

	Scope of work for Provision of Electrical Maintenance services for Transmission Real Estate (Eastern Grid-KwaZulu Natal)	Transmission

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1. INTRODUCTION

This is an electrical maintenance service, goods and material supply contract and will render a service to the Transmission Real Estate property portfolio in the Eastern Grid (consisting of substations, regional office and Customer Load Network (CLNs), within the Kwa-Zulu Natal Province for a period of 60 months on an as and when required basis.

This will include provision of labour, supervision and management, staff uniform/PPE, equipment and its maintenance, transport and services such electrical maintenance etc. during the critical operation of Eskom Transmission Services. This document outlines the roles and responsibilities, what the scope of work will entail as well as the technical evaluation criteria to be used during tender evaluations.

1.1. Roles and Responsibilities

The Contractor shall ensure that:

- Its employees shall comply with Eskom's policies and site regulations.
- Workmanship shall, at all times, be of a grade accepted as the best practice of the particular trade involved and as stipulated in written standards of recognized organizations or institutions of the respective trades, except as exceeded or qualified by the specifications. The Contract Manager shall determine the acceptability of workmanship.
- The *Contractor* shall provide a complete Quality Assurance plan in accordance with the requirements of ISO 9001: 2015 to the *Employer* for approval. This plan must ensure an integrated quality service as part of the contract. Execution of all quality related activities, including inspection and test plans compilation and execution, spares material quality inspections and all quality related record keeping is part of the *Contractor's* scope of work.

1.2. Provision Of Staff Uniform/PPE And Other

The Contractor shall:

- Supply staff protective wear uniforms/gear that is SABS approved i.e., headgear, goggles, reflective vest safety boots and gloves, dust mask (appropriate to their tasks and functions) as according to the risk exposure identified in the Risk Assessment whilst on duty.
- Ensure uniforms are of good quality and labelled with a company name.
- Ensure that all staff members whilst on duty are neatly dressed, presentable and hygienic.

1.3. Provision Of Transport

Contractor is responsible for providing own transport for its employees in line with Eskom Vehicle safety specifications (32-345)

- The transport is required for:

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- Movement of equipment and staff around sites

2. DOCUMENT CONTENT

2.1. Requirements

Adherence to Eskom generic policies

All Contractor Employees shall comply with the non-use of cell phones in restricted areas, adherence to Eskom's life-saving rules, no smoking policy and other procedures. These documents will be made available during tendering stage.

2.2. Provision of Manpower

The successful Contractor/s shall utilise / provide skilled and suitably qualified staff as governed by Eskom Maintenance Contracts User Specification Requirements and should conform to:

- Quality Management Control and Assurance as per ISO Standards.
- Have a valid wireman's licence and an electrician's trade certificate as a minimum for electricians.
- Occupational Health and Safety Act 85/1993 and (SHE) Standards.
- Have valid medical fitness certificate.
- The contractor shall supply provision of all necessary general labour, supervisor with trade test to perform some of the work and management to do all the works.
- All staff will be available on as and when required basis only for purpose of this contract works.
- The Contractor is required to have a roster for weekends, public holidays and for after hours to cater for any emergencies that may occur on site.
- Contractor to develop a fatigue management plan that will be approved by the *Employer* (as and when requested).
- Contractor is also to provide necessary training of all the staff appointed to ensure conformity with the scope of work.

2.3. LABOUR REQUIREMENTS

- Conduct criminal and site clearance checks of its employees (before offer of employment).
- Conduct training, testing and verifying key personnel qualifications and competence including certification for operation of machinery and equipment in relation to OSHACT.

2.4. Contractor's Management, Meetings and Key People

- The Contractor shall be required to do safety induction prior to start any work on site.

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- The Contractor's safety file must be approved before any work commence on site and should always be kept with employees working on site and should be updated regularly when new risk are identified.
- Other contract related meetings shall be communicated to the Contractor on arrival to site.

2.5. Equipment

- The Contractor shall provide all tools and equipment required for the project/work/task.

2.6. Management Reporting and Process for Monitoring

- The Employer will establish sound contract management principles.

