

ESKOM GENERATION**2025**

**THE PROVISION OF MAINTENANCE AND
REPAIRS OF ALL DIESEL ENGINES FOR A
PERIOD OF 60- MONTHS AT CAMDEN
POWER STATION - BILLS OF QUANTITIES**

CONTRACT NUMBER :**CONTRACTOR :****CONTRACT AMOUNT (EXCL. VAT) :****CONTRACT AMOUNT (INCL. VAT) :**

THE PROVISION OF MAINTENANCE AND REPAIRS OF ALL DIESEL ENGINES FOR A PERIOD OF 60- MONTHS AT
CAMDEN POWER STATION - BILLS OF QUANTITIES

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STATION - BILLS OF QUANTITIES**
NOTES TO TENDERERS

1. BILLS OF QUANTITIES

This document comprises Notes to Tenderers and Bills of Quantities and is hereafter referred to as "the Bills of Quantities".

The Tenderers are to note that this is a Contract with a Bills of Quantities.

2.1 CONTRACT DOCUMENTS

The contract documents will consist of:

2.1.1 The NEC3 Term Services Contract 2013 together with all amendments.

2.1.2 These Bills of Quantities, including all annexures and supplementary documentation referred to therein.

2.1.3 Documents to be provided by the Contractor in terms of the requirements of these Bills of Quantities.

2.1.4 Construction Regulations 2014

2.1.5 Occupational Health and Safety Act of 1993

2.1.6 The Contractor is referred to the Scope of works Document and to pay carefull attention to the requirements of this document

3 DRAWINGS

There are no drawings for this contract.

4 VALUE ADDED TAX

Tenderers should compute their rates from the net costs (excluding Value Added Tax). Value Added Tax at the current rate of 15% is to be added to the net sub-total on the final summary page by means of a single sum calculation to establish the tender price.

5 SCOPE OF WORK

As a guide only, the work comprises as follows:-

The Provision of Boiler Washing Services on as and When Required Bases for a Period of 60 Months at Camden Power Station

6 ADDRESS WHERE DOCUMENTS CAN BE OBTAINED

Tender documents will be made available Electronically on an online portal to be provided by Eskom

7 POSSESSION OF SITE

The date of which possession of the Site shall be given to the Contractor shall be within 7 **working days** of the acceptance of this tender.

8 CONSTRUCTION PERIOD - DATES FOR PRACTICAL COMPLETION

The intended date for practical completion and penalty for each calendar day for non-completion shall be:

Practical Completion: 60 Months from the date of Site Handover

Tenderers are to note that the Contract will be delivered as a whole and NOT to be phased.

9 COMMON LAW OR BY-LAW REQUIREMENTS

No liability for not specifically mentioning any normal contractual, Common Law or By-Law requirements will be accepted by the Employer, or Contracts Manager.

10 ORDERING OF MATERIALS

No claims will be entertained due to non-availability of materials or labour. The Tenderer is therefore required to investigate and ensure that the specific materials and components required for the works will be available at the relevant estimated construction times, at the time of tendering.

11 CONTRACT PRICE ADJUSTMENT

The Contract Sum shall be subject to CPAP.

12. PRICED BILLS OF QUANTITIES:

Tenderers must submit to the Contracts Manager a copy of the Bills of Quantities fully priced and extended, with his tender. After the Bills have been checked, and when called upon, each page of the Bills of Quantities shall be initialed and the Index page and the Final Summary page signed in full.

13 DIFFERENCE AND DISCREPANCIES:

Should there be any difference or discrepancy between the prices or particulars contained in the official Tender Form and those contained in any covering letter from the Tenderer, the prices contained in the official Tender Form shall prevail.

Every Tenderer shall be deemed to have waived, renounced and abandoned any conditions printed or written upon any stationery used by him for the purpose of or in connection with the submission of his Tender, which are in conflict with the Conditions of Tender.

Tenderers are warned that any material divergence from the official conditions or specifications may render their Tenders liable to disqualification.

The Tenderers are to note that if there are any arithmetical errors in the Tenderers' form of tender in calculation of the Tender Sum, the Contracts Manager will correct the calculation accordingly.

