Kenya Power

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Stima Plaza, Kolobot Road,
Nairobi, Kenya

Our Ref: KP1/9AA-3/OT/11/16-17/jm/mn Date: 23rd September, *2016*
Your Ref:

TO:
ALL PROSPECTIVE BIDDERS

Dear Sirs/ Madams

RE: ADDENDUM NO. 2 TO THE TENDER NO. KP1/9AA-3/OT/11/16-17 FOR SUPPLY ISOLATOR AIR BREAK SWITCHES, CURRENT AND VOLTAGE TRANSFORMERS OPEN TENDER

Please refer to the above Tender.

The following amendments are made to the specified provisions of the Tender document for the Supply of Isolator Air Break Switches,Current and Voltage Transformers dated 16th August, 2016.

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. **TECHNICAL SPECIFICATIONS**

With respect to the tenderer's request, we're glad to respond with the guidance of the tender specifications as follows:-

i.) Bidders are notified that the 33kv solid link has been uploaded in the portal.

ii.) Bidders are required to note the following specification attached on the Portal relate to the code as indicated below:-

188452-Isolator Air Break Switch 3-P 33kv 400A-KPLC1-3CB-TSP-11-012.
188450- Isolator Air Beak Switch ABS 3-P 33kv1200A- KP1-3CB-TSP-11-012-1.
188547- Isolator Air Break Switch 3-P 33kV 800A- KPLC1-3CB-TSP-11-012.

iii) Bidders are requested to note that ratios to be taken for 33kv current Transformers are-;

- *400-200/1/1/1/1A shall be Type II, as per specification*
- *800-400/1/1/1/1A shall be Type III, as per specification*

iv) Bidders are also requested to note that ratios to be taken for 66kv current Transformers are-;

- *400-200/1/1/1/1A*
- *1600-800/1/1/1A*

And also notified that thay shall be Type I, as per specification attached on E procurement potal

The ratings and terminal markings shall be as per the two tables below. All other requirements shall be as per the specification.

A. Ratings

The ratings of the current transformer shall be as indicated below:-

Table 1: Ratings

Description	Requirements
Rated voltage and frequency	72.5kV, 50Hz
Minimum creepage of insulator	2250mm
Minimum lightning impulse withstand voltage	325kV (peak)
Minimum power frequency withstand voltage	140kV (rms)
Overload factor	1.5
Rated short circuit withstand	25kA, 3 seconds
Rated primary current	1600A
CT ratio	1600/1000/1-1-1-1-1A
Accuracy class and rated burden (VA)	
Core 1	X, V_k = 350V Ik = ≤ 30mA
Core 2	X, V_k = 350V Ik = ≤ 30mA
Core 3	0.5, 1000/1A – 20VA, 1600/1A – 30VA
Core 4	X, V_k = 350V Ik = ≤ 30mA
Core 5	5P20, 1000/1A – 20VA, 1600/1A – 30VA

B. Terminal Markings

The terminal markings shall be as indicated in Table 2

Table 2: Terminal Markings

CORE1		CORE 2		CORE 3		CORE 4		CORE 5	
Terminals	Ratio	Terminals	Ratio	Terminals	Ratio	Terminals	Ratio	Terminals	Ratio
1S1 -1S2	1000/1	2S1 -2S2	1000/1	3S1 -3S2	1000/1	4S1 -4S2	1000/1	5S1 -5S2	1000/1
1S1-1S3	1600/1	2S1-2S3	1600/1	3S1-3S3	1600/1	4S1-4S3	1600/1	5S1-5S3	1600/1

- *800-400/1/1/1A shall be Type III, as per specification*

v.) Ratios to be taken for 132kv current Transformers are-;

- *100-50-25/1/1/1A shall be Type II as per specification*
- *Codes 199361 -current transformer 132kv* 100-50-25/1/1/1A and code 199388 Current transformer 132 kv current tx ratio 100-50-1-1-1A - *Both of them shall be Type II as per specification*

vi.) *Bidders are notified that description of code 800137 is 33kv current tx ratio 100-50/1-1. and is Type II as per the attached specification on the E procurement portal.*

3. CHANGE OF CLOSING DATE.

The tender closing date has been extended to close on the **29th, September, 2016 at 10.00 a.m.**

All other terms and conditions remain as per the Principal Tender Document.

Yours faithfully,
FOR: THE KENYA POWER & LIGHTING COMPANY LIMITED

JOYCE OCHIENG
Ag. GENERAL MANAGER SUPPLY CHAIN.

4.2.11 The current transformer shall have cores as per clause 4.3. The ratio selection shall be done on the secondary side.

4.2.12 The protection cores shall be suitable for conventional overcurrent and for true transformation of the fully asymmetrical fault currents.

4.3 Ratings

The ratings of the current transformer shall be as indicated in Table 1.

Table 1: Ratings

Description		Requirements		
Rated voltage and frequency		72.6kV, 50Hz		
Minimum creepage of insulator		2250mm		
Minimum lightning impulse withstand voltage		325kV (peak)		
Minimum power frequency withstand voltage		140kV (rms)		
Overload factor		1.5		
Rated short circuit withstand		25kA, 3 seconds		
Type of CT		TYPE I	TYPE II	TYPE III
Rated primary current		400A	200A	800A
CT ratio		400/200/100/1-1-1-1	200/100/1-1-1-1	800/400/1-1-1-1
Rated secondary current		1A	1A	1A
Accuracy class and rated burden	Core 1	Class0.5,15VA	Class0.5,15VA	Class 0.5, 15VA
	Core 2	Class 5P20, 15VA	Class 5P20, 15VA	Class 5P20, 15VA
	Core 3	Class X, V_k= 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA
	Core 4	Class X, V_k= 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA

4.4 Quality Management System

4.4.1 The supplier shall submit a quality assurance plan (QAP) that will be used to ensure that the transformer design, material, workmanship, tests, service capability, maintenance and documentation, will fulfill the requirements stated in the contract

4.2.11 The current transformer shall have cores as per clause 4.3. The ratio selection shall be done on the secondary side.

4.2.12 The protection cores shall be suitable for conventional overcurrent and for true transformation of the fully asymmetrical fault currents.

4.3 Ratings

The ratings of the current transformer shall be as indicated in Table 1.

Table 1: Ratings

Description		Requirements			
Rated voltage and frequency		145kV, 50Hz			
Minimum creepage of insulator		4495mm			
Minimum lightning impulse withstand voltage		750kV (peak)			
Minimum power frequency withstand voltage		325kV (rms)			
Overload factor		1.5			
Rated short circuit withstand		31.5kA, 3 seconds			
Type of CT		TYPE I	TYPE II	TYPE III	TYPE IV
Rated primary current		600A	100A	50A	600A
CT ratio		600/300/1-1-1-1	100/50/1-1-1	50/25/1-1-1	600/400/200/1-1-1-1
Rated secondary current		1A	1A	1A	1A
Accuracy class and rated burden	Core 1	Class 0.5, 15VA	Class 0.5, 15VA	Class 0.5, 15VA	Class 0.5, 15VA
	Core 2	Class 5P20, 15VA	Class 5P20, 15VA	Class 5P20, 15VA	Class 5P20, 15VA
	Core 3	Class X, V_k= 350V, Ik< 30mA	Class X, V_k= 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA	Class X, V_k = 350V, Ik< 30mA
	Core 4	Class X, V_k= 350V, Ik< 30mA	-	-	Class X, V_k = 350V, Ik< 30mA

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4.4.1 The supplier shall submit a quality assurance plan (QAP) that will be used to ensure that the transformer design, material, workmanship, tests, service capability,