

SUBSTATION MAINTENANCE - BILL OF QUANTITIES

Item	Description	Unit	Qty	Supply Rate	Amount
SECTION A1 : ANNUAL CHARGES					
A1.1	Annual Preliminary & General				
A1.1.1	Provision of surety	Year	1		
A1.1.2	Provision of insurances	Year	1		
A1.1.3	Staff protective personal equipment	Year	1		
A1.1.4	Staff induction	Year	1		
A1.1.5	OHS compliance method statement	Year	1		
A1.1.6	CEMP compliance method statement	Year	1		
A1.1.7	Provision of Electronic Maintenance Manual	Year	1		
A1.1.8	Provision of Updated drawings in AutoCAD format	Year	1		
TOTAL FOR SCHEDULE CARRIED FORWARD TO SUMMARY				Sub Total	
SECTION A2 : MONTHLY CHARGES					
A2.1	Monthly Preliminary & General				
A2.1.1	Monthly overheads & administration charges	Months	12		
TOTAL FOR SCHEDULE CARRIED FORWARD TO SUMMARY				Sub Total	
SECTION B1 : ROUTINE MAINTENANCE					
B1	Routine maintenance (inclusive of all labour, equipment, transport and related costs)				
B1.1	Complete monthly inspection & submit report in electronic format, recording works carried out, findings requiring attention and costs to resolve	No.	12		
B1.2	Batteries Tested by means of a EC Series Electrochemical Analyser				
B1.2.1	Test & maintain Standby alternator lead acid battery	sum	156		
B1.2.2	Test & maintain Nicad cells in BTU	sum	56		
B1.2.3	Test & maintain UPS battery	sum	96		
B1.3	Transformer - see attached NRS Recommendation				
B1.3.1	Complete Inspection, Testing and Maintenance under Live Conditions	sum	88		
B1.3.2	Complete Inspection, Testing and Maintenance under Isolated Conditions	sum	56		
B1.4	Complete SBV4 Switchboard as per manufacturers standards				
B1.4.1	Complete Inspection, Testing and Maintenance under Live Conditions	sum	56		
B1.4.2	Complete Inspection, Testing and Maintenance under Isolated Conditions	sum	0		
B1.5	Secondary type K, RM6 & ABB Safe Ring type switchgear as per manufacturers standards				
B1.5.1	Complete Inspection, Testing and Maintenance under Live Conditions	sum	96		
B1.5.2	Complete Inspection, Testing and Maintenance under Isolated Conditions	sum	0		
B1.6	Electrical substation building				
B1.6.1	Clean all walls, floors, luminaires, doors, filters and lubricate locks (rate per complete substation/Node Room)	sum	88		
B1.6.2	Clean all walls, floors, luminaires, doors, filters and lubricate locks (rate per complete substation)	sum	0		
B1.6.3	Clean all walls, floors, luminaires, doors, filters and lubricate locks (rate per complete Metered Switch Chamber)	sum	8		
B1.7	Standby diesel alternator plant				
B1.7.1	Service, run (On load) and inspect complete alternator, engine , tank, exhaust, frame, auxiliary equipment to manufacturers specification	sum	0		
B1.7.2	Clean, run (no load) and inspect complete alternator, engine , tank, exhaust, frame, auxiliary equipment to manufacturers specification	sum	156		
B1.8	Miniature Substations - see attached NRS Recommendation				
B1.8.1	Complete Inspection, Testing and Maintenance under Live Conditions	sum	120		
B1.8.2	Complete Inspection, Testing and Maintenance under Isolated Conditions	sum	0		
TOTAL FOR SCHEDULE CARRIED FORWARD TO SUMMARY				Sub Total	
Item	Description	Unit	Qty	Supply & Install Rate	Amount
SECTION C1 : GENERAL MAINTENANCE					
C1	General maintenance (inclusive of 24 hour response with ELIDZ control and security office)				
C1.1	Apply specified DC/AC/VLF voltage test and complete test records (test fault/test clear).	sum	1		
C1.2	Locate Cable Fault	sum	1		
C1.3	Survey Complete Repair	sum	1		
C1.4	Provide Switching Services for complete repair	sum	1		
C1.5	MV Cable (XLPE) Joint 35/70 mm including excavations and reinstatement	sum	1		
C1.6	MV Cable (XLPE) Joint 95/150 mm including excavations and reinstatement	sum	1		
C1.7	MV Cable (XLPE) Joint 185/300 mm including excavations and reinstatement	sum	1		
C1.8	LV Cable (PVCSWA) Joint 4/35 mm including excavations and reinstatement	sum	1		
C1.9	LV Cable (PVCSWA) Joint 50/95 mm including excavations and reinstatement	sum	1		
C1.10	LV Cable (PVCSWA) Joint 120/185 mm including excavations and reinstatement	sum	1		
C1.11	MV Cable (XLPE) Indoor Termination 50/95 mm	sum	1		
C1.12	MV Cable (XLPE) Indoor Termination 120/300 mm	sum	1		
C1.13	MV Cable (XLPE) Outdoor Termination 50/95 mm	sum	1		
C1.14	MV Cable (XLPE) Outdoor Termination 120/300 mm	sum	1		
C1.15	LV Cable (PVCSWA) Termination 4/35 mm	sum	1		
C1.16	LV Cable (PVCSWA) Termination 50/120 mm	sum	1		
C1.17	Replace internal 2*58W fluorescent fitting unit to match existing	sum	1		
C1.18	Replace external 2*58W bulkhead unit to match existing	sum	1		
C1.19	Replace photocell unit	sum	1		
C1.20	Replace damaged light switch including cover plate	sum	1		
C1.21	Replace damaged single switched socket outlet including cover plate	sum	1		
C1.22	Replace damaged double switched socket outlet including cover plate	sum	1		
TOTAL FOR SCHEDULE CARRIED FORWARD TO SUMMARY				Sub Total	
SECTION A4 : PROVISIONAL CHARGES					
Item	Description	Unit	Qty	Supply & Install Rate	Amount
SECTION D1 : PROVISIONAL SUMS					
D1.1	Call out (inclusive of all labour, equipment, transport and related costs)				
D1.1.1	Emergency response (Immediate)	No.	1		
D1.1.2	Urgent response (24 hours)	No.	2		
D1.1.3	Routine response (extra over during normal working hours)	No.	20		