14 COMMUNICATION WITH MEMBERS OF THE CLIENT COMPANY OR PROFESSIONAL TEAM

A Tenderer shall not in any way communicate with a member of the Client Company or Professional Team or with any officer on a question affecting any contract or the supply of goods or for any work, undertaking or service which is the subject of a Tender during the period between the closing date for receipt of Tenders and the dispatch of the written notification of the Employer's decision on the award of the contract; provided that a Tenderer shall not hereby be precluded from obtaining from the Employer or his authorised representative information as to the date upon which the award of the contract is likely to be made or, after the decision upon the award has been made by the Contracts Manager to which the Employer had delegated its powers, information as to the nature of the decision or such information as was publicly disclosed at the opening of Tenders.

15 IMPORT PERMITS:

Tenderers must apply direct for any import permit and/or currency required, however the Contracts Manager will furnish successful Tenderers with a supporting statement if required.

16 BILLS OF QUANTITIES:

No alteration, erasure, omission or addition is to be made to the text and conditions of these Bills of Quantities and should any such alteration, amendment, note or addition be made, the same will not be recognised, but the reading of the Bills of Quantities as prepared by the Contracts Manager will be adhered to.

It should be understood that the system of measurement herein adopted is the only system of measurement which will be recognised in connection with this contract. Before the signing of the contract, the Contracts Manager will be entitled to call for adjustments of individual rates and rectify discrepancies, as he considers necessary without alterations to the Tender amount.

6 Ensure that every employee or person (including visitors) who enters the site of the Works undergoes health and safety induction training pertaining to hazards identified on the site of the Works and upon such training having been successfully completed, the Contractor must issue written confirmation by a competent person to the trained employees or persons who shall be further instructed to carry such confirmation with them at all times whilst on the site of the Works;

7 Issue, on loan, the necessary personal protective equipment to visitors to the site of the Works; and

8 Be in good standing with the Compensation Commissioner at all times during the duration of the Contract.

9 The Contractor is to sign a Non-Disclosure Agreement prior to collecting or receiving any proprietary information from Eskom, drawings, documentation, reports and photographs

The Contractor will be deemed to have satisfied himself with his obligations in terms of the Act and to have allowed for all costs arising from compliance with the Act as no claim for extra costs arising from compliance with, and obligations in terms of the Act will be entertained.

17 PRICING OF THESE GENERAL NOTES

The Contractor must allow in his pricing for any additional costs arising from these "General Notes" as no later claims for additional costs will be considered.

18 TAX COMPLIANCE

Failure to provide mandatory information required in this Bid will result in the submissions being deemed null and void and shall be considered non-responsive. An Electronic Tax Compliance Status (TCS) System will be used to verify the bidder's tax compliance status so bidders must request a unique security personal identification number (PIN) from SARS which must be submitted with the bid

No alternative tender offers will be considered and these bills of quantities are not to be used for the purpose of ordering materials
All Bill rates are to include for material, labour, plant, wastage, transport and profit.

