

Our Ref: KP1/6A.1/OT/5/23/B18

5<sup>th</sup> January, 2024

TO: ALL PROSPECTIVE BIDDERS

Dear Sir/ Madam

**ADDENDUM NO. 3 FOR TENDER NO: KP1/6A.1/OT/5/23/B18- PROCUREMENT OF DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF PRIMARY DISTRIBUTION SUBSTATIONS AND ASSOCIATED LINES AT MBITINI SUBSTATION IN KITUI COUNTY AND MSAMBWENI SUBSTATION IN KWALE COUNTY DATED 21<sup>ST</sup> NOVEMBER, 2023.**

The following amendments are made to the specific provisions of the issued bidding document for Procurement of Design, Supply, Installation and Commissioning of Primary Substations and associated Lines Project at Mbitini Substation in Kitui County and Msambweni Substation in Kwale County.

Save where expressly amended by the terms of the addendum, the Principal Bidding Document shall continue to be in full force and effect. The provision of this addendum shall be deemed to have been incorporated in and shall be read and construed as part of the Principal Bidding Document.

**VOLUME I OF BIDDING DOCUMENT**

**1. SECTION II - TENDER DATA SHEET (TDS)**

a) ITT 18 of the Particulars of Appendix to Instructions to Tenders has been amended to read as follows:

<b>ITT Reference</b>	<b>PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS</b>
ITT 18	<p>Project Implementation time shall be Eighteen Months (18) from effective date of the Contract</p> <p>In addition to requirements in clause 3.1(a) to (g) bidders shall submit with their Bids:</p> <ul style="list-style-type: none"><li>a) At least two (2) previous similar EPC successfully completed contracts with full contacts including telephone, email and physical addresses of previous clients where similar contracts have been implemented successfully in the last 10 years.</li><li>b) Two (2) Reference Letters from the previous clients of similar EPC contracts confirming satisfactory completion of the contracts.</li><li>c) Duly filled signed and stamped Schedule of Prices</li><li>d) Project implementation schedule in Gantt chart, work methodology, Quality management plan and ESHS work site plan.</li></ul>

- e) Documentary evidence to demonstrate manufacturer qualification:
- Manufacturer's authorizations and Warranty in case the bidder is not a manufacturer
  - Manufacturer's ISO 9001:2015
  - Guaranteed Technical Particulars (GTPs) duly completed and signed by the bidder/manufacturer as required in technical specifications.
  - Type tests report and certificate from accredited testing laboratory as required in the technical specifications
  - The accreditation certificate for the testing laboratory to ISO/IEC 17025
  - Bidders shall provide additional information such as brochures/catalogues and drawings (technical data sheet) describing in detail the technical particulars of proposed equipment.
  - The Manufacturer's declaration of Conformity to reference standards.
- f. Bidder's Audited Financial statements for the last five (5) years, the latest audited financial statements must be those that are reported within 12 calendar months of date of tender document.
- g. Documentary Evidence indicating manufacturers Supplies record as follows;  
List of manufacturer's customer sales records outside country of origin/manufacturer to support the offer, and details of the supply contracts as follows:
- i. The Client's name, address and contact person as well as its location.
  - ii. Four (4) Copies of signed contracts, award letters, and Purchase Orders indicating quantity of similar equipment supplied under the contract and the contract amount outside the country of origin
  - iii. Four (4) copies of reference letter from clients confirming satisfactory performance of the similar equipment.

Major Materials/equipment in this Project are:

NO	Equipment/Materials
1.	Power transformer
2.	33 and 11kV Outdoor Switchgears (Circuit breaker, Auto recloser, Air Break switches and Isolators)
3.	33 and 11kV Instrument transformers (Current and Voltage)
4.	Protection and Control Panels
5.	Conductors and Aluminium alloy tubes
6.	33 and 11kV Surge Arrestors
7.	Multicore Control cables
8.	110V and 48V Battery and Charger
9.	Concrete poles
10.	33 and 11kV Insulators
11	Steel structures
12	Power cables

## 2. SECTION III - EVALUATION AND QUALIFICATION CRITERIA

### (a) 3.3.5.3 Qualification for the Manufacturers and Main Contractor

Item numbers under subclause 3.3.5.3 listed in table below have been amended to read as follows:

Item No.	Description of Item	Minimum Criteria to be met	Support document
1	Supplier for Major materials and equipment	For equipment supplied/manufactured outside or within the employer's country, i) Manufacturer must have been manufacturing the materials for at least 7 years Equipment must have been in service for at least 5 years outside the country of origin/manufacture.	Manufactures sales records, purchase orders/ four (4) Customer references and recommendations letters.
2	Main contractor: Substation equipment installation and Lines Construction	Must have completed construction and commissioned works of at least two (2) Substations and associated Lines projects of similar size and complexity 2.5MVA 33/11kV or above) in the last 10 years starting from January, 2013 to December, 2023 successfully completed in any two (2) years	Signed contracts, completion certificates, and at least two (2) Customer references and recommendations letters.
3	Main contractor: Civil works	Must have completed civil works of at least two (2) substations and associated Lines projects of similar size and complexity (2.5MVA 33/11kV and above in the last 10 years or equivalent building and civil works, starting from January, 2013 to December, 2023 successfully completed in any two (2) years	Signed contracts, completion certificates, and at least two (2) customer references and recommendations letters.
4	Lines construction main contractor	Must have completed construction and commissioned works of at least 100 km lines projects of similar size and complexity (33, 11kV and 66 kV) in the last 10 years, starting from January, 2013 to December, 2023 successfully completed in any two (2) years	Signed contracts, completion certificates, and at least two (2) customer references and recommendations letters.
5	Testing and commissioning main contractor	Must have completed testing and commissioning of at least two (2) substations and Lines projects of similar size and complexity (2.5MVA 33/11kV or above in the last 10 years, starting from January, 2013 to December, 2023	Signed contracts, completion certificates, and at least two (2) customer references and recommendations letters.

### 3.3.5.5 Performance Qualification Criteria

Item numbers under sub clause 3.3.5.5.1 listed in table below have been amended to read as follows.

