

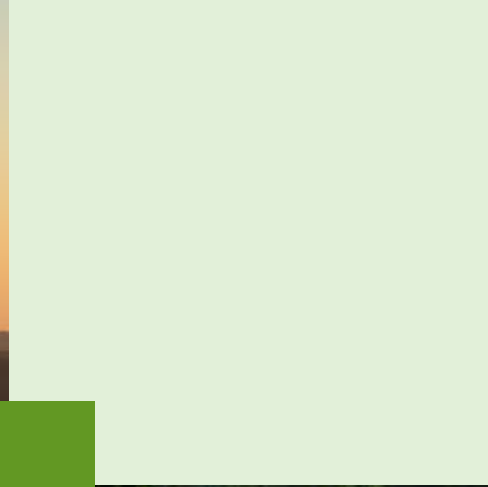


Renewable Energy.
Sustainable Development.

HALE KUAWEHI SOLAR PROJECT UPDATE



Waimea Community
Association
June 6, 2019



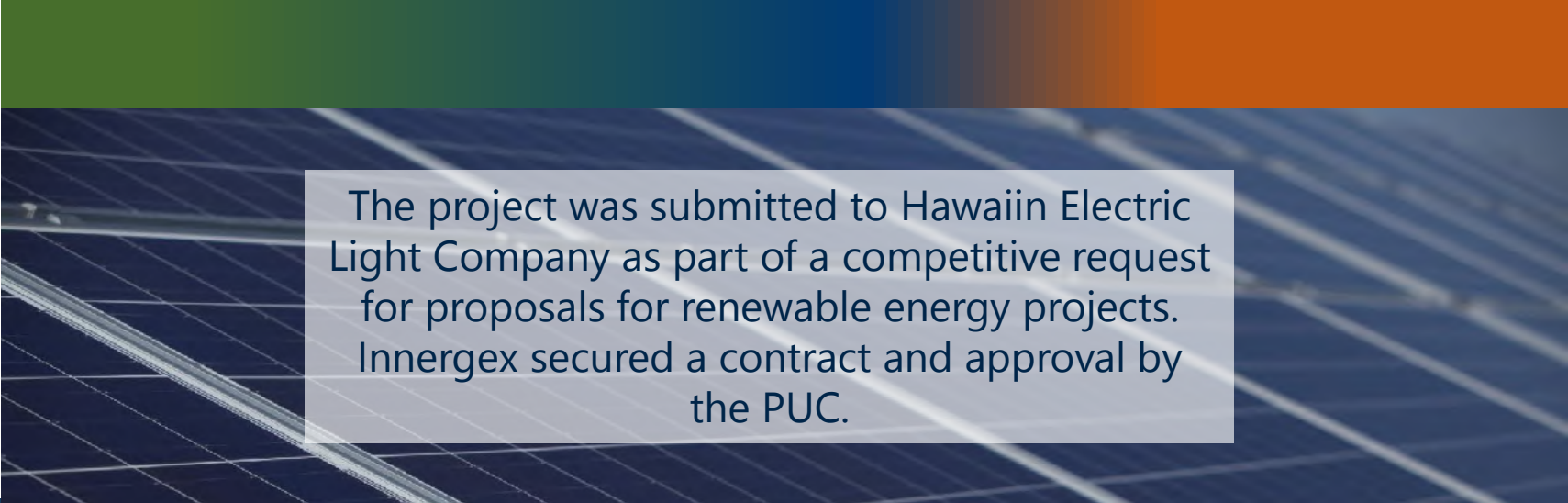


HALE KUAWEHI SOLAR PROJECT

The Hale Kuawehi Solar Project is a proposed 30 MW solar photovoltaic + 120 MWh battery storage project located on Parker Ranch, near Waimea.

