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Hawai'i Natural Energy Institute Research Highlights

International Support

Support to the USAID Energy Secure Philippines (ESP) Program

OBJECTIVE AND SIGNIFICANCE: HNEI GridSTART is delivering technical support to the USAID-funded Energy Secure Philippines (ESP) Program, the Philippines Energy Regulatory Commission (ERC), and the Philippines Department of Energy (PDOE) in their mission to advance inclusive economic growth and resilient energy sector development. This support includes the establishment of net energy metering (NEM) rules for numerous small island grid systems and the development of a regulatory framework for battery energy storage systems (BESS) adoption in the Philippines.

BACKGROUND: In 2019, HNEI GridSTART collaborated with USAID Clean Power Asia to provide technical and capacity building support to the PDOE for the preparation and presentation of its Department Circular (DC) titled "Promulgating Policies to Enhance Customers' Participation in the Philippines' Net-Metering Framework."

HNEI GridSTART continues to support the Philippines' power sector by delivering both collaborative (APRESA-funded) and USAID ESPfunded technical support to the ERC, PDOE, distribution utilities (DUs), and other Philippine energy industry stakeholders. Specifically, HNEI GridSTART has assisted in developing comprehensive set of rules for a NEM program, as well as a mandated regulatory framework for BESS in the Philippines. The BESS framework includes: streamlined rules for BESS interconnection, guidelines for BESS technical codes and standards, mechanisms for cost recovery related to utility-owned BESS, and third-party-owned BESS delivering ancillary services. This work is assisting the ERC in fulfilling its mandate set by the PDOE.

PROJECT STATUS/RESULTS: In the summer of 2022, HNEI GridSTART submitted reports and documentation on NEM rules for isolated "off-grid" island systems and a BESS regulatory framework in the Philippines to USAID ESP and the ERC. These reports were presented in person in Manila in August 2022 and a workshop with the USAID ESP and the ERC followed in September 2022 to draft BESS regulations for ERC promulgation. In February 2023, HNEI GridSTART conducted a second in-person writing workshop on the ERC's draft BESS regulation.



Figure 1. HNEI's Philippines BESS Regulation Drafting Workshop #2 in Pasig City in February 2023.

In June 2023, HNEI GridSTART delivered in-person capacity building on microgrids to the ERC and on power system resiliency to the PDOE. Following these presentations, HNEI GridSTART participated as an online presenter in the Philippines' 2023 Energy Resiliency Forum at the PDOE's request.



Figure 2. HNEI's meeting with the PDOE in June 2023.

In November 2023, HNEI GridSTART delivered two days of in-person capacity building activities on energy storage systems (ESS) to the PDOE, aimed to assist DUs by: 1) providing a better understanding of the costs and benefits of ESS; 2) building an understanding of BESS behind-the-meter applications; 3) helping policymakers and regulators to address BESS-related policy and regulatory gaps; and 4) assessing the need to enhance the existing institutional approach to promote and utilize BESS in the Philippines.

HNEI GridSTART is also working with USAID ESP to develop and administer a hybrid classroom/hands-on training curriculum aimed at helping off-grid DUs optimize NEM uptake, which is currently planned to be delivered in the first half of 2024.

Funding Source: USAID ESP Program; Office of Naval Research

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Last Updated: November 2023