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Compiled by	Functional Responsibility	Authorised by
P.P.		
Sandile Madonsela	**Nkosinathi Maseko**	**Lindokuhle Ngobese**
System Engineer	**Electrical Engineering Manager**	**Acting Engineering Manager**
Date 31/05/2022	Date 20/05/2022	Date 02/06/2022

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TABLES

1. INTRODUCTION

The Occupational Health and Safety Act requires that employers be committed in providing safe and healthy working conditions for its employees. In terms of the Occupational Health and Safety Act 85 of 1993 (OHS Act), Electrical Machinery Regulation Section 9, all equipment installed in hazardous (flammable liquid and dust) locations shall comply with the minimum requirements of the relevant standards. A hazardous location is regarded as different to other locations due to the possibility of explosions, fire or damage to plant and injuries to people due to electrical sparks, flammable gases, dust, vapours or mists, fibres suspended in the air, lighting, and heat generated in conductors and equipment, static power, friction and generation of toxic or explosive gasses. Eskom Matla Power Station did a plant assessment to understand the extent of risk and mitigation required to fully comply to the Occupational Health and Safety Act 85 of 1993 (OHS Act), Electrical Machinery Regulation Section 9, a report was drafted with recommendations of the required plant refurbishment activities that will get Matla to fully comply to the regulation A scope of work was developed which includes, supply, installation, testing and commissioning of Ex certified lights, light fittings, lighting support brackets, junction boxes, cable glands, supply cables, earthing cables, junction boxes, wall sockets, emergency lighting, PA system, extraction fans, control stations, H2 detection sensors, issuing of CoC's, demarcation boards, equipment certificates, document files, welding outlets, belt alignment switches, pull switches, belt speed monitor, block chute detectors, start-up sirens, induction motors and flame proof plugs for the classified HAZLOC areas. A technical evaluation strategy is required to document the technical evaluation criteria as per the Tender Technical Evaluation Procedure 240-48929482 of which this document is intended to such.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document describes how tenders received for the Matla Hazardous Locations Refurbishment project be technically evaluated and scored The team members are listed and appointed in this document along with their responsibilities The document also describes the acceptable and unacceptable risks and qualifications and/or conditions

The Tender Technical Evaluation Strategy will define the following technical evaluation criteria:

- Mandatory Evaluation Criteria
- Qualitative Evaluation Criteria
- TET Member Responsibilities
- Acceptable/Unacceptable Qualifications

No changes will be permitted to be made to the evaluation criteria once the Technical Evaluation Strategy is approved by the relevant System engineer, Electrical Manager, Engineering Manager

2.1.1 Purpose

The purpose of this technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and Technical Evaluation Team (TET) member responsibilities for tender technical evaluation The technical evaluation strategy serves as basis for the tender technical evaluation process.

2.1.2 Applicability

This document applies to Matla Hazardous Locations Refurbishment project in accordance with the authorised procurement strategy

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs

2.2.1 Normative

[1] 240-48929482 Tender Technical Evaluation Procedure

2.2.2 Informative

[2] Occupational Health and Safety Act 85 of 1993, Electrical Regulations 9.

[3] SANS 10086-1 The installation, inspection and maintenance of equipment used in explosive atmospheres Part 1. Installations including surface installations on mines

[4] SANS 10087-3 The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 L

[5] SANS 10089-3 The petroleum industry Part 3 The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations

[6] SANS 10108 The classification of hazardous locations and the selection of equipment for use in such locations

[7] SANS 10142-1 The wiring of premises Part1: Low Voltage Installations

[8] SANS 10142-2 The wiring of premises Part 2 Medium – Voltage installations above 11kV AC not exceeding 22 kV AC and up to and including 3 MVA installed capacity

[9] SANS 60079-0 Explosive atmospheres - Part 0. Equipment - General requirements

[10] SANS 60079-17 Explosive atmospheres Part 17 Electrical installations inspection and maintenance

[11] SANS 60079-19 Explosive atmospheres - Part 19 Equipment repair, overhaul and reclamation