Performance Criterion	Requirement	Compliance Requirements			Documentation Submission Requirements																				
		Single Entity	Joint Venture (existing or intended)	One Member																					
3.3.5.5.1(b) Construction Experience		All Parties Combined	Each Member	Member																					
i	General Construction Experience	Experience in EPC construction contracts in the role of prime contractor, JV member, or Sub contractor for at least last 10 years, starting 1 <sup>st</sup> January, 2013 and 31 <sup>st</sup> December, 2023:	Must meet requirement	N/A	N/A	Documentary evidence of signed contract letters and customer references/recommendations																			
ii	Specific Construction Experience on EPC Contract Implementation	(i) A minimum number of similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, or sub-contractor between 1st January 2013 and 31 <sup>st</sup> December, 2023:	Must meet requirement	N/A	N/A	Signed Contract letters with contract value amount, and reference/recommendations																			
		<table border="1"> <thead> <tr> <th>Lot No</th> <th>No. of Contracts</th> <th>Minimum value (KES) of each contract</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1</td> <td>1</td> <td>200M</td> </tr> <tr> <td colspan="2" style="text-align: center;">or</td> </tr> <tr> <td rowspan="2">2</td> <td>2</td> <td>100M</td> </tr> <tr> <td>1</td> <td>260M</td> </tr> <tr> <td colspan="2" style="text-align: center;">or</td> <td></td> </tr> <tr> <td>2</td> <td>2</td> <td>130M</td> </tr> </tbody> </table>	Lot No	No. of Contracts	Minimum value (KES) of each contract	1	1	200M	or		2	2	100M	1	260M	or			2	2	130M				
Lot No	No. of Contracts	Minimum value (KES) of each contract																							
1	1	200M																							
	or																								
2	2	100M																							
	1	260M																							
or																									
2	2	130M																							

Performance qualification Criterion	Requirement	Compliance Requirements			Documentation Submission Requirements	
		Single Entity	Joint Venture (existing or intended) All Parties Combined	Each Member		One Member
iii	<p>For the above and any other contracts completed and under implementation as prime contractor, joint venture member, or Sub-contractor from 1st January 2013 to 31<sup>st</sup> December, 2023 a minimum construction experience in following key activities successfully completed in any two (2) years</p> <p><b><u>For Award of Lot 1 and 2</u></b> Contractor must have successfully completed construction of 2 Nos. 2.5 MVA 33/11kV and above substation with Switchgear building, protection and control and at least 100 km of 66, 33 and 11kV Lines in any two (2) years from 1st January 2013 to 31<sup>st</sup> December, 2023</p> <p>In addition, should have completed installation of 33/11kV MV cable feed outs in a substation of more than 4 cable feed outs in any two (2) years, from 1st January 2013 to 31<sup>st</sup> December, 2023</p>	Must meet requirements	Must meet requirements	N/A	N/A	Signed Contract letters, Completion /Handover certificates and Customer recommendations

**(B) Financial detailed Examination Criteria**

Item numbers under subclause 3.4.3 listed in table below have been amended to read as follows.

Criterion	Financial Performance Qualification Requirement	Single Entity	Compliance Requirements (existing or intended)			Documentation Submission Requirements						
			All Parties Combined	Each Member	One Member							
<b>(a) Financial capability and Performance</b>												
Financial Capabilities	<p>i The Bidder shall demonstrate that it has access to, or has available, liquid assets, Unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction <b>Cash flow requirements</b> estimated in KES as.</p> <table border="1" data-bbox="683 1417 785 1865"> <thead> <tr> <th>Lot</th> <th>Cash Flow (KES)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>50 M</td> </tr> <tr> <td>2</td> <td>52 M</td> </tr> </tbody> </table>	Lot	Cash Flow (KES)	1	50 M	2	52 M	Must meet requirement	Must meet requirement	N/A	N/A	Documentary evidence Forms FIN-3.1 and FIN-3.3
		Lot	Cash Flow (KES)									
		1	50 M									
2	52 M											
ii Bidder shall also demonstrate, to the satisfaction of the Employer, that has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments	Must meet requirement	Must meet requirement	N/A	N/A	Documentary evidence. Forms FIN-3.1 and FIN-3.4							
iii Audited financial statements for the last Five (5) years shall be submitted and must demonstrate the current soundness of the Bidder's financial position. The Bidder's financial position will be deemed sound if at least three (3) of the following four (4) criteria are met:	Must meet requirement	Must meet requirement	N/A	Must meet requirement	Audited financial statements and Form FIN-3.1, with attachments							
	<p>a) Average earnings before interest, taxes, depreciation, and amortization (EBITDA) for the last three (3) years &gt; 0;</p> <p>b) Total equity (net worth) for the last three (3) years &gt; 0;</p> <p>c) Average liquidity ratio for the last three (3) years &gt; 1((Current assets) / (Current liabilities) &gt; 1);</p> <p>d) Average indebtedness ratio for the last three (3) years &lt; 6 ((Total financial liabilities) / (EBITDA) &lt; 6).</p>											

Criterion	Financial Performance Qualification Requirement		Single Entity	Compliance Requirements (existing or intended)			Documentation Submission Requirements						
	Minimum Annual Construction Turnover	iv		All Parties Combined	Each Member	One Member							
	Minimum Average Annual Construction Turnover in KES,		Must meet requirement	Must meet requirement	Must meet atleast [twenty five] per cent [25] % of the requirement	Must meet atleast [forty] per cent [40] % of the requirement	Form FIN-3.2						
		<table border="1"> <thead> <tr> <th>LOT</th> <th>Annual Average construction Turnover (KES)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>140 M</td> </tr> <tr> <td>2</td> <td>155 M</td> </tr> </tbody> </table>	LOT	Annual Average construction Turnover (KES)	1	140 M	2	155 M					
LOT	Annual Average construction Turnover (KES)												
1	140 M												
2	155 M												
	for the last 5 years, calculated as total <i>Certified Annual Payments</i> received for contracts in progress and/or completed contracts.												

### 3. SECTION VI: PRICE SCHEDULES

Some Items and Works scope in the price schedules have been amended and added as per the revised Price schedules below.