~100,000
High
efficiency
solar panels

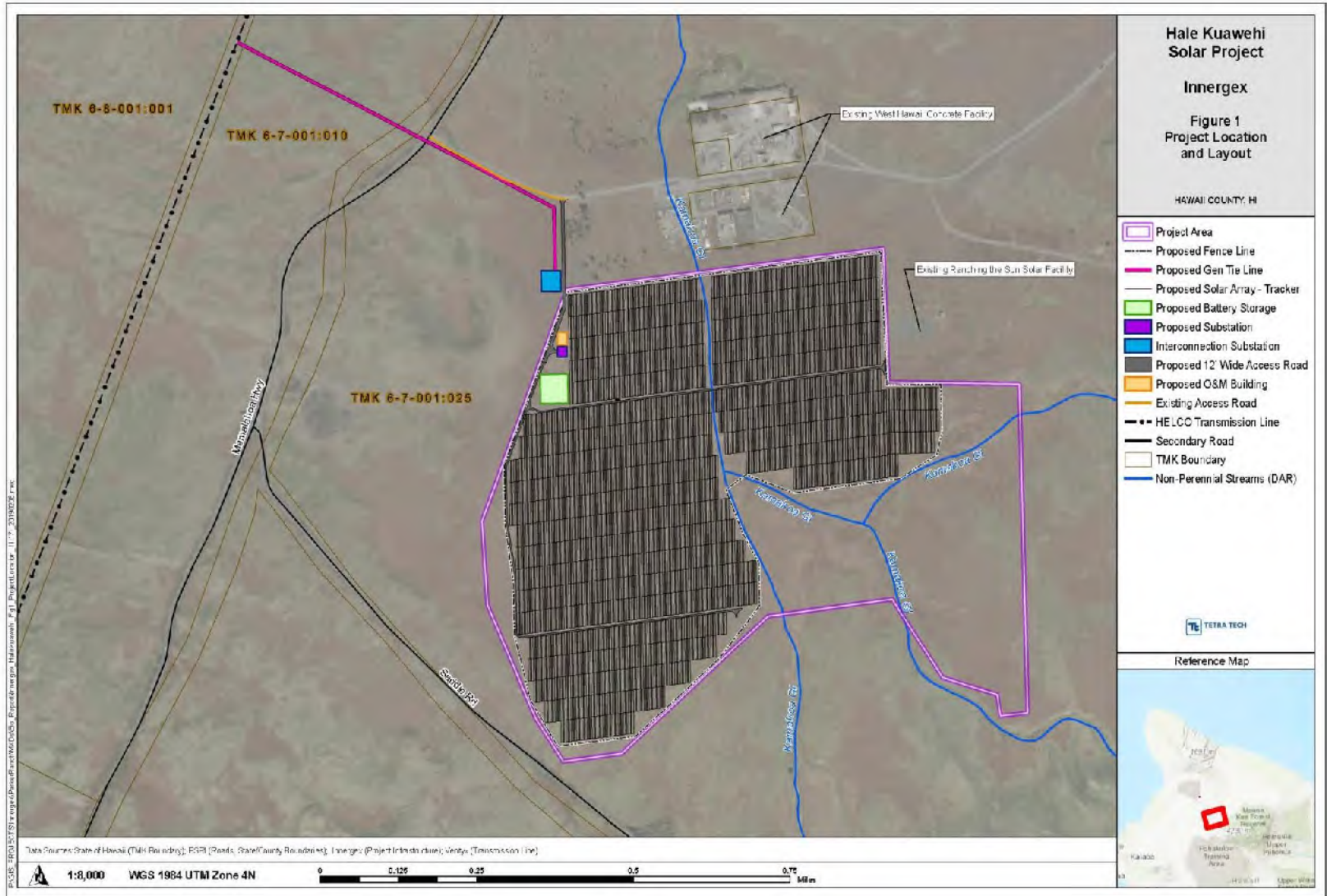
Enough to
power
~16,750
homes



The project was submitted to Hawaii Electric Light Company as part of a competitive request for proposals for renewable energy projects. Innergex secured a contract and approval by the PUC.



PRELIMINARY PROJECT LAYOUT



This conceptual layout is based on topographic data. The next version of the layout will incorporate archaeological, cultural, environmental and technical study results as well as balancing economic and social perspectives. At times, these various considerations may conflict with each other but we will strive to make development decisions that appropriately balance these considerations, with the intent of developing the best possible project.



