

ES20 RADIO PARK GENERATOR REPLACEMENT BOQ

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL	LABOUR	TOTAL
	The supply, installation, testing, commissioning and a 52 week defects liability period in accordance with this bill of material, Local Supply Authority's by-laws & regulations, National Building Regulations, Regulations of Telkom, SANS 10142-1: 2003 (Code of Practice), Occupational Health and Safety Act, General Conditions of Contract, Local fire regulations and drawings.					
1	Preliminary and General					
1.1	Fixed charge items	Sum	1			R -
	Site establishment: Allow for site establishment, storage of plant, materials and equipment including protection thereof.					R -
						R -
1.2	Site disestablishment	Sum	1			R -
	Allow for the demolishing and removal of the site camp upon completion of the contract.					R -
						R -
1.3	Commissioning and testing	Sum	1			R -
	Supply all test equipment and labour for testing and commissioning of the final installation.					R -
						R -
1.4	Guarantee	Sum	1			R -
	Allow for a guarantee period of 12 months against defect in equipment, material and workmanship, but wear and tear and normal against defect in equipment, material and maintenance excluded.					R -
						R -
1.5	Performance guarantee of the work	Sum	1			R -
						R -
1.6	SASRIA Insurance to the value of R 5000 000-00	Sum	1			R -
						R -
1.7	Public liability / 3rd party to the value of R 20 000 000-00.	Sum	1			R -
						R -
1.8	AS BUILT DRAWINGS					R -
	The marking - up of "As Built" drawings and submitting to the engineer at the end of the installation.	Sum	1			R -
						R -
1.9	Compiling and submitting operating and maintenance manuals	Sum	1			R -
						R -
1.10	Additional fixed charge items Any additional item(s) that the tenderer may wish to detail and price.	Sum	1			R -
SUB-TOTAL TO BE CARRIED OVER TO SUMMARY PAGE						R -

2	GENERATORS					
2.1	Primary Offer - Generator Set – 1250kVA (Prime Rated) with remote radiators as per the specification including 900L diesel day tank with fuel level indicator. The fuel level to start pump at 50% and stop pump at 90%. At 100% the fuel alarm should be send and a second stop activated. at 30% low level fuel alarm should also be send. The set shall include remote radiator, piping between radiator and gen, pump, valves, cabling and etc.. Radiator to be located two floor above the generator room.	each	2			R -
2.2	Control cables between generator/controller/changer over panel	Sum	1			R -
2.3	Generator room ventillation	Sum	1			R -
2.4	Primary Offer - Containerised Diesel Generator 500 kVA (Prime Rated) Set including 500L base tank with fuel level indicator. The fuel level to start pump and 50% and stop pump at 90%. At 100% the fuel alarm should be send and a second stop activated. at 30% low level fuel alarm should also be send. The base tank shall have a double skinned wall to have 110% overfill capacity.	each	2			R -
2.5	Control cables between generator/controller/changer over panel	Sum	1			R -
2.6	Delivery, rigging and installation of the new generators.	Sum	4			R -
2.7	Synchronising panel Radio Park	each	1			R -
2.8	Synchronising panel Radio Studios in a weather proof canopy	each	1			R -
2.9	Trenching: allowance for a 600mm deep trench for generator cabling.	m	90			R -
2.10	BMS integration for 5 generators (SABC BMS maintained by Atbro, liaise with Atbro for the integration on 011 794 7900/terrryn@atbro.co.za)	Sum	1			R -
2.11	Remote monitoring system for 4 generators, note the different location of the generators.	Sum	1			R -
2.12	Rigging of the generators and temporary support of the slab during rigging. Please note the route restrictions.	Sum	1			R -
	SUB-TOTAL TO BE CARRIED OVER TO SUMMARY PAGE					R -

3	LT Installation					
3.1	Cables:					
	Rates to include for supply, delivery and installation, but excluding trenching, terminations, joints and cable supports for PVC/SWA 600/1000V copper cables laid in trenches, installed in sleeves, fixed on surface and laid on trays:					
a	95mm ² x 4-core PVC-SWA cable (from K2 change over to D2 plant room DB B)	m	2500		R	-
b	120mm ² x 4-core PVC-SWA cable	m	350		R	-
c	150mm ² x 4-core PVC-SWA cable	m	300		R	-
d	185mm ² x 4-core PVC-SWA cable (from change over to DB A)	m	600		R	-
e	185mm ² x 4-core PVC-SWA cable (from change over to DB F)	m	200		R	-
f	185mm ² x 4-core PVC-SWA cable (from Gen 1 to change over panel) K2	m	400		R	-
g	185mm ² x 4-core PVC-SWA cable (from Gen 2 to change over panel) K2	m	230		R	-
h	185mm ² x 4-core PVC-SWA cable (from Gen 1 to change over panel) Radio Studios	m	1000		R	-
i	185mm ² x 4-core PVC-SWA cable (from Gen 2 to change over panel) Radio Studios	m	1000		R	-
j	185mm ² x 4-core PVC-SWA cable (Disconnect riser bus bar from Sub F DB and connect them to Sub B DB)	m	80		R	-
k	95mm ² x 4-core PVC-SWA cable	m	230		R	-
3.2	Earthing:					
	Bare copper earth conductors installed with cables and drawn into conduits with PVC conductors as specified in the Specification, including terminations:					
a	95mm ² .	m	6890		R	-
b	70mm ² .	m	1000		R	-
3.3	Cable Terminations:					
	For PVC-SWA cables including armour glands, shrouds, lugs and connections:					
a	185mm ² x 4-core copper.	each	50		R	-
b	150mm ² x 4-core copper.	each	10		R	-
c	120mm ² x 4-core copper.	each	10		R	-
d	95mm ² x 4-core copper.	each	8		R	-
3.4	Panels					
a	DB A	each	1		R	-
b	DB B	each	1		R	-
c	DB F	each	1		R	-
d	DB C	each	1		R	-
	SUB-TOTAL TO BE CARRIED OVER TO SUMMARY PAGE				R	-

4	PC AMOUNTS, TESTING & COMMISSIONING					
4.1	Temporary 600KVA Generator for the duration of the installation. The generator shall be wire into existing change over panel. Allow 50 metres of power and control cables	Sum	2			R -
4.2	COC's					
	Panels	each	6			R -
4.3	Building work	Sum	1	R 1 000 000.00		R 1 000 000.00
	Attendance and profit on provisional amount%	Sum	1			
4.4	Ventilation duct relocation	Sum	1	R 300 000.00		R 300 000.00
	Attendance and profit on provisional amount10....%	Sum	1			
4.5	PC amount for MV switch gear remote switching	Sum	1	R 550 000.00		R 550 000.00
	Attendance and profit on provisional amount%	Sum	1			
4.6	Structural work	sum	1	R 250 000.00		R 250 000.00
	Attendance and profit on provisional amount%	sum	1			
4.7	Temporary services	sum	1	R 400 000.00		R 400 000.00
	Attendance and profit on provisional amount%	sum	1			
4.8	Decommissioning existing generators and removal from site	each	6			R -
	SUB-TOTAL TO BE CARRIED OVER TO SUMMARY PAGE					

SUMMARY PAGE						
	DESCRIPTION:					
1	Preliminary and General	Sum				
2	GENERATORS	Sum				
3	LT Installation	Sum				
4	PC AMOUNTS, TESTING & COMMISSIONING	Sum				
	Sub Total	Sum				R -
5	Contingency amount (10%):This amount will be under the control of SABC and may be deducted after approval only.	Sum				R -
	TOTAL (Carry over to Form of Tender)	Sum				R -