



# United States Department of the Interior

## NATIONAL PARK SERVICE

Joshua Tree National Park  
74485 National Park Drive  
Twentynine Palms, California 92277-3597

IN REPLY REFER TO:

L7619 (JOTR-RM)

October 4, 2010

Paul Murphey  
Division of Water Rights  
State Water Resources Control Board  
Post Office Box 2000  
Sacramento, California 95812

**COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE EAGLE  
CREST ENERGY PUMPED STORAGE PROJECT (STATE CLEARINGHOUSE NO:  
2009011010)**

Dear Mr. Murphey:

Joshua Tree National Park, and the National Park Service (NPS), appreciates the opportunity to provide comments on the Draft Environmental Impact Report (DEIR) for the proposed Eagle Crest Energy Pumped Storage Project (Project). Joshua Tree National Park surrounds the Project on three sides, with the boundaries of the two projects less than two miles apart in some locations. At the closest, the proposed transmission lines are on property less than one mile from NPS lands in several locations.

Joshua Tree National Park asks the State Water Resource Control Board (SWRCB) and the Federal Energy Regulatory Commission (FERC) to reconsider permitting the proposed Eagle Crest Energy Pumped Storage Project. The proposal is being promoted as a renewable energy project, yet it is dependent upon a non-renewable source of ancient groundwater to generate a reported annual net loss of electricity. In comments initially submitted to FERC's Ready for Environmental Analysis Notice (April 23, 2010), the NPS noted that the Project proposes to generate 1,300 megawatts of electricity during peak demand, but is expected to consume 1,600 megawatts of electricity in the process. The Final EIR will need to clarify whether or not the proposal will result in a net loss of energy from the region's electrical grid. Even if the proposal can meet an economically desirable need for supplying energy during peak demand times, it should not override the fact that a highly valuable and limited resource (drinking water) will be used to create a net loss of energy from the electrical grid. This condition seems inconsistent with the public's typical perspective of what a renewable energy project should be. The park asks the agencies to continue to consider alternative uses of this land that are more compatible with the adjacent landscapes and resources.

Resource impacts of specific concern to the NPS are noted below and are discussed in more detail in the attached comment document and tables.

## Water Resources

**Evaluation of conformance with applicable groundwater LORS is lacking.** Little or no discussion is presented in Section 3.3 on whether or not the Project, as proposed, will conform to the Federal, State, and local laws, ordinances, regulations, and standards (LORS) applicable to the proposed Project. In preparing the Final EIR, this compliance should be clarified, and commitment towards appropriate mitigation strategies made.

Additionally, the SWRCB has not rectified the apparent policy inconsistency of allowing significant evaporative losses to occur for the pumped storage energy project under Policy Resolution No. 88-63, while discouraging comparable evaporative losses from occurring for other energy projects in the valley such as wet-cooled solar energy projects under Policy Resolution No. 75-58. This discrepancy and mitigation measures to reduce evaporative losses will need to be addressed in preparing the Final EIR.

**Groundwater storage depletion impacts are under-estimated.** The NPS appreciates the applicant's effort to re-evaluate their water balance estimates and subsequent analysis of individual and cumulative impacts to groundwater storage in the basin resulting from their Project and other reasonably foreseeable projects. However, the NPS is still concerned that the analysis grossly over-estimates the amount of natural recharge coming into the Chuckwalla Valley, Pinto Valley and Orocopia Valley and therefore, under-estimates the amount of groundwater storage depletion that will occur. Our concern is based on the following primary lines of evidence:

- The follow-up literature review has neglected considering the results from a recent USGS Scientific Investigations Report 2004-5267 prepared for the nearby Joshua Tree area, which indicated that present-day groundwater recharge in this region of the Mojave Desert is very limited, and, therefore, it is likely that nearly all of the water being removed from the basins in this region is likely coming from depletion of existing groundwater storage. The NPS believes the results of this study should be extrapolated to the study area.
- In their recoverable water estimate study, the applicant summarily dismisses the validity of the methods generating lower recharge estimates for the study area basins because the estimates are not in-line with higher recharge estimates from other methods. Discounting these results because they don't agree with the higher estimates predicted by the other methods unjustifiably biases the recharge analysis toward a higher recharge estimate. This ultimately has the effect of over-estimating the recharge and dampening the effects of the Project pumping on aquifer storage depletion.
- The applicant's water balance analysis suggesting an excess of inflow over outflow is NOT supported by the water level records in the study area. The available water level evidence largely points to a steady decline of water levels over the period of record, indicating that outflow has exceeded inflow to the study area and that depletion of groundwater storage likely has been occurring for many years.
- The lower recharge estimates proposed by the NPS appear to be supported by the declining water level trends in the study area. Evaluation of the declining water level trend in the Pinto Valley



indicates that this decline can be partially explained by the lower estimates of recharge for this valley and the depletion of groundwater storage in the valley by historic pumping.

