

Ragged Islands Microgrid Project Bahamas



Ragged Islands is one of the *Family Islands* in The Bahamas archipelago, originally powered by diesel gensets. After the passage of hurricane Irma, the Bahamas Power and Light Company (BPL), tendered a project to implement a micro grid with a high penetration of renewable energy on the island to increase resiliency and diversify the island's energy sources.

Project

Tugliq Energy and its construction partner Salt Energy were awarded the EPC mandate to design, procure, install and operate for a year a hybrid solar-battery microgrid coupled with the existing diesel plant. The nameplate capacity of the system is:

- Solar installed capacity of 402 kW_p;
- BESS energy content of 1,336 kWh.

Key facts

- Approximately 93% of the diesel for power generation will be replaced by clean energy;
- Annual reductions of 210,000 liters of diesel and 587 TCO_{2eq} greenhouse gas emissions avoided;
- Local employment of 5 island residents and 5 additional Bahamians expected;
- First high penetration microgrid for the Bahamian utility.

Project status

The PV arrays are fully commissioned. BESS commissioning has been stopped due to the COVID-19 and will resume upon authorization of the Bahamian government.



Client: BPL

Studies: 2019

Commissioning: 2020

Solar capacity: 402 kW_p

BESS: 1,336 kWh

Location: Ragged Island, The Bahamas

