



PURCHASING CONSORTIUM SOUTHERN AFRICA (PURCO SA) IN COLLABORATION WITH WESTERN TVET COLLEGE (WESTCOL)

REQUEST POTENTIAL BIDDERS FOR PROPOSALS (RFP) FOR THE MAINTENANCE, SUPPORT AND ONLINE MONITORING OF BACK-UP GENERATORS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

TENDER NO: PU2611/023

Prospective Suppliers who are interested in participating in the aforementioned tender are invited to submit a proposal in full compliance to the requirement of this tender document. Completed documents with all attachments must be signed and submitted on the PURCO SA Website.

The closing time and date for receipt for online tender 27 November 2023 is at 23:59

Tender number	PU2611/023		
Date issued	05 November 2023		
Tender closing date	27 November 2023 Tender Submission will be	Time:23: e Electronic on www.purcosa.c	
Compulsory Information Session	16 November 2023	Time:10:	00
Company Name			
Address			
Contact person	Mr/Mrs/Ms/Dr/Prof.		
Contact numbers	(w)	(cell)	
Email address		1	

1.1 RFP FORMAT

All Supplier responses must follow the prescribed format. Refer to "Delivery Instructions" below. Failure to do so may result in disqualification from this RFP/Proposal process.

Please see table below for the list of mandatory requirements and tick yes if documentation is submitted and no if not submitted.

Appendix Number	Description of Appendix	Requirement	Circle ye	
Appendix A	RFP Document	Each page of the RFP document to be initialled by a delegated representative	Yes	No
Appendix A1	Proof of Payment	Attach Payfast proof of payment and include the company tendering for, if purchased by a different company	Yes	No
Appendix B	Technical specifications and pricing	Attach your pricing schedule as per specifications.	Yes	No
Appendix C	Proof of Bank Account	Provide Confirmation letter from Bank not older than 3 months	Yes	No
Appendix D	Company registration documents	Provide Company registration documents	Yes	No
Appendix E	ID Copies of directors	Certified & not older than 3 months	Yes	No
Appendix F	Tax Pin	An original valid Tax Pin	Yes	No
Appendix G	Audited Annual Financial Statements / Annual Financial Statements	Provide Audited Annual Financial Statements (fully signed by auditor and director) or Annual Financial Statements (fully signed by director) for the last 2 recent years	Yes	No
Appendix H	B-BBEE certification	Provide a valid B-BBEE certificate from a SANAS accredited agency or Auditor registered with the IRBA	Yes	No
Appendix I	Declaration of Interest	Complete Point 9 of this tender document	Yes	No
Appendix J	Registration On Central Supplier Data Base (CSD)	Provide a copy of the full and summary reports of registration on National Treasury Central Supplier Database	Yes	No
Appendix K	CIDB Grading Certificate	Minimum 2EB/EP or higher	Yes	No

NB: No points will be allocated to this phase; however, tenders that do not meet the prequalification requirements may not advance to the next phase of the evaluation process.

1.1.1 STAGE 1: EVALUATION OF FUNCTIONALITY

The evaluation criterion for functionality aims to assess the capability of the tenderer to execute and maintain a tender and/ or contract. Tenderers need to obtain a minimum percentage score of 70% and above in order to progress to the next stage of evaluation.

All proposals will be evaluated on the following criteria indicated below.

Step 1: References table

The references must be current clients that have done business with your company for a minimum of five (5) years and more for contracts of a similar size or more with a proven record of accomplishment.

Bidders are required to submit with the bid, a Proposal.

The Proposal is to be a brief printed document that describes how the Bidder intends to ensure the following items within the sub-criterion: The proposal to reflect the areas below as headings. Failure to submit the required proposal will result in disqualification based on non-responsiveness. Company profile only, will not be acceptable as a proposal.

