

Funding Opportunity Announcement DE-FOA-0002740

Code: TA3-049-E

Grid Resilience and Innovation Program (GRIP)

Topic 3: Grid Innovation Program (BIL § 40103 (b))

Utility Solar Grid Forming Technology

Technology - Innovative Technology of Installing Advanced Grid Forming Inverters and Battery Energy Storage at Legacy Solar Power Sites

Impact - Creation of Hybrid Power Supply with Enhanced Dispatchability, Resource Availability and Provision of Ancillary Grid Services

Goals - Effective Island-wide Grid Operation when Dispatching a Variety of Generation Sources and Loads, Demonstrating the Technology for Hawai'i and Others

Prime Recipient - Business, Economic Development & Tourism, Department of Hawai'i – Hawai'i State Energy Office

Project Manager - **Christopher Yunker:** Managing Director, Resilience, Clean Transportation, & Analytics (HSEO)

Key Personnel - **Donna Mau:** Managing Director, Operations (HSEO)

Parker Kushima: Outreach & Community Engagement Specialist (HSEO)

Brad Rockwell: Oversight and Project Management (KIUC)

Cameron Kruse: Engineering Management (KIUC)

John Cox: Construction Oversight (KIUC)

Beth Amaro: Project Administration (KIUC)

Stacie Dellamano: Project Accounting and Financial Reporting (KIUC)



Total Project Cost:	\$32.5 million
Requested DOE Funds:	\$16.25 million
Cost Share (50%)	\$16.25 million

Utility Solar Grid Forming Technology

Grid Benefitting Outcomes: Reliability and resilience on the transmission and distribution system by increasing inertia and reducing the frequency, scale, and duration of disruptions that would otherwise destabilize the system. Immediate economic savings by off-loading reactive power from fossil units.

Key Project Idea/Takeaway: An innovative technology to effectively update legacy solar power at brownfield sites. A broadly applicable means of enhancing clean energy availability and energy security with minimal to no environmental impacts.



KRS1 – Anahola



KRS2 – Kōloa