

31st July 2017

TENDER FOR RELOCATION OF ONE GE FRAME 6 GAS TURBINE FROM EMBAKASI IN NAIROBI TO MUHORONI NEAR KISUMU: KGN-GT-012-2017

KenGen wishes to make the following clarification and changes through Addendum 4

ITEM	Proposed Changes	Effective Changes
1	Additional Scope for calibration.	Calibration of 100.000litres tank.
2	Additional scope for pipe connections between existing tanks and relocated tank	Supply pipes, fittings, valves and install.
3	Additional Cable trays and supports	Civil works, Supply and installation of additional cable trays between the two Gas turbines
4	Civil works for revised position of relocated tank	Items for the civil works in this addendum replaces items in addendum no.2
5	Revised layout drawing	Office block position, Store location, of relocated tank and other tank details.
6	Clarification on Addendum 2 & 3	Kenya Standard KS: 1967-2006 Shall be applicable for tank Assembly and commissioning.
7	Clarification on responsibilities	Transformer commissioning

ITEMS 1 And 2: CALIBRATION OF 100,000 LITRES DAY TANK AND CONNECTIONS OF RELOCATED TANK

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.18	i) Carry out calibration of 100,000 litres day tank.	SUM			
	ii) Pipes, valves and other fittings connection to fuel off-loading bay and fuel delivery to existing fuel line.	SUM			
	iii) Supply new drums for transportation of turbine lube oil. Capacity 200litres each	NO.	35		
TOTAL COST TRANSFERRED TO PRICE SCHEDULE 3					

ITEMS 3,4 AND 5: CABLE TRAYS, CIVIL WORKS FOR RELOCATED TANK AND ADDITIONAL DRAWINGS

ITEM 3: ADDITIONAL CABLE TRAYS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
17.80	Additional cable trays/Support for cables between the two Gas turbines				
17.81	Excavations for cable tray supports	SUM			
17.82	Cable trays steel support structures in RHS at intervals of 2-3m with horizontal angles members welded and painted .Structures to cover entire cable route.	M	200		
17.83	Cable trays formed in galvanized sheets gauge 22 complete with covers for the entire cable route	M	200		
TOTAL FOR ITEMS 17.81 TO 17.83 (CABLE TRAYS)					

ITEM 4: CIVIL WORKS FOR THE FUEL TANK

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
22.0	Supply of materials, equipment, labour and Construction of fuel tank base and containment band wall to detailed drawing and specification				
22.10	Excavation of top soil and disposal.	M3	440		
22.11	Levelling of excavated area.	M2	400		
22.12	Excavation in rock of tank base and bandwall footing.	M3	120		
22.13	Blinding concrete (C15) for tank base and band wall.	M3	8		
22.14	Foundation concrete (C20) for tank base, bandwall footing and containment floor area.	M3	40		
22.15	Foundation concrete (C25) for tank base, bandwall footing and containment floor area.	M3	25		

22.16	Fabric mesh A142	M2	63		
22.17	Reinforcement steel (Y10) for tank base.	Kg	312		
22.18	Reinforcement steel (Y12) for tank base	Kg	440		
22.19	Masonry walling (200 mm thick) for the band wall containment.	M2	100		
22.20	Rendering for item 22.19	M2	224		
22.21	Invert block drain (IB-150 mm deep) around the fuel tank.	M	42		
22.22	C20 concrete for IB base and support	M3	5		
22.23	Compacted gravel bases to 95% MDDAASHTO	M3	460		
TOTAL FOR 22.10 TO 22.23					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
22.24	Sand bed to specification	M3	35		
22.25	HDPE membrane	M2	80		
22.26	4 NO. UPVC 75 mm diameter weep holes	M	12		
22.27	New fuel interceptor tank to detail complete with connecting pipeworks, valves and fittings	SUM			
22.28	Gravel (Crushed stone) backfill to a depth of 100mm to entire tank farm area.	M2	270		
22.29	Provide steel access ladder similar to detail for the extended tank farm.	No.	2		
TOTAL FOR 22.24 TO 22.29 (CIVIL WORKS FOR TANK)					
TOTAL FOR 22.10 TO 22.23 (CIVIL WORKS FOR TANK)					
TOTAL FOR ITEMS 17.81 TO 17.83 (CABLE TRAYS)					
TOTAL FOR ITEMS 22 AND 17.8 CARRIED TO SUBTOTAL 6 OF PRICE SCHEDULE 4					