[12] 240-103031952 Application of Certificate of Compliance (CoC) and Safety Clearance Certificate on Electrical Installations in Generating Power Plant Work Instruction

[13] 36-681 Generation Plant Safety Regulations

2.3 DEFINITIONS

Definition	Description
Certificate of Compliance	a) A certificate with unique number obtainable from the chief inspector, or a person appointed by the chief inspector, in the form Annexure1 of Electrical Installation Regulation, and issued by registered person in respect to an electrical installation or part of an electrical installation b) A certificate of compliance issued under Electrical Installation Regulations, 1992
Competent Person According to SANS 10108	The definition of "Competent Person" as per SANS 10108 [5] reads as follows:

	Person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them
Explosive Atmosphere	Mixture with air, under atmospheric conditions, of flammable substances in the form of gas or vapour or mist or dust or fibre (or a combination of these) in which, after ignition, combustion spreads throughout the whole mixture Note – Although a mixture which has a concentration above the upper explosive limit (UEL) is not an explosive gas atmosphere, it can readily become so and, in certain cases for area classification purposes, it is advisable to consider it as an explosive gas atmosphere
Hazardous Location / Area (dust)	Area in which combustible dust, in the form of a cloud is present, or may be expected to be present, in quantities such as to require special precautions for the construction, installation and use of equipment NOTE 1 - Hazardous areas are divided into zones based upon the frequency and duration of the occurrence of explosive dust atmospheres. NOTE 2 - The potential of creating an explosive dust cloud from a dust layer also needs to be considered
Hazardous Location / Area (on account of explosive gas atmospheres)	An area in which an explosive gas atmosphere is or may be expected to be present, in quantities such as to require special precautions for the construction, installation and use of equipment
Safe Location	A safe location is e g Spaces that are unlikely to contain a flammable substance and that are adjacent to a hazardous location but isolated from it by gastight partitions that have no communicating openings; and drying, baking locations that have positive mechanical ventilation adequate to prevent the formation of flammable concentrations of vapour and that have effective interlocks to de-energize all electrical apparatus (other than electrical apparatus approved for zone 1 locations) if the ventilating equipment becomes inoperative
Ventilation	Movement of air and its replacement with fresh air due to the effects of wind, temperature gradients, or artificial means (for example fans or extractors)

2.3.1 Disclosure Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
CoC	Certificate of Compliance
HAZLOC	Hazardous Locations
IEC	International Electro technical Commission
kPa	Kilo Pascal
MIE	Master Installation Electrician

Abbreviation	Description
OHS Act	Occupational Health and Safety Act 85 of 1993

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482. Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%

3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Nkosinathi Maseko	HAZLOC Chairperson - Electrical Engineering
TET 2	Sandile Madonsela	HAZLOC System Engineer – Electrical Engineering

3.3 MANDATORY TECHNICAL EVALUATION CRITERIA

In accordance with 240-48929482, an assessment of 'NO' against any criterion referenced in Table 2 shall disqualify the assessed tendered documents from further Qualitative Evaluation

Table 2: Mandatory Technical Evaluation Criteria

Ref #	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1	MIE certificate	Submit proof of valid MIE certificate that will be issuing the CoCs for this Project.	A classified HAZLOC area cannot be deemed compliant without a valid CoC issued by a registered MIE Qualitative *evaluation phase shall not proceed without this* submission
2	*Minimum CIDB Level 6 (EP)*	*Supply valid proof of CIDB grading*	The work is classified as construction work as per the construction regulations. Qualitative evaluation phase shall not proceed without this submission

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

In accordance with 240-48929482, tenders that have met all the Mandatory Evaluation Criteria will be evaluated against the Qualitative Evaluation Criteria defined in Table 3 2 below The scoring of qualitative criteria shall be based on the degree of achievement by the tenderer to meet the technical requirements defined in each tendered design Technical Schedule. Each item shall have the specific weighting criteria that shall be scored in accordance with Table 3 1

The minimum weighted final score (threshold) required for the tendered scope of work to be considered FUNCTIONALLY ACCEPTABLE from a technical perspective is 70%

The recommendation on the highest technically ranked tenderer shall be based on the final scoring comparisons and the tenderer with the highest score shall be recommended from a technical perspective, if the weighted final score exceeds the defined threshold

