<table>
<thead>
<tr>
<th><strong>DOCKETED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Docket Number:</strong></td>
</tr>
<tr>
<td><strong>Project Title:</strong></td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
</tr>
<tr>
<td><strong>Description:</strong></td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
</tr>
<tr>
<td><strong>Docketed Date:</strong></td>
</tr>
</tbody>
</table>
NPCA Comments on Palen PMPD to supplement existing submitted comments

Additional submitted attachment is included below.
Dear Commissioners:

The National Parks Conservation Association (NPCA) urges the California Energy Commission (CEC) to uphold the December, 2013 Presiding Member’s Proposed Decision and deny the Palen Solar Electric Generating System (PSEGS) amendment due to its significant and unmitigable impacts to cultural, visual and biological resources.

The National Parks Conservation Association (NPCA) was created in 1919 to protect and enhance America’s national parks for present and future generations. NPCA’s Pacific Region has field offices in Barstow and Joshua Tree that work to protect the California desert national parks. NPCA has 116,000 active members and supporters in the state of California and more than 875,000 nationwide.

The purpose of this letter is to highlight the fact that the proposed PSEGS undermines the intent of the 1994 California Desert Protection Act and National Park Service mission by harming Joshua Tree National Park’s visual resources, dark night skies and visitor experience. The proposed PSEGS would be located 10 miles east of Desert Center, along Interstate-10, approximately halfway between the cities of Indio and Blythe, in Riverside County, California. The project’s footprint would encompass approximately 3,794 acres of Bureau of Land Management lands and include two 750 foot high power towers topped with 10 foot antennas, 85,000 heliostat panels and a 4.5 mile 230kV gen-tie line that will connect the project to the Red Bluff Substation.

NPCA is submitting this letter to supplement our existing written and oral comments which speak to visual resource impacts, significant and fully unmitigable impacts to Joshua Tree National Park, and to the significant impacts to birds, insects, and predators that would be caused by this project, many of which are specific to this technology and to the project’s towers and corresponding solar flux fields. NPCA recommends that additional survey and study with appropriate scientific protocols be undertaken to more fully understand the broad range of impacts introduced by this technology before committing approvals and public resources to a potentially environmentally harmful project, located within the Pacific Flyway. NPCA was recently made aware that the TAC for Ivanpah Solar did not modify the project or adopt National Fish and Wildlife Forensic Laboratory recommendations for surveying and curtailment. This demonstrates that even when provided opportunity to improve methodology, reporting, and limit harm and loss, there is a reluctance to do so, which indicates that approval of Palen could likely lead to worst case scenarios for loss of species. This is a reasonable assumption as the same project proponent is involved. Additionally, and simply, we (science, the proponent, and the CEC) do not fully understand the impacts of solar flux exposure to birds and approving a larger project in a more important location for bird movement would likely lead to more harm to birds. Extrapolations of potential loss should include preliminary data collected at ISEGS, with the understanding that those reports likely represent gross misrepresentations of the total loss due to poor survey techniques, infrequent survey, and some data being collected before all towers were operational.

1 California Energy commission. (September, 2013). Final Staff Assessment for the Palen Solar Electric Generating System: Amendment to the Palen Solar Power Project. P. 3-2,3-3
President Franklin Delano Roosevelt declared Joshua Tree a National Monument on August 10, 1936. It became a national park after the passage of Senator Dianne Feinstein’s 1994 California Desert Protection Act, which protected the convergence of three distinct ecosystems within its boundaries: the washes and bajadas of the Colorado Desert; the vast Joshua tree forests of the Mojave Desert and the high elevation Pinyon and Juniper country of the Little San Bernardino Mountains. This initiating legislation states that, “The federally owned lands of southern California constitute a public wildlands resource of extraordinary and inestimable value for this and future generations,” and that, “Appropriate lands in the California desert shall be included within the National Park System and the National Wilderness Preservation system,” in order to “Preserve the unrivaled scenic, geologic and wildlife values associated with these unique national landscapes” and to “Perpetuate in their natural state significant and diverse ecosystems of the California desert”.

The proposed PSEGS undermines Congress’ legislative intent as the California Energy Commission’s Final Staff Assessment demonstrates that the PSEGS will have “A substantial adverse impact to existing scenic resource values as seen from several viewing areas and key observation points in the project vicinity and Chuckwalla Valley area, including Joshua Tree National Park’s federally designated wilderness and backcountry to the west and northwest of the project site.” For example, Key Observation Points (KOP) 1 and 2 are respectively located along State Route 177 Corridor adjacent to Joshua Tree National Park’s Coxcomb Mountains and west of Desert Center. These two observation points include landscapes that appear predominantly natural and are designed to characterize visual impacts to park visitors who may tour remote jeep roads or explore some of Joshua Tree National Park’s federally designated wilderness. The California Energy Commission Final Staff Assessment also concludes that the PSEGS’s contribution to significant cumulative visual effects would be “Cumulatively considerable” when combined with other development projects in the area.

