

TYPE:	Operations & Maintenance
LOCATION:	Togo
CLIENT:	Power generation asset owner / utility
TECHNOLOGY:	Pratt & Whitney FT8 gas turbine (HalfPac)



TOGO | PW FT8 HALFPAC REHABILITATION Gas Turbine Rehabilitation and Life Extension Programme

THE CHALLENGE

A PW FT8 HalfPac unit required comprehensive rehabilitation to restore operational performance and extend asset life. The turbine needed detailed technical assessment and rehabilitation across multiple systems, and execution needed to be completed without introducing additional operational risk or extended outages.

THE SOLUTION

USP&E carried out a comprehensive rehabilitation programme, including:

- **Site Assessment:** Thorough site evaluation to identify conditions and requirements
- **Engine Borescope Inspections:** Gas Generator (GG) and Brush Generator borescopes to assess internal conditions and functionality
- **Ancillary Systems Rehabilitation:** Cold air buffer system, GG/PT lube oil system, hydraulic starting system, and generator lube oil system
- **Additional System Inspections and Repairs:** Inlet air filter house assessed and cleaned, bleed air system inspected and repaired, liquid and gas fuel skids serviced, water injection system maintained for NOx control and efficiency
- **Control and Protection Systems:** Woodward Micronet+ control system, generator protection relays, Bentley Nevada vibration monitoring, MMC and Citech HMI

THE OUTCOME

The rehabilitation restored the PW FT8 HalfPac to optimal operational condition, enhancing reliability, efficiency, and longevity. The turbine was returned to service with improved reliability and extended operational life, reducing the risk of unplanned outages.

BUILT FOR THE FRONTIER

This project demonstrates Ownership and Grit in action: USP&E systematically rehabilitated a complex gas turbine across multiple systems, restoring performance and extending asset life. Entrepreneurial speed. Engineering credibility. That is what Powering Possibility means.