FUNCTIONALITY CRITERIA		POINTS ALLOCATED
Experience, Skills and Ability of Services Provider to fulfil Westcol's requirements, past experience in work of similar nature. The service provider must have at least 5 years' experience in preventative and reactive maintenance of diesel generators, installation of new diesel generators, major overhaul services of diesel generators and online monitoring. Provide verifiable written references: • 5 or more written verifiable references • 4 written verifiable reference • 3 written verifiable reference No references Irrelevant references Notes: 1. Each reference letter (project) should be accompanied by an appointment letter. 2. A reference letter on the clients letterhead indicating the following: • Performance of contractor • Clients contact details (name of contact person, contact numbers, contact email address) • Size and capacity of diesel generator(s) and • Description of works carried out WESTCOL has right to verify the company reference	= 15 points = 10 points = 05 points = 00 point = 00 point	15
Key staff skills and experience (electrical or mechanical technicians) A concise CV indicating key staff's relevant experience to the scope of works. Proof of qualification and trade test must accompany each key staff member's CV Points Allocation: Head of Operations (Minimum 3 years experience) Account Manager (Minimum 3 years experience)	= 05 points = 05 points = 05 points	20

Total points		100
Gauteng Province • 00 Points outside Gauteng Province	= 00 points	10
 Locality: 10 Points within West Rand District Municipality 05 Points outside West Rand District Municipality but within 	= 10 points = 05 points	40
 they will deliver on the requirements as set out by Westcol in the specifications document Poor (0 points) - No response or methodology failed to address requirements Poor (05 points) - The technical approach and/or methodology is poor/is unlikely to satisfy project objectives or requirements. The bidder has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project. Satisfactory (10 points) -The approach is generic and not tailored to address the specific project objectives and methodology. The approach does not adequately deal with the critical characteristics of the project. Good (20 points) -The approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that may occur during execution. The quality plan and approach to managing risk etc., is specifically tailored to the critical characteristics of the project. Very Good (30 points) -Besides meeting the "good" rating, the important issues are approached in an innovative and efficient way, indicating that the bidder has outstanding knowledge of state-of-the- art approaches. The approach paper details ways to improve the project outcomes and the quality. 	= 00 points = 05 points = 10 points = 20 points = 30 points	30
Suitable - 7 Project Execution Plan (PEP) Provide a detailed technical proposal or methodology to indicate how	– oo ponits	
 4.3 Quality Control Plan - 7 Points Generic/ not suitable - 0 Partially suitable - 3.5 Suitable - 7 	= 00 points = 2.5 points = 05 points	05
 4.2 Environmental Management Plan - 6 Points Generic/ not suitable - 0 Partially suitable - 3 Suitable - 6 	= 00 points = 7.5 points = 15 points	15
SHEQ documents The bidder shall submit proof of their company's SHEQ documents. These shall be relevant to the scope of work in this bid 4.1 Health and Safety Plan - 7 Points Generic/ not suitable - 0 Partially suitable - 3.5 Suitable - 7	= 00 points = 5.5 points = 05 points	05
 Operations Manager (Minimum 3 years experience in electrical or mechanical engineering sphere) Electrical/mechanical technician with registration with relevant body 	= 05 points	

TECHNICAL SPECIFICATIONS

BACKGROUND

Western TVET College is looking for services of a supplier for maintenance, support and online monitoring of back-up generators.

GOAL

To obtain a reputable, experienced supplier responsible for maintenance, support and online monitoring of back-up generators for a period of 36 months (03 years).

TERMS OF REFERENCE

In the management of infrastructure, maintenance plays vital role in order to ensure reliability, longevity, and return on investment on equipment procured. Maintenance on infrastructure is either planned (preventative) or unplanned (reactive), and in more critical infrastructure even predictive. The latter requires sophisticated installation that will allow for trending of equipment behaviour whose data will be used to create patterns and trends that will allow for prediction of when equipment is likely to fail in order to intervene before the effect.

Generator Online Monitoring

The criticality of the reliability of back-up power supply at Western TVET College campuses requires that predictive maintenance be employed. This requires the installation of online monitoring on all diesel generators; this will be treated as a once off installation at the commencement of the appointed service provider's contract. This online monitoring system should have a report printing functionality (e.g. usage report, refuelling report and when the unit is on and off)

The online monitoring system shall be compatible, as far as possible, with the existing diesel generator electronic control units (ECU). The college has the following ECUs currently installed on generators at its campuses; these are Deep Sea Electronics (DSE).