PROVISIONS OF MAINTENANCE AND REPAIRS OF ALL DIESEL ENGINES FOR 60 MONTHS AT CAMDEN POWER STATION: BILL OF QUANTITIES

Item	Description	Unit	Qty	Rate	Amount
	<u>PRELIMINARIES AND GENERAL</u>				
	<u>PREAMBLES</u>				
	<u>RATES</u>				
	The tenderer is advised that all rates must include the following breakdown:				
	Labour, Transport Plant, wastage and Profit.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderers omission to price any item will be entertained.				
	<u>SCOPE OF WORKS</u>				
	The Contractor is referred to entire Scope of Woks for the details of the Scope. The Contractor is to study the details of this document prior to pricing this Bills of Quantities as these documents are contractual and Eskom will not be held responsible for any ambiguity				
	<u>CONTRACT PERIOD</u>				
	60 Months				
	<u>CURRENCY</u>				
	All rates tendered on and / or pricing in these bills of quantities to be in the South African Rands Currency (ZAR)				
	All individual amounts in these bills of quantities exclude Value Added Tax (VAT) VAT is to be calculated as a lump sum and added to the total of all values in the Final Summary under the item provided for VAT				
	<u>HEALTH AND SAFETY</u>				
	The contractor must ensure that all health and safety regulatory and safety requirements are met and valid.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the tenderes omission to price any item will be entertained				
	The contractor's prices for all items throughout this document must take account of and include for all obligations, requirements and specifications given in the said works information/scope of work				
	<u>BILL OF QUANTITIES</u>				
	<u>BILL NO.01 - PRELIMINARIES AND GENERAL</u>				
	<u>FIXED CHARGES</u>				
	<u>ESTABLISHMENT OF FACILITIES ON SITE</u>				
1	De- establishment	Sum	1		R

2	SAPS Vetting and /or Finger Print Check	Sum	1		R
	<u>Contractor's obligations in respect of the Occupational Health and Safety Act</u>				
3	Health and Safety Requirements (Safety File etc)	Sum	1		R
4	PPE	Sum	1		R
5	Medicals and Induction	Sum	1		R
6	De- establishment	Sum	1		R
	SUB TOTAL COST FIXED CHARGES (A)				R
	TIME RELATED CHARGES				
7	Consumable	Sum	1		R
8	Travelling expenses (to and from Camden Power Stati	Sum	1		R
9	Accommodation during rainy seasons per team	Sum	1		R
10	Low Bed Truck	Sum	1		R
	SUB TOTAL COST TIME RELATED ITEMS (B)				R
	TOTAL COST A+B TRANSFERRED TO FINAL SUMMARY				R

PROVISIONS OF MAINTENACE AND REPAIRS OF ALL DIESEL ENGINES FOR 60 MONTHS AT CAMDEN POWER STATION: BILL OF QUANTITIES

Item	Description	Unit	Qty	Rate	Total
	<u>BILL OF QUANTITIES :MINOR SERVICE</u>				
	<u>PREAMBLES</u>				
	<u>RATES</u>				
	The tenderer is advised that all rates must include the following breakdown:				
	Labour, Transport Plant,wastage and Profit.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderers omission to price any item will be entertained.				
	<u>SCOPE OF WORKS</u>				
	The Contractor is referred to entire Scope of Woks for the details of the Scope. The Contractor is to study the details of this document prior to pricing this Bills of Quantities as these documents are contractual and Eskom will not be held responsible for any ambiguity				
	<u>CONTRACT PERIOD</u>				
	60 Months				
	<u>CURRENCY</u>				
	All rates tendered on and / or pricing in these bills of quantities to be in the South African Rands Currency (ZAR)				
	All individual amounts in these bills of quantities exclude Value Added Tax (VAT) VAT is to be calculated as a lump sum and added to the total of all values in the Final Summary under the item provided for VAT				
	<u>HEALTH AND SAFETY</u>				
	The contractor must ensure that all health and safety regulatory and safety requirements are met and valid.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the tenderes omission to price any item will be entertained				
	The contractor's prices for all items throughout this document must take account of and include for all obligations, requirements and specifications given in the said works information/scope of work				
	<u>BILLS OF QUANTITIES</u>				
	<u>Supply of spares for the service of diesel and petrol engines.</u>				
1	<u>One off Caterpillar(Model 3406, serial no. 6TB22761)</u>				
	<u>Fire diesel engine A</u>				
1.1	Oil filter (part no. 1R-0716)	No.	20	R	R
1.2	Fuel filter(part no. 1R-0749)	No.	20	R	R

