

## **9.0 KPANDU-KADJEBI POWER PROJECT**

### **Project Objective**

The Ghana Grid Company intends to improve on the reliability of power supply to Electricity Company of Ghana (ECG) for northern parts of the Volta Region by extending the 69kV supply from existing Kpandu Substation to Kedjebi and the construction of a 69/34.5kV substation at Kedjebi.

### **Scope of Works**

The scope of works is as follows:

- The turn-key construction of a new substation at Kedjebi to be known as Kedjebi Substation. This will involve the provision of line terminal equipment made up of 69kV circuit breakers, 69kV motorized/manual disconnect switches, 69kV Instrument Transformers, 69kV Surge Arresters, 69kV gantries, 34.5kV feeder equipment complete, 34.5kV underground cables, buswork, substation grounding, AC/DC station auxiliaries, metering equipment, control equipment (Mosaic Mimic) and protective relaying complete.
- Supply and/or installation and commissioning of 1No. 69/34.5kV, 15MVA power transformer for the Kedjebi Substation and bringing into service the whole Kedjebi Substation.
- Expansion of existing Kpandu substation to install terminal equipment for the existing Kpandu Incomer and also to install terminal equipment for the new Kedjebi outgoing feeder complete.
- Supply and/or installation and commissioning of 1No. 69/34.5/11.5kV, 15MVA power transformer complete with its balance of plant at existing Kpandu Substation.
- Design, manufacture, supply, installation and commissioning of telecontrol (SCADA), teleprotection and telephone facilities using the OPGW to be consistent with existing VRA communications systems.
- Design, manufacture, supply, installation and commissioning of a 161kV insulated Transmission Line between Kpandu and Kadjebi to be initially operated at 69kV and the termination of the line at both Kpandu and Kadjebi substations.
- All civil works associated with the above works including site survey, substation site clearing, leveling, filling and compaction, substation control building, security gatehouse, drainage and septic tank, fencing with gates,

driveways, equipment plinths, tower foundations, Engineer's Representatives office etc.

- Construction of 80km of 161kV transmission line to be initially operated at 69kV from Kpandu to Kedjebi.

**Duration for Contract Implementation**

The duration for contract implementation shall be 18 months.

**Project Status**

Preliminary designs, preparation of technical specifications and bidding documents about 60% completed.

**Funding**

No funding has been secured for this project. GRIDCo is awaiting some other sources of funding for the project.