CURRENT EQUIPMENT:

	l .		
Generator Serial No:	PG015	Engine Make:	VOLVO
kVA rating:	350	Engine Model:	TAD1342GE
Voltage rating:	400V	Engine serial no:	20132009242
Hz rating:	50Hz	Alternator Make:	STAMFORD
Rpm rating:	1500rpm	Alternator Model:	S4L1D-E41
		Alt. Serial no:	X20E221635
Campus:	CORPORATE	Controller Make:	DEEPSEA
		Controller model:	DSE7320

Generator Serial No:	PG016	Engine Make:	VOLVO
kVA rating:	400	Engine Model:	TAD1344GE
Voltage rating:	400V	Engine serial no:	20132009088
Hz rating:	50Hz	Alternator Make:	MARELLI
Rpm rating:	1500rpm	Alternator Model:	MJB315MA4
		Alt. Serial no:	MHM10006
Campus:	RANDFONTEIN	Controller Make:	DEEPSEA
		Controller model:	DSE7320

Generator Serial No:	PG017	Engine Make:	VOLVO
kVA rating:	200	Engine Model:	TAD733GE
Voltage rating:	400V	Engine serial no:	531290003
Hz rating:	50Hz	Alternator Make:	STAMFORD
Rpm rating:	1500rpm	Alternator Model:	UCI274H1
		Alt. Serial no:	X19K451488
Campus:	KRUGERSDORP WEST	Controller Make:	DEEPSEA
		Controller model:	DSE7320

Generator Serial No:	PG018	Engine Make:	VOLVO
kVA rating:	350	Engine Model:	TAD1342GE
Voltage rating:	400V	Engine serial no:	20132008228
Hz rating:	50Hz	Alternator Make:	STAMFORD
Rpm rating:	1500rpm	Alternator Model:	S4L1D-E41
		Alt. Serial no:	X20E221636
Campus:	KRUGERSDORP	Controller Make:	DEEPSEA
		Controller model:	DSE7320

Generator Serial No:	PG019	Engine Make:	VOLVO
kVA rating:	150	Engine Model:	TAD731GE
Voltage rating:	400V	Engine serial no:	5312569134
Hz rating:	50Hz	Alternator Make:	STAMFORD
Rpm rating:	1500rpm	Alternator Model:	UCI274F1
		Alt. Serial no:	X20A023452
Campus:	KRUGERSDORP	Controller Make:	DEEPSEA
		Controller model:	DSE7320

Generator Serial No:	PG020	Engine Make:	VOLVO
kVA rating:	200	Engine Model:	TAD733GE
Voltage rating:	400V	Engine serial no:	531259000
Hz rating:	50Hz	Alternator Make:	STAMFORD
Rpm rating:	1500rpm	Alternator Model:	UC1274H1
		Alt. Serial no:	X20A022434
Campus:	CARLETONVILLE	Controller Make:	DEEPSEA
		Controller model:	DSE7320

CAMPUS SITE DETAILS:

CORPORATE

42 JOHNSTONE STREET, RANDFONTEIN

RANDFONTEIN CAMPUS

12 KIEWIET STREET, RANDFONTEIN

KRUGERSDORP WEST CAMPUS

69 FLEMMING STREET, KRUGERSDORP WEST

KRUGERSDORP CAMPUS

32 VON BRANDIS STREET, KRUGERSDORP

CARLETONVILLE

20 SOUTH STREET, CARLETONVILLE

Provision of a qualified technician on a **quarterly basis** to perform the following and issue a service certificate on all generators:

Service Checklist	
(1) Engine Oil	Change interval schedule
(1) Engine Oil	Change interval schedule.Check levels.
	Check pipes for damage or leaks.
	Advise on oil level and record.
(2) Fuel	Adjust oil level if required. Check topks for any damage of leaks.
(2) 1 dei	Check tanks for any damage of leaks. Check day tank float level quiteb.
	Check day tank float level switch. Check final transfer numb energian.
	Check fuel transfer pump operation. Check all pipes for any locks or demand.
	Check all pipes for any leaks or damage.Check fuel level.
(3) Coolant	Replace any damaged items. Test artificate and DCA4 levels.
(3) Coolant	Test antifreeze conditions and DCA4 levels. Chack all pipes for any demand of leaks.
	Check all pipes for any damage of leaks. Check redictor for any damage or leaks.
	Check radiator for any damage or leaks. Inchest radiator cap.
	Inspect radiator cap.Advise level and condition.
	Check operation of water jacket and hoses. Replace any damages items.
(4) Drive Belts	Replace any damages items.Check condition.
(4) Drive Dells	Check tension.
(5) Batteries	Report if drive belt must be replaced. Chack general condition.
(5) Datteries	Check general condition. Check terminals for called connection and if there is any
	 Check terminals for solid connection and if there is any corrosion.
(6) Ventilation	Check for any restriction in air flow path.
(o) vortiliation	Check radiator matrix.
(7) Electrical	Check power cables for secure connections between
(7) Electrical	genset and switch panel.
	Check all mounted components for secure fitment.
	Check mounting bolts and vibration mountings for secure
	fitment.
	Check for any hot spots.
	Check general condition of panel.
(8) Drain	Check water from fuel/water separators.
	Check water from fuel filters.
(9) Test	Do check if generator is safe to start.
	Start and run at no load for 10 minutes.
	Check and record all gauge readings, coolant
	temperature, oil pressure, voltage and frequency reading.
	Check air cleaner restriction indicator.
	Do a mains failure simulation in the presence of Western
	TVET College representative. Run generator for 15
	minutes and record all readings.
	 Check readings and report any problems.

