

BARBERS POINT SOLAR PROJECT

FREQUENTLY ASKED QUESTIONS

WHAT IS THE BARBERS POINT SOLAR PROJECT?

Innergex is proposing a 15 MW solar photovoltaic system coupled with a 15 MW, 4-hour (60MWh) DC-coupled energy storage system (DE-ESS) project (the Project) located in Kapolei on the island of Oahu. The Project is to be located on two non-contiguous lots (Parcels 38 & 40) owned by Department of Hawaiian Home Lands (DHHL). The solar array and associated infrastructure will utilize approximately 100 acres and will interconnect to the Hawaiian Electric grid via a 0.25-mile 46-kilovolt generation-tie line.

WHAT LED DHHL TO IDENTIFY SUITABLE LANDS FOR RENEWABLE ENERGY PROJECTS?

In August 2009, the DHHL and Hawaiian Electric executed the Energy Partnership Charter with a shared vision for an energy future for Hawaii that would serve as a model of energy self-sufficiency and sustainability and leave a legacy for future generations to come. Critical energy objectives were set, including identifying suitable renewable projects for DHHL's suitable lands that were not suitable for homestead development.

DHHL has developed a three-tiered planning system to guide planning on its land holdings and policies for resource management, for the benefit of current and future beneficiaries (DHHL 2014). The planning system includes an overarching General Plan; Strategic Program Plans and Island Plans, including the Oahu Island Plan; and Regional and Development plans, such as the Kapolei Regional Plan. The parcels at Kalaeloa are designated as Industrial and have qualities that are ideal for a solar project. The proposed project would provide DHHL with revenue, which would be utilized for developing homestead sites.

WHAT LED TO THE KALAELOA PARCELS OF LAND BEING AVAILABLE FOR SOLAR DEVELOPMENT?

Renewable energy sites were selected by DHHL in consultation with the beneficiary community as part of their planning processes throughout 2008 – 2014. DHHL lands in Kalaeloa, O`ahu were deemed not suitable for homesteading due to their proximity to a nearby airport as well as their remote locations, physical characteristics, and lack of infrastructure for residential development.

While all DHHL lands in Kalaeloa are zoned for Industrial use, several parcels were designated for renewable energy production in 2014 through the Department's beneficiary consultation process and in accordance with DHHL's 2009 Ho`omalua energy policy.

It was also determined that the highest and best use of these available lands would be in the renewable energy category as a result of limiting issues including land tenure, presence of historical structures, and topography. The area's terrain is considered karst which is characterized by porous and permeable coralline limestone reef deposit, making much of DHHL's Kalaeloa land susceptible to sink holes and therefore more appropriate for low-intensity industrial use. Revenues developed from industrial leasing of these available lands are used by DHHL to develop new homesteads in suitable residential areas throughout the state.

In 2018 and in 2019, DHHL ran consecutive competitive solicitation processes for the disposition of these sites by general leases for renewable energy projects. The DHHL RFP was widely advertised and all qualified applicants were welcomed to bid.

Innergex was selected by DHHL as the final applicant for the proposed project site and to continue with the leasing process that includes consultation meetings with DHHL's beneficiaries and public hearings. A non-exclusive Right-of-Entry was issued on August 1, 2019 for an initial period of two years with the option to extend for three additional one-year periods to conduct due diligence activities and investigation related to the development of a solar project. Innergex would seek a 25-year term lease to match the power purchase agreement. At the end of the PPA, Innergex is committed to remove the solar equipment and return the site to its previous condition.

WHAT LEAD TO THIS PROJECT BEING DEVELOPED?

Innergex responded to a competitive Request for Proposal (RFP) issued by Hawaiian Electric in 2019 for renewable energy that will help stabilize and lower costs while reducing the state's reliance on imported fossil fuels and cutting greenhouse gas emissions.

WHO IS INNERGEX?

Founded in 1990, Innergex is an independent renewable power producer which develops, acquires, owns and operates hydroelectric facilities, wind farms and solar farms. Innergex has operating projects in the United States, Canada, Chile, and France. It is a priority for us to be a good community partner because we are a long-term owner and operator of projects.

WHO IS FUNDING THE BARBERS POINT SOLAR PROJECT?

Innergex will be responsible for 100% of the development, construction, and start-up costs. After completion, Innergex will also be responsible for all operational and maintenance costs.

WILL THIS MEAN INCREASED COSTS FOR CONSUMERS?