#### General

1. The Price is divided into separate Schedules as follows:  
**Schedule No. 1:** Plant and Mandatory Spares supplied from abroad  
**Schedule No. 2:** Plant and Mandatory Spares supplied from within employer's Country  
**Schedule No. 3:** Design Services  
**Schedule No. 4:** Installation and other Services  
**Schedule No. 5:** Grand Summary
2. The Schedules do not generally give full description of plant to be supplied, and services to be performed under each item. Bidders shall be deemed to have read Employer's works requirements and other sections of the bidding document and reviewed drawings to ascertain full scope of requirements included in each item prior to filling in the rates and prices. Bidder's filled rates and prices shall be deemed to cover full scope as aforesaid, including overheads and profit.
3. Prices shall be filled in indelible ink and any alterations necessary due to errors etc. shall be initialed by the Bidder.
4. As specified in the Tender Data Sheet and Special Conditions of Contract, prices shall be fixed for the whole duration of the Contract. The prices for Substation works shall be on **Lump sum** contract basis whereas for the lines works shall be on **Admeasurement** contract basis. Bid prices shall be quoted in the manner indicated and, in currencies, specified in the Instructions to Tenderers.
5. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in **Volume II of Bidding documents (Work requirements and particular technical specifications) and elsewhere in the bidding document.**
6. When requested by the Employer for the purposes of making payments or partial payments, valuing variations, evaluating claims, or for such other purposes as Employer may reasonably require, Contractor shall provide a breakdown of lump sum items in price schedules and bill of quantities.

**Note:** Bidder shall *cost in schedule No.2 only material/equipment NOT supplied under Schedule No.1*



**LOT 1: MBITINI 2.5 MVA, 33/11KV SUBSTATION AND ASSOCIATED LINES**

**Schedule 1: Plant and Mandatory Spares supplied from Abroad**

NO	Materials/ Equipment Description	UoM	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl VAT (3) = (1*2)
<b>Substation Equipment/Materials</b>					
MTN-101	2.5 MVA, 33/11kV transformer with bushing CTs	Pc.	1		
MTN-102	33KV Circuit breakers	Pc.	2		
MTN-103	33kV motorized Isolator with earth switch	Pc.	1		
MTN-104	33kV motorized Isolator without earth switch	Pc.	2		
MTN-105	33kV Current Transformer	Pc.	6		
MTN-106	33kV bus bar Voltage Transformer	Pc.	3		
MTN-107	33 & 11kV Bay and Bus bar material	lot	1		
MTN-108	33 & 11kV Steel Structures for equipment and Bus bar support	lot	1		
MTN-109	33kV Surge arrestors with surge counters	Pc	6		
MTN-110	Transformer Protection and Control Panel	Pc	1		
MTN-111	33kV Line protection and control panel	pc	1		
MTN-112	11kV Control Panel for 4Nos. feeders	pc	1		
MTN-113	Common metering panel for 33kV and 11kV Circuits	pc	1		
MTN-114	11kV Neutral isolating link with neutral CTs	pc	1		
MTN-115	11kV surge arrestors with surge counters	pc	15		
MTN-116	11kV Auto-recloser complete with bypass switch, solid links, and surge arrestors	pc	5		
MTN-117	11kV motorized Isolator without earth switch	pc	6		
MTN-118	11kV Current transformer	pc	15		
MTN-119	11kV Bus bar Voltage transformer	pc	3		
MTN-120	Auxiliary transformer 100kVA 33/0.420 kV complete with HV expulsion fuses, surge arrestors and LV fuse cut out for protection	lot	1		
MTN-121	Multicore copper cables for signal, command and measurement (2.5mm <sup>2</sup> stranded wire armored)	lot	1		
MTN-122	3Phase auxiliary supply system complete with AC distribution board	lot	1		
MTN-123	DC Supply System (110Vdc/165Ah Battery and charger with DB board)	lot	1		
MTN-124	Base radio station system for Mbitini and Kitui 33/11kV substations	lot/pc	2		
MTN-125	RTU floor standing Panel for bay and IEDs signals complete with Ethernet cables	pc	1		
MTN-126	MV and LV earthing system	lot	1		
MTN-127	Switchyard Lighting System	lot	1		
MTN-128	Lightning Protection system	lot	1		
MTN-129	Fire Protection system (indoor and outdoor)	lot	1		
<b>Remote Line Bay</b>					
MTN-130	33kV Auto-recloser complete with bypass switch, solid links, surge arrestors, cables and fittings at line tee-off point	pc	1		
MTN-131	Auto recloser H-Pole structure complete with fittings and accessories	lot	1		
MTN-132	Auxiliary 230VAc supply for autor closer complete with material accessories.	lot	1		
<b>Line Equipment/materials</b>					

