KIUC and AES to Join Forces on First Ever Solar + Pumped Storage Hydro Project

**WKEP will move Kaua‘i beyond 80% renewable generation and meet more than 25% of its electricity needs**

*Lih‘u’e, Kaua‘i, HI – January 7, 2021* — Kaua‘i Island Utility Cooperative (KIUC) signed agreements with The AES Corporation (NYSE: AES) for the development, construction, and operation of the cooperative’s solar pumped storage hydro project, also known as the West Kaua‘i Energy Project (WKEP). A power purchase agreement (PPA) was also executed and filed with the Hawai‘i Public Utilities Commission on December 31, 2020.

WKEP is an integrated renewable energy and irrigation project with several key components: renewable energy production via hydropower and solar photovoltaic generation, coupled with pumped hydropower and battery energy storage to shift most of the project’s output into the nighttime peak. This project will offset the use of 8.5 million gallons of fossil fuels annually and supply irrigation water delivery to support diversified agriculture on state-owned lands. The project will also rehabilitate the existing Pu‘u ‘Opae, Pu‘u Lua, and Mānā Reservoirs and the related ditch system infrastructure. In addition, historic diversion structures in Koke‘e will be modified to restore and increase flow to the Waimea River in compliance with the instream flow standard established by the Waimea Watershed Agreement and adopted by the Commission on Water Resources in April 2017.

“This project’s integration of pump storage hydropower with large-scale solar power is unique in the energy industry. Working with AES helps keep this important project moving forward while minimizing risk to our cooperative. Upon completion, the facility will operate at a cost that will benefit KIUC’s members for decades,” said KIUC’s President and Chief Executive Officer David Bissell. “AES is a trusted partner with the expertise and experience to bring this complex project to successful completion.”

When operational, the solar array will contribute up to 35 megawatts directly to the grid and will store up to 240 megawatt hours for dispatch during evening peak. The hydro resources are expected to produce 24 megawatts on average daily, which includes 12 hours of storage to be used overnight.

KIUC has completed two solar-plus-storage renewable projects in partnership with AES: a 20-megawatt (MW) facility in Lāwa‘i and a 14 MW facility at the Pacific Missile Range Facility. AES has more than 200 MW of solar, solar + storage, and wind resources in operation or under development across Hawai‘i.

(more)
"AES has been a long-time provider of low-cost electricity for Hawai‘i and we are honored to continue our successful partnership with KIUC to support Kaua‘i and the state in transitioning to 100% renewable energy,” said Woody Rubin, AES Clean Energy Chief Development Officer. “We look forward to continuing to work with the Kaua‘i community and stakeholders to develop this project responsibly, and to realize the agricultural, economic, and environmental benefits the project offers.”

“WKEP will deliver many benefits to KIUC’s members and the community-at-large,” Bissell said. “To name just a few, the project will move Kaua‘i beyond 80% renewable generation, stabilize and lower electricity rates over time for our members, open up dormant agricultural lands for production, assure adequate streamflow and increase public access and recreational opportunities associated with the Pu‘u Lua Reservoir.” He added that rehabilitation of the reservoirs will also assist first responders in addressing wildfires.

The project is expected to meet roughly 25% of Kaua‘i’s electricity needs, and will also support the grid with long-duration storage capability. The pumped hydropower will provide twelve hours of storage daily, compared to the conventional four- or five-hour storage from existing solar-battery facilities. This long-duration storage capacity will allow the island to run on 100% renewable energy for prolonged periods without sunlight and will provide additional grid stability by balancing intermittent solar with firm hydropower.

Environmental studies for WKEP have been ongoing. A draft environmental assessment (EA) is expected to be filed with the Department of Land and Natural Resources in the first quarter of 2021.

**About KIUC**

*KIUC is a member-owned cooperative serving 34,000 customers on the island of Kaua‘i. Formed in 2002 and governed by a nine-member, elected board of directors; KIUC is one of more than 900 electric co-ops in the United States. KIUC’s Board of Directors has set a strategic goal of reaching 70 percent renewable generation by the year 2030. Currently, KIUC derives more than 60 percent of its power from renewable sources.*

**About AES**

*The AES Corporation (NYSE: AES) is a Fortune 500 global energy company accelerating the future of energy. Together with our many stakeholders, we’re improving lives by delivering the greener, smarter energy solutions the world needs. Our diverse workforce is committed to continuous innovation and operational excellence, while partnering with our customers on their strategic energy transitions and continuing to meet their energy needs today. For more information, visit [www.aes.com/even-better-together/](http://www.aes.com/even-better-together/)*
Pu‘u ‘Ōpae is one of three reservoirs to be rehabilitated as part of the project. This image represents the reservoir once the project is complete.