

	Scope Of Work	Generation
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Title: **Provision of Lighting systems
Maintenance at Kriel Power
Station for a period of Five (5)
years**

Unique Identifier:

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Area of Applicability: **Maintenance**

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DISCLOSURE**

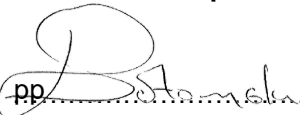
Compiled by



**E. Malofha
Senior Advisor**

Date: 11 January 2022.....

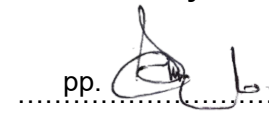
Functional Responsibility



**K. Ntsheroa
Electrical Maintenance
Manager**

Date: ...2022/01/11.....

Authorised by



**L Gumbi
Maintenance Manager**

Date: ...2000/01/11.....

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1. INTRODUCTION

The contract is for the Provision of maintenance (Preventative & corrective, removal, installation and repairs), continuous monitoring of all lighting systems at Kriel Power Station for a period of five (5) years

The *Contractor* provides qualified and competent personnel to perform preventative maintenance (PM), corrective maintenance (CM), and continuous operating and monitoring of all employers lighting systems at Kriel Power Station and immediate surroundings and Kriel outside plants

The *Contractor* shall be based on-site and report for duty during employers normal working hours.

In addition, the contractor provides a standby service after hours with weekends and holidays included.

The *Contractor* ensures that the number of personnel provided is sufficient and able to manage all works on-site to the employer's satisfaction.

2. SCOPE OF WORK / SPECIFICATION

The scope of the document defines the technical criteria by which tenderers for the supply of labour for general electrical work at Kriel Power Station will be evaluated.

2.1.1 WORKS INFORMATION

The scope of work includes the supply of labour in the form of **semi-skilled electricians** to perform lighting systems maintenance at Kriel Power Station from Unit 1-6 as well as on the outside plant. Work will mainly be performed in all areas, but the *Contractor* may also be required to work in other areas as in when required by Eskom.

Activities include, but are not limited to:

- a) Develop a database for the respective lights and luminaires used throughout the power station
- b) Develops an inspection schedule for different location areas across the power station, and provides to the *Service Manager* for acceptance, after one month of contract award
- c) Executes all work according to the planned maintenance schedules, supplied by the *Employer*, throughout the contract period
- d) Performs plant inspections on lights and emergency lighting, and repairs as per the planned maintenance schedule
- e) Repairs defective lights, including emergency lights
- f) Replaces or repairs defective lighting circuit wiring

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- g) Ensures lighting circuits are phase balanced
- h) Performs inspections on high mast lights and poles, as per the planned maintenance schedule
- i) Performs inspections and repairs on all security fence lights, as per the planned maintenance schedule
- j) Performs inspections and repairs on all office buildings lights and associated and associated electrical installations as per the planned maintenance schedule
- k) Cleans light covers and diffusers as per the planned maintenance schedules
- l) Performs tests, measurements and reports on illumination levels, in accordance with SANS10114-1, SANS10114-2, SANS10389-1 and SANS10389-2 for Interior and Exterior lighting respectively, as per the planned maintenance schedule
- m) *Employer* supplies all the spares required to execute the maintenance scope, as per the planned maintenance schedule
- n) Performs lighting simulations for inadequate illumination level areas, as requested by the *Service Manager* or delegated representative. Lighting simulations to be done in licenced Relux software (version 2016) or higher and electronic native files to be approved by the *Employer*
- o) The *Contractor* will be responsible for the provision of tools to all employees for lighting maintenance

Provision of Semi-skilled Artisans at Kriel power station for a period of five year (60 months)			
Item No	Description	Unit	Quantities
100	PRELIMINARY & GENERAL		
101	Site-Establishment	Sum	1
101	Transport	Monthly	60
102	Medicals	Yearly	5
103	PPE	Each	100
104	Health & Safety File	Sum	1
105	Covid 19 Masks	Monthly	60
105	Tools & Consumables	Monthly	60
105	De-establishment	Sum	1
200	WORK FORCE		
201	Normal Worktime		
202	Semi-skilled Electrician (10)	Per Hour	96 000
300	Saturday Overtime		
301	Semi-skilled Electrician (10)	Per Hour	9 600

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2.2 Employers objectives and purpose of the service

Note: This service shall include all outage work, routine maintenance, repairs, inspections & cleaning, support services, emergency breakdown services, statutory inspections and defect correction during normal and abnormal condition or operation, to ensure the integrity of the installed lighting systems at Kriel Power Station.

The *Contractor* shall through execution of the services ensure that all systems are safe and operational. These will include but not limited to all lighting systems

Kriel Power Station operates on a 24-hour basis, 7 days a week

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2.2.1 EMPLOYERS REQUIREMENTS FOR THE SERVICE

2.2.1.1 The *Contractor* provides the service in accordance with the original equipment manufacturers (OEM) specifications and any additional standards which the employer stipulates.

2.2.1.2 The *Contractor* provides the service as per Eskom Works Management principles and the employers approved maintenance strategies. This includes to and use of the Employers computer systems. *Contractor* provides additional inputs where necessary to improve the strategies, processes and procedures.