NO	Materials/ Equipment Description	UoM	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl VAT (3) = (1*2)
MTN-133	33kV 3phase O/H line 75mm <sup>2</sup> ACSR conductors, including insulators, Line fittings and hardware	lot/km	55		
MTN-134	33kV 185mm <sup>2</sup> 3/cores Aluminium XPLE cable complete with termination Kits, surge arrestors and fitting for 3nos. crossing of 220kV HET line	Lot/km	0.9km		
MTN-135	11kV 3phase O/H line 75mm <sup>2</sup> ACSR conductor including insulators, line fittings and other hardware	lot/km	7		
MTN-136	11kV line materials including insulators, fittings and other hardware for transfer of existing 3phase conductors to concrete poles after replacement of wooden poles	lot/km	7		
MTN-137	11kV 185mm <sup>2</sup> 3/cores Aluminium XPLE cable complete with termination Kits, surge arrestors, fitting and transition structures at both ends for crossing of 220kV EHT line	Lot/km	0.25km		
MTN-138	H-Pole structures, GI steel pipes and steel channels for cable support and protection at EHT line crossings	Lot	1		
MTN-139	11kV Air break switches complete with fittings	Pc	4		
MTN-140	11kV Auto recloser complete with bypass switches, solid links, surge arrestors, fittings/cables, and 240Vac auxiliary supply system	Pc	2		
MTN-141	Materials (line/concrete pole fittings) for transfer of existing 33/11/0.42kV Overhead lines to new 33/11kV lines	Lot/km	2		
MTN-142	Line materials (H frame poles and hardware) for dualling of existing/new 33 and 11kV with 11kV or 33kV lines	Lot/km	4		
MTN-143	Concrete Poles for 33 and 11kV Lines	Lot/km	69		
MTN-144	Stay wire, accessories and blocks for the lines	Lot/km	69		
<b>Mandatory spares</b>					
ST-001	11kV Current transformer	Pc	3		
ST-002	33kV current transformer	Pc	3		
ST-003	11kV Auto recloser complete with bypass switches, solid links, surge arrestors, fittings /cables and 240Vac auxiliary supply system	Pc	3		
ST-004	11kV ABS switches	pc	1		
ST-005	11kV Motorized isolator	pc	1		
ST-006	33kV and 11kV transformer bushings	Each	1		
ST-007	33kV and 11kV 185mm <sup>2</sup> AL cable jointing kit each one set	Each	1 set		
ST-008	Silica gel breather (complete with glass cylinder)	pc	1		
ST-009	Live line tester for up to 36kV	set	1		
ST-010	Phasing out stick	set	1		
<b>Sub Total Schedule NO.1</b>					
<b>Add VAT</b>					
<b>Name of Bidder</b>					
<b>Signature of Bidder</b>					
<b>Stamp</b>					

**LOT 1: MBITINI 2.5 MVA 33/11KV SUBSTATION AND ASSOCIATED LINES**

**Schedule 2: Plant and mandatory spares Supplied from within Employer's Country**

NO	Materials/ Equipment Description	UoM	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl VAT (3) = (1*2)
<b>Substation Equipment/Materials</b>					
MTN-201	2.5 MVA, 33/11kV transformer with bushing CTs	Pc.	1		
MTN-202	33KV Circuit breakers	Pc.	2		
MTN-203	33kV motorized Isolator with earth switch	Pc.	1		
MTN-204	33kV motorized Isolator without earth switch	Pc.	2		
MTN-205	33kV Current Transformer	Pc.	6		
MTN-206	33kV bus bar Voltage Transformer	Pc.	3		
MTN-207	33 & 11kV Bay and Bus bar material	lot	1		
MTN-208	33 & 11kV Steel Structures for equipment and Bus bar support	lot	1		
MTN-209	33kV Surge arrestors with surge counters	Pc	6		
MTN-210	Transformer Protection and Control Panel	Pc	1		
MTN-211	33KV Line protection and control panel	pc	1		
MTN-212	11kV Feeders Control Panel	pc	1		
MTN-213	Common metering Panel for 33kV and 11kV Circuits	pc	1		
MTN-214	11kV Neutral isolating link with Neutral CTs	pc	1		
MTN-215	11kV surge arrestors with surge counters	pc	15		
MTN-216	11kV Auto-recloser complete with bypass switch, solid links, and surge arrestors	pc	5		
MTN-217	11kV motorized Isolator without earth switch	pc	6		
MTN-218	11kV Current transformer	pc	15		
MTN-219	11kV Bus bar Voltage transformer	pc	3		
MTN-220	Auxiliary transformer 100kVA 33/0.420 kV complete with HV expulsion fuses, surge arrestors and LV fuse cut out for protection	pc	1		
MTN-221	Multicore copper cables for signal, command and measurement (2.5mm <sup>2</sup> stranded wire armoured)	lot	1		
MTN-222	3Phase auxiliary supply system complete with AC distribution board	lot	1		
MTN-223	DC Supply System (110Vdc/ 165Ah Battery and changer with DB board)	lot	1		
MTN-224	Base radio station system for Mbitini and Kitui 33/11kV substations	lot/pc	2		
MTN-225	RTU floor standing Panel for bay and IEDs signals complete with Ethernet cables	lot	1		
MTN-226	MV and LV earthing system	lot	1		
MTN-227	Switchyard Lighting System	lot	1		
MTN-228	Lightning Protection system	lot	1		
MTN-229	Fire Protection system (indoor and outdoor)	lot	1		
<b>Remote Line Bay</b>					
MTN-230	33kV Auto recloser complete with a bypass switch, surge arrestors and accessories at line tee-off point.	pc	1		
MTN-231	Auto recloser H- Structure complete with fittings and accessories	lot	1		
MTN-232	Auxiliary 230VAc supply for Auto recloser complete with material accessories.	lot	1		
<b>Line equipment/materials</b>					

NO	Materials/ Equipment Description	UoM	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl VAT (3) = (1*2)
MTN-233	33kV 3phase O/H line 75mm <sup>2</sup> ACSR conductors, including insulators, fittings and other line hardware	Lot/km	55		
MTN-234	33kV 185mm <sup>2</sup> 3/cores Aluminium XPLE cable complete with termination Kits, surge arrestors and fitting for 3nos. crossing of 220kV HET line	Lot/km	0.9km		
MTN-235	11kV 3phase O/H line 75mm <sup>2</sup> ACSR conductor including insulators, fittings and other line hardware	lot/km	7		
MTN-236	11kV line materials including insulators, fittings and other hardware for transfer of existing 3phase conductors to concrete poles after replacement of wooden poles	lot/km	7		
MTN-237	11kV 185mm <sup>2</sup> 3/cores Aluminium XPLE cable complete with termination Kits, surge arrestors, fitting and transition structures at both ends for crossing of 220kV EHT line	Lot/km	0.25km		
MTN-238	H-Pole structures, GI steel pipes and steel channels for cable support and protection at EHT line crossings	Lot	1		
MTN-239	11kV Air break switches complete with fittings	Pc	4		
MTN-240	11kV Auto recloser complete with bypass switches, solid links, surge arrestors, fittings/cables, and 240Vac auxiliary supply system	Pc	2		
MTN-241	Materials (Line/concrete pole fittings) for transfer of existing 33/11/0.420kV Overhead lines to new 33/11kV lines	Lot/km	2		
MTN-242	Line materials (H frame poles and hardware) for dualling of existing/new 33 and 11kV with 11kV or 33kV lines	Lot/km	4		
MTN-243	Concrete Poles for 33 and 11kV lines	Lot/km	69		
MTN-244	Stay, Accessories and blocks for the lines	Lot/km	69		
<b>Mandatory spares</b>					
ST-001	11kV Current transformer	Pc	3		
ST-002	33kV current transformer	Pc	3		
ST-003	11kV Auto recloser complete with bypass switches, solid links, surge arrestors, fittings/cables and 240Vac auxiliary supply system	Pc	3		
ST-004	11kV ABS switches	pc	1		
ST-005	11kV Motorized isolator	pc	1		
ST-006	33kV and 11kV transformer bushings	Each	1		
ST-007	33kV and 11kV 185mm <sup>2</sup> AL cable jointing kit each one set	Each	1 set		
ST-008	Silica gel breather (complete with glass cylinder)	pc	1		
ST-0079	Live line tester for up to 36kV	pc	1		
S7-010	Phasing out stick	set	1		
	<b>Sub Total Schedule NO.2</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				
	<b>Stamp</b>				