Table 3.1: Qualitative Technical Evaluation Criteria Scoring Scale

Score	(%)	Definition
5	100	**COMPLIANT** • Meet technical requirement(s) AND, • No foreseen technical risk(s) in meeting technical requirements
4	80	**COMPLIANT WITH ASSOCIATED QUALIFICATIONS** Meet technical requirement(s) with; • Acceptable technical risk(s) AND/OR, • Acceptable exceptions AND/OR; • Acceptable conditions.
2	40	**NON-COMPLIANT** • Does not meet technical requirement(s) AND/OR; • Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions.
0	0	**TOTALLY DEFICIENT OR NON-RESPONSIVE**
Note 1: The scoring table does not allow for scoring of 1 and 3. **Note 2**: Foreseen acceptable and unacceptable risk(s), exceptions and conditions shall be unambiguously defined in the relevant Tender Technical Evaluation Strategy.		

Table 4.2: Qualitative Technical Evaluation Criteria

Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Scoring Scale			
			0 = 0%	2=40%	4=80%	5=100%
Proof of previously issued Hazloc CoC by the MIE	Submit valid copies of CoC	30	Not submitted	Submitted 1 CoC copy	Submitted 2 CoC copies	Submitted 3 CoC copies
Qualified and Registered Electrician as per the Electrical Installation Regulation 5 (4) with at least 3 years of relevant experience in HAZLOC related work	Submit a copy of certificate as a Registered Electrician & copy of a CV highlighting the *relevant* experience	20	Not submitted both CV and Certificate Less than 3 years' experience	Submitted both CV and certificate, with 3 years' experience	Submitted both CV and certificate with 4 years' experience	Submitted both CV and certificate both, with 5 years' experience
An example of a Quality Control Plan for the project as per the SOW	Copy of a QCP as per the SOW	5	Not submitted	Submitted and covers 40% of the SOW	Submitted and covers 80% of the SOW	Submitted and covers 100% of the SOW

Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Scoring Scale			
			0 = 0%	2=40%	4=80%	5=100%
Provide (1 – 3) traceable evidence of similar executed work, contracts with completion certificates	Copy of Project Completion Certificate of similar SOW	20	Not submitted	Submitted 1 project completion certificate	Submitted 2 project completion certificate	Submitted 3 project completion certificate
Safety officer with SAMTRACT or safety related qualification with (1 – 3) years'	Attach SAMTRACT certificate with CV highlighting experience	10	No qualification or less than 1 year of experience	Certificate with 1 year of experience	Certificate with 2 years of experience	Certificate with 3 years of experience or more
Project execution Duration to complete scope of work at the tendered or contracted value	Copy of Proposed Project Plan	15	Not submitted or *submitted but* Scope execution takes more than 36 months	Complete scope *execution at a* contracted/tendered value in 31-36 months	Complete scope execution at a *contracted/tendered* value in 25-30 months	Complete scope execution at a *contracted/tendered* value in 1 -24 months.
		100				

TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2
1	X	X
2	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**
1	X	X
2	X	X
3	X	X
4	X	X
5	X	X
6	X	X

3.5 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.5.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1	Tendering without conducting Site visit/s for items described in the Scope of Work

Table 7: Unacceptable Technical Risks

Risk	Description
1	Mandatory criteria not satisfied

3.5.2 Exceptions/Conditions

Table 8: Acceptable Technical Exceptions/Conditions

Risk	Description
1	*Declining to provide technical details accurately deemed intellectual proprietary*

Table 9: Unacceptable Technical Exceptions/Conditions

Risk	Description
1	*Providing invalid/incomplete CoC by the MIE*

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
L Ngobese	**Group Acting Engineering Manager**

5. REVISIONS

Date	Rev.	Compiler	Remarks
29/09/2021	0	N Maseko	First Draft
05/05/2022	1	N Maseko	Review of section 3 4 with changes

6. DEVELOPMENT TEAM

The following people were involved in the development of this document

- Nkosinathi Maseko

7. ACKNOWLEDGEMENTS

- None