mitigation and Cumulative Impact, Visual Resources, and Air Quality.

Thank you for your time and consideration of this matter, feel free to contact me if I can be of assistance in this matter or to answer any questions that you may have.

David Lamfrom California Desert Field Representative NPCA