

Title: **Lethabo Power Station FAB 1-3
Crawl Beam Installation Project
Tender Technical Evaluation
Strategy Report**

Unique Identifier: **375-172711**

Alternative Reference Number: **N/A**

Area of Applicability: **Engineering**

Documentation Type: **Strategy**

Revision: **1.0**

Total Pages: **15**

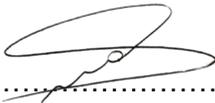
Next Review Date: **N/A**

Disclosure Classification: **CONTROLLED
DISCLOSURE**

Compiled by

**Suven Govender
Civil Engineer
Lethabo Power Station**

Date: 20/06/2023

Supported by

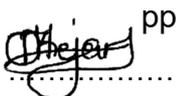
**Ndumiso Ngubane
Senior Civil Engineer
Lethabo Power Station**

Date: 05/07/2023

Functional Responsibility

**Johan Brink
OPE Manager
Lethabo Power Station**

Date: 2023-07-26

Authorised by

**Theko Shete
Acting Engineering Manager
Lethabo Power Station**

Date: 2023-07-26

CONTENTS

	Page
1. INTRODUCTION	3
2. SUPPORTING CLAUSES.....	3
2.1 SCOPE	3
2.1.1 Purpose	3
2.1.2 Applicability.....	3
2.2 NORMATIVE/INFORMATIVE REFERENCES.....	3
2.2.1 Normative	4
2.2.2 Informative.....	4
2.3 DEFINITIONS.....	4
2.3.1 Classification	4
2.4 ABBREVIATIONS.....	4
2.5 ROLES AND RESPONSIBILITIES.....	5
2.6 PROCESS FOR MONITORING.....	5
2.7 RELATED/SUPPORTING DOCUMENTS.....	5
3. TENDER TECHNICAL EVALUATION STRATEGY	5
3.1 TECHNICAL EVALUATION METHOD.....	5
3.2 TECHNICAL EVALUATION THRESHOLD	6
3.3 TET MEMBERS.....	6
3.4 MANDATORY TECHNICAL EVALUATION CRITERIA	6
3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA.....	7
3.6 TET MEMBER RESPONSIBILITIES.....	11
3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS.....	12
3.7.1 Risks.....	12
3.7.2 Exceptions / Conditions	12
4. AUTHORISATION.....	14
5. REVISIONS	14
6. DEVELOPMENT TEAM	14
7. ACKNOWLEDGMENTS.....	14
APPENDIX A: CONTRACTOR'S RELEVANT EXPERIENCE.....	15

LIST OF TABLES

Table 1: TET Members	6
Table 2: Qualitative Technical Evaluation Criteria.....	7
Table 3: TET Member Responsibilities.....	11
Table 4: Acceptable Technical Risks.....	12
Table 5: Unacceptable Technical Risks	12
Table 6: Acceptable Technical Exceptions / Conditions.....	12
Table 7: Unacceptable Technical Exceptions / Conditions	13

CONTROLLED DISCLOSURE

1. INTRODUCTION

Lethabo Power Station is a coal-fired power plant, which is situated in the Northern Free State. The station comprises of six of 618 MW Units. During the generation of electricity, large quantities of ash is produced, which needs to be disposed-off. The ash handling system was designed to accumulate, transport and dispose of the ash generated from the power station. This system (i.e. ash handling system) comprises of four main sub-systems namely the bottom ash handling system, fly ash handling system, ash conditioning system and the ash disposal system.

At the ash conditioning plant, a hoisting mechanism is required to safely remove and reinstall mechanical components of the conveyor structure during maintenance activities. At present, the supporting steel members for the conveyor belts is being utilised as a lifting beam. This poses serious safety risks to the maintenance team as such steel members are not designed to withstand such loads. Furthermore, a fabricated crawl beam and supporting infrastructure, without approved designs, is being used to hoist electrical motors for the conveyor structure.

The purpose of this document is to develop the mandatory and qualitative technical evaluation criteria, which will be used to evaluate/assess the tender submissions made by all tenderers.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document provides the tender technical evaluation strategy for the supply and construction/installation of crawl beams required at three FAB buildings.

2.1.1 Purpose

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

2.1.2 Applicability

This document will apply to all appointed resources involved in the technical tender evaluation and Lethabo Power Station.