2.2.1.3 The *Contractor* is present and available on-site during the employers working hours and suitable personnel perform overtime as and when required by *Employer*

2.2.1.4 The *Contractor* attends to complaints from clients regarding lighting problems and keeps the clients informed of progress and completion.

2.2.1.5 The *Contractor* provides all the necessary tools and equipment to provide the service. This includes all hand tools such as spanners, screw drivers, pliers and electrical / electronic and measuring tools / instruments including drilling machines drilling machines flukes and meggers and any additional tools as well as Step ladders etc.

2.2.1.6 The *Contractor* cleans and removes any spares, used parts, materials and debris, dust and rubble arising from work done in order to ensure that the *employer's* premises are left in a clean condition afterward. Waste disposal is done in accordance to the employer's site regulations.

2.2.1.7 The *Contractor* conducts a monthly inspection of the plant before the end of each month, and provides a detailed, written report within 3 (three) working days thereafter.

2.2.1.8 The *Employer* provides all replacement plant components and spares for servicing and repairs, however the *Contractor* is responsible to inform the *Employer* of spares requirements (provides specifications and quantities for the employers stock holding requirements).

2.2.1.9 The *Contractor* conforms to all prevailing legal requirements of the republic of South Africa, Eskom SOC Limited and Kriel Power Station Site legal Requirements, with special reference but not limited to the following:.

Number	Title	Year / revision
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Provision of Lighting systems Maintenance at Kriel Power Station
for a period of Five (5) years

Unique Identifier:
Revision: **1**
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BIA/QA/STD/01	MPs Quality Requirements	2009 Rev 0
SERV/FIRE02	MPs Hot Work Procedure	2005 Rev 0
	Criteria For Approval Of Rigging Work	
	Working At Heights	
32-421	Life Saving Rules	2010 Rev 0
36-681	Plant Safety Regulations	2012 Rev 0
	Occupational Health And Safety Act 85 Of 1993	
SANS 10400	National Building regulations	
GGPP0592	Generation Policy: Power Station Plant Classification	
OPG 0159-02	Eskom manual: Classification Guideline.	
	Compensation for Occupational Injuries and Diseases Act 130 of 1993 as amended	
	National Environmental Management Act 107 of 1998 as amended	
	National Environmental Waste Act 59 of 2008 as amended	
	National Water Act 36 of 1998 as amended	
004 4830	Eskom procedures and Safety requirements set out in Safety, Health and environmental specifications	
32-95	Eskom procedures 32-95 with regards to the management of safety, health and environmental incidents	

Any other act or procedure deemed necessary or applicable if the work includes some toxic and/or hazardous substances during normal and routine maintenance activities stipulated in this document. In this case the Contractor handles such hazardous substances in accordance with the applicable regulations and procedures, and is disposed of by the Contractor in accordance with the applicable law.

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2.2.2 APPLICABILITY

This document is applicable to Kriel Power Station

2.2.3 INFORMATIVE

Not applicable.

2.3 DEFINITIONS

2.3.1 DISCLOSURE CLASSIFICATION

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary)

2.4 ABBREVIATIONS

Abbreviations	Description
AKZ	Anlagen Kenn Zeichnungs
BOQ	Bill of Quantities
CoE	Centre of Excellence
PTM	Protection, Testing and Metering department
EMD	Electrical Maintenance Department
DC	Direct Current
OHSA	Occupational Health and Safety Act
PPE	Personal Protective Equipment
PTW	Permit To Work
QA	Quality Assurance
QC	Quality Control
QCP	Quality control program/plan/procedure
QCP	Quality Control Procedure

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2.5 ROLES AND RESPONSIBILITIES

Roles and responsibilities are as follows:

Senior Advisor – Compile the scope of work for the contract

2.6 PROCESS FOR MONITORING

The QCPs on incoming product and services rendered by the supplier will be done and all materials are to be signed off by the system engineer and hold/witness points should be marked to ensure the quality of the supplied goods is according to standard.

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2.6.1 DOCUMENTATION SUBMISSION AND RECORDING

The supplier is to provide the following documentation;

- Medical and induction certificates
- Safety file

2.6.2 PLANT CODIFICATION

Kriel Power Station uses the AKZ numbering system.

3. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
Kgosi Ntsheroa	Electrical Maintenance Department Manager
Alex Nkadameng	Electrical Senior Technician

4. REVISIONS

Date	Rev.	Compiler	Remarks
April 2021	1	E Malofha	Document compilation

5. DEVELOPMENT TEAM

The following people were involved in the development of this document:

- Evah Malofha

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5.1 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 60%.

5.2 TET Members

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Alex Nkadimeng	Technician – Electrical Maintenance Department
TET 3	Evah Malofha	Technical Support – Electrical Maintenance Department

5.3 Tender returnables

Gatekeepers:

1.	Proof of qualifications <ul style="list-style-type: none">Qualification of Electrician
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Qualitative with a total score exceeding 60% required in order to be technically acceptable:

2.	Proof of relevant Trade tested Artisan for lights maintenance <ul style="list-style-type: none">At least Two (2) electricians to have a valid trade test
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