ITEM 5: REVISED SITE LAYOUT DRAWING, TANK FOUNDATION DRAWINGS, AND GENERAL ARRANGEMENT DRAWING FOR THE TANK. –ATTACHED

ITEM 6: CLARIFICATION ON ADDENDUM NO. 2 and No. 3, for tank assembly and commissioning KS: 1967-2006 is applicable.

ITEM 7: CLARIFICATION ON RESPONSIBILITIES AT SUBSTATION

MATRIX TABLE CLARIFYING RESPONSIBILITIES

TASK	FIRM	Kenya Power (KPLC)	KENGEN	GT RELOCATION CONTRACTOR
(a)	CONSTRUCTION OF 33kV BAY AT MUHORONI	YES	NO	NO
(b)	CONSTRUCTION OF PLINTH AND ASSOCIATED CIVIL WORKS FOR 11/33kV, 45MVA POWER TRANSFORMER	NO	NO	YES
(c)	SUPPLY OF 11kV CABLE CLAMPS SIZED TO ACCOMMODATE 630MM ² POWER CABLES (CLAMPS TO BE MOUNTED ON THE 11KV BUSBARS OF THE 11/33KV BAY)	YES	NO	NO
(d)	CONNECTION OF THE POWER CABLES TO THE 11KV CABLE CLAMPS	NO	NO	YES
(e)	SUPPLY OF 630MM ² CABLE TERMINATION KITS AND TERMINATION OF THE TWELVE (12NOs.) CABLES AT BOTH ENDS	NO	NO	YES
(f)	COMMISSIONING OF 33KV WORKS INCLUDING CONFIRMATION OF INTEGRITY OF WIRING OF CONTROL WIRING FROM SUBSTATION EQUIPMENT TO THE 33KV BAY MARSHALLING KIOSK	YES	NO	NO
(g)	ASSEMBLY AND COMMISSIONING OF THE TRANSFORMER	NO	YES	NO
(h)	COMMISSIONING OF PROTECTION AND CONTROL SYSTEMS FOR THE TRANSFORMER INCLUDING INTER-TRIPS	YES	YES	NO
(i)	LAYING OF THE 630MM ² POWER CABLES BETWEEN THE GT PLANT AND THE 33KV BAY	NO	NO	YES
(j)	TESTING OF THE POWER CABLES TO CONFIRM SUITABILITY FOR SERVICE	NO	NO	YES
(k)	LAYING AND TERMINATION OF THE CONTROL CABLES BETWEEN THE 33KV BAY MARSHALLING KIOSK AND THE GT PLANT	NO	NO	YES
(l)	CONFIRMATION OF THE INTEGRITY OF WIRING OF CONTROL CABLES BETWEEN THE 33KV BAY MARSHALLING KIOSK AND THE GT PLANT	NO	NO	YES
(m)	CONSTRUCTION OF THE CABLE TRAYS AND LAYING OF 1000V POWER CABLES BETWEEN THE CONTROL ROOMS FOR THE TWO GT PLANTS. THE CABLES SHALL BE TERMINATED AT THE STANDBY 415V BREAKERS OF THE TWO GT PLANTS	NO	NO	YES

ACKNOWLEDGEMENT OF ADDENDUM 4

We/I, the undersigned hereby certify that the addendum is an integral part of the document and the alterations set out in the Addendum have been incorporated in the tender proposal.

Signed.....

Tenderer.....