

CASE STUDY

USAID Caribbean Clean Energy Program (CARCEP)

BACKGROUND

The USAID Caribbean Clean Energy Program's (CARCEP) purpose was to assist certain countries of the Caribbean, with emphasis on Jamaica and the Eastern Caribbean, in establishing effective policy and regulatory environments, as well as incentives, for greater energy efficiency and for low-emission growth in the energy sector. This program also works with the public and private sectors in these countries to spur on investment in Clean Energy development.

CHALLENGE

The increased penetration of renewable resources has resulted in challenges surrounding the operation and planning of the grid as this type of generation has not been included in the previously developed grid codes. Additionally, due to the sensitivity of the grids in the Caribbean, high penetration of renewables can lead to outages and load shedding if not properly planned and operated.

SOLUTION

EPE completed a multi-year project through USAID with Deloitte to provide assistance in grid code development and updating, transmission planning training and other renewable integration procedures/training in the Caribbean. EPE's services covered included the following:

- Led the development of transmission, distribution, metering, and supply grid codes for Jamaica and Grenada in collaboration with stakeholders to address utility needs with increased renewable energy usage. EPE reviewed grid codes from similar regions and conducted stakeholder meetings for new grid code development.
- EPE conducted training sessions for Jamaica Public Service Co. on renewable energy grid integration studies, focusing on generation interconnection studies using DigSilent Power Factory. The sessions included setting up models, reviewing results, and ensuring compliance with grid codes.
- Improved renewable energy forecasting, reviewing load forecasting, supporting energy storage evaluation, and addressing real-time operations and dispatch issues for renewable energy efficiency.
- Smart Grid road map development for the individual islands in coordination with CARILEC. Integration of efforts through webinars and workshops.
- Recommendations for resource forecast and operation software.

CLIENT

Deloitte.

TYPE

Professional Services

SECTOR

Transmission Utilities

ISO

LATAM

LINE OF BUSINESS

Transmission Planning

SERVICES PROVIDED

- Grid Code and Smart Grid Development

LOCATION

Jamaica

COMPLETED DATES

April 2016 - June 2018

REFERENCE

Dan Potash
571-814-7622
dpotash@deloitte.com



Delivering Energy Intelligence