### Air Quality

The NPS agrees that the project will result in significant and unavoidable impacts to air quality during the construction phase of the project. Additional concerns regarding air quality relate to the cumulative impacts associated with new transmission utility corridors to be developed with all proposed energy projects in Chuckwalla Valley. High voltage transmission lines are known to ionize the atmosphere and produce localities of concentrated ozone levels. The proposed transmission utility corridor and other proposed corridors are within a few miles of the park which is a Class I area for meeting National Ambient Air Quality Standards (NAAQS). Air quality monitoring has been ongoing since 2006 at a site five miles west of the proposed facility. Prior to the 2008 NAAQS revision of the standards, the air quality monitoring station west of the proposed facility was compliant for ozone NAAQS within the park. In January 2010, the EPA proposed revising the standard from the 2008 NAAQS of 75 ppb to a range of 60 to 70 ppb. Based on current data from our monitoring station located in the Pinto Basin, this new standard in conjunction with any increase in ozone in this area will result in a non-attainment status of this Class I area.

### Viewshed/Recreation

**Viewshed analysis does not include higher elevation points.** The NPS agrees that the project will result in significant and unavoidable impacts to the aesthetics, i.e., the viewshed. The DEIR states that the viewshed will be significantly impacted by the proposed project as well as other renewable energy projects in the same vicinity (cumulative impacts). However, in preparing the Final EIR, the analysis should include views from the higher elevations of the park to more thoroughly assess potential impacts to park visitors. All of the Observation Points occurred at elevations below the Project, with no Observation Points looking down on the Project.

### Wilderness and Values

**Assessment of wilderness impacts are insufficient.** Joshua Tree National Park manages 585,000 acres Congressionally-designated as wilderness, including areas which are within a few miles from the project site. As required by Congress' designation, these lands are managed for the preservation of wildness and its undeveloped and primeval character and influence. The 1964 Wilderness Act states: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." While not expected to be as heavily visited as other locations of the park, the use of this area is extremely valued because of its lack of human impact. Wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation. The NPS has concerns that this proposed energy project, and others proposed for this area, will affect the wilderness experience for those who visit there by adding substantial evidence of humans and their works within the landscape view. The impacts of this proposal and currently structured mitigations, and the cumulative impacts of other development of any sort located near wilderness may adversely affect wilderness visitor experience. The NPS requests that project effects on wilderness be re-assessed in the Final EIR.



### Night Sky

The proposed project is located in one of the most pristine areas for night sky viewing. We strongly encourage and support any further mitigation that would prevent light trespass from the proposed project. We appreciate the opportunity to collaboratively develop a monitoring plan to maintain existing levels of darkness throughout the life of the project.

### Wildlife resources

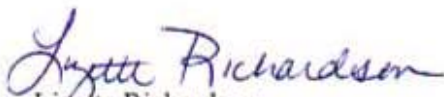
**Include a predator monitoring program.** We ask that the agencies reconsider a quantitative raven and other predator monitoring program. While the "in-lieu" fee can assist with regional understanding of tortoise populations to assist in their recovery, this does not measure the direct impacts that the project may have on raven populations and thus subsequently the desert tortoise. This project should better assess local raven predation impacts to local tortoise populations.

### Cumulative Impacts

The park agrees that cumulative impacts of the proposed projects will be significant or considerable for groundwater, aesthetics, and air quality resources. The proposed projects together will have varying cumulative effects on not only the six resources identified above. The cumulative extent, scale, impact and duration of public utility-scale renewable energy projects in close proximity to the park makes them incompatible with the protection of adjacent national park resources and park visitor experience.

Thank you for this opportunity to comment. Addressing each of these topics in depth and with a re-assessment of the impacts to the nearby national park is necessary for providing adequate analysis in the Final EIR. If you have any questions or need some additional information, please contact me at 760-367-5502, or Andrea Compton, Chief of Resources at 760-367-5560, [Andrea\\_Compton@nps.gov](mailto:Andrea_Compton@nps.gov). If you have questions or need clarification about specific comments in preparing the Final EIR, Ms. Compton can direct you to the appropriate NPS resource professional.

Sincerely,



Lizette Richardson  
Acting Superintendent

Enclosures

Cc: Christine Lehnertz, Regional Director, Pacific West Region  
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