

# PAEAHU SOLAR PROJECT

---

## COMMUNITY FEEDBACK

### WHAT WE HEARD ABOUT

### STATUS

#### Revised Project Layout

- The solar array racking system design was changed from single-axis trackers to fixed-tilt.
- Fixed-tilt systems have the advantage of being slope tolerant and can be installed in a more compact space compared to single-axis trackers. Due to the topography of the site, the use of fixed-tilt foundations allows for a reduced Project footprint; thereby allowing more flexibility on the micro-siting of the solar array.
- The Project layout has been designed to take into account the results of the archaeological and environmental studies (see attached figures).
- The solar panels will occupy about one-quarter of the approximately 200-acre study area.

#### Roadways and Traffic through Maui Meadows

- The Project is planning to use a temporary access road outside of Maui Meadows during construction.
- Use of Piilani Highway during construction would be temporary and would try to avoid peak traffic hours.
- During operations the site requires only minimal access by light-duty vehicles.
- Best management practices will be used during construction and operation such as scheduling deliveries for non-peak hours of traffic, minimizing the number of vehicles on roadways.
- A traffic Impact Analysis will be completed as part of County Special Use Permit application.

#### Visuals and Setbacks

- The setback between the Project and residences was increased an additional 70 ft. The Project is now 270 ft at the closest point.
- The height of the solar panels was reduced from 14-16 ft to 7-8 ft by using a shorter solar tracking systems.
- The Project will be visible from select locations but will not dominate the landscape.
- Visual (photo) simulations show that some Project areas will be visible to the closest residences in Maui Meadows, but not visible from most of the neighborhood or from Piilani Highway.
- Innergex is assessing landscaping options for visual screening to supplement the existing natural vegetation to help reduce visual impacts.

## WHAT WE HEARD ABOUT

## STATUS

### Glint and Glare

- The solar panels will have an anti-reflection coating.
- Single-axis tracking panels (i.e. instead of fixed-tilt) will continuously track the movement of the sun with the center of the panel face. This will minimize reflectivity and limit glint and glare.
- The Project design accounts for potential glint or glare and follows guidance developed by the Federal Aviation Administration (FAA).
- Preliminary analysis that simulated the perspective of nearby residences did NOT find any glint or glare issues.
- Detailed analysis will be conducted on the final design layout and if any issues are identified then measures will be taken to mitigate them.

### Fire Preparedness and Response

- Preliminary meeting was held with the Maui Fire Department to discuss fire protection and risk reduction in which the department noted the project would act as a firebreak to Maui Meadows.
- A fire safety plan will be implemented. We will work with the department to identify and mitigate safety risks to prevent incidents and protect employees, first responders, the public and the environment.
- A site visit with the Fire Department will be held to review procedures for different types of potential incidents.

### Equipment Fire

- Paeahu's battery energy storage system has been designed to comply with national fire safety standards and best safety practices including proper training for operators and first responders.
- Battery storage to be used at Paeahu has undergone stringent safety testing and are designed for commercial and outdoor use and will utilize liquid cooled lithium-ion batteries enclosed in multiple smaller steel cabinets to mitigate fire spread in the case of an external or internal fire event.
- Battery supplier has completed a full-scale hazard assessment of its battery system by the US National Fire Protection Association (NFPA) that included both internal and external fire attack experiments.

### Archaeological, Cultural and Environmental Concerns

- Required archaeological, biological, technical, and site-specific surveys and studies are underway to assess potential impacts, mitigation measure, design limitations, and meeting permitting criteria for the Project.
- Site-specific plans will be prepared to address potential impacts (e.g. spill and stormwater prevention, erosion and sediment control).
- Innergex is regularly consulting with the Aha Moku, environmental groups, and other stakeholders in to these surveys and studies.

### Heat Island Effect

- The Project will not change the local climate or affect the natural flow of air across Maui Meadows. The up- and down-slope winds off Haleakala would overwhelm any heat creation from the solar farm. The Project area is simply too small in relation to the area of the southwestern slope of Haleakala to have a significant impact on the natural air movement across Maui Meadows and the larger Wailea area.
- The Tetra Tech Memorandum RE Heat Island Effect in Context to the Proposed Paeahu Solar Project, Maui County, Hawaii dated December 12, 2018.

## WHAT WE HEARD ABOUT

### Electro Magnetic Fields (EMF)

## STATUS

- EMF levels at Maui Meadows will not change as a result of the Project. Electric facilities produce EMF, as do household appliances and electrical lights. The Project will produce low levels of DC EMF from panels and collector lines, and AC EMF from inverters, battery energy storage system, transformers, and power lines.
- Levels of DC EMF produced are significantly less than the Earth's magnetic field. Levels of AC EMF also decrease rapidly with distance and point sources will be 625 - 3,000 ft from Maui Meadows. As a result, no electric or magnetic fields created by the project will be measurable at any residences.
- The term "dirty" power is used to describe electricity containing high radio frequency noise. "Dirty" power is commonly produced by household electronics such as computers. Utility-scale power generators such as solar farms must meet national power quality standards and include high frequency voltage filtering. Project equipment must meet federal radio frequency standards and any low levels produced dissipate near the source, leaving no measurable levels at the project boundary.
- Innergex followed-up with the two companies put forward by Dr. Debra Greene: Cratus Canada on December 12, 2018 and Satic Inc. on December 13, 2018. Satic agreed that the proposed project at these distances are far enough away to not have an impact on the neighboring residences. Innergex requested that they provide additional information for review and consideration.
- Refer to the Tetra Tech Memorandum RE EMF and 'Dirty Power' in Context to the Proposed Paeahu Solar Project, Maui County, Hawaii dated December 15, 2018.

### Property Values

- The Project is not expected to have an adverse effect on nearby property values.
- An analysis was conducted by CohnReznick to quantify changes in adjacent property values upon the construction, operation, and overall presence of a solar facility in various locations in the United States. The study locations represent California, Hawaii, Indiana, Minnesota, and New York in a variety of market conditions to ensure an unbiased and distinct sample size.
- Property values for parcels adjacent to an existing facility were analyzed (as well as in various phases of construction where possible) as a test group and compared with properties outside of the vicinity of any solar project as the control group using indicators. In order to take into account market fluctuations due to time and location of sales, a regression model was used to scale price and demand for properties and ensure comparability. Impact to property value was measured in differences in range of sale prices, unit sale prices, conditions of sale, and overall marketability between the control group and the test group.
- In all the studied areas, it was conclusive that proximity to an existing solar facility did not have an impact on property values. This conclusion was reaffirmed by property assessment and sales professionals.
- Colliers International analyzed tax assessment and property sale values for properties adjacent to two recent utility-scale solar projects in Hawaii (Waianae and Waihonu). Residential properties adjacent or in close proximity to the solar farms increased in value over 3-4 years between 8% to 35%.
- Refer to the Colliers International Memorandum RE Market Pricing Study: Property Tax Assessment & Price Changes to Land Adjacent to Solar Farms dated November 22, 2018.
- Refer to the CohnReznick Property Value Impact Study dated May 2020.