D1.2	Labour additional to scheduled works					
D1.2.1	Electrical Technician	hr	10			
D1.2.2	Semi Skilled Labour	hr	10			
D1.2.3	Labour	hr	10			
D1.3	Travelling additional to scheduled works					
D1.3.1	LDV	hr	72			
D1.3.2	Truck - 8 Ton	hr	20			
D1.3.3	Hydraulic Platform	hr	5			
D1.3.4	Crane truck	hr	8			
D1.3.5	Compressor	hr	8			
D1.3.6	Whacker Rammer Compactor	hr	8			
D1.4	Provisional Allowance for replacement equipment					
D1.4.1	Consumables like fuel, oil and filters etc	Sum	1	R	80,000.00	R 80,000.00
D1.4.2	Profit and Attendance	%				
D1.4.3	Provisional Sum for Annual Standby Generator Plant Maintenance	Sum	1	R	100,000.00	R 100,000.00
D1.4.4	Profit and Attendance	%				
D1.4.5	Provisional Sum for UPS Plant Replacement	Sum	1	R	300,000.00	R 300,000.00
D1.4.6	Profit and Attendance	%				
D1.4.5	Provisional Sum for Annual Protection Maintenance	Sum	1	R	450,000.00	R 450,000.00
D1.4.6	Profit and Attendance	%				
D1.4.7	Contingency Sum - Provisional Sum for Bulk Service Equipments	Sum	1	R	900,000.00	R 900,000.00
D1.4.8	Profit and Attendance	%				
D1.4.9	Provide the following for the services of specialist site management to plan, implement and control daily site activities - subject to agreement with ELIDZ	Sum	1	R	500,000.00	R 500,000.00
D1.4.10	Profit and Attendance - Mark up on Item D1.4.9 for the Contractor's administrative cost and profit (State % and extend as an amount) Not applicable where works are executed by the contractor.	%				
	TOTAL FOR SCHEDULE CARRIED FORWARD TO SUMMARY				Sub Total	
	SUMMARY					
	SECTION A1 : ANNUAL CHARGES					
	SECTION A2 : MONTHLY CHARGES					
	SECTION B1 : ROUTINE CHARGES					
	SECTION C1 : GENERAL MAINTENANCE					
	SECTION D1 : PROVISIONAL SUMS					
	Nett Tender Sum for Year 1					
	Nett Tender Sum for Year 2 (Escalated)	%				
	Nett Tender Sum for Year 3 (Escalated)	%				
	Total for 3 (Three) Year Term					
	Add VAT @ 15%					
	Gross Tender Sum carried to Form of Offer					