2.7. General Requirements

- The Contractor immediately reports all injuries as well as any threat to health or safety of which it becomes aware of on the site of the Employer.
- The Contractor shall provide in writing a works programme with achievable times lines to the Site Supervisor before commencement of the project (if required).
- The Contractor shall provide to the Site Supervisor a daily progress report that speaks to the works programme, all delays shall be explained to the Contract Manager/Supervisor (Site).
- The Contractor's performance evaluation shall be done during ad hoc meetings between the Contractor and the Contract Manager/Supervisor during the project period.
- The *Contractor* shall carry out tasks as described in the scope of work and will only report to the *Employers/Contract Manager/Site Supervisor* appointed for this project.

3. PLANT AND MATERIAL

The Contractor shall be responsible for:

- All spares and materials required for repairing, maintaining, replacing and new fitting will be provided by the Contractor.
- Any damage caused by the Contractor are to be repaired by the Contractor at his/her own cost prior to take over.
- Purchasing, replenishing, safe storage, distributions and control of consumables, to agreed inventory levels, of consumables and some non-consumables (i.e., equipment's) required by the staff in the provision of the Maintenance services.
- Requesting approval from Contract Manager before purchasing of consumables.

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- Maintaining records of receipts and issues which should be reconciled and report submitted to the Service/Contract Manager on a monthly basis;
- Ensure any non-compliant equipment is not used by any person whatsoever in the provision of the maintenance services; all equipment provided by the supplier should comply with SABS Standard.
- Ensure that equipment used is safe and does not endanger the operator/s or member of the public in the surrounding areas where the equipment is being used.


4. SCOPE OF WORK

The scope of work includes but are not limited to the below listed activities:

AREAS	ACTIVITIES
Security fence (electric)	Repair or replace all defective lights
	Repair or replace defective cables and connections
	Earth all unearthed steel structures
	Repair and replacement of electric fence energizers
	Repair and replacement of electric fence insulators
	Repair or replace defective insulators
	Repair and re-tension fence wires where applicable
	Repair or replace defective steel supports
	Earth unearthed steel structures
Flood lights	Repair or replace all defective lights
	Repair or replace all defective cables and connections
	Earth all unearthed steel structures
	Repair or replace control circuits
Electrical	Replacement of light bulbs and/or light bulb fittings inside and outside the buildings with energy efficient light bulbs and/or light fittings.
	Repair or replace all lights (including emergency lights)
	Perform effective troubleshooting to identify hazards or malfunctions and repair or substitute damaged units
	Prevent breakdowns of systems by routine inspection and replacing old wiring and insulated cables, cleaning circuits etc

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	Replacement and maintenance of lights and light holders inside and outside buildings	
	Rewiring of DB boards	
	Complete replacement of circuit breakers	
	Correct labelling of circuit breakers	
	Correct labelling of circuit breaker load receivers (e.g., plugs, etc)	
	Installation of load protectors	
	Correct separation of lines and circuits	
	Separation of electricity meters	
	Create an isolation point for each aircon unit in the complex	
	Develop a wiring diagram	
	Repair/replace electrical motors for gates	
	Issue electrical COC	
	Issue electrical COC for hazardous areas such as battery rooms	
	Connection of mobile generators, wiring, laying of cables as per Eskom approved specification and issuing COC	
	Repair, test, re-wire where necessary, issue COC for 380V TDB	
	Rewire where necessary, test and issue COC for 380V chop over	
	Repairs and replacement of plugs	
	Repairs and replacement of heating element in circuit breakers	
	Cable fault finding and repairs or replacement	
	Installation of new extractor fans as per Eskom standard	
	Repair or replacement of existing extractor fans with associated pipework and cabling	
	Repair or replacement of emergency DC lighting in substations	
	Earth all unearthed structures as and when required (e.g fences/gates)	
Provision of spares	Energizers: Power supply card (BS120 battery charger) Relay Card (Alarm card) 8 Channel Relay Card (Alarm card) 25 Channel Communications card (BS120 Monitor board) HT Transformer	

