

# Palen solar project gets rare scrutiny

## Public can weigh in on solar farm plan

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Birds found near solar projects with singed and scorched wings. Tribal and prehistoric artifacts potentially destroyed by solar pylons pounded into the ground. The prospect of 750-foot-tall solar towers and thousands of reflecting mirrors dominating a mostly pristine desert landscape.

These are some of the issues that likely will be flashpoints at a state hearing on BrightSource Energy's 500-megawatt Palen solar project set to begin Oct. 28 in Palm Desert. The evidentiary hearing, which may last two to three days, will mark one of the first times the California Energy Commission (CEC) has come to the desert for this kind of official session on a large-scale solar project proposed for public land east of the Coachella Valley.

Located about 60 miles east of Indio and covering 3,800 acres, the Palen project would use BrightSource Energy's



This photo illustration depicts what BrightSource Energy's Palen solar project would look like from Interstate 10.

Courtesy photo

solar thermal technology, with two soaring solar towers, each surrounded by 85,000 mirrors or heliostats. Sunlight reflected from the mirrors would be targeted at a boiler on top of the towers, heating liquid to create steam and turn turbine generators, producing enough electricity to power 200,000 homes, according to the company website.

At 750 feet, the towers would be more than twice as tall as

the Morongo Casino Resort and Spa in Cabazon, which at 340 feet is the tallest building in Riverside County.

"We've never seen anything this large on the California desert where we have so many unknowns about the effects of these projects on wildlife," said Ileene Anderson, a biologist with the Center for Biological Diversity, who will be delivering sworn testimony at the hearings. "They've been

put in areas with relatively little development; they are gigantic experiments.”

“The two solar towers will be massive, dwarfing everything else — natural or man-made — in the vicinity,” according to Rebecca Loudbear, attorney general for the Colorado River Indian Tribes (CRIT), in an Oct. 16 filing with the Energy Commission, which incorporates direct quotes from the commission’s final environmental impact report on Palen.

“CRIT concurs that if the Project were constructed, ‘the landscape would no longer retain the integrity of [setting, feeling, and association] to convey unique historic events and high artistic values.’ There is no ‘feasible way to mask the visual presence of the towers or the solar receiver steam generators,’ and there are no ‘mitigation measures that would reduce the loss of an entire landscape or a significant portion of one to a less than significant level.’”

BrightSource officials have declined any comment in advance of the hearings.

As described on the Energy Commission website, the evidentiary hearing is a key step in the permitting process. BrightSource officials and

consultants likely will give sworn testimony and be cross-examined by commissioners and representatives from other official stakeholders, such as environmental or tribal groups. These groups also will testify and may be cross-examined.

Members of the public will be given an opportunity to speak out on their views of the project. The commission’s final decision on the project will be based largely on the evidence presented during the meetings. Commissioners Karen Douglas and David Hochschild are expected to attend.

### **Subhead**

BrightSource has a lot riding on the outcome. The company purchased Palen from its former owner, the bankrupt Solar Trust of America, last year at a time when it was running into permitting problems with two other 500-megawatt projects, Rio Mesa, near Blythe, and Hidden Hills in Inyo County. It put Hidden Hills on indefinite hold in April and pulled the plug completely on Rio Mesa in July, focusing all its efforts on pushing forward with Palen.

Before the Solar Trust bankruptcy, the state had approved the project as a solar thermal plant, but using solar troughs rather than solar towers. Due to the technology change,

both the Energy Commission and the U.S. Bureau of Land Management, which was close to a final approval at the time of the Solar Trust bankruptcy, are now repermitting the project, which may cost billions to construct.

But while the company has touted the technology change as shrinking the project footprint and decreasing some environmental impacts, Anderson, Loudbear and others have raised concerns about the effects of the tall towers and mirrors, and charged BrightSource and the commission with incomplete or inadequate analysis.

Anderson pointed to the growing number of bird deaths found at solar plants under construction or soon to go online. In June and July, a rash of water and shore birds were found dead at both the Desert Sunlight and Genesis projects located near the Palen site in the Riverside East solar zone, a 148,000-acre swath of public land between Joshua Tree National Park and the city of Blythe. The number of water bird deaths at Desert Sunlight have tapered off; in August and September, two eared grebes and a pie-billed grebe were found dead on the site, along with the carcasses of about a dozen songbirds.

More than a dozen birds — many dead, a few still living — were found with singed and scorched feathers in September at the 377-megawatt Ivanpah project, another BrightSource solar tower project, about to go online in eastern San Bernardino County, according to a report the company filed with the Energy Commission. Similar to BrightSource, Ivanpah has 300,000 reflecting mirrors and three solar towers, each topping out at 459 feet.

Anderson and others think the birds at Ivanpah may be victims of solar flux, the intense solar radiation caused by sunlight reflecting off the mirrors, and say more research needs to be done to gauge and prevent the likelihood of similar bird deaths at Palen.

“When they are migrating through or whether they’re moving around on the desert, a lot of birds are attracted to water features. CEC didn’t do due diligence in looking at other resources out there,” she said, referring to eBird.org, an online birding site maintained by the Cornell Lab of Ornithology and National Audubon Society. “Adjacent to both Desert Sunlight and Palen is Lake Tamarisk, which is known as a birding hotspot. (There’s)

an extensive collection of lists, quite a bit of data on what kind of birds have been using that general area — that’s what we want to see. Let’s get the science out there.”

Loudbear also took the commission and BrightSource to task for insufficient research on cultural resources, noting that in some cases, research and planning would be delayed until after approval. The visual impacts of the towers could reach beyond the 15-mile radius described in the report, affecting the use of tribal sites and trails, she said.

The pedestals used for the heliostats will be driven into the ground to a depth of 12 feet, according to the commission’s assessment, resulting in the unseen but still harmful destruction of buried artifacts, she said.

“CRIT rejects the implied belief of both CEC Staff and BrightSource that installing heliostat pedestals will not result in harm to buried cultural materials, simply because the direct harm will remain unknown. Damage or disruption to buried resources does not disappear simply because it cannot be immediately seen.”