1.3	Air filter (part no. 4N-0015)	No.	20	R	R
1.4	V-belts	No.	6	R	R
1.5	Thermostat	No.	3	R	R
1.6	Oil (15W40)	Lt	90	R	R
1.7	Anti-Freeze	Lt	50	R	R
1.8	Oil pressure gauge	No.	6	R	R
1.9	Temperature gauge	No.	6	R	R
1.10	Speed sensor	No.	6	R	R
1.11	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
2	<u>One off Cummins (Model 200/38 C360)</u>				
	<u>Fire diesel engine B</u>				
2.1	Oil filter (part no. P553000)	No.	20	R	R
2.2	Fuel filter(part no. P553004)	No.	20	R	R
2.3	Fuel filter(part no. FS 36203)	No.	20	R	R
2.4	Air filter	No.	12	R	R
2.5	V-belts	No.	6	R	R
2.6	Oil (15W40)	Lt	150	R	R
2.7	Anti-Freeze	Lt	30	R	R
2.8	Thermostat	No.	3	R	R
2.9	Oil pressure gauge	No.	6	R	R
3.10	Temperature gauge	No.	6	R	R
3.11	Speed sensor	No.	6	R	R
3.12	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
3	<u>One off Mistubishi(Model S6R2-PTAA, Serial no. 70357)</u>				
	<u>Generator ash water reservoir</u>				
3.1	Oil filter (B7577)	No.	10	R	R
3.2	Oil filter (B96)	No.	10	R	R
3.3	Fuel filter	No.	10	R	R

3.4	Air filter	No.	10	R	R
3.5	V-belts	No.	3	R	R
3.6	Oil (15W40)	Lt	100	R	R
3.7	Anti-Freeze	Lt	30	R	R
3.8	Thermostat	No.	3	R	R
3.9	Oil pressure gauge	No.	3	R	R
3.10	Temperature gauge	No.	3	R	R
3.11	Speed cable	No.	3	R	R
3.12	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R
4	<u>One off Mobile Deutz engine water pump (F6L912-158,no.108995)</u>				
	<u>Mobile diesel engine water pump</u>				
4.1	Oil filter (Deutz 01183574)	No.	20	R	R
4.2	Fuel filter (Deutz 01174423)	No.	20	R	R
4.3	Air filter	No.	20	R	R
4.4	V-belts	No.	12	R	R
4.5	Fuel level gauge	No.	12	R	R
4.6	Oil (15W40)	Lt	150	R	R
5.5	Fuel Solenoid(12V)	No.	6	R	R
4.7	Alternator (09.006.70.0.000) 12V	No.	4	R	R
4.8	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
5	<u>One off Mobile Deutz engine water pump(F4L913)</u>				
	<u>Mobile diesel engine water pump</u>				
5.1	Oil filter (Deutz 01174418)	No.	20	R	R
5.2	Fuel filter (Deutz 01174423)	No.	20	R	R
5.3	Air filter	No.	20	R	R
5.4	V-belts	No.	12	R	R
5.5	Fuel level gauge	No.	12	R	R
5.6	Oil (15W40)	Lt	100	R	R
5.7	Fuel Solenoid(12V)	No.	6	R	R

5.8	Alternator (09.006.70.0.000) 12V	No.	4	R	R
5.90	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
6	<u>One off Mobile Kirloskar engine water pump(Model: 6K 1080TA Serial: 6H 3065/2220024)</u>				
	<u>Mobile diesel engine water pump coal stock yard dam</u>				
6.1	Oil filter	No.	20	R	R
6.2	Fuel filter	No.	20	R	R
6.3	Air filter	No.	20	R	R
6.4	V-belts	No.	20	R	R
6.5	Fuel level gauge	No.	20	R	R
6.6	Oil (15W40)	Lt	100	R	R
6.7	Anti-Freeze	Lt	30	R	R
6.8	Fuel Solenoid(24V)	No.	6	R	R
6.9	Alternator (24V)	No.	4	R	R
6.10	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
7	<u>One off Mobile Kirloskar engine water pump(DV8. 3566/2220026)</u>				
	<u>Mobile diesel engine water pump Reclamation dam</u>				
7.1	Oil filter (P554005)	No.	20	R	R
7.2	Fuel filter (R120T-SA)	No.	20	R	R
7.3	Fuel filter water separator(WK940/20)	No.	20	R	R
7.4	Air filter (F6.404.25.0.00)	No.	20	R	R
7.5	Air filter (F6.404.27.0.00)	No.	20	R	R
7.6	Air filter (F6.404.28.0.00)	No.	20	R	R
7.7	Oil (15W40)	Lt	180	R	R
7.8	Anti-Freeze	Lt	120	R	R
7.9	V-belts	No.	12	R	R
7.10	Fuel level gauge	No.	12	R	R

