

[← BACK TO PROJECTS](#)

Hoku Nui Microgrid

Off-Grid Microgrid Installation

Makawao, HI



Project Highlights

- Delivered the electrical scope for an off-grid microgrid serving an Upcountry Maui community.
- Installed 2.5 miles of 15 kV underground transmission with splices and terminations.
- Completed string wiring and hookups to 2,668 photovoltaic modules.
- Built the grounding grid and medium-voltage terminations with ELCCO's own crews.
- Integrated photovoltaic generation, battery storage and backup generation on one islanded system.
- Held the five-month schedule through a medium-voltage cable delivery shortage.
- Completed the full scope of work with no safety incidents.

Overview

Hoku Nui Microgrid is an intentionally islanded electrical system in Makawao, Upcountry Maui, built to supply homes and buildings across the property independently of the utility grid. ELCCO installed the electrical gear and wiring for a 1 MW photovoltaic array paired with a 3 MWh battery energy storage system and a backup generator, then built the medium-voltage distribution backbone that carries power across the subdivision. Two contracts were executed as a single effort: the microgrid itself, and 2.5 miles of 15 kV underground transmission with splices and terminations at each location. ELCCO self-performed the grounding grid, medium-voltage terminations, feeder and branch wiring, and the string wiring and hookups to 2,668 photovoltaic modules. The work finished on schedule in five months with no safety incidents.

Services Provided

- Electrical
- Solar & Storage
- Medium & High Voltage

“

ELCCO delivered on our large microgrid projects despite tight timelines and hard deadlines. Their team came through, and we look forward to working with them again on future projects.

Vice President, Solar EPC
Developer

The ELCCO Difference

Hoku Nui reflects ELCCO's commitment to building energy infrastructure that keeps Maui communities supplied, using local crews with the medium-voltage and renewable-energy skill the islands depend on.

Let's Build Together

[DISCUSS YOUR PROJECT](#)

Ready to Start Your Project?

Ready to work with us?
Have a question or Need Assistance?
Let us know how we can help.

[LET'S TALK](#)



At ELCCO, we are dedicated to excellence through solutions that stand the test of time.

Company

About
Services
Projects
Careers
Perspectives
Contact