Oahu has some of the highest electricity prices in the United States at 31 cents per kWh. The price of solar plus energy storage in the recent Hawaiian Electric RFPs is the lowest to date for renewable electricity in the state. The Project will provide a fixed, long-term price for 25-years, in place of volatile prices of fossil fuels, will put downward pressure on electricity rates.

WHAT WILL THE PROPOSED PROJECT ACCOMPLISH?

The proposed Project will power approximately 6,200 homes with renewable energy. This would contribute to the State of Hawaii's goal to be 100% renewable by 2045 and reduce the state's dependency on imported fossil fuel.

HOW ELSE WILL THE COMMUNITY BENEFIT FROM THE PROPOSED PROJECT?

Innergex will give preference to qualified local suppliers and contractors throughout the development of the project. During operations, the project's community benefits package will be dedicated funding to the Kapolei Community Development Corporation (KCDC) for the Heritage Center. The benefit of working with the KCDC is that its membership includes the homesteader associations in the Kapolei/Kalaeloa area, including Malu'ohai, Kaupe'a, Kānehili and Ka'uluokaha'i homestead communities, but also provides a place for all of Oahu and neighbor island Hawaiians to meet on Oahu for various purposes. Innergex is working with the Center for Native Hawaiian Advancement and the Mākaha Training Center who will be providing a solar installation skills training course for its members and beneficiaries who are looking to participate in this industry, with a particular focus on utility-scale projects. The project will also contribute to local organizations, community projects and events throughout the life of the project. Through annual sponsorship evaluation, the project will contribute to local organizations, community projects and events throughout the life of the project.

WHY IS ENERGY STORAGE PART OF THIS PROPOSED PROJECT?

The DC-coupled battery energy storage system (DC-ESS) is a key aspect of the RFP. The DC-ESS would be completely charged from the solar panels during the day. The energy can then be used during peak demand in the evening or at other times when the sun is not shining.

ARE THERE ANY CULTURAL OR ENVIRONMENTAL FEATURES TO CONSIDER FOR THE SITE?

Respecting archaeological, cultural, and environmental features of any site that Innergex develops is a priority. These studies and analyses will be conducted to gain a thorough understanding of the site and any findings. The intent would be to arrive at the best possible final layout that balances archaeological, cultural, environmental, technical, economic, and community considerations.

WHAT IS THE OVERALL IMPACT OF SOLAR PROJECTS ON THE ENVIRONMENT?

Innergex must provide a complete analysis of the greenhouse gas (GHG) emissions created throughout the life cycle of the project as part of the Public Utilities Commission approval process.

The analysis of GHG emissions created throughout the life cycle of the project will include:

- Solar PV Manufacturing, Including Material Extraction,
- Battery Storage Manufacturing, Including Material Extraction,
- Transmission Line Manufacturing, Including Material Extraction
- Additional Transportation to and from Oahu and Project Construction
- Operations
- Decommissioning & Disposal

This comprehensive inventory of emissions is compiled and compared to the alternative production of the equivalent amount of energy production as if the project were not built.

A recent analysis showed that a similar sized project in Hawaii would avoid 94% of the Lifecycle and Operational GHG emissions that would have been produced by the normal generation mix.

WHAT IS THE TIMELINE FOR THE PROPOSED PROJECT?

Innergex responded to Hawaiian Electric's RFP and was selected to start PPA negotiations in May 2020. Innergex anticipates completing construction and beginning operation of the project by the end of 2023. The initial term under the PPA is 25 years. Thereafter, the project can be acquired by Hawaiian Electric, have its PPA renewed, or be decommissioned, recycled and site returned to its original state.

HOW WILL THE PROJECT BE DECOMMISSIONED?

As part of the decommissioning of a typical solar project after its useful lifecycle (between 25-35 years), any and all components associated with the project would be removed and the area would be returned to substantially the same condition as existed prior to project development. Decommissioning criteria include consideration of local environmental factors to minimize effects such as erosion during the removal process, and the recycling of all possible materials demolished or removed from the site.

Reuse or recycling of materials would be prioritized over disposal. Recycling is an area of great focus in the solar industry, and programs for both batteries and solar panels are advancing every year. Panels and batteries would most likely be shipped to recycling facilities on the mainland.

If any materials need replacing before the facility end-of-life, Innergex would seek the most environmentally responsible route for reuse, recycling or disposal.

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INNERGEX

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Sustainable Development.