3

Hawai'i Natural Energy Institute Research Highlights

International Support

Support to the USAID Energy Secure Philippines (ESP) Program

OBJECTIVE AND SIGNIFICANCE: HNEI's Grid System Technologies Advanced Research Team (GridSTART), under contract with the Research Triangle Institute (RTI), is delivering technical and regulatory support to the USAID-funded Energy Secure Philippines (ESP) Program, Philippines Energy Regulatory Commission (ERC), and Philippines Department of Energy (DOE). This support builds on previous collaborations with USAID Clean Power Asia utilizing APRESA funding.

BACKGROUND: The \$34 million ESP Program aims to advance economic growth and energy sector resilience by mobilizing \$750 million in private investment for 500 megawatts of additional generation capacity. In 2022 and 2023, HNEI's support of ESP included assisting in the development of comprehensive off-grid net energy metering (NEM) rules, developing and drafting a framework and regulations for battery energy storage systems, and providing capacity building for the ERC, DOE and distribution utilities (DUs) on various topics including microgrids, resiliency and energy storage.



Figure 1. AFP Camp Aguinaldo, Quezon City, Metro Manila, Philippines.

PROJECT STATUS/RESULTS: While in Manila presenting at the Asia Clean Energy Forum (ACEF) in early June 2024, HNEI GridSTART met with its counterparts from RTI to discuss refinements to our ESP scope of work (SOW). Specifically, the parties discussed expanding the previous scope to include: 1) a design review for an electric-powered fishing boat; 2) in-person training sessions/presentations for select DUs and local government units (LGUs); 3) training on renewable energy use and power system resiliency for the Siargao Women's Center; 4) assessing the power distribution system of Siargao Electric Cooperative (SIARELCO); and 5) an assessment of and conceptual strategies for improving power

system resiliency of the Armed Forces Philippines (AFP) General Headquarters at Camp Aguinaldo.

In June 2024, HNEI returned to the Philippines for site visits to the provinces covered by the expanded SOW and to meet with key energy stakeholders (e.g., DUs, LGUs) in Manila, Bohol, Iloilo, and Siargao. Some of the local officials with whom GridSTART met during the site visits included the Mayor of Baclayon, Mayor and former Mayor of Del Carmen, Governor and a Provincial Board Member of Iloilo, and representatives of various DUs.

Discussions to build alignment on the expanded SOW with RTI continued through August 2024 when, while in Manila presenting at a USAID capacity building workshop for ASEAN power system operators, we participated in additional meetings with a representative from the Siargao Women's Center and AFP representatives at Camp Aguinaldo. A contract modification reflecting the expanded SOW was executed shortly thereafter in September 2024, with the period of performance extended through October 2025.

Pursuant to the modified SOW, HNEI GridSTART delivered two in-person training sessions in Iloilo in November 2024: one for the MORE Electric and Power Corporation, and the second for the LGU there. Work on the remaining deliverables in the expanded SOW also began in late 2024 and is scheduled to continue into late 2025, including development of an energy resiliency risk assessment framework for the Philippines DOE and AFP.



Figure 2. HNEI Discussing Capacity Building Support with MORE Electric Power Corporation on Iloilo.

Funding Source: USAID ESP Program; Office of Naval Research

Contact: Leon Roose, lroose@hawaii.edu

Last Updated: November 2024