**LOT 1: MBITINI 2.5 MVA 33/11KV SUBSTATION AND ASSOCIATED LINES**

**Schedule 3: Design Works**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
<b>Line Design Works</b>					
MTN-301	Substation Design Engineering (Electrical, Mechanical, Civil, Control/ Protection and telecommunication work)	Lot	1		
MTN-302	Coordination of relay setting with upstream substation	Lot	1		
MTN-303	33 and 11kV Line route survey and line design work	Lot	1		
<b>Sub Total Schedule No. 3</b>					
<b>Add VAT</b>					
<b>Name of Bidder</b>					
<b>Signature of Bidder</b>					
<b>Stamp</b>					

**Lot 1: MBITINI 2.5MVA 33/11KV SUBSTATION AND ASSOCIATED LINES**

**Schedule 4: Installation and Other Services**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
<b>Substation Civil and Installation Work</b>					
MTN-401	7.5MVA transformer foundation with fabricated (at least 1.5m in height) GI angle steel channel for a 2.5MVA transformer base.	Lot	1		
MTN-402	Control Building with a minimum floor area of 70m <sup>2</sup>	Lot	1		
MTN-403	Substation Earth work for 1 Acre plot (excavation Back filling, compaction, ballasting etc.)	Lot	1		
MTN-404	Platform Work – Equipment Foundations and associated work	Lot	1		
MTN-405	Access roads in Cabro with acceleration and deceleration, 5m substation Internal roads etc.	Lot	1		
MTN-406	One Acre plot masonry perimeter wall with razor wire, gates and Switch yard Chain link fence	Lot	1		
MTN-407	Establish a 70 Sqr. meter storage yard with Chain link fence, access road in Cabro and gate	Lot	1		
MTN-408	Drainage system– Storm water and Foul water/Sewage drainage	Lot	1		
MTN-409	Water Supply and rain water harvesting system	Lot	1		
MTN-410	Fire detection and suppression system	Lot	1		
MTN-411	Cable trenches work, ducts, Cable trays etc.	Lot	1		
MTN-412	Equipment and Bay steel support structure erection	Lot	1		
MTN-413	Substation equipment (indoor and outdoor) erection/ installation	Lot	1		
MTN-414	LV and Control cable and associated works	Lot	1		
MTN-415	Auxiliary supplies installation and commissioning	Lot	1		
MTN-416A	Substation equipment (Indoor and outdoor) testing and commissioning	Lot	1		
MTN-416B	RTU Panel installation including all bays signal termination and testing.	Lot	1		
MTN-417	Separate modern Pit latrine with gender separation	Lot	1		
MTN-418	Guard house and associated facilities	Lot	1		
MTN-419	Substation Security lighting	Lot	1		
MTN-420	Substation Earthing and lightning protection				
MTN-421	Base radio station installation and commissioning at Mbitini and Kitui substations	Lot	1		
MTN-422	Facilities for KPLC Project implementation team (Site office, Communication and transport services)	Lot	1		
MTN-423	Drawings approval and substation commissioning tools	Pc	2		
MTN-424	Control room office facilities (2nos. Desk, 3nos.Chairs and other facilities)	Lot	1		
MTN-425	Costs of GoK Agencies approval statutory fees	Lot	1		
<b>33 and 11kV Line Work</b>					
MTN-426	33kV line civil and Erection work	Lot/km	55		
MTN-427	11kV line civil and Erection work	Lot/km	14		
MTN-428	33kV remote line bay installation and commissioning	Lot	1		
MTN-429	33kV line Stringing, Cable installation and	Lot/km	55		

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl. VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
	commissioning				
MTN-430	11kV line Stringing, cable installation and commissioning	Lot/km	7		
MTN-431	33/11kV installation, testing and commissioning of line Auto reclosers at 3 separate locations	Lot/Pc	3		
MTN-432	Transfer of existing 33/11/0.420kV line to new 33/11kV lines	Lot/km	2		
MTN-433	Restringing of 11KV existing line after replacing wooden poles with concrete poles and fittings	Lot/km	7		
MTN-434	Construction of new lines dual with exiting 33/11/0.42kV lines	Lot/km	4		
MTN-345	Recovery of existing line wooden poles/fittings and delivery to Kitui KPLC storage yard	lot/km	7		
<b>Factory acceptance tests (FAT)</b>					
MTN-436	Power transformers, Instrument transformers, Surge arrestors and Insulators	Lot	1		
MTN-437	Switchgears (Circuit breakers, Isolators, Air break switches and Auto-reclosers)	Lot	1		
MTN-438	LV (Control) cables	Lot	1		
MTN- 439	Protection and Control system	Lot	1		
MTN- 440	110 and 48V DC Batteries and Chargers	Lot	1		
MTN- 441	Phase Conductors and stay wires	Lot	1		
MTN- 442	Steel structures	Lot	1		
MTN- 443	Concrete poles and stay blocks	Lot	1		
	<b>Sub Total Schedule NO. 4</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				