2.2 NORMATIVE/INFORMATIVE REFERENCES

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

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

2.2.1 Normative

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] ISO 9001 Quality Management Systems
- [3] 32-1034 Eskom Procurement Policy
- [4] 375-172707: Lethabo Power Station FAB 1-3 Crawl Beam Installation Construction Project Technical Specification

2.2.2 Informative

- [5] 240-53113685: Design Review Procedure
- [6] 240-53114026: Project Engineering Change Management Procedure
- [7] 240-53114002: Engineering Change Management Procedure

2.3 DEFINITIONS

Definition	Description
Contractor/Tenderer	Refers to the company/supplier appointed to perform the works
Employer	Refers to Eskom Holdings State Owned Company
Eskom Plant Engineering	Refers to the Eskom Engineering team who will perform the reviews and provide technical assistance for the work performed by the appointed Contractor.
Specification	The document/s forming part of the contract in which the methods of executing the various items of work to be done is described, as well as the nature and quality of the materials to be supplied and it includes technical schedules and drawings attached thereto as well as all samples and patterns
The Client	The end user will be Eskom who will be represented by Lethabo Power Station throughout the duration of the Project.

2.3.1 Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
D&S	Design and Specification
ECSA	Engineering Council of South Africa
FAB	Fly Ash Bunker
NEC	New Engineering Contract
OPE	Outside Plant Engineering
O&M	Operations and Maintenance
TET	Technical Evaluation Team

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

2.5 ROLES AND RESPONSIBILITIES

As per Tender Technical Evaluation Procedure [1].

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION METHOD

The basic steps for a technical evaluation must be followed as per the Tender Technical Evaluation Procedure [1].

A two stage Technical Evaluation Strategy is set out.

Stage 1: Mandatory Technical Evaluation Criteria (gatekeepers) are 'must meet' criteria. These criteria shall not be weighted or point scored, but shall be assessed on a Yes/No basis as to whether or not the criteria are met. An assessment of 'No' against any criterion shall technically disqualify the tenderer and the tenderer shall not be further evaluated against Qualitative Criteria.

Stage 2: Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion.

The evaluation of the tender submission will be based on the tenderer's ability to meet the technical requirements for the project. A weighted scorecard approach is used to evaluate the technical compliance of the tenders against the specifications.

The scoring method will be as follows:

SCORE	PERCENTAGE	DESCRIPTION
5	100	COMPLIANT <ul style="list-style-type: none">Meet technical requirement(s) AND;No foreseen technical risk(s) in meeting technical requirements.
4	80	COMPLIANT WITH ASSOCIATED QUALIFICATIONS <ul style="list-style-type: none">Meet technical requirement(s) with;Acceptable technical risk(s) AND/OR;Acceptable exceptions AND/OR;

CONTROLLED DISCLOSURE

		<ul style="list-style-type: none"> Acceptable conditions.
2	40	NON-COMPLIANT <ul style="list-style-type: none"> 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

The evaluation scores will be weighted as follows:

Engineering (100%)	
General	50%
Civil & Structural Engineering	50%
TOTAL (100%)	
Overall minimum threshold for qualification (70%)	

3.2 TECHNICAL EVALUATION THRESHOLD

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

3.3 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	Suven Govender	Civil Engineer: Lethabo Power Station
TET 2	Ndumiso Ngubane	Senior Civil Engineer: Lethabo Power Station
TET 3	Nicolan Govender	Civil Engineer: Lethabo Power Station

3.4 MANDATORY TECHNICAL EVALUATION CRITERIA

None

CONTROLLED DISCLOSURE

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 2: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Evaluation Scoring Breakdown			
					0	2	4	5
2.	General		50					
2.1	<p>Contractor’s relevant experience in installation and/or commissioning of crawl beams:</p> <p>List of verifiable references (minimum of 3 projects) must be provided. The Contractor must submit evidence of reference projects by completing the template as illustrated in Appendix A.</p>	Tender Returnable: List of completed projects in Previous Projects Template (Appendix A)		50	No work done on previous projects of similar scope or no submission made	Work conducted on 1 -2 projects of similar scope	Work conducted on 3 projects of similar scope	Work conducted on more than 3 projects of similar scope
2.2	<p>The tenderer is to submit a Project Schedule (Level 3) indicating the following as a minimum:</p> <ul style="list-style-type: none"> ▪ Full scope of work for construction phase in accordance with Works Information. ▪ Breakdown and linking of all activities. 			25	No submission made	Project Schedule (Level 3) submitted illustrating less than two of the minimum requirements	Project Schedule (Level 3) submitted illustrating two or more, but not all of the minimum requirements	Project Schedule (Level 3) submitted illustrating all the minimum requirements