7.11	Fuel Solenoid/governor (24V)	No.	6	R	R
7.12	Alternator (24V)	No.	4	R	R
7.13	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	10	R	R
				R	R
8	Five off Cummins Engine (NTA 400 IPG/CPL2025) SBN3758			R	R
	Engine no. 7W20909, Pston no.147540			R	R
	Diesel engine generator			R	R
				R	R
8.1	Oil filter (P 198)	No.	25	R	R
8.2	Fuel filter (GUD Z 247)	No.	125	R	R
8.3	Coolant filter(P 552075) or (PR 3753)	No.	50	R	R
8.4	V-belts	No.	6	R	R
8.5	Thermostat	No.	6	R	R
8.6	Oil (15W40)	Lt	500	R	R
8.7	Anti-Freeze	Lt	150	R	R
8.8	Fuel Solenoid (24V)	No.	5	R	R
8.9	Oil pressure gauge	No.	6	R	R
8.10	Temperature gauge	No.	6	R	R
8.11	Speed cable	No.	6	R	R
8.11	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R
9	One off Kiloskar diesel engine (6SL8800TA)				
	Diesel engine generator				
9.1	Oil filter	No.	10	R	R
9.2	Dual Fuel filter	No.	10	R	R
9.3	Air filter	No.	10	R	R
9.4	Oil pressure gauge	No.	3	R	R
9.5	Temperature gauge	No.	3	R	R
9.6	Oil (15W40)	Lt	150	R	R
9.7	Anti-Freeze	Lt	30	R	R
9.8	Fuel Solenoid(12V)	No.	3	R	R

9.9	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R
10	<u>Three off Kiloskar diesel engine (6H 3065/2220015)</u>				
	<u>Service water diesel engine Water treatment Plant</u>				
10.1	Oil filter (6H.1193.02.0.00)	No.	15	R	R
10.2	Fuel filter (pre-filter F002 H20 308)	No.	15	R	R
10.3	Fuel filter (fine filter F002 H20 306)	No.	15	R	R
10.4	Air filter	No.	15	R	R
10.5	Oil pressure gauge	No.	3	R	R
10.6	Temperature gauge	No.	3	R	R
10.7	Oil (15W40)	Lt	300	R	R
10.8	Anti-Freeze	Lt	150	R	R
10.9	Fuel Solenoid(24V)	No.	3	R	R
10.10	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R
11	<u>One Cummins engine(S/N 6210413) diesel compressor</u>				
	<u>Diesel compressor</u>				
11.1	Oil filter	No.	10	R	R
11.2	Fuel filter	No.	10	R	R
11.3	Air filter	No.	10	R	R
11.4	Oil pressure gauge	No.	3	R	R
11.5	Temperature gauge	No.	3	R	R
11.6	Oil (15W40)	Lt	150	R	R
11.7	Anti-Freeze	Lt	30	R	R
11.8	Electronic fuel governor	No.	2	R	R
11.9	Fuel Solenoid (24 V)	No.	3	R	R
11.10	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R

12	<u>Diesel engine Model F6L413, no.10519F7) Serial: 5885751</u>				
	<u>Demin Transfer engine water pump</u>				
12.1	Oil filter (KF0-03-1-2608)	No.	10	R	R
12.2	Fuel filter water separator(P550248)	No.	10	R	R
12.3	Fuel filter (P556245)	No.	5	R	R
12.4	Air filter	No.	10	R	R
12.5	Oil pressure gauge	No.	3	R	R
12.6	Temperature gauge	No.	3	R	R
12.7	Oil (15W40)	Lt	150	R	R
12.8	Anti-Freeze	Lt	30	R	R
12.9	Fuel Solenoid (24 V)	No.	3	R	R
12.10	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R
13	<u>Security backup diesel engine (Volvo Penta Model TAD734GE Serial: 5312617958)</u>				
13.1	Oil filter	No.	15	R	R
13.2	Dual Fuel filter	No.	15	R	R
13.3	Air filter	No.	15	R	R
13.4	Oil pressure gauge	No.	3	R	R
13.5	Temperature gauge	No.	3	R	R
13.6	Oil (15W40)	Lt	150	R	R
13.7	Anti-Freeze	Lt	30	R	R
13.8	Fuel Solenoid (24 V)	No.	4	R	R
13.9	Engine service minor, oil change, oil filter, fuel filter, air filter change and cleaning of an engine with pressure cleaner (cost of labour)	No.	5	R	R