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	<p>Capacitor card (Energiser Board)</p> <p>12v 7Ah Batteries</p> <p>Control boxes (BS120 Display unit with or without SMS module)</p> <p>SMS module for keypad</p> <p>Mimic panels - Remote control BS120</p> <p>Synchronising box (BS120 Synchronising unit)</p> <p>RS485 to Plastic fibre convertor</p> <p>BS120 CT unit</p> <p>220/110V Step-down transformer</p> <p>BS120 Energiser complete</p> <p>4x BS120 Isolator kiosk complete</p> <p>RS485 - 2wire master unit</p> <p>Lightning diverter</p> <p>Stinger software program</p> <p>RS485-RS232 converter</p> <p>Repair BS120 equipment</p> <p>Fence repairs Provide service</p> <p>Rep Equipment inspect, repair/replace</p> <p>Provide courier services road transport parcel</p> <p>Stinger CPU for mimic</p> <p>Mimic unit lock</p> <p>Gates:</p> <p>Centurion D10 Complete motor.</p> <p>Centurion D10 Control card.</p> <p>Centurion D10 24V Charger.</p> <p>Centurion D10 Optical Censor.</p> <p>IR Safety Beams (Set)</p> <p>12V Remote control alkaline batteries</p> <p>Centurion one button remote control</p> <p>Centurion four button remote control</p> <p>Centurion Supahelix receiver</p> <p>Remote control replacement buttons</p>
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	Centurion Vantage 500 motor complete Centurion Vantage 500 motor controller Centurion Vantage 500 motor Fences: Ferrules Galvanised 2,24mm wire 1000M Galvanised Line Clamps Polypropylene Insulators Donaldson tensioners Ceramic strain insulators
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4.1. Access, working platforms and scaffolding

- No scaffolding and platforms will be used without it having been safety cleared and the required documentation completed as per SANS 10085-1:2004 or recent version.
- scaffolding should be done by trained personnel and certified as safe thereafter
- All working at heights apparel should be certified and inspected daily (when in use)

4.2. Access for and interface with other Contractors

- During the progress of the work the Contractor shall provide reasonable access to other Contractors to execute work carried out by other Contractors
- The Contractor will ensure that any damages made during the execution of their activities will be repaired (at Contractor's cost) to the satisfaction of the Employer and that the Employer will not suffer adverse inconvenience in utilising parts of the complex during the project execution.

CLN	Site Name	Address	Purpose
Empangeni	Empangeni Depot	2 Bronze Street, Empangeni	Depo
Empangeni	Impala Substation Armed NKP	-28 45.952 31 56.803	Sub Station
Empangeni	Athene Substation Armed NKP	-28 45.483 31 55.633	Sub Station
Empangeni	Imvubu Substation	-28 41.304 32 2.19	Sub Station
Empangeni	Rabbit substation		Sub Station
Ladysmith	Danskraal Depot	-28 33.917 29 50.083	Depo
Ladysmith	Drakensberg substation		Sub Station

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Ladysmith	Bloukrans Substation	-28 45.6 29 51.1	Sub Station
Ladysmith	Danskraal Substation	-28 33.917 29 50.083	Sub Station
Ladysmith	Tugela Substation	-28 34.8 29 19.3	Sub Station
Ladysmith	Venus Substation	-28 56.28 29 50.744	Sub Station
Ladysmith	Ingula Substation	-	Sub Station
Pinetown	Pinetown Depot	26 Henwood Road	Depo
Pinetown	Georgedale Substation	-29 46.967 30 36.833	Sub Station
Pinetown	Mersey Substation	-29 23.583 30 28.667	Sub Station
Pinetown	Ariadne Substation	-29 43.741 30 23.422	Sub Station
Pinetown	Eros Substation	-30 36.358 29 54.282	Sub Station
Pinetown	Avon Substation	-29 25.039 31 9.662	Sub Station
Pinetown	Illovo Substation	-30 4.5 30 50	Sub Station
Pinetown	Hector Substation	-29 46.711 30 39.66	Sub Station
Pinetown	Westville Area Office	1 Langford road, Westville	Offices
Newcastle	Newcastle Depot		Depo
Newcastle	Incandu Substation	-27 43.167 29 58.733	Sub Station
Newcastle	Chivelston Substation	-27 50.25 29 59.368	Sub Station
Newcastle	Ingangane Substation	-27 50.716 29 59.098	Sub Station
Newcastle	Umfolozi Substation	-28 12.923 31 11.222	Sub Station
Newcastle	Bloedrivier Substation	-27 53.667 30 34.583	Sub Station
Newcastle	Peguses Substation NKP ARMED		Sub Station

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5. TECHNICAL EVALUATION CRITERIA

Functionality will be evaluated on a total weight of 100% with a minimum threshold of 80% will be considered for selection.