TIMELINE & MILESTONES OVERVIEW

- February 2018 Request for Proposal Issued ✓
- April 2018 Request for Proposal Bids Submission ✓
- June 2018 Short List Group Notification and Best and Final Offer ✓
- September 2018 Final Award Group Selection and Contract Negotiations Begin ✓
- December 2018 Execute Power Purchase Agreement (PPA) ✓
- Q1 2019 Public Utilities Commission Approval of the PPA ✓
- 2019-2020 Complete Archaeological, Cultural and Environmental Surveys & Technical Studies
- 2020-2021 Obtain Permits and Approvals
- Q2 2021 Estimated Construction Start
- Q2 2022 Commercial Operation Date
- Operation 25-Year PPA Timeframe Thereafter, the contract can be extended or the project can be decommissioned (equipment recycled).

COMMUNITY ENGAGEMENT IS ONGOING THROUGHOUT THE ENTIRE PROCESS.



ENVIRONMENTAL STUDIES

General Plant
and Wildlife
Surveys



Invertebrate
Survey:
Blackburn
Sphinx Moth
Survey



Pre-
construction
Biological
Clearance
Surveys

Phase 1
Environmental
Site
Assessment

Determination
of Wetlands
and Waters

Visual Impact
Analysis

Noise
Modeling

Traffic Impact
Assessment





GENERAL PLANT & WILDLIFE SURVEY

PRELIMINARY RESULTS:

- No federal or state listed threatened.
- The biological resources in the Project area have been modified by past disturbances including the introduction of non-native ungulates and plants, domestic grazing, and agricultural uses.
- These uses have reduced the number and abundance of native species and their habitat.
- The area is currently dominated by pasture land grasses and other non-native species with very few shrubs and trees.



Fountain grass with scattered 'a'ali'i along the generation tie-line west of Mamalahoa Highway



ARCHAEOLOGICAL AND CULTURAL STUDIES

Important aspects to consider before finalizing the design and building of a project are the potential archaeological, cultural and historical properties the project could impact.



Archaeological Inventory Survey

- Archival research
- Surface survey
- Test excavations
- Data analysis
- Reporting





ARCHAEOLOGICAL INVENTORY SURVEY

PRELIMINARY RESULTS:

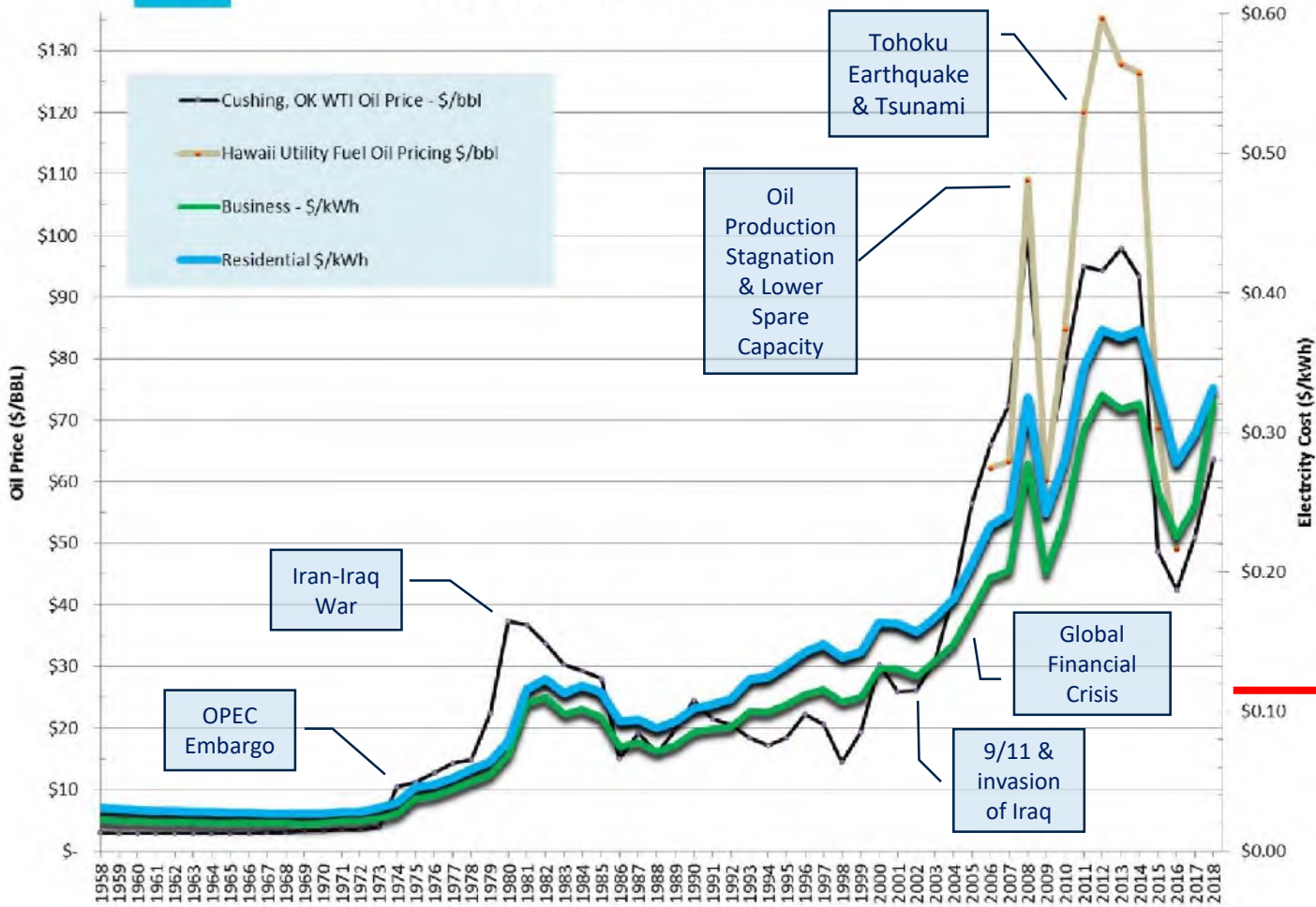
- Five historical properties were identified & recorded.
 - Modified outcrop, water tank, trough, shut-off valve, fence line.
- Five isolated objects were identified & recorded.
 - Disk harrow, wooden boards, small arms ammunition, bottle glass.
- Animal bones (identified as pig) were encountered in a natural deposit in one of the trenches.
- A controlled stratigraphic test excavation was conducted at the modified outcrop (metal fragments, single flake of volcanic glass). Charcoal flecking collected for dating analysis.