14	Diesel Dispenser minor service (change of filters and cleaning)				
14.1	Minor service (cost of labour and filters) serial no.F00598000	No.	15	R	R
15	Other related				
15.1	Drain and clean diesel tank 1000 lt (activity)	No.	17	R	R
15.2	High pressure wash the engine (activity)	No.	40	R	R
15.3	Spray painting of mobile diesel engines (activity including paint and compressor)	No.	15	R	R
15.4	Battery (size 647)	No.	10	R	R
15.5	Battery (size 619)	No.	10	R	R
15.6	Battery (size 674)	No.	16	R	R
15.7	Start and stop Engine Control panel (12V) Murphy Power core MPC-10	No.	4	R	R
15.8	Start and stop Engine Control panel (24V)Murphy Power core MPC-10	No.	6	R	R
15.9	Battery Terminals (Set)	No.	8	R	R
15.10	Body solenoid(24V)	No.	8	R	R
15.1	Fuel line 1/4 inch NRV	No.	10	R	R
15.12	Mobile Engine ignition	No.	8	R	R
15.1	Supply of Diesel dispenser (PIUSI F00598000, flow rate= 72 L/min)Ex-rated dispenser to ensure hazardous location compliance.	No.	3	R	R
15.14	6 " pipe suction strainer with NRV for water pump	No.	6	R	R
15.2	8 " pipe suction strainer with NRV for water pump	No.	6	R	R
15.16	Diesel engine oil 15W40	Lt	4000	R	R
15.2	Antifreeze	Lt	1200	R	R
15.18	Tyre (155/80 R13)	No	4	R	R
15.2	Tyre (195/80 R14)	No.	4	R	R
15.20	Tyre (225/70 R15)	No.	4	R	R
15.2	Tyre (245/70 R16)	No.	4	R	R
15.22	Heavy duty Jocky wheel	No.	4	R	R

15.2	Gorman T-6 water pump	No.	3	R	R
15.24	Centrifugal pump Kirloskar (flow rate 650 to 600m ³ /h), head= 40m, power input 81 KW, HPSH 4 to 6m	No.	1	R	R
15.25	6 inch Pime vacuum assist pump(automatic sefl-priming system)	No.	1	R	R
15.3	Centrifugal pump kirloskar (type: KPD 250/50, flow rate 1300m ³ /h), head= 50m to 60m, power input 130 KW, HPSH 4 to 6m	No.	1	R	R
15.27	8 inch Pime vacuum assist pump(automatic sefl-priming system)	No.	1	R	R
15.28	Submersible pump 12V (flow rate 70L/min)	No.	2	R	R
15.3	Submersible pump 24V (flow rate 70L/min)	No.	2	R	R
15.30	Portable diesel engine water pump(flow rate 1000L/min), head=30M, suction and discharge = 80mm	No.	1	R	R
15.31	16 to 20 bar layflat hose or pipe	M	1000	R	R
15.3	Heavy duty 6 inch pipe clamp	ea	200	R	R
15.33	Heavy duty 8 inch pipe clamp	ea	200	R	R
15.34	6 inch pipe coupling (male and famale)	No.	50	R	R
15.4	2 inch HPDE pipe (6 m long)	ea	17	R	R
15.36	2 inch HPDE pipe butt welding	ea	100	R	R
15.37	4 inch HPDE pipe (6 m long)	ea	17	R	R
15.4	4 inch HPDE pipe butt welding	ea	100	R	R
15.39	6 inch HPDE pipe (6 m long)	ea	17	R	R
15.40	6 inch HPDE pipe butt welding	No.	100	R	R
15.4	6 inch HDPE stub and flange	No.	34	R	R
15.42	315 mm HDPE pipe butt welding	ea	100	R	R
15.43	315 mm HDPE stub and flange	No.	34	R	R
16	<u>Labour rates</u>				
	<u>Maintenance of running engines on call outs and during rainy season</u>				
16.1	Diesel Mechanic normal time	Hour	5000	R	R
16.2	Diesel Mechanic overtime	Hour	1200	R	R
16.3	Diesel Mechanic overtime (Sunday & public holidays)	Hour	720	R	R
16.4	Semi-skilled/Assistant normal time	Hour	5000	R	R