These findings are of grave concern for the National Park Service as their report, *A Call to Action: Preparing for a Second Century of Stewardship and Engagement*, states that two of the National Park Service goals are to, “Protect clean air and spectacular scenery now and for future generations,” and also “Lead the way in protecting natural darkness as a precious resource”. Additionally, the proposed PSEGS constitutes very significant threat to visitor experience at Joshua Tree National Park: one that cannot be merely measured by the number of visitors to the southeastern section of the park, but to the overall quality of wilderness travelers’ experience. The NPS has conducted recent research that underscores the fact that visual and night sky resources are extremely important to park visitors, suggesting that a degradation of Joshua Tree National Park’s visual and night sky resources would have an adverse impact on visitor experience. According to the National Park Service’s report, *National Park Service Visitor Values and Perceptions of Clean Air, Scenic Views and Dark Night Skies*, many visitors to national park units across the nation come specifically for undeveloped scenic vistas and natural, dark night skies.

The report states that in 67 studies from 1988-2011 in 53 National Park Service Units, scenic vistas were rated by 90% of 31,358 visitor groups as extremely important to very important. In fact, scenic views ranked as one of the

---

1 California Desert Protection Act of 1994. Public Law 103-433, p.1, 2
3 Ibid
4 Ibid
5 Ibid
8 Ibid
top five most important attributes worthy of protection in 90% of the aforementioned studies. The 2010 Joshua Tree National Park Visitor Survey also found that 90% of groups surveyed thought that Joshua Tree National Park’s views without development were very or extremely important to their visitor experience. Finally, in 41 studies from 1988-2011 in 15 National Park Service Units, dark night skies were rated by 62% of 18,345 visitor groups as extremely important or very important.

NPCA is also concerned that some of the conclusions in a recent report by Argonne National Laboratory titled, *Utility Scale Solar Energy Facility Visual Impact Characterization and Mitigation Project Report*, which purports to evaluate the visual impacts of parabolic trough, photovoltaic, power tower and concentrating photovoltaic technologies in the southwestern United States, may understate the true visual impacts of power tower projects like the proposed PSEGS. NPCA concurs with some of the findings from Argonne’s fieldwork including:

1) Daytime aerial hazard lighting on power towers was visible for long distances and added substantially to visual contrast in certain conditions.
2) Power towers have substantially larger visual impacts than other solar technologies

However, we are concerned that this report’s data on the Ivanpah project’s visual impacts will be used as an analog for the proposed PSEGS, primarily because the Ivanpah facility was not operational during the time of the study. Therefore, it is certain that the true visual impacts Ivanpah are much greater than what is presented in this report. For example, even though the Ivanpah plant was not operational, its unlit towers were visible to the unaided eye at 35.7 miles and there was a strong glare from the heliostats from 2 key observation points. NPCA strongly believes that had the Ivanpah facility been operational, the towers and heliostats would have been visible from a much greater distance. Therefore, we urge the CEC not to consider Argonne National Laboratory’s analysis of Ivanpah’s visual impacts as comparable to the proposed PSEGS because it would diminish the true visual impacts of this project. Additionally, Ivanpah’s three power towers are only 450 feet tall compared with the PSEGS’s 750 foot tall towers, suggesting that larger towers will have an even greater impact on visual resources than the aforementioned project.

NPCA strongly agrees with two of the report’s concluding statements regarding visual and night sky resources:

1) Further research into the visual impacts of utility scale solar projects is needed and that, “Of particular importance is the assessment of visual contrasts from large scale power tower facilities. These facilities are likely to have very large visual impacts, but because facilities of this size have no precedent, little is known about how they may impact scenic resources.”

---

9 Ibid, p.20
13 Ibid, p.4
14 Ibid, p.27
15 Ibid, p.49
2) “While this study suggests that good lighting mitigation and lighting practices can result in near zero impacts at PV facilities, solar thermal facilities present much greater lighting mitigation challenges”\cite{16}

In conclusion, NPCA believes that the PSEGS constitutes a threat to Congress’ legislative intent as stated in the 1994 California Desert Protection Act and the mission of the National Park Service because of this project’s significant and unmitigable adverse impacts to Joshua Tree National Park’s visual resources, dark night skies and visitor experience. We urge the CEC Commissioners to deny the PSEGS amendment and uphold the December, 2013 Presiding Members Proposed Decision.

Respectfully,

Seth Shteir,
California desert senior field representative
National Parks Conservation Association

\cite{16} Ibib