Hopi Utilities Corporation HOPI REMOTE MICROGRID TO SUPPORT SIDE ROCK WATER PROJECT

TOPIC AREA 1

Award: DE-IE0000185

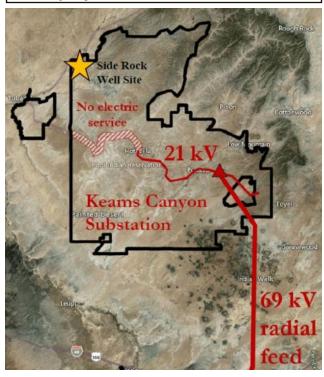
Project Summary

This project was awarded \$4,165,796 of DOE funding to deploy a remote microgrid equipped with 250kW of solar PV, 1,200 kWh of battery energy storage, a microgrid controller, and approx. 1.5 miles of distribution line to connect to two well sites. This advanced microgrid will provide power to two wells at the remote, unelectrified Side Rock well field on the Hopi Reservation. These wells will deliver water to the villages of Upper and Lower Moenkopi via pipeline that is currently in development as part of the ongoing Side Rock Water Supply project and will replace the current water source which is extremely limited and projected to be insufficient for community needs by 2025.

The proposed microgrid is the lowest-cost feasible energy solution to support the Side Rock Water Supply project. It aligns with Hopi's vision to rewrite its energy story by enhancing sovereignty and self-determination through ownership of critical energy resources instead of relying on service provided by non-Hopi entities.

Budget

Federal funds awarded: \$4,165,796 Recipient cost share: \$462,867 Total project costs: \$4,628,663



Side Rock project site, Hopi Reservation, AZ

Key Personnel/Organizations

The Applicant and Lead Organization is Hopi Utilities Corporation, a wholly-owned entity of the Hopi Tribe. Fletcher Wilkinson, HUC Energy Manager, will be primarily responsible for executing this project for HUC.

HUC will be supported by its long-standing energy advisor consultants at Woven Energy.

Project Outcomes

- Improved affordability by supplementing 544,000 kWh of diesel generation annually.
- Provide water security for 235 residential and 14 commercial customers
- Enable economic development which is currently limited by water shortage
- Construct islanded microgrid with at least 95% availability
- Power remote water pumps using solar generation and battery energy storage
- Train and hire 1 permanent technician to perform O&M on HUC Microgrids
- Enhance HUC capacity to plan and deploy future microgrids in other remote areas

This microgrid is critical to supply power to the remote Side Rock well field and ensure future water access for Moenkopi residents.