 Eskom	Strategy	Engineering
---	----------	-------------

Title **Tender Technical Evaluation** Document Identifier **EAP0619**
Strategy for Kriel PS Replacement
of Diesel Generator Project

Alternative Reference N/A
Number

Area of Applicability **Kriel Power Station**

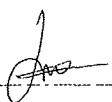
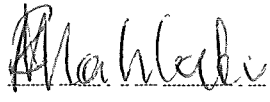


Functional Area **Strategy**

Revision **2**

Total Pages **18**

Next Review Date **N/A**

Disclosure **Controlled Disclosure**
Classification

Compiled by	Functional Responsibility	Supported by	Authorized by
			
System Engineer	Snr Technologist Engineer	Auxiliary Engineering Manager	Group Engineering Manager
Date 2025/10/14	Date 2025/10/14	Date 2025/10/15	Date 2025/10/16

CONTROLLED DISCLOSURE

When downloaded from the document management system this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd. © copyright Eskom Holdings SOC Ltd. Reg No 2002/015527/30

Content

Page

1	Introduction	2
2	Supporting Clauses	2
2 1	Scope	2
2 1 1	Purpose	2
2 1 2	Applicability	2
2 2	Normative/Informative References	3
2 2 1	Normative	3
2 2 2	Informative	3
2 3	ABBREVIATIONS	3
3	TENDER TECHNICAL EVALUATION STRATEGY	5
3 1	TECHNICAL EVALUATION THRESHOLD	5
3 2	TET MEMBERS	5
3 3	MANADATORY TECHNICAL EVALUATION CRITERIA	6
3 3 1	Mandatory Technical Evaluation Criteria	6
3 4	QUALITATIVE TECHNICAL EVALUATION CRITERIA SCORING MATRIX	7
3 5	QUALITATIVE TECHNICAL EVALUATION CRITERIA	8
3 6	TET MEMBER RESPONSIBILITIES	14
3 7	FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS	15
3 4 1	Risks	15
3 4 2	Exceptions / Conditions	15
4	AUTHORISATION	17
5	REVISIONS	17
6	DEVELOPMENT TEAM	17
7	ACKNOWLEDGEMENTS	17

Figures

Tables

Table 1	TET Members	5
Table 2	Qualitative Technical Evaluation Criteria Scoring Matrix	7
Table 3	Qualitative Technical Evaluation Criteria	8
Table 4	TET Members	14
Table 5	Acceptable Technical Risks	15
Table 6	Unacceptable Technical Risks	15
Table 7	Acceptable Technical Exceptions / Conditions	16
Table 8	Unacceptable Technical Exceptions / Conditions	16

CONTROLLED DISCLOSURE

1. Introduction

Kriel Power Station Units (1-6) are equipped with two Diesel Generators per unit which are connected in parallel for the essential standby supplies and for the full power supply redundancy. The Diesel Generators for U3 - U6 have surpassed the operational lifespan of 35 years compounded by frequent breakdowns due to aging and spares obsolescence.

The Kriel PS replacement of Diesel Generators Project mainly entails the decommission and removal of existing U3-U6 Diesel Generators including the detail design, manufacturing, construction, factory acceptance testing, transporting, offloading, installation, site acceptance testing and commissioning of eight (8) new Diesel Generators (400kVA) for U3-U6.

This tender technical evaluation strategy (TES) is intended for the technical evaluation of the Kriel PS replacement of Diesel Generators Project. Through applying this TES, the technical evaluation team (TET) is enabled to evaluate proposals received from the market fairly and transparently.

2. Supporting Clauses

2.1 Scope

This document covers the multi-disciplinary design team technical evaluation requirements that will be applied during the technical evaluations in order to evaluate the proposals received from the market. The Tender Technical Evaluation Strategy defines the following with regards to this project:

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

Once the Technical Evaluation Strategy is authorised, no changes will be permitted to be made to the evaluation criteria.

The scope of this document does not include the selection of a specific tenderer, nor does it include the evaluation of the suitability of any particular tenderer. These issues will form part of the technical evaluation report.

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 basis for the tender technical evaluation process.

2.1.2 Applicability

This document applies to the Kriel Power Station.

CONTROLLED DISCLOSURE

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] 240-53716726 Technical Scoring Form
- [3] 240-53716712 Technical Evaluation Results

2.2.2 Informative

- [5] 377-KRL-AABZ28-SP0004-35 Diesel Generator Replacement SCOPE OF WORK REPORT

Classification

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

2.3 ABBREVIATIONS

The following abbreviations are used in this document

Abbreviation	Description
C&I	Control and Instrumentation
CV	Curriculum Vitae
DSP	Digital Signal Processor
ECSA	Engineering Council of South Africa
EDWL	Engineering Design Work Lead
FAT	Factory Acceptance Test
GM	General Manager
HMI	Human Machine Interface
KVA	kilo-volt-ampere
LCC	Life Cycle Cost
N/A	Not Applicable
OEM	Original Equipment Manufacturer
ONAN	Oil Natural Air Natural
PLC	Programmable Logic Controller
SoW	Scope of Work
TES	Technical Evaluation Strategy
TET	Technical Evaluation Team
WI	Works Information

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd. © copyright Eskom Holdings SOC Ltd. Reg No 2002/015527/30

2.4 ROLES AND RESPONSIBILITIES

As per 240-48929482 Tender Technical Evaluation Procedure

2.5 PROCESS FOR MONITORING

Not applicable

2.6 RELATED/SUPPORTING DOCUMENTS

Not applicable

CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the system. No part of this document may be reproduced in any manner or form by third parties without the written consent of Eskom Holdings SOC Ltd. © copyright Eskom Holdings SOC Ltd. Reg No 2002/015527/30

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%. Any tenderer who scores below this threshold will be disqualified.