**LOT 1: SCHEDULE NO 5: GRAND SUMMARY**

<b>NO</b>	<b>Item Description</b>	<b>Total Price Excl. VAT (KES)</b>
<b>2.5MVA 33/11kV Mbitini Substation and Associated Lines</b>		
1	Total Schedule No 1: Plant and Mandatory Spares Supplied from abroad	
2	Total Schedule No 2: Plant and Mandatory Spares Supplied within Employer's Country	
3	Total Schedule No 3: Design Services	
4	Total Schedule No 4: Installation & Other Services	
<b>Total LOT 1 (Amount Inserted in the e-Procurement Portal)</b>		
<b>ADD 16% VAT</b>		
<b>Grand Total LOT 1 (KES)</b>		
<b>Amount in words:</b>		
<b>Name of Bidder:</b>		
<b>Signature of Bidder:</b>		
<b>Stamp:</b>		



**LOT 2: KWALE 2.5 MVA 33/11KV SUBSTATION AND ASSOCIATED LINES**

**Schedule 1: Plant and Mandatory spares Supplied from Abroad**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
<b>Substation Equipment/Materials</b>					
KWL-101	2.5 MVA, 33/11kV transformer with Bushing CTs	Pc.	1		
KWL-102	33KV Circuit breakers	Pc.	2		
KWL-103	33kV motorised Isolator with Earth switch	Pc.	1		
KWL-104	33kV motorised Isolator without Earth switch	Pc.	2		
KWL-105	33kV Current Transformer	Pc.	3		
KWL-106	33kV Voltage Transformer	Pc.	3		
KWL-107	33 & 11kV Bay and Bus bar Material	Lot	1		
KWL-108	33 & 11kV Steel Structures for Support	Lot	1		
KWL-109	33kV Surge Arresters	Pc.	6		
KWL-110A	33kV Transformer Protection and Control Panel	Pc.	1		
KWL-110B	33KV Line protection and control panel	pc	1		
KWL-111	11kV Feeders Control Panel	Pc.	1		
KWL-112	Common Metering Panel for 33kV and 11kV Circuits	Pc.	1		
KWL-113	11kV Neutral Link with Neutral CTs	Lot	1		
KWL-114	11kV Surge Arrestors	Pc.	15		
KWL-115	11kV Auto-reclosers complete with bypass switch, Isolating link and surge arrestors	Pc.	5		
KWL-116 A	RTU floor standing Panel for bay and IEDs signals complete with Ethernet cables	Pc.	1		
KWL-116B	Multiplexer Switch IP620 with Ethernet LAN switches	Lot	1		
KWL-117	Approach cable for OPGW with ODFs and Splice Boxes	Lot/km	0.5		
KWL-118	11kV Isolator without Earth switch	Pc.	6		
KWL-119	11kV Air break Switch	Pc.	4		
KWL-120	11kV Current Transformer	Pc.	15		
KWL-121	11kV Voltage Transformer	Pc.	3		
KWL-122	Auxiliary Transformer 100kVA, 33/0.420kV with HV and LV fuse protection system	Pc.	1		
KWL-123	Control and measuring cables	Lot	1		
KWL-124	3phase AC Auxiliary AC Supply	Lot	1		
KWL-125	110V /655Ah DC Supply System	Lot	1		
KWL-126	Earthing System	Lot	1		
KWL-127	Switchyard Lighting System	Lot	1		
KWL-128	Lightning Protection system	Lot	1		
KWL-129	Fire detection and suppression System (indoor and outdoor)	Lot	1		
<b>Line Equipment/Materials</b>					
KWL-130	33kV Overhead Single Circuit Line in 150 mm <sup>2</sup> ACSR conductors, including, insulators, fittings and all other Line hardware	Lot/Km	2		

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
KWL-131	11kV OH Line including 75mm <sup>2</sup> ACSR line conductors, insulators, isolators, fittings and other necessary equipment	Lot/Km	12		
KWL-132	Materials (line/concrete pole fittings) for transfer of existing 33/11/0.420kV Overhead lines to new 33/11kV lines	Lot/km	2		
KWL-133	Line materials (H frame poles and hardware) for dualling of existing/new 33 and 11kV with 11kV or 33kV lines	Lot/km	3		
KWL-134	11kV Air break switches complete with fittings	Pc	3		
KWL-135	Concrete Poles for 33 and 11kV lines	Lot/km	14		
KWL-136	Stay wire, accessories and blocks for the lines	Lot/km	14		
<b>Mandatory spares</b>					
SS-001	11kV Auto-reclosers	Pc.	1		
SS-002	33kV Current Transformers	Pc.	3		
SS-003	11kV Current Transformers	Pc.	3		
SS-004	11kV ABS switches	pc	1		
SS-005	11kV Motorized isolator	pc	1		
SS-006	Silica gel breather (complete with glass cylinder)	pc	1		
SS-007	Live line tester for up to 36kV	pc	1		
SS-008	Phasing out stick	Set	1		
ST-009	33kV and 11kV transformer bushings	Each	1		
	<b>Sub Total Schedule 1</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				
	<b>Stamp</b>				

