



## Songo Songo Gas to Electricity Project

**Location:** Ubungo, Tanzania, East Africa

**Client:** Ocelot and TransCanada PipeLines (OTC)

**Gryphon Contact:** Dominic Au

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**Project Summary** Development of a natural gas field at Songo Songo Island, Tanzania, and construction of a gas production facility and gas transmission system for supplying natural gas to an upgraded gas fired power plant at Ubungo, Tanzania. The existing oil fired GE LM6000 and ABB GT10 gas turbine generators would be upgraded and converted to natural gas fired units.

**Project Services** Gryphon was responsible for the engineering for the upgrade and conversion of the Ubungo Power Plant.

**Phase 1**

Feasibility study to assess the modifications required to the existing oil fired power plant to use natural gas fuel and to add one additional 40MW gas turbine generator.

**Phase 2**

Preliminary Engineering to define the rehabilitation work, the changes required to provide for one additional gas turbine generator and to allow complete centralized control of the plant and ensure a high reliability level for continuous operation on natural gas fuel.

**Phase 3**

Detailed engineering and design for the implementation of the project including:

- Plant general arrangement.
- Mechanical systems modifications.
- Existing main equipment modifications and upgrade work specifications.
- Technical coordination and specifications for the gas turbine generator upgrade, conversion, and long term maintenance contracts.
- Civil engineering and design for modifications.
- Electrical engineering and design for plant modifications and expansion as well as upgrade of the TANESCO switchyard and dispatch center SCADA monitoring system.



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