		 Take note of any vibrations, noise and or excessive smoking conditions.
		 Leave generator in auto position or requirement on site.
(10)	After Test	 Check of any leaks, once set has cooled down, clean set and area after services/testing.
(11)	Report	 Submit full report, indicating replacement of any major parts and provide quotation accordingly.
(12)	Hand over	 Sign off quarterly test with Western TVET College representative.

Provision of a qualified technician on an <u>annual basis/250 hours</u> to perform the following and issue a service certificate on all generators:

Service Checklist			
Check	For any obstructions to fuel tank vents and overflow.		
	Fan and fan hub condition.		
	Exhaust restriction.		
	Exhaust system mounting supports and hangers.		
	Visual check for any winding or electrical component		
	issues.		
	Check power circuit breaker operation.		
Change	Fuel filters.		
	Water separator filters		
	Lubrication oil and oil filters		
	Air filters		
Visually inspect	Turbocharger condition.		
Alternator	Inspect main terminals and clean.		
	Inspect main alternator bearing.		
	Advise on general condition of windings.		
	 Inspect cooling fins and coupling and advise. 		
Batteries	Check general condition testing.		
	Check terminals for solid connection and if there is any		
	corrosion.		
Controller	Test functionality and record.		
	 Record running hours. 		
	Record all readings as per test and inspection sheet.		
Test	Ensure safe to start.		
	Start and run at no load for 10 minutes.		
	Check and record all gauge readings.		
	Check air cleaner restriction indicator.		
	 Do mains failure simulation and run test under load for 15 minutes. 		
	Check and record all gauge readings.		
	Take note of any abnormal vibrations, noise or excessive		
	smoking conditions.		
	Leave generator in auto position.		
After service	 Check for any leaks. After the unit has cooled down, clear set and area after servicing. 		
Report	Submit full report including quotations for major parts replacements.		
Acknowledgement	Sign off annual service by Western TVET College representative.		

The minimum requirements of the diesel generator online monitoring system are;

- The system shall have capability to collect and store real-time data which should be accessible via the internet or mobile and/or computer-based installed application.
- The system shall be capable of sending out short message service (SMS) texts to alert identified mobile numbers of certain alarm set points (representatives) that variable intervals (e.g. 80%, 70% etc, oil temperature above 80 degrees Celsius, etc. The appointed service provider shall be

- responsible to ensure that the system is registered with relevant authorities to allow for such communication, such as Independent Communications Authority of South Africa (ICASA).
- The system shall either be separately compatible with DSE controllers or be one that is capable of integrating all signals from either onto one dashboard for ease of monitoring. The latter is preferred, however, where not possible, the former shall be considered.
- The appointed service provider shall be responsible for full-time monitoring of the dashboard;
 Western TVET College shall be given the same access to all signals being monitored on the same
 dashboard. Access rights for Western TVET College shall be to dedicated individuals which shall be
 provided to the appointed service provider, provision shall be made for 5 licenses for Western TVET
 College per unit.

The data collected via the online monitoring system shall also be used to implement predictive or preventative maintenance.

Planned and unplanned Maintenance

It is an inherent nature of maintenance of rotating machinery that there will be planned and unplanned activities. The implementation of predictive maintenance aims to also reduce the portion of unplanned maintenance or change what would be unplanned activities to planned ones.

The requirements as outlined in the specifications/scope of work shall be adhered to and used as a minimum guideline for planned maintenance and procurement of diesel generators for Western TVET College, should the latter be so required. This will also help to guide the service provider on their pricing on the bid documents. The planned maintenance intervals or frequency is set out above as well as on the Service Level Agreement (SLA).

