Kenya Power

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Our Ref: KP1/9AA-3/PT/45/14-15
KP1/9AA-3/PT/62/14-15

Date: 30th March, *2015*

Your Ref:

TO:
ALL PROSPECTIVE BIDDERS

Dear Sirs/ Madams

RE: ADDENDUM NO. 1 TO THE TENDER NO. KP1/9AA-3/PT/45/14-15 AND TENDER NO.KP1/9AA-3/PT/62/14-15 FOR SUPPLY OF CABLES.

The following ammendments are made to the specified provisions for the tender document for the supply of Cables dated March, 2015.

1. **RELATIONSHIP WITH THE PRINCIPAL TENDER DOCUMENT**
   Save where expressly amended by the terms of this Addendum, the PTD shall continue to be in full force and effect. The provisions of this Addendum shall be deemed to have been incorporated in and shall be read and construed as part of the PTD

2. **SECTION I – INVITATION TO TENDER.**
   Clause 1.3 submission of tender documents.The closing date of the tender should read **Tuesday, 14th April,2015.**

3. **SECTION VII- GENERAL CONDITIONS OF CONTRACT**
   Clause 7.20.5 on General Price Variation formula has now been included in the tender document and is attached.

4.. **DEADLINE FOR SUBMISSION OF TENDER.**
   The tender closing date remains **14th April, 2015 at 10.00 a.m**
   Tenders must be received by the procuring entity not later than **10.00a.m** at **Stima Plaza Auditorium**. The procuring entity will open the bids immediately thereafter on the same day in the **auditorium Stima Plaza.**

7.20.5 For items where price variation formula is not applicable, the price will be fixed for the initial year and may be negotiated for the subsequent years as per the provisions of the Public Procurement and Disposal Act.

1. GENERAL PRICE VARIATION FORMULA FOR ANY ITEM

For items not quoted for on the basis of length, a formula based on ratios would be more suitable. In its simplest form, with only one significant price-variability sensitive component (and without a price-stable component), the formula would be of the following form: -

$P_1 = P_0 * A_1/A_0$

Where the item has more than one significant component, with some components having stable prices in the item, the formula would take the following form:

$P_1 = P_0 * (c + d*A_{1d}/A_{0d} + e*A_{1e}/A_{0e} + \ldots + n*A_{1n}/A_{0n})$ where;

P_1 is the adjusted price of the item

P_0 is the original bid price

c is a coefficient accounting for the component of the price that is stable and not subject to variations

d, e, . . . , n are coefficients for the value contributions of the various components of the item

A_{0d}, A_{0e}, A_{0n} are the LME (or suitable commodity exchange) prices at the date of the tender closing.

A_{1d}, A_{1e}, A_{1n} are the LME (or other suitable commodity exchange) prices prevailing on the date of negotiation of unit price for the subsequent year

and:

$c + d + e + \ldots + n = 1$

The first formula where only one significant component is involved will be applicable for the following items.

i) Steel structures

ii) Bolts and nuts

iii) Line taps

For these items and others of a similar nature the computation of the adjusted price will therefore only take into account the two LME prices as described above and the adjusted price P_1 will be computed directly.

For the other items involving more than one metal item with a significant change in price, the second formula will apply. The table of coefficients shown herebelow contain some of the proposed coefficients to be used in the computation of the adjusted price.

For other items outside the above in the table the coefficients "c, d, e, …, n" are proposed by each bidder and that, subject to contract negotiations, the coefficients so submitted are used in determining the price variation. The bidder shall indicate the source of the coefficients so used. It is however recommended that the IEEMA be the reference source of such coefficients.

TABLE OF COEFFICIENTS

ITEM	C	D	e	f
Copper wound	0.41	0.23	0.27	0.09

Distribution and Power transformers upto 10MVA		(copper)	(CRGO)	(Iron and steel)
Switchgear and Control gear	0.55	0.17 (iron and steel)	0.18 (copper)	0.1 (aluminium)
Lead Acid batteries	0.7	0.3(Lead ingot)	n/a	n/a

Notes on coefficients

These figures are derived from Price Variation Formulae by Indian Electrical & Electronics Manufacturers Association (IEEMA) . Our derived figures have restricted the variables to the metal elements only.

2. GENERAL FORMULA (For cables and conductors)

Where only one significant component of the item is considered, the formula for cables and conductors is of the form

$P_1 = P_0 + [K^* (A_1-A_0)]$

In its more general form with more than one significant component, it would be of the form:

$$P_1 = P_0 + [K_a^* (A_{1a}-A_{0a})] + [K_b^*(A_{1b}-A_{0b})] + \ldots + [K_n^*(A_{1n}-A_{0n})]$$

Where;

P_1 is the adjusted price (per km)

P_0 is the bid price for the cable or conductor (per km)

A_{1a}, A_{1b}, A_{1n} are the LME (or suitable commodity exchange) price per kg of the various components at the specified adjustment date, defined by the company as desired.

A_{0a}, A_{0b}, A_{0n} are the LME (or suitable commodity exchange) prices per kg of the various components, corresponding to the bid time, defined by the company as desired.