HISTORICAL ELECTRICITY COST



**State of Hawaii - Historical Electricity Cost
1958 to 2014 - \$/kWh**



Hale Kuawehi Solar
\$0.087 /kWh
 Fixed Priced for 25 years



HELCO IDENTIFIED BENEFITS

Fixed Price Contract

The Unit Price, as defined in the PPA, is advantageous in that it is fixed for the duration of the PPA and is anticipated to result in lower effective rates for customers.

Consumer Savings

A typical HELCO customer consuming 500 kWh per month is estimated to save approximately \$6.20 in 2022 and \$6.79 in 2023 on the customer's monthly electric bill.

Operational Flexibility

HELCO will have the contractual flexibility to dispatch energy from the Project's PV or battery storage system as needed, offset night-time customer demand, and assist in grid stabilization subject to discharge limits.



HELCO IDENTIFIED BENEFITS

Addresses RPS Needs

The Project will contribute up to 7.7% to HELCO's Renewable Portfolio Standard (RPS) over the 25-year term of the PPA.

Reduces Fuel Consumption

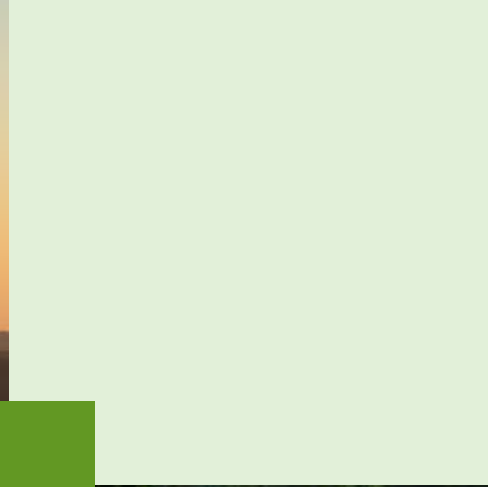
The Project will significantly reduce HELCO's fuel consumption on its generating units. It is estimated that the Project will displace 497,126 barrels of fuels over the 25-year term of the PPA.

Displaces GHG's

An estimated total of up to 180,500 tons of GHG emissions that will be avoided during the 25-year term of the PPA.

INNERGEX

Renewable Energy.
Sustainable Development.



Mahalo!

For more information visit
halekuawehisolar.com

Submit your ideas via email to
hawaiisolar@innergex.com