



GHANA POWER COMPACT

INAUGURATION

UNIVERSITY OF GHANA MEDICAL CENTRE (UGMC) PRIMARY SUBSTATION

Date: Wednesday April 27, 2022

Venue: UGMC Primary Substation, Legon

GHANA-USA COOPERATION



Collaborating to reduce Poverty through Economic Growth



PROGRAMME

- 9.30 Guests Arrive
- 10.00 Opening Prayer
- 10.05 Welcome Address - Board Chairperson - MiDA
- 10.10 Statement by ECG - Board Chairman - ECG
- 10.15 Statement by MCC - Resident Country Director, MCC
- 10.20 Guest Speaker's Address - Hon. Matthew Opoku Prempeh, MP
Minister for Energy
- 10.35 Introductions: - Messrs. Eiffage & TBEA
Contractors and Consultants
- 10.40 Vote of Thanks - Chief Executive Officer, UGMC
- 10.45 Closing Prayer
- 10.50 -Ribbon Cutting and Unveiling
of Plaque
-Tour of Substation
- 11.05 Departures



UGMC Primary Substation

The Ghana Power Compact Program funded by the United States Government, acting through the Millennium Challenge Corporation (MCC), has invested US\$11m in the construction of a 52MVA Primary Substation and its associated Interconnecting Circuits (ICC) for the University of Ghana Medical Centre (UGMC).

The UGMC Primary Substation is one of many electric infrastructural assets, which form part of the ECG Financial and Operational Turnaround (EFOT) Project of the Compact Program.

The Substation has a capacity of 52 mega volts amperes (MVA) and can supply all present and future power needs of the University of Ghana Medical Centre and the Noguchi Memorial Institute for Medical Research, and serve as an alternative source of supply to the University of Ghana, the Ghana Institute of Public Administration, the Ghana Standards Authority, and the surrounding communities. Equipment within the Substation comprise two 20/26MVA transformers, located outdoors and switching equipment housed in a basement-type

Control Building. The Substation has been sized to provide for any future extension of the 33kV and 11kV switchgear. The Substation has been integrated into the existing ECG 33kV Sub-transmission Network through a total of 24 km of 33kV interconnecting circuits. Power is evacuated to the UGMC and other Load Centers through 41.4 km of 11kV offloading circuits.

Following its commissioning and energization, the UGMC Primary Substation has been addressing the power supply challenges experienced by the UGMC and its sister Institution, the Noguchi Memorial Institute for Medical Research. These critical health Institutions can now operate in an environment of more stable and reliable power. With the Substation in close proximity to these Institutions and with sufficient redundant capacity, the risk of equipment failure due to voltage fluctuations is significantly reduced.

The Substation was constructed by Messrs. Eiffage Énergie Systèmes' of France and the interconnecting and offloading circuits by Messrs. TBEA Co. Ltd. of China.



INTERCONNECTING CIRCUITS

2.2km of Underground Fibre Optic Cable (UGFOC)

41.4km of 11kV cables

24km of 33kV cables

30 Ring Main Units (RMUs) installed



A set of Ring Main Units in service

FACT SHEET

PROJECT: UGMC PRIMARY SUBSTATION(PSS) & INTERCONNECTING CIRCUITS(ICC)

- **Funding** : United States Government through the Millennium Challenge Corporation (MCC)
- **Contractors** : Eiffage Énergie Systèmes'
: TBEA Co. Ltd.
- **Project Engineer** : SMEC International Pty Ltd
- **Contract Value** : US\$ 11 million
- **Contract Start Date** : February 2020
- **Contract End Date** : April 2022
- **Installed Capacity** : 52MVA
- **Beneficiary Areas** : University of Ghana Medical Centre (UGMC), University of Ghana Campus, Noguchi Memorial Institute for Medical Research, Ghana Standards Authority, Okponglo Area, Fiesta Royale, GIMPA and the surrounding areas.

Project Benefits

- Improved power supply, quality and reliability to UGMC, the University, businesses and homes.
- Reduced technical losses in ECG's Distribution System, ultimately contributing to improved financial performance.
- Improved redundancy and consequently improved reliability of the Sub-transmission Network in the Shiashie, University of Ghana, West Legon and East Legon area.
- Reduced power outages.