**Schedule 2: Plant and Mandatory spares Supplied from within Employer's Country**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
<b>Substation Equipment/Materials</b>					
KWL-201	2.5 MVA, 33/11kV transformer with Bushing CTs	Pc.	1		
KWL-202	33KV Circuit breakers	Pc.	2		
KWL-203	33kV motorised Isolator with Earth switch	Pc.	1		
KWL-204	33kV motorised Isolator without Earth switch	Pc.	2		
KWL-205	33kV Current Transformer	Pc.	3		
KWL-206	33kV Voltage Transformer	Pc.	3		
KWL-207	33 & 11kV Bay and Bus bar Material	Lot	1		
KWL-208	33 & 11kV Steel Structures for Support	Lot	1		
KWL-209	33kV Surge Arresters	Pc.	6		
KWL-210A	33kV Transformer Protection and Control Panel	Pc.	1		
KWL-210B	33KV Line protection and control panel	pc	1		
KWL-211	11kV Control Panel for 4Nos. feeder outs	Pc.	1		
KWL-212	Common Metering Panel for 33kV and 11kV Circuits	Pc.	1		
KWL-213	11kV Neutral Link with Neutral CTs	lot	1		
KWL-214	11kV Surge Arrestors	Pc.	15		
KWL-215	11kV Auto-reclosers complete with bypass switch, Isolating link and surge arrestors	Pc.	5		
KWL-216 A	RTU floor standing Panel for bay and IEDs signals complete with Ethernet cables	Pc.	1		
KWL-216B	Multiplexer Switch IP6820 with Ethernet LAN Switches system	Lot	1		
KWL-217	Approach cable for OPGW with ODFs and splice Boxes	Lot/km	0.5		
KWL-218	11kV Isolator without Earth switch	Pc.	6		
KWL-219	11kV Air break switch	Pc.	4		
KWL-220	11kV Current Transformer	Pc.	15		
KWL-221	11kV Voltage Transformer	Pc.	3		
KWL-222	Auxiliary Transformer 100kVA, 33/0.420kV with HV and LV fuse protection system	Pc.	1		
KWL-223	Control and measuring cables	Lot	1		
KWL-224	3phase AC Auxiliary AC Supply	Lot	1		
KWL-225	110V /655Ah DC Supply System	Lot	1		
KWL-226	Earthing System	Lot	1		
KWL-227	Switchyard Lighting System	Lot	1		
KWL-228	Lightning Protection system	Lot	1		
KWL-229	Fire detection and suppression system (indoor and outdoor)	Lot	1		
<b>Line Equipment/Materials</b>					
KWL-230	33kV Overhead line 3phase circuit in 150 mm <sup>2</sup> ACSR conductors, including, insulators, fittings and other line hardware	Lot/Km	2		
KWL-231	11kV OH line 3phase circuit in 75mm <sup>2</sup> ACSR conductors, insulators, fittings and other line hardware	Lot/Km	12		

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl. VAT (3) = (1*2)
KWL-232	Materials (line/concrete pole fittings) for transfer of existing 33/11/0.420kV Overhead lines to new 33/11kV lines	Lot/km	2		
KWL-233	Line materials (H frame poles and hardware) for dualling of existing/new 33 and 11kV with 11kV or 33kV lines	Lot/km	3		
KWL-234	11kV Air break switches complete with fittings	Pc	3		
KWL-235	Concrete Poles for 33 and 11kV Lines, incl	Lot/km	14		
KWL-236	Stay wire, Accessories and blocks for the lines	Lot/km	14		
<b>Mandatory spares</b>					
SS-001	11kV Auto-reclosers	Pc.	1		
SS-002	33kV Current Transformers	Pc.	3		
SS-003	11kV Current Transformers	Pc.	3		
SS-004	11kV ABS switches	pc	1		
SS-005	11kV Motorized isolator	pc	1		
SS-006	Silica gel breather (complete with glass cylinder)	pc	1		
SS-007	Live line tester for up to 36kV	pc	1		
SS-008	Phasing out stick	set	1		
ST-009	33kV and 11kV transformer bushings	each	1		
	<b>Sub Total Schedule 2</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				
	<b>Stamp</b>				

Lot 2: KWALE 2.5MVA 33/11KV SUBSTATION AND ASSOCIATED LINES

**Schedule 3: Design Work**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl VAT (3)=(1*2)
KWL-301	Substation Design (Electrical, Mechanical, Civil, Protection & Control and SAS Engineering)	Lot	1		
KWL-302	Coordination of relay setting with upstream substation	Lot	1		
KWL-303	33 and 11kV Line Design	Lot	1		
	<b>Sub Total Schedule 3</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				
	<b>Stamp</b>				

**Schedule 4: Installation and Other Services**

NO	Materials/ Equipment Description	Unit	Qty (1)	Unit Price Excl VAT (KES) (2)	Sum Total Excl VAT (3)=(1*2)
KWL-401	7.5MVA transformer foundation with fabricated (at least 1.5m in height) GI angle steel channel for a 2.5MVA transformer base.	Lot	1		
KWL-402	Control Building with a minimum floor area of 70 Sqr. meter and associated facilities	Lot	1		
KWL-403	Approximately one acre Substation earthwork (Excavation, Compaction, back filling and ballasting etc.)	Lot	1		
KWL-404	Platform Work – Equipment foundations	Lot	1		
KWL-405	Road's work -Access roads with acceleration and deceleration and 5m internal substation roads in Cabro	Lot	1		
KWL-406	Approximately One acre perimeter wall with razor wire	Lot	1		
KWL-407	Drainage work – Storm water and Foul water/Sewage drainage	Lot	1		
KWL-408	Water Supply and harvesting system	Lot	1		
KWL-409	Fire Protection system (Internal and External)	Lot	1		
KWL-410	Cable trenches work and drainage	Lot	1		
KWL-411	Substation Equipment and Bay Erection and installation	Lot	1		
KWL-412A	Substation Equipment testing and commissioning	Lot	1		
KWL-412B	RTU Panel, approach cable and ODFs installation, signal termination in RTU panel from all bays and testing	Lot	1		
KWL-413	Substation Earthing and lightning protection	lot	1		
KWL-414	Substation switchyard lighting installation	Lot	1		
KWL-415	Demarcated Guard house with VIP toilet	Lot	1		
KWL-416	Costs of GoK Agencies approval statutory fees	Lot	1		
KWL-417	Facilities for KPLC Project implementation team (Site office, Communication and transport services)	Lot	1		
KWL-418	Drawings approval and substation commissioning tools	Lot	1		
KWL-419	Control room office facilities (2nos. Desk, 3 Chairs and other facilities)	Lot	1		
KWL-420	Costs of GoK Agencies approval statutory fees	Lot	1		
<b>Line Works</b>					
KWL-421	33kV Line Civil and structural works	Lot/km	2		
KWL-422	11kV Line Civil and structural works	Lot/km	12		
KWL-423	33kV line stringing complete with OPGW, testing and commissioning	Lot/km	2		
KWL-424	11kV line stringing, testing and commissioning	Lot/km	12		
KWL-425	Transfer of existing 33/11/0.420kV line to new 33/11kV lines	Lot/km	2		
KWL-426	33kV line installation and commissioning at tee-off point	Lot	1		

