

**Project owner**

Volta River Authority-Corporate

Construction period

02/2023 - 2026

Net contract value

4,9 Mio. €

Contractor

VORWERK Gas Technology GmbH

In-house Services

Engineering, manufacturing, and installation of a fuel gas system to supply gas turbines with a capacity of 250 MW

Kumasi 1 Thermal Power Project (K1TPP)

In May 2023, VORWERK Gas Technology was awarded the contract to supply the fuel gas supply system for the Kumasi power plant. With the construction of the gas-fired power plant, the Volta River Authority (VRA) is strengthening the electricity supply and grid stability in the Ashanti Region.

The plant system draws natural gas from the local grid and supplies the 250 MW gas-fired power plant with conditioned fuel gas. The inlet assemblies are designed to Class 600 (PN100) standards and supply the site's gas turbines via two redundant lines. To this end, the natural gas is cleaned of dust and condensate, measured, preheated, and pressurized to the respective operating pressure of the gas turbines. In addition to manufacturing the components, VORWERK Gas Technology was also commissioned with the engineering of the mechanical and electrical plant systems, transport logistics, and installation.

Factory production has been completed; the system has arrived at the site and will be installed in the course of 2026.

The plant essentially consists of the following main assemblies:

- Quick-closing valve skid
- Inlet filter assembly
- Calibratable measurement system
- Joule-Thompson preheater
- Gas pressure control to turbine pressure
- Gas pressure control system for the boiler
- Hot water system and boiler plant