

BILL OF QUANTITIES

PROJECT : STEAM SAMPLING SYSTEM C&I MAINTENANCE AT KUSILE POWER STATION FOR A PERIOD OF THREE (3) YEARS ON AN AS AND WHEN REQUIRED BASIS - REV 1

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	ITEM 1 PRELIMINARIES AND GENERAL				
1.1	Site Establishment for:Delivery of 6m x 3m Kitchen, 6m x 3m Office, 6m x 3m Ablution & 12m x 3m Storage	Once Off	1		
1.2	Site De-establishment for: 6m x 3m Kitchen, 6m x 3m Office, 6m x 3m Ablution & 12m x 3m Storage	Once Off	1		
1.3	PPE	Once/Year	18		
1.4	Safety file	Once Off	1		
1.5	Medicals - Entry	Once/Year	18		
1.6	Medicals - Exit	Once Off	6		
1.7	Police Clearance certification	Once/Year	18		
1.8	Site Office Container (Insulated, with Air-Con): 6m x 3m (1 Off)	Monthly	36		
1.9	Site Storage Container: 12m x 3m (1 Off)	Monthly	36		
1.10	Site Kitchen Container : 6m x 3m (1 Off)	Monthly	36		
1.11	Ablution Unit (Serviced weekly) 6m x 3m (1 Off)	Monthly	36		
1.12	Site Bakkie 4 x 4 Single Cab (1 Off)	Monthly	36		
1.13	Travelling (Sedan 7 Seater) (1 Off)	Monthly	36		
	Total for Item 1 (Preliminaries and General) Carried to Final Summary				
2	ITEM 2 RESOURCES				
2.1	NORMAL HOURS				
2.1.1	Supervisor (Min 5 Year of Experience) (1 Off)	Hours	1248		
2.1.2	Safety Officer (Min 5Years of Experience) (1 Off)	Hours	1248		
2.1.3	Technician (2 Off)	Hours	2496		
2.1.4	Assistant (2 Off)	Hours	2496		
	Sub-Total for Item 2.1 (Normal Hours)				
2.2	OVERTIME (WEEKDAYS & SATURDAYS)			1.50	
2.2.1	Supervisor (Min 5 Year of Experience) (1 Off)	Hours	1440		
2.2.2	Safety Officer (Min 5Years of Experience) (1 Off)	Hours	1440		
2.2.3	Technician (2 Off)	Hours	2880		
2.2.4	Assistant (2 Off)	Hours	2880		
	Sub-Total for Item 2.2 (Overtime Weekdays and Saturdays)				
2.3	OVERTIME SUNDAYS & PUBLIC HOLIDAYS			2.00	
2.3.1	Supervisor (Min 5 Year of Experience) (1 Off)	Hours	736		
2.3.2	Safety Officer (Min 5Years of Experience) (1 Off)	Hours	736		
2.3.3	Technician (2 Off)	Hours	1472		
2.3.4	Assistant (2 Off)	Hours	1472		
	Sub-Total for Item 2.3 (Overtime Sundays & Public Holidays)				
2.4	STANDBY				
2.4.1	Supervisor (Min 5 Year of Experience) (1 Off)	Days	432		
2.4.2	Safety Officer (Min 5Years of Experience) (1 Off)	Days	432		
2.4.3	Technician (2 Off)	Days	864		
2.4.4	Assistant (2 Off)	Days	864		
	Sub-Total for Item 2.4 (Standby)				
	Total Item 2 (Resources) Carried to Final Summary				
3	ITEM 3 SAMPLE ROOMS - REFURBISHMENT				
3.1	Isolation Globe V+C94 Valves	Each	6		
3.2	Pressure Gauges	Each	6		
3.3	Temperature Gauges	Each	6		
3.4	Pressure Regulators: (VRTS)	Each	6		
3.5	Pressure Diff Transmitters	Each	6		
3.6	Fittings, impulse lines and coolers	Each	6		
3.7	Coolant Flow indicators	Each	6		
3.8	Coolant Flow indicators [Inlet Header]	Each	6		
3.9	Thermal Shut-off Valves	Each	6		
3.10	Sample Flow Totaliser and Panels.	Each	6		
	Total for Item 3 (Sample Rooms - Refurbishment) Carried to Final Summary				