KWL-427	Construction of new lines dual with exiting 33/11/0.42kV line	Lot/km	2		
<b>Factory Acceptance Tests (FAT)</b>					
KWL-428	Power transformers, Instrument transformers, Surge arrestors and Insulators	Lot	1		
KWL-429	Switchgears (Circuit breakers, Isolators, Air break switches and Auto-reclosers)	Lot	1		
KWL-430	LV (Control) cables	Lot	1		
KWL-431	Protection and Control system	Lot	1		
KWL-432	110 and 48V DC Batteries and Chargers	Lot	1		
KWL-433	Phase Conductors and stay wires	Lot	1		
KWL-434	Steel structures	Lot	1		
KWL-435	Concrete poles and stay blocks	Lot	1		
	<b>Sub Total- Schedule 4</b>				
	<b>Add VAT</b>				
	<b>Name of Bidder</b>				
	<b>Signature of Bidder</b>				
	<b>Stamp</b>				

**Lot 2: Schedule NO 5: Grand Summary**

NO	Item Description	Total Price Excl. VAT (KES)
<b>Lot 2: 2.5 MVA Kwale Substation and Associated Lines.</b>		
1	Total Schedule No 1: Plant and Mandatory Spares Supplied from Abroad	
2	Total Schedule No 2: Plant and Mandatory Spares Supplied within Employer's Country	
3	Total Schedule No 3: Design Services	
4	Total Schedule No 4: Installation & Other Services	
<b>Total Lot 2 (Amount Inserted in the e procurement portal)</b>		
<b>ADD 16% VAT</b>		
<b>Grand Total Lot 2</b>		
<b>Amount in Words</b>		
<b>Name of Bidder</b>		
<b>Signature of Bidder</b>		
<b>STAMP.....</b>		



## VOLUME II OF TENDER DOCUMENT

### SECTION V- WORKS REQUIREMENT AND PARTICULAR TECHNICAL SPECIFICATIONS

Some scope of work *requirement and particular technical specifications* have been amended or added as follows.

#### (1) 4.7.2 Mbitini 2.5MVA 33/11kV Substation and lines

(a) Subparagraph *under clause 4.7.2 detailing scope of line work* has been amended to read as follow;

- i) The line work shall entail construction of approximately 55.0km of 33kV overhead 3phase line in 75mm<sup>2</sup> ACSR conductor and a total of approximately 14.0km of 11kV Overhead 3phase lines in 75mm<sup>2</sup> ACSR Conductor. The four feeder outs are: Mosa feeder: 6.0km, Kanzau feeder: 5.0km, Voo feeder 0.05km and Kisasi feeder 3.0 Km.
- ii) Additionally 33kV line shall include three (3) section of 185mm<sup>2</sup> 3/core Aluminium cable totalling approximately 0.9km for crossing existing EHT lines. 11kV line shall also include one (1) section of 185mm<sup>2</sup> 3/core Aluminium cable approximately 0.25km for crossing existing EHT lines.
- iii) Out of 14.0km of 11kV overhead lines to be constructed, 7.0 km are new short lines and remaining 7.0km shall involve restringing of existing conductors after replacement of exiting wooden poles and fittings with concrete poles and associated fittings. Required concrete poles might be more than wooden poles to be replaced in order to achieve required line sagging and spans.
- iv) Recovered materials from site (wooden poles and hardware) shall be delivered to KPLC Kitui offices storage yard approximately 40km from Mbitini proposed substation.

#### (2) 5.16.3.2 11kV Overhead line protection and Control

This paragraph has been amended to read as follows:

- i) Main Protection for 11kV line where SAS is not included in the scope shall be 3 phase Overcurrent & Earth fault and Sensitive & Standby earth fault protection functions.
- ii) All protection functions shall be provided by use of an Auto recloser.
- iii) Control and indications shall be provided in Auto recloser and remote control Panel than can accommodate four feeders.
- iv) Auto reclose function shall also be incorporated in the protection EID or Auto recloser.
- v) Control panel shall also have mimic diagram, Semaphores, remote Close/Open discrepancy switches, status indications (Open, Close, Gas status etc.) for the 11kV transformer and line bays.
- vi) Multifunctional measurement instruments to measure V, I power and energy for each feeder shall be installed in the remote control panel

The Overcurrent & Earth faulty and Sensitive Earth fault protection functions shall have same features as described in clause 5.16.1 EIDs particular technical specifications.

#### (3) 6.1.1.2 Major Civil Works in the scope

Subclause 6.1.1.2 (a) has been amended to read as follows:

The 2.5MVA 33/11kV transformer plinth floor area shall be designed and constructed to accommodate a 7.5MVA 33/11kV transformer. In addition, Plinth minimum associated work shall include fabricated GI angle channel base frame at least 1.5m high anchored on the plinth for a 2.5MVA transformer to ensure ground to live bus bar clearance is achieved. Oil interceptor pit with burnt oil sump, and Plinth grating shall be constructed.

**(4) 7.1.13 Line Formation**

This clause has been amended to include item number (iv) requirement for 33 and 11kv line dualling. The following is recommendation for the use of different common overhead line formations:

- i) Line poles for deviations 0°-10° degree- Steel cross arm will be used for horizontal and delta formations.
- ii) Line poles for deviation 20-60 degrees- Steel double cross-arms or vertical flying angle shall be used.
- iii) Line poles for deviations greater than 60 degree - vertical sections shall be used.
- iv) Construction of new and transfer of existing 33 and 11kV in dual formation shall use **H-frame concrete pole** structures. Single poles shall not be used to carry 33 and 11kV lines in dual formation for both Lot 1 (Mbitini) and Lot 2 (Kwale) line construction work.

**Attachments to Addendum No.2**

1. Existing 11kV line FDB profile for Mbitini area
2. KPLC Specifications for 33 and 11kV 185mm<sup>2</sup> cable
3. Guaranteed technical particulars for 33 and 11kv Cable

Yours faithfully,

**For: KENYA POWER & LIGHTING COMPANY PLC**

  
**PETER MUCHORI**  
**Ag. SUPPLY CHAIN MANAGER, PROCUREMENT**