K_a, K_b, …,K_n are coefficients for converting prices from "cash per kg" to the required "cash per km" for the various components of the item.

It is based on price difference and is suitable for conductors and cables whose prices are quoted on "per km" basis.

The formula $P_1 = P_0 + [K^* (A_1-A_0)]$ will be applicable to the following types of conductors and wires

a) All Aluminium conductors (AAC)
b) All Aluminium Alloy conductors (AAAC)
c) Stay wire
d) Earth wire
e) Copper winding wire for transformers
f) Aluminium binding wire bare

The other formula

$$P_1 = P_0 + [K_a^* (A_{1a}-A_{0a})] + [K_b^*(A_{1b}-A_{0b})] + \ldots + [K_n^*(A_{1n}-A_{0n})]$$

will be applicable to the following types of cables and conductors

a) Aluminium Conductor Steel Reinforced (ACSR)
b) XLPE cables

c) PVC insulated cables- armoured and unarmoured

The coefficients K for each of the different types of cables and conductors are as tabulated in the attached table. These have been derived from IEEMA tables and computations based on KPLC specifications on weight in KG per KM of the various cables and conductors which are based on the respective relevant international standard .
Where a conductor,wire or cable may not have been included in the table, the IEEMA variation factors shall apply. However, the manufacturer can provide other alternative internationally acceptable variation factors which are supported by the applicable standards and the respective cable or conductor specification.

VARIATION FACTORS-CONDUCTORS AND CABLES

			MATERIAL COMPOSITION	VARIATION FACTOR KG/M FOR 1ST METAL	VARIATION FACTOR KG/M FOR 2ND METAL
		ALUMINIUM CONDUCTORS			
1	182402	CONDUCTOR 50MM2 AA HD BARE	Al	0.145	N/A
2	182404	CONDUCTOR 100MM2 AA HD BARE	Al	0.29	N/A
3	182408	CONDUCTOR 300MM2 ALUM. AA BARE	Al	0.997	N/A
4	182415	CONDUCTOR 75MM2 ACSR BARE	Al/Fe	0.215 Al	0.102 Fe
5	182417	CONDUCTOR 150MM2 ACSR BARE ALUM.SCA	Al/Fe	0.433 Al	0.288 Fe
6	182420	CONDUCTOR 150MM2 ACSR PVC ALUM.SCA	Al/Fe/PVC	0.433 Al	0.288 Fe
7	182432	CONDUCTOR 50MM2 AA HD PVC H/D	Al/PVC	0.145	N/A
8	182433	CONDUCTOR 100MM2 AA HD PVC H/D	Al/PVC	0.29	N/A
9	182437	CONDUCTOR 50MM2 AA.SD PVC	Al	0.145	N/A
10	182438	CONDUCTOR 100MM2 AA.SD PVC.	Al	0.29	N/A
		BINDING WIRES			
1	189703	BINDING WIRE NO.9 AL BARE	Al	0.028	N/A
2	189705	BINDING WIRE NO.9 AL PVC	Al/PVC	0.028	N/A
		ABC CONDUCTORS			
1	108815	CABLE ABC 3 X 120AL/70ALM MM2 XLPE 0.6/1KV	AL/Fe	1.036 Al	0.616 Fe
2	108818	CABLE ABC 3 X70AL MM2 XLPE 6.35/11KV	AL/Fe	0.593 Al	0.996 Fe
		COPPER CONDUCTORS			
1	182406	100MM^2 STRANDED CU BARE	CU	0.9112	N/A
2	182409	150MM^2 STRANDED CU BARE	CU	1.3760	N/A
		STAY WIRE			
1	189237	4/4.00/700 STAY WIRE	Fe	0.39	N/A
2	189744	7/2.00/700 STAY WIRE	Fe	0.17	N/A
3	189737	7/4.00/700 STAY WIRE	Fe	0.69	N/A
4	189739	19/3.55/700 STAY WIRE	Fe	1.47	N/A
		CABLES			
1	106698	CABLE 1.0MM2 19/CORE REF.3180/197			
2	108618	CABLE BLACK/RED CU 7/044 6.00MM2 S/C	CU/PVC	0.056	N/A
3	108627	CABLE GREY 1.0MM2 PVC TWIN 3/029	CU/PVC		N/A
4	108628	CABLE TWIN WITH EARTH 1.5MM PVC	CU/PVC	0.026	N/A
5	108629	CABLE 2.5MM2 TWIN WIRE CONDUCTOR	CU/PVC	0.047	N/A
6	108642	CABLE PVC 7/029 BLACK 2.5MM2	CU/PVC	0.023	N/A