	<ul style="list-style-type: none"> ▪ Timelines for execution of activities. ▪ Critical path 							
2.3	<p>Tenderer to submit a project organogram reflecting the key staff required for the project.</p> <p>Organogram provided should consider the entire project lifecycle (i.e. construction phases).</p> <p>As a minimum, the organogram is to illustrate the following key resources:</p> <ul style="list-style-type: none"> • Construction manager • Site supervisor/Foreman • Health & safety officer 	Section 5.3.2 of the Technical Specification		25	No submission made	Organogram provided however, minimum key resources are no illustrated.	-	Organogram provided for the entire project lifecycle including minimum key resources.
3.	Civil & Structural Criteria		50					
3.1	<p>High-level method statement detailing the construction methodology, which is in compliance to the full scope and describes how the scope will be executed:</p> <p>High level construction method statement, demonstrating understanding of the scope and includes the following as a minimum:</p>			70	No submission made	<p>Method Statement reiterates the Employer's scope of works</p> <p>OR</p> <p>Method statement submitted illustrates less than two of the</p>	Method statement describes how the scope will be met and illustrates three or more, but not all of the minimum requirements	Method statement details fully how scope will be met and illustrates all the minimum requirements

	<ul style="list-style-type: none"> Proposed plant, equipment and tools. Demolition activities considered. Methodology of commissioning the installed crawl beams. Installation of the crawl beams and the protection of existing equipment (e.g. conveyor belts). Foreseen risks and concerns. Required temporary works (if any). 					minimum requirements		
3.2	<p>Tenderer to submit the CV of the Construction Manager and Supervisor/team leader as per the project organogram.</p> <p>Construction Manager is to have 5 years construction experience in structural steel and/or concrete works.</p> <p>Supervisor/team leader is to have 5 years construction experience in structural steel works.</p>			30	No submissions made	Less than 5 years relevant experience for Construction Manager and Supervisor/team leader	5 years relevant experience for Construction Manager and Supervisor/team leader	More than 5 years relevant experience for Construction Manager and Supervisor/team leader

**Lethabo Power Station FAB 1-3 Crawl Beam Installation
Project Tender Technical Evaluation Strategy Report**

Unique Identifier: **375-172711**
Revision: **1.0**
Page: **10 of 15**

	<p>If the Construction Manager and/or Supervisor/team leader is not employed by the main Contractor, then a letter of intent signed by both parties where the subcontractor will be used for resources. The letter should be specific on the roles and responsibility for the resource.</p>							
			<p>TOTAL: 100</p>					

3.6 TET MEMBER RESPONSIBILITIES

Table 3: TET Member Responsibilities

Qualitative Criteria Number	TET 1	TET 2	TET 3
2.1	X	X	X
2.2	X	X	X
2.3	X	X	X
3.1	X	X	X
3.2	X	X	X

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 4: Acceptable Technical Risks

Risk	Description
1.	Proposing Standards and Procedures (motivated in detail) other than the specified Standards and Procedures in the Technical Specifications

Table 5: Unacceptable Technical Risks

Risk	Description
1.	Non-compliance or deviation with sections of the scope of work and standards without adequate explanation or alternatives
2.	Exclusions of scope specified in the Scope of Works
3.	The contractor's approach is generic and not tailored to address the specific project objectives and requirements. The approach does not consider all the critical characteristics of the work
4.	The Contractor does not show a full understanding of the scope of work
5.	The inadequate experience level of the Contractor to perform such works
6.	Change of Sub-Contractors after Tender award

3.7.2 Exceptions / Conditions

Table 6: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

Table 7: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Deviations to any part of the technical specifications without providing alternate solutions
2.	The technical proposal/method statement is generic, incomplete and not tailored to address the specific project objectives, scope and constraints. It does not deal with the critical constraints and hazards of the project.

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signatures
Suven Govender	Lethabo Power Station: Civil Engineer	
Ndumiso Ngubane	Senior Civil Engineer: Lethabo Power Station	
Nicolan Govender	Lethabo Power Station: Civil Engineer	

5. REVISIONS

Date	Rev.	Compiler	Remarks
May 2023	0.1	S. Govender	First Draft for comments
May 2023	1.0	S. Govender	Document updated due to comments from internal meeting

6. DEVELOPMENT TEAM

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

- Suven Govender
- Nicolan Govender
- Ndumiso Ngubane

7. ACKNOWLEDGMENTS

- TET Members

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

APPENDIX A: CONTRACTOR'S RELEVANT EXPERIENCE

List of Completed Projects			
Project name	Description of work performed	Project start and end date	Name, designation and contact number of reference person

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.