

SCHEDULE 1: Project Description

This Schedule confirms the agreed Project Description which comprises of two parts: (a) The new transmission elements that the Project Company shall be establishing for augmentation of the National Transmission grid of Kenya (the "Primary Description"), and (b) the modification/alterations, as proposed by KETRACO, of the existing transmission system of KETRACO/KPLC for overall improvement of the Kenyan grid (the "Additional Description").

1. Description of the Project

- **Primary Description: Augmentation of the National Transmission Grid of Kenya**

The works covered under this header: (a) are part of the Total Project Costs for the Project; (b) shall be considered as the basis of the Project Availability assessments; and (c) for which the Project Company shall take up O&M responsibilities.

- **Project Line: Kisumu (Kibos)-Kakamega-Musaga Transmission lines**
- **Transmission Line**

The transmission line includes the segments below:

- Kisumu (Kibos)-Kakamega 220kV double circuit Transmission Lines with ACSR Canary conductor configuration
- Kakamega-Musaga 220kV double circuit Transmission Line with ACSR Canary conductor configuration.
- Loop-in-Loop-out (LILO) of Musaga (existing) – Lessos 132 kV double circuit transmission Line.
- **Substations**

For Kisumu (Kibos) substation fully furnished bays at Kisumu (Kibos) substation to accommodate termination of the 220kV Kisumu (Kibos)-Kakamega double circuit line.

For the Kakamega substation:

- Establishment of New 220/33kV substation at Kakamega.
- Fully furnished 220kV switchyard with bays for complete integration to the national power grid to accommodate termination of the two double circuit lines to Kibos and Musaga amongst other specifications.
- Fully furnished 33kV system with bays.
- Space provision for future expansion.

For the Musaga substation:

- Establishment of New 220/132kV substation at Musaga.
- Fully furnished 220kV switchyard to accommodate termination of the double circuit line to Kakamega amongst other specifications.
- Fully furnished 132kV system with bays to accommodate LILO-ed circuits of the Musaga (existing)–Lessos 132kV D/C line amongst other specifications.
- Space provision for future expansion.
- **Connection Point**

The 220kV Double Circuit (D/C) Kibos-Kakamega-Musaga Transmission Line, associated substations and substation extensions including 132kV intertie to existing 132kV network at Musaga (Project 2):

- Remote substations for Musaga 220/132kV substation are Kakamega Substation*, Musaga and Lessos Substations. The interconnection points for Musaga substation will be the LILO of existing 132kV Lessos-Musaga double circuit transmission line and the proposed 220kV Musaga-Kakamega circuit transmission line.
- Remote substations for Kakamega 220/33kV substation are Musaga Substation*, and existing Kibos 220/132/33kV. The interconnection points for Kakamega substation will be the Musaga and Kibos substations.
- The interconnection points for the transmission lines in Project 2 will therefore be the LILO of existing 132kV Lessos- Musaga transmission line at Musaga (New) and associated bays of 220 KV Kibos -Kakamega-Musaga Transmission line at Musaga (new) and Kakamega(new) and 220kV bay extension at Kibos (existing).

2. SCADA and Telecommunications Description

Integration of new substations or extensions in existing substations to the National Control Centre through the central SCADA/ Energy Management System (EMS). The SCADA system shall consist of the Central SCADA System at the National Control Centre, and Substation Automation Systems based at the Substations. Further qualities and functionalities of the proposed system are outlined in Schedule 2 - Specifications and Standards - section 2- Detailed Technical Specifications.

3. Additional Description: Modification / Alteration of Existing KETRACO/ KPLC Transmission System

The transmission works covered under the Additional Scope Description shall be part of the Capital Expenditures Total Project Cost for the Project to be made by the Project Company; however, these shall not be part of “Availability” assessments, nor will the Project Company have responsibility for any O&M activities or O&M obligations in Clause

16 of the Project Agreement for the outlined elements in the Additional Scope during the Operation Period.