Technical Evaluation Criteria For Electrical Maintenance					
1. Mandatory Requirements					
	Factor	Sub-factor	Description	Yes/No	What the evaluator is to look for
1.1	Company Registration	Confirmation of company registration is required to ensure compliance with labour regulation. Lack of this valid and legal registration renders the bidder an illegal / non-existent electrical contractor and will render the tender invalid.	1. Compulsory Company Legal registration		
1.2	authorisation documentation	2. A Team member/leader/ Supervisor should have the following Training Certificates: <ul style="list-style-type: none">• ORHVS (HVO 02),• Supervision• HIRA• Fire Fighting• First Aid level 1 & 2	2. Compulsory Registration with EBC or ECA. compulsory documentation required for authorisations to work in Eskom substations		all documents to be verified and certified. All certificates are for a single person/supervisor
2. Qualitative Technical Evaluation Criteria					
	Factor	Sub-factor	Description	Weight	What the evaluator is to look for
2.1	Company Track record and experience	Relevant Building Electrical Maintenance Experience	Bidder must provide 5 verifiable letters or purchase orders (on client's letterhead) and corresponding completion reference letters or completion certificate, not older than 5 years in the field. Purchase orders and appointment letters without corresponding completion certificates will score 0.	35%	5 or more appointment letters or Purchasing Orders with Corresponding Completion Certificates or completion reference letters in electrical building maintenance project. = 35% 4 x Appointment letters or Purchasing Orders with 4 Corresponding Completion Certificates or completion reference letters in electrical building maintenance project = 24% 2 or 3 x Appointment letters or Purchasing Orders with 3 Corresponding Certificates or completion reference letters in electrical building maintenance project=12% 1 or nothing x Appointment letters or Purchasing Orders with 5 Corresponding Completion Certificates or completion reference letters in electrical building maintenance project =0
2.2	Key personnel	CVs and Copy of related qualifications and proof of 5 years' or more experience to be provided for the each of the listed personnel in the various disciplines. NB: Proof of qualifications that only include CV or certificate but not both items, will be scored 0.	A)Registered person with Wireman's License (Installation Electrician) N3 or higher qualification. No Single-Phase Tester will be accepted. B)Artisan/electrician with trade test, N2 or higher C)Master installation electrician, registered as master installer (hazardous areas) D) Semi-Skilled/ Electrical assistant /apprentice	36%	A)Installation Electrician with 5-6 years related experience =3% Installation Electrician with 7-9 years related experience =6% Installation Electrician with 10 or more years experience = 9% B)Electrician with 5-6 years related experience =3% Electrician with 7-9 years related experience =6% Electrician with 10 or more years related experience =9% B)Master Installer Electrician with 5-6 years related experience =3% Master Installer Electrician with 7-9 years related experience =6% Master Installer Electrician with 10 or more years related experience =9% C)1 x resource = 3% 2 x resource = 6% 3 x resource = 9%
2.3	Equipment	A)The tenderer to provide . Provide evidence that the contractor has the required equipment (including calibration certificates)	<ul style="list-style-type: none">•Multi meter•Insulation tester•Clamp On meter•Earth leakage tester•Lux meter•Loop impedance•Phase rotation B) Vehicles registered to the company	29%	A)Evidence of 2 or less tests =0 Evidence of 4 or less tests =7% Evidence of 6 or less tests =12% Evidence of 7 or less tests =17% B)No proof of vehicles registered to the business = 0 . 1 Vehicle registered to the company = 5% 2 vehicles registered to the company = 8% More than 2 vehicles registered to the company = 12%
			Total	100%	

NR: The minimum qualifying score for functionality (threshold) is 80%. All tenders that fail to achieve the minimum qualifying score on functionality shall not be considered for further evaluation.

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