



SOLAR NOISE CONSIDERATIONS

SOLAR PROJECTS LIKE
GRANGE SOLAR MAKE
QUIET NEIGHBORS



GRANGE
S O L A R

Contact Us

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SOLAR PROJECTS ARE QUIET

Once constructed, solar facilities are extremely quiet, with few moving parts and maintenance traffic comparable to farming activity. Solar facilities do not generate electricity at night, when it is most important to nearby households. Most solar project noise comes from the project substation, the inverters, and the small electric “tracker” motors that slowly rotate the panels throughout the day.

The project substation is sited at a single point and set back to avoid noise impacts, and the trackers generally cannot be heard outside the fence. Inverters, which manage the electricity produced by the solar panels, are centrally located within the fence so that any significant noise dissipates before it affects neighbors.

Unlike some utility-scale solar projects operating today, Grange Solar will be designed to further reduce any inverter noise impact by locating inverters no closer than 500 feet from neighboring homes. Because sound dissipates rapidly with distance from the source of the sound, this large setback addresses most concerns. Planted vegetative buffers will further minimize noise.

INVERTER NOISE



Grange Solar will take specific steps to ensure that inverter noise does not impact neighboring residences.

Grange Solar will first take sound measurements in the project area to determine the existing sound levels. It will commit to not exceed those sound levels by a state-approved benchmark.



If an inverter is found to produce more noise than allowed, Grange Solar will mitigate the noise with retrofits such as noise dampeners or acoustic barriers.

SOLAR CONSTRUCTION NOISE

Like any large construction project, construction of a solar project will create some noise. Noise will be less than many construction jobs and noise at any particular location will be limited because the site is large, construction activities will not be concentrated in one area for long, and construction hours are limited by the State. Small pile drivers used to drive the piles for the panels into place will create a rapid and repeating “pinging” noise over a few months, but such noise near any particular location across the site would last only a few days.



FREQUENTLY ASKED QUESTIONS



I have seen videos of solar projects with loud inverters. How is Grange different?

Some operating solar projects were not designed with large inverter setbacks and did not plant robust vegetative screening buffers that can help muffle noise. Grange is not only committed to a minimum 500-foot setbacks from inverters to homes, but is also committing to measurable noise mitigation in the event an inverter creates more noise than expected. Finally, the sound from inverter videos may not be a reliable indicator of the actual sound and are subject to manipulation.

Do solar projects make noise at night that a neighbor could hear?

No. Solar projects only produce electricity during the daytime. Inverters are loudest on hot sunny days when they are processing the most electricity and their cooling fans run. They are virtually silent at night.

How long does project construction last? What is the noisiest part of the process?

Solar project construction typically lasts 12-18 months. The noisiest part is when small pile drivers install the vertical steel piles into the ground, which creates a “pinging” noise over a few months. Also, pile driving only occurs in a particular area over a very short period of time.

Is there a lot of traffic noise during project operations?

No. One reason why solar projects make quiet neighbors is the limited need for operations and maintenance presence. The primary maintenance activity on a solar site is landscape maintenance and grass mowing, which is relatively infrequent in any one location and likely will involve less traffic noise to active farming. Grange also plans to use sheep for maintaining some of its grass ground cover, which will further reduce noise vs. active mowing or crop harvesting.



QUESTIONS? WE WANT TO HEAR FROM YOU

- LEARN MORE ABOUT THE GRANGE SOLAR PROJECT
- REVIEW WELL-VETTED INFORMATION ABOUT SOLAR
- SCHEDULE A MEETING WITH OUR TEAM TO DISCUSS YOUR CONCERNS OR FEEDBACK
- DISCOVER HOW SOLAR CAN BENEFIT YOUR COMMUNITY
- GET INVOLVED!



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