16.5	Semi-skilled/Assistant overtime	Hour	1200	R	R
16.6	Semi-skilled/Assistant (Sunday & public holidays)	Hour	720	R	R
16.7	Auto electricain normal time	Hour	5000	R	R
16.8	Auto electricain overtime	Hour	1200	R	R
16.9	Auto electricain overtime (Sunday & public holidays)	Hour	720	R	R
	TOTAL CARRIED TO FINAL SUMMARY				R

PROVISIONS OF MAINTENANCE AND REPAIRS OF ALL DIESEL ENGINES FOR 60 MONTHS AT CAMDEN POWER STATION: BILL OF QUANTITIES

Item	Description	Unit	Qty	Rate	Total
	<u>BILL OF QUANTITIES :MAJOR SERVICE</u>				
	<u>PREAMBLES</u>				
	<u>RATES</u>				
	The tenderer is advised that all rates must include the following breakdown:				
	Labour, Transport Plant,wastage and Profit.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the Tenderers omission to price any item will be entertained.				
	<u>SCOPE OF WORKS</u>				
	The Contractor is referred to entire Scope of Woks for the details of the Scope. The Contractor is to study the details of this document prior to pricing this Bills of Quantities as these documents are contractual and Eskom will not be held responsible for any ambiguity				
	<u>CONTRACT PERIOD</u>				
	60 Months				
	<u>CURRENCY</u>				
	All rates tendered on and / or pricing in these bills of quantities to be in the South African Rands Currency (ZAR)				
	All individual amounts in these bills of quantities exclude Value Added Tax (VAT) VAT is to be calculated as a lump sum and added to the total of all values in the Final Summary under the item provided for VAT				
	<u>HEALTH AND SAFETY</u>				
	The contractor must ensure that all health and safety regulatory and safety requirements are met and valid.				
	<u>PRICING OF THIS BILLS OF QUANTITIES</u>				
	Any items left unpriced will be understood to be provided free of charge and no claim for any extras arising out of the tenderes omission to price any item will be entertained				
	The contractor's prices for all items throughout this document must take account of and include for all obligations, requirements and specifications given in the said works information/scope of work				

BILLS OF QUANTITIES					
Caterpillar (model no. 3406, serial no. 6TB2261)					
1	Oil pump	No.	3	R	R
2	Water pump	No.	3	R	R
3	Main bearings	No.	21	R	R
4	Big end bearings	No.	18	R	R
5	Cam bushes	No.	21	R	R
6	Injectors	No.	18	R	R
7	Diesel engine oil for test running	No.	240	R	R
8	Exhaust valves	No.	36	R	R
9	Intake valves	No.	36	R	R
10	Valve guides	No.	72	R	R
11	Valve stem seals	No.	72	R	R
12	Valve seats	No.	36	R	R
13	Fuel filter	No.	6	R	R
14	Intake gasket	No.	6	R	R
15	Exhaust gasket	No.	6	R	R
16	Top gaskets	No.	6	R	R
17	Injector tube O-ring	No.	18	R	R
18	Oil filter	No.	6	R	R
19	Turbo	No.	3	R	R
20	Thermostat	No.	3	R	R
21	Thrust washers	No.	6	R	R
22	V-belt	No.	3	R	R
23	Radiator	No.	1	R	R
24	6 meter Coolant hose	No.	9	R	R
25	Cooling fan	No.	3	R	R
26	Sleeve Kit	No.	18	R	R
27	Bolts and nuts(set)	No.	3	R	R
28	Oil cooling nozzles	No.	18	R	R