Mandatory Technical Evaluation Criteria (gatekeepers) are essential requirements that must be met. These criteria are evaluated on a Yes/No basis and are not weighted or scored. If a criterion is marked 'No', the tenderer is disqualified and not considered further.

Qualitative Technical Evaluation Criteria are weighted criteria used to rank tenderers technically after they have met all the Mandatory Evaluation Criteria. These criteria are weighted to indicate their relative importance.

3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	[REDACTED]	System Engineer – Auxiliary Engineer
TET 2	[REDACTED]	Snr Civil Engineer
TET 3	[REDACTED]	C&I Engineer
TET 4	[REDACTED]	Snr Technologist Engineer
TET 5	[REDACTED]	Electrical Technician

3.3 MANADATORY TECHNICAL EVALUATION CRITERIA

3.3.1 Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1	Local company's appointment as the local agent of the OEM's	Tenderer submits a letter stating that local technical support could be provided by a technician in SA on site within 24 hours of reporting a fault The letters shall also state the number of year's local representative exists in South Africa	Guarantee of the plant operation and support from the OEM and the local Agent
2	Warrantees	Tenderer submits an OEM signed confirmation letter/s confirming that warrantees to the end user shall be honoured by the OEM	To cover any defects that may become apparent during the first 12 months of operation
3	Proof of ECSA professional registration (PrEng/PrTech) for Engineers	Provide valid and certified (not older than 3 months) copies of ECSA Professional Engineering Certificates PrEng/PrTech <ul style="list-style-type: none">• Civil Engineering• Electrical Engineering• C&I Engineering	Statutory requirement for design works

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA SCORING MATRIX

The qualitative criteria will be scored according to the scoring matrix set out in the Tender Engineering Evaluation Procedure.

Table 3 shows the scoring matrix that will be used

Table 2: Qualitative Technical Evaluation Criteria Scoring Matrix

Score	%	Definition
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, 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
Note 1: The scoring table does not allow for scoring of 1 and 3		

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

Qualitative Technical Criteria Description								
MECHANICAL ENGINEERING - 30%								
1.	EXPERIENCE	Reference to Technical Specification /Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Evaluation Scoring Breakdown			
					0	2	4	5
1.1	Supply Reference list with installations (Projects), designs and MVA size (not less than 400kVA) duration, location, contact persons and specified being in service in an application similar that is stipulated for > than 3 years without significant failures	Tenderer submits a Completion Certificates for completed projects consisting of the following information <ul style="list-style-type: none"> Name of company where project was executed Contact details (including e-mails) of project managers and responsible engineer Construction period Contract value	30%	100%	Completion certificate provided	Tenderer submits three (3) completion certificates for similar scope executed	Tenderer submits four (4) completion certificates for similar scope executed	Tenderer submits five (5) completion certificates for similar scope executed

ELECTRICAL ENGINEERING - 40%				
2.	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Discipline Weighting (%)	Sub Weighting (%)
2 1	Compliance letter with the electrical requirements	The Contractor shall provide a letter indicating that they will comply with the electrical requirements and shall also comply with the stated standards or clearly state any deviations on the deviation schedule	<ul style="list-style-type: none"> Contractor submits letter indicating compliance – 100% Contractor does not supply letter indicating compliance – 0% 	20
2 2	Typical full FAT results of the same or above Diesel Generator rating (400kVA)	Submit typical full FAT results of the same or above Diesel Generator rating (400kVA)	<ul style="list-style-type: none"> Results submitted – 100% No results submitted – 0% 	10
2 3	Technical Schedule A&B	The Tenderer shall provide a completed Technical Schedule A&B.	<ul style="list-style-type: none"> Contractor provides complete technical schedule A&B – 100% Contractor provides partial technical schedule A&B – 40% Contractor provides no technical schedule – 0% 	30
2 4	Configure and programme existing controllers	The Contractor shall provide a letter indicating that they have the capability to verify, configure and commission any new logics and programming on the existing controllers (Deep Sea), for interfacing with the new diesel generators	<ul style="list-style-type: none"> Contractor provides letter – 100% Contractor provides no letter – 0% 	30
2 5	Technical Specification list for critical spares	The Contractor shall provide a letter indicating that they shall provide the following <ul style="list-style-type: none"> Technical specification list for critical spares 	<ul style="list-style-type: none"> Contractor provides letter – 100% Contractor provides no letter – 0% 	10