7	108643	CABLE PVC 7/029 BLUE S/C 2.5MM2	CU/PVC	0.023	N/A
8	108644	CABLE PVC 7/029 S/C GREEN CU. 2.5MM2	CU/PVC	0.023	N/A
9	108645	CABLE PVC 7/029 2.5MM 6491 S/C GREY	CU/PVC	0.023	N/A
10	108646	CABLE SINGLE CORE RED 7/029 2.5MM2	CU/PVC	0.023	N/A
11	108647	CABLE PVC 7/029 S/C YELLOW 2.5MM2	CU/PVC	0.023	N/A
12	108698	CABLE 2.5MM2 U.G SWA 19/CORE 7/029 CU	CU/Fe/PVC	0.446 Cu	0.397 Fe
13	108756	CABLE 630MM2 S/C AL PVC 0.6/1KV	Al/PVC	2.365	N/A
14	108823	CABLE 10MM2 S/C CONCETRIC CU PVC 0.6/1KV	CU/PVC	0.095	N/A
15	108829	CABLE 2.5MM2 7/CORE 7/029 CU	CU/PVC	0.164	N/A
16	108830	CABLE 2.5MM2 PVC 12/CORE	CU/PVC	0.282	N/A
17	108834	CABLE 25MM 4/C SWA AL PVC 0.6/1KV	Al/Fe/PVC	0.292 Al	0.382 Fe
18	108836	CABLE 120MM2 4/C SWA AL.PVC 0.6/1KV	Al/Fe/PVC	1.382 Al	0.731 Fe
19	108837	CABLE 300MM2 4/C SWA AL PVC 0.6/1KV	Al/Fe/PVC	3.514 Al	1.113 Fe
20	108840	CABLE 2.5MM2 2/CORE CU SWA	CU/Fe/PVC	0.046 CU	0.277 Fe
21	108848	CABLE 2.5MM2 4C PVC CU MULTICORE ARMOUR	CU/PVC	0.092	N/A
22	108848	CABLE 2.5MM2 4C PVC CU MULTICORE ARMOUR	CU/PVC	0.092	N/A
23	108849	CABLE 185MM2 4/C SWA AL PVC 0.6/1KV	Al/Fe/PVC	2.140 Al	0.879 Fe
24	108852	CABLE 300MM2 3C AL XLPE /33 KV	AL/Fe/XLPE	2.635 Al	1.758 Fe
25	108856	CABLE 1.5MM2 12/CORE PIVOT WIRE		0.157	N/A
26	108861	CABLE 70MM2 4/C SWA AL PVC 0.6/1KV	Al/Fe/PVC	0.791Al	0.587Fe
27	108862	CABLE 16MM2 S/C CONCETRIC AL PVC 0.6/1KV	Al/PVC	0.1303	N/A
28	108866	CABLE 300MM2 S/C AL PVC 0.6/1KV	Al/PVC	0.879	N/A
29	108875	CABLE 300MM2 3/C 11KV Al XLPE	Al/Fe/PVC	2.635 Al	1.465 Fe
30	108876	CABLE 300MM2 S/C AL XLPE 6.35/11KV	Al/Fe/XLPE	0.879 Al	1.318 Fe
31	108886	CABLE 300MM2 S/CORE 66KV XLPE	Al/Fe/XLPE	0.879	
32	108889	CABLE 630MM2 S/C HT ALUM 11KV	AL/Fe/XLPE	1.828	
33	108891	CABLE 95MM2 3/C SWA AL XLPE 6.35/11 KV	AL/Fe/XLPE	0.821Al	0.907 Fe
34	108916	CABLE 10MM2 S/C COPPER PVC(RED) LV	CU/PVC	0.095	N/A
35	108917	CABLE 10MM2 S/C COPPER PVC(BLACK) LV	CU/PVC	0.095	N/A
36	108919	CABLE 3/CORE FLEXIBLE 2.5MM2	CU/PVC	0.069	N/A
37	108920	CABLE FLEXIBLE 4/CORE 2.5MM2	CU/PVC	0.092	N/A
38	108925	CABLE 4.0MM2 3/CORE FLEXIBLE	CU/PVC	0.112	N/A
39	108932	CABLE 1.0MM2 S/C COPPER BLACK	CU/PVC	0.0086	N/A
40	108933	CABLE 1.5MM2 S/C COPPER STRANDED BLACK	CU/PVC	0.013	N/A
41	108944	CABLE 1.5MM2 S/C COPPER STRANDED RED	CU/PVC	0.013	N/A
42	108945	CABLE 1.5MM2 S/C COPPER STRANDED GREEN	CU/PVC	0.013	N/A
43	108952	CABLE 1.5MM2 5242Y T/ECC	CU/PVC	0.013	N/A
44	108954	CABLE 4.00MM2 TWIN EARTH SHEATHED	CU/PVC	0.076	N/A
45	108957	CABLE 16MM2 PVC TWIN EARTH SHEATHED		0.299	N/A
46	108978	CABLE 1.0MM2 S/C GREEN PVC COPPER	CU/PVC	0.0086	N/A
47	108979	CABLE 1.5MM2 S/C STRANDED		0.013	N/A
48	182534	CABLE 50MM2 S/C CU PVC (19/064)	CU/PVC	0.451	N/A
49	182537	CABLE COPPER S/C 95MM2	CU/PVC	0.901	N/A
50	199236	CABLE 300MM2 S/CORE 33KV CU XLPE	CU/Fe/PVC	0.879 CU	1.738 Fe