29	Polish camshaft	No.	3	R	R
30	Skim cylinder head	No.	3	R	R
31	Starter	No.	3	R	R
	<u>BILLS OF QUANTITIES</u>				
Duetz (Model F6L912-158, No. 108995)					
1	Oil pump	No.	3	R	R
2	Main bearings	No.	21	R	R
3	Big end bearings	No.	18	R	R
4	Cam bushes	No.	21	R	R
5	Injectors	No.	18	R	R
6	Diesel engine oil for test running	No.	240	R	R
7	Exhaust valves	No.	36	R	R
8	Intake valves	No.	36	R	R
9	Valve guides	No.	72	R	R
10	Valve stem seals	No.	72	R	R
11	Valve seats	No.	36	R	R
12	Fuel filter	No.	6	R	R
13	Intake gasket	No.	6	R	R
14	Exhaust gasket	No.	6	R	R
15	Top gaskets	No.	6	R	R
16	Injector tube O-ring	No.	18	R	R
17	Oil filter	No.	6	R	R
18	Turbo	No.	3	R	R
19	Thrust washers	No.	6	R	R
20	V-belt	No.	3	R	R
21	Cooling fan	No.	3	R	R
22	Sleeve Kit	No.	18	R	R
23	Bolts and nuts(set)	No.	3	R	R
24	Oil cooling nozzles	No.	18	R	R

25	Polish camshaft	No.	3	R	R
26	Skim cylinder head	No.	3	R	R
27	Starter	No.	6	R	R

	<u>BILLS OF QUANTITIES</u>				
Cummins NTA 400, SBN 3758, Engine no. 7W 20909, Piston No. 143450, Camshaft no. 143450					
1	Oil pump	No.	3	R	R
2	Water pump	No.	3	R	R
3	Main bearings	No.	21	R	R
4	Big end bearings	No.	18	R	R
5	Cam bushes	No.	21	R	R
6	Injectors	No.	18	R	R
7	Diesel engine oil for test running	No.	240	R	R
8	Exhaust valves	No.	36	R	R
9	Intake valves	No.	36	R	R
10	Valve guides	No.	72	R	R
11	Valve stem seals	No.	72	R	R
12	Valve seats	No.	36	R	R
13	Fuel filter	No.	6	R	R
14	Intake gasket	No.	6	R	R
15	Exhaust gasket	No.	6	R	R
16	Top gaskets	No.	6	R	R
17	Injector tube O-ring	No.	18	R	R
18	Oil filter	No.	6	R	R
19	Turbo	No.	3	R	R
20	Thermostat	No.	3	R	R
21	Thrust washers	No.	6	R	R
22	V-belt	No.	3	R	R
23	Radiator	No.	3	R	R

24	6 meter Coolant hose	No.	9	R	R
25	Cooling fan	No.	3	R	R
26	Sleeve Kit	No.	18	R	R
27	Bolts and nuts(set)	No.	3	R	R
28	Oil cooling nozzles	No.	18	R	R
29	Polish camshaft	No.	3	R	R
30	Skim cylinder head	No.	3	R	R
31	Starter	No.	9	R	R
TOTAL CARRIED TO FINAL SUMMARY					R

**PROVISIONS OF MAINTENANCE AND REPAIRS OF ALL DIESEL ENGINES FOR 60 MONTHS AT CAMDEN POWER STATION:
BILL OF QUANTITIES**

FINAL SUMMARY

No	Description	Amount
1	Section 1 - Preliminaries and General	R
2	Section 2 - BOQ Minor Service	R
3	Section 3 - BOQ Major Service	R
	Sub-Total	R
3	Value Added Tax @ 15%	R
4	Grand Total (Incl. VAT) - Carried to Form of Offer and Acceptance	R