		<ul style="list-style-type: none"> Service kits technical specification list for major services 		
--	--	--	--	--

CONTROL AND INSTRUMENTATION ENGINEERING - 20%								
3.	Previous Experience and Customer Satisfaction	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Evaluation Scoring Breakdown			
					0	2	4	5
3.1	Provide method detailing installation of C&I equipment from Diesel Engine to up to Engine Control Unit e.g. Field instrumentation, loop diagrams, junction boxes and cable racking, in Power Generation industry	The Contractor shall provide a previous valid signed previous project work orders and completion certificates		35%	Contractor provides no work orders and completion certificates	The contractor provides 1 work order and completion certificates	The contractor provides 2 x work orders and completion certificates	The contractor provides 3 x work orders and completion certificates

**Tender Technical Evaluation Strategy for Kriel
PS Replacement of Diesel Generator Project**

Unique Identifier: EAP0619

Revision 1

Page Page 11 of 18

3 2	Interfacing of signals between Diesel Gen Engine and Engine Controller Unit (Deep Sea Controllers)	The Contractor shall provide a previous valid signed previous project work orders and completion certificates which proves their experience in controller interfacing	20%	25%	Contractor provides no work orders and Completion certificates	Contractor provides 1 x work orders and completion certificates	Contractor provides 2 x work orders and completion certificates	The contractor provides 3 x work orders and Completion certificates
3 3	Knowledge of field Instrumentation devices used or applicable for this Diesel Gen Engine as per the scope of work	The Contractor shall demonstrate knowledge of this by providing datasheets and specifications of all field instrumentation devices required between Diesel Gen Engine and Controller Unit		40%	Contractor provides no list	Contractor provides partial list of instrumentation to be used		Contractor provides a complete comprehensive list of instrumentation to be used
Civil Engineering – 10%								
4		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Evaluation Scoring Breakdown			
					0	2	4	5

4 1	Skills Requirement Pr Civil Eng/Tech (Structural) with a minimum of 2 years relevant experience post ECSA registration	<ul style="list-style-type: none"> BEng/BSc/BTech Civil Engineering Degree Certificate Pr Eng/Tech Certificate Proof of post registration experience in the form of a CV with contactable references	10%	6%	No submission of Pr Eng/Tech OR Less than 2 years' experience post ECSA registration	2-4 years post ECSA registration however not all with Structural Engineering experience	5-7 years post ECSA registration with all relevant experience	>8 years post ECSA registration with all the relevant experience
4 2	Technical Competency Company's background and experience	Demonstrate experience on similar Civil Engineering projects (Structural analysis and design) successfully completed Provide completion confirmation letter with contactable reference from the previous projects Provide Completion certificates for completed projects consisting of the following information <ul style="list-style-type: none"> Name of company where project was executed Project description and scope overview Dates when projects were carried out and completed Contract Value 		4%	None provided / Less than 2 projects submitted	2 projects similar to scope with all requested information provided	3-5 projects similar to the scope with all requested information provided	6 or more projects similar to the scope with all requested information provided

**Tender Technical Evaluation Strategy for Kriel
PS Replacement of Diesel Generator Project**

Unique Identifier: EAP0619

Revision **1**

Page **Page 13 of 18**

		<ul style="list-style-type: none">Client contact person details (reference) Minimum of 2 projects						
	TOTAL = 100% THRESHOLD=70%							

3.6 TET MEMBER RESPONSIBILITIES

Table 4: TET Members

	TET 1	TET 2	TET 3	TET 4	TET 5
Qualitative Criteria Number					
1	X	X	X	X	X
2	X	X	X	X	X
3	X	X	X	X	X
Qualitative Criteria Number					
1.1	X				
2.1				X	X
2.2				X	X
2.3				X	X
2.4				X	X
2.5				X	X
3.1			X		
3.2			X		
3.3			X		
4.1		X			
4.2		X			

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.4.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1	

Table 6: Unacceptable Technical Risks

Risk	Description
1	No confirmation letter is provided by the Contractor to confirm that they have capacity to verify, configure and commission any new logics and programming on the existing controllers (Deep Sea), for interfacing with the new diesel generators
2	Incomplete Technical Schedule AB is Submitted.

3.4.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

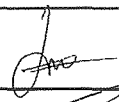
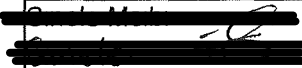
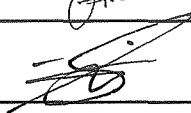




Risk	Description
1	

Table 8: Unacceptable Technical Exceptions / Conditions

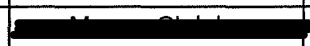

Description

4. AUTHORISATION

This document has been seen and accepted by






Name	Designation	Signature
Marvin Shilabe	System Engineer - Auxiliary Engineering	
	Snr Civil Engineer	
	C&I Engineer	
	Snr Technologist Engineer	
	Electrical Technician	

5. REVISIONS

Date	Rev.	Compiler	Remarks
October 2025	0 1		Draft Document
October 2025	1		1 st Revision

6. DEVELOPMENT TEAM

The following people were involved in the development of this document

7. ACKNOWLEDGEMENTS

Not applicable