4	<b>ITEM 4</b> <b>SAMPLE ROOMS - NEW SUPPLY</b>				
4.1	Isolation globe valves	Each	6		
4.2	Pressure Gauges	Each	6		
4.3	Temperature Gauges	Each	6		
4.4	Pressure Regulators: (VRTS)	Each	6		
4.5	Pressure Diff Transmitters	Each	6		
4.6	Fittings, impulse lines and coolers	Each	6		
4.7	Coolant Flow indicators	Each	6		
4.8	Coolant Flow indicators [Inlet Header]	Each	6		
4.9	Thermal Shut-off Valves	Each	6		
4.10	Sample Flow Totaliser and Panels.	Each	6		
	<b>Total for Item 4 (Sample Rooms - New Supply) Carried to Final Summary</b>				
5	<b>ITEM 5</b> <b>SAMPLE ROOMS SET-UP, ADJUSTMENT AND CALIBRATION</b>				
5.1	Isolation globe valves	Each	6		
5.2	Pressure Gauges	Each	6		
5.3	Temperature Gauges	Each	6		
5.4	Pressure Regulators: (VRTS)	Each	6		
5.5	Pressure Diff Transmitters	Each	6		
5.6	Fittings, impulse lines and coolers	Each	6		
5.7	Coolant Flow indicators	Each	6		
5.8	Fittings, impulse lines and coolers	Each	6		
5.9	Thermal Shut-off Valves	Each	6		
5.10	Sample flow totaliser and panels.	Each	6		
	<b>Total for Item 5 (Sample Rooms Set-Up, Adjustment &amp; Calibration) Carried to Final Summary</b>				
6	<b>ITEM 6</b> <b>CPP SYSTEMS - REFURBISHMENT</b>				
6.1	Isolation globe valves	Each	6		
6.2	Pressure Gauges	Each	6		
6.3	Temperature Gauges	Each	6		
6.4	Pressure Regulators: (VRTS)	Each	6		
6.5	Pressure Diff Transmitters	Each	6		
6.6	Fittings, impulse lines and coolers	Each	6		
6.7	Coolant Flow indicators	Each	6		
6.8	Coolant Flow indicators [Inlet Header]	Each	6		
6.9	Sample Flow indicators [CPP Analysis Panel]	Each	6		
6.10	Sample Flow indicators [CPP Sample Panel]	Each	6		
6.11	Thermal Shut-off Valves	Each	6		
6.12	Sample flow totaliser and panels.	Each	6		
	<b>Total for Item 6 (CPP Systems - Refurbishment) Carried to Final Summary</b>				
7	<b>ITEM 7</b> <b>CPP SYSTEMS - NEW SUPPLY</b>				
7.1	Isolation globe valves	Each	6		
7.2	Pressure Gauges	Each	6		
7.3	Temperature Gauges	Each	6		
7.4	Pressure Regulators: (VRTS)	Each	6		
7.5	Pressure Diff Transmitters	Each	6		
7.6	Fittings, impulse lines and coolers	Each	6		
7.7	Coolant Flow indicators	Each	6		
7.8	Coolant Flow indicators [Inlet Header]	Each	6		
7.9	Sample Flow indicators [CPP Analysis Panel]	Each	6		
7.10	Sample Flow indicators [CPP Sample Panel]	Each	6		
7.11	Thermal Shut-off Valves	Each	6		
7.12	Sample flow totaliser and panels.	Each	6		
	<b>Total for Item 7 (CPP Systems - New Supply) Carried to Final Summary</b>				

8	ITEM 8 CPP SYSTEMS SET-UP, ADJUSTMENT AND CALIBRATION				
8.1	Isolation globe valves	Each	6		
8.2	Pressure Gauges	Each	6		
8.3	Temperature Gauges	Each	6		
8.4	Pressure Regulators: (VRTS)	Each	6		
8.5	Pressure Diff Transmitters	Each	6		
8.6	Fittings, impulse lines and coolers	Each	6		
8.7	Coolant Flow indicators	Each	6		
8.8	Coolant Flow indicators [Inlet Header]	Each	6		
8.9	Sample Flow indicators [CPP Analysis Panel]	Each	6		
8.10	Sample Flow indicators [CPP Sample Panel]	Each	6		
8.11	Thermal Shut-off Valves	Each	6		
8.12	Sample flow totaliser and panels.	Each	6		
	Total for Item 8 (CPP Systems Set-Up, Adjustment & Calibration) Carried to Final Summary				
	ITEM 9 CONSUMABLES				
9.1	Nitrogen Gas Cylinder, Purging, 7kg	Each	1		
9.2	Refrigeration Grade Compressor Oil, 5l	Each	1		
9.3	R407C Gas Cylinder, Refrigerant, 13kg	Each	2		
9.4	Outsourced Labour & Travel Charges	Each	1		
	Total for Item 9 (Consumables) Carried to Final Summary				
	FINAL SUMMARY				
ITEM 1	PRELIMINARIES & GENERAL				
ITEM 2	RESOURCES				
ITEM 3	SAMPLE ROOMS - REFURBISHMENT				
ITEM 4	SAMPLE ROOMS - NEW SUPPLY				
ITEM 5	SAMPLE ROOMS SET-UP, ADJUSTMENT AND CALIBRATION				
ITEM 6	CPP SYSTEMS - REFURBISHMENT				
ITEM 7	CPP SYSTEMS - NEW SUPPLY				
ITEM 8	CPP SYSTEMS SET-UP, ADJUSTMENT AND CALIBRATION				
ITEM 9	CONSUMABLES				
	Total Amount (Excl Vat)				