Unplanned maintenance shall comprise, as a minimum, of the following;

- Fault finding and resolution.
- Repair and/or replacement of parts.
- Drafting of scope of work for repairs and issuing of quotation or itemised bill of quantities for such works.

Response times for unplanned maintenance are stipulated in the SLA document and should be adhered to.

SAFETY HEALTH ENVIRONMENT AND QUALITY (SHEQ) REQUIREMENTS

The Successful Bidder will ensure that all work performed and all vehicles, plant and equipment bought onto or used on site complies with the Occupational Health and Safety Act, 1993 (Ac no 85 of 1993) as well as the Compensation for Occupation Injury and Disease Act, 1993 (Act no 130 of 1993). The bidder shall submit their company's SHEQ policy, plans, procedures, standards, etc. It is to be noted that these must not be generic documents, but must be tailored to suite the scope of works detailed in this document.

Safety

Safety is of paramount importance at all Western TVET College sites, particularly when dealing with rotating machinery, it is therefore a requirement that a Safety File be submitted by the appointed service provider upon appointment.

The appointed service provider shall;

- Ensure the safety of their personnel when carrying out any works on the Western TVET College sites
- Ensure the safety of Western TVET College personnel when carrying out any works on Western TVET College sites.
- Ensure the safety of all persons within the vicinity when carrying out any works on Westcol sites.

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- Ensure the safe operation of the equipment that is under their maintenance responsibility.
- Submit a safety file that contains a Baseline Risk Assessment for working on diesel generators and their auxiliaries, as well as a Baseline Risk Assessment for business operations should there be any downtime as a result of any faults on the diesel generators.
- Ensure compliance with the Occupational Health and Safety Act, Act 85 of 1993

Health

Health of Westcol personnel, contractor's personnel, and Westcol clients are also paramount at all Westcol facilities.

The appointed service provider shall:

- Ensure that there are no hazards that may be harmful to health when carrying out of works. If there
 is need for hazardous chemicals to be used, these shall be clearly communicated via signage, and
 must also form part of the risk assessment.
- Diesel exhaust fumes can be harmful to health, therefore, the appointed service provider shall
 continuously check (either visual or using instruments) that there are no exhaust fumes that are
 directed towards occupied spaces. Generator exhaust pipes shall discharge safely away to prevent
 being carried into buildings, this should be at points where the fumes can be carried away via natural
 air draught.
- Ensure that there are no diesel or oil spillages that affect the surrounding environment. If a spillage does happen, it shall be contained within the area of the generator.
- Report any spillage that has impacted on the environment and carry out the clean-up operations.
- Ensure that noise pollution is also addressed.

The appointed service provider shall perform assessments on the generator plants to identify any factors that may affect the environment and advise Westcol accordingly.

Environment

The environment in and around the diesel generators shall be preserved at all times. The appointed service provider shall;

- Ensure that there are no diesel or oil spillages that affect the surrounding environment. If a spillage does happen, it shall be contained within the area of the generator.
- Report any spillage that has impacted on the environment and carry out the clean-up operations.
- Ensure that noise pollution is also addressed.

Quality

To ensure that back-up power supply to Westcol sites is reliable at all times, any works that are carried out on the diesel generator plant shall of high quality, whether workmanship or the supply of replacement parts or fuel grade.

The appointed service provider shall;

• Submit a Quality Control Programme (QCP) with provision for necessary interventions points (e.g. hold points, witness point, etc)

PRICE SCHEDULE

Rendering of TMC all Westcol campuses (5 campuses)

TENDER PRICE:

Description	YEAR	TOTAL
TCM Service Fee Provide detailed breakdown per transaction	Year 1 (2024/25)	R,
TCM Service Fee Provide detailed breakdown per transaction	Year 2 (2025/26)	R,
TCM Service Fee Provide detailed breakdown per transaction	Year 3 (2026/27)	R,
	SUB-TOTAL	R,
	VAT 15%	R,
	TOTAL (INCL. VAT)	R,

 ${\bf Note: Official\ company\ quotation\ to\ accompany\ this\ submission\ confirming\ above\ totals.}$

NOTE:

All prices must be VAT inclusive and must be quoted in South African Rand (ZAR). All prices quoted should be fixed the contract period 3 years period (36 months).