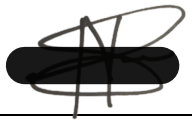
Eskom	Strategy	Camden Power Station

Title: **Tender Technical Evaluation Strategy for the Replacement of Electrical Compressors**

Document Identifier:	**229-T2913**
Alternative Reference Number:	**N/A**
Area of Applicability:	**Engineering**
Functional Area:	**Engineering**
Revision:	**2**
Total Pages:	**19**
Next Review Date:	**N/A**
Disclosure Classification:	**Controlled Disclosure**

Compiled by	Functional Responsibility	Authorized by
		
[redacted]	[redacted]	[redacted]
Snr. Engineer	**Auxiliary Engineering Manager**	**Power Station Engineering Manager**
Date: 13/Aug/2025	Date: 13/08/2025	Date: 13/08/2025

Content

Tables

1. Introduction

The compressed air plant provides control air and service air to the power station. The compressors at Camden Power Station are housed in two houses, namely: the East compressor house and the West compressor house. The control air components are housed in both the east compressor house and the west compressor house. Three electrical oil flooded screw compressors, and an oil flooded screw diesel compressor are housed in the east compressor house and two electrical compressors are housed in the west compressor house. The service air compressor is housed in the west compressor house. The currently installed electrical compressors are obsolete and needs to be upgrade.

The station requires the following to be satisfied:

- Replace the existing electrical compressors with new efficient equipment that can be operated, maintained and supported for the remaining life of the station.
- Replace the compressors with compact that are independent on their auxiliaries.
- Increase the plant availability and reliability.

2. Supporting Clauses

2.1 Scope

The scope is for the design, procurement, supply, installation and commissioning of the entire engineering works to ensure fully functional replaced electrical compressors.

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 to evaluate all tenders received from the Service Provider(s) in response to the Enquiry.

2.1.2 Applicability

This document is applicable to Eskom Camden Power Station, Tender Evaluation Team for evaluating the tenders received from the Service Provider(s) in response to Supply, Install and commission of electrical compressor as per the specifications.

2.1.3 Effective date

Is the date the document is signed for Authorisation when compliance to the document requirements shall have been established and implemented.

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] ISO 9001 Quality Management Systems

[2] 240-48929482: Tender Technical Evaluation Procedure

[3] 240-53716726 Technical Scoring Form

[4] 240-53716712 Technical Evaluation Results

2.2.2 Informative

[5] 383-CMDN-AABZ28-SP0004-63: Camden Power Station Electric Compressor Replacement Technical Specification

2.3 Classification

Controlled Disclosure: Controlled Disclosure to external parties

2.4 Definitions

N/A

2.5 Abbreviations

Table 1: List of abbreviations

Abbreviation	Description
ECSA	Engineering Council of South Africa
FAD	Free Air Delivery
HMI	Human Machine Interface
IO	Input Output
kPa	Kilo Pascal
OEM	Original Equipment Manufacturer
OPCR	Outside Plant Control Room
PS	Power Station
QCP	Quality Control Plan
RAM	Reliability Availability Maintainability

Abbreviation	Description
SOW	Scope of Work
EDWL	Engineering Design Work Lead
TET	Technical Evaluation Team
LDE	Lead Design Engineer
CV	Curriculum Vitae
N/A	Not Applicable

2.6 Roles and Responsibilities

As per 240-48929482: Tender Technical Evaluation Procedure

2.7 Process for Monitoring

As per 240-48929482: Tender Technical Evaluation Procedure

2.8 Related/Supporting Documents

N/A

3. Tender Technical Evaluation Strategy

A weighted score-card approach is used to evaluate the technical compliance of the tenders against the specifications or ability to perform the work. Tenderers need to have a minimum weighted score of 70% overall or more to technically qualify for further evaluation. Should suppliers not meet minimum threshold of 70%, Eskom reserves the right to consider suppliers that obtained from 60% to 69%.

3.1 Technical Tender Evaluation Method

The evaluation criteria will be based upon a two-step process

3.1.1 Mandatory Criteria Evaluation

All TET members as defined in the Tender Technical Evaluation Strategy (and specifically TET member responsibilities) shall independently evaluate each tender in terms of compliance to the defined Mandatory Evaluation Criteria. Each TET member shall provide an individual scoring form on the compliance / non-compliance of all tenderers' responses to the Mandatory Evaluation Criteria. Each TET member shall provide clear justification(s) for each Mandatory Criteria evaluated as non-compliant ('NO'). All individual scoring forms shall be evaluated by the EDWL to check for consistency in scoring of the Mandatory Evaluation Criteria. Should the EDWL find inconsistency in the scoring, an internal clarification meeting shall be conducted with all TET members (who performed the evaluation) in the presence of the Commercial Representative. This meeting shall aim to jointly establish which of the tenderers qualify for the next phase of Qualitative Technical Evaluation. In the case where no tenderer meets all Mandatory Evaluation Criteria this shall be formally escalated to the Commercial Representative who shall guide the subsequent process. All meeting minutes shall be recorded and distributed to the Commercial Representative and included in the Tender Technical Evaluation Report

3.1.2 Qualitative Criteria Evaluation

Tenderers that have met all the Mandatory Evaluation Criteria shall be evaluated against the Qualitative Criteria as defined in the Tender Technical Evaluation Strategy. The scoring of qualitative criteria shall be based on the degree of achievement by the tenderer to meet the technical requirements. A score shall be allocated as per Table 2: Qualitative Evaluation Criteria Scoring Table, for each technical qualitative criterion. Each TET member shall populate a Tender Technical Evaluation Scoring Form [3] for each tenderer. Note: Individual Qualitative Criteria scores shall only be finalised after all clarification sessions have been concluded.

Table 2: Qualitative Evaluation Criteria Scoring Table

Score	Points	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.		

The evaluation method will be based on similar projects done by the tenderers in the past. The tenderers will need to perform a complete detailed design (including supply bill of quantities), removal of existing system, supply and install new system as well as commission and test new system. A weighted score-card approach is used to evaluate the technical compliance of the tenders against the specifications. Tenderers need to have a weighted score of 70% overall or more to technically qualify for further evaluation.

The technical criteria weighting is as follows:

a) Engineering: 100%

The evaluation of the tender submission will be based on the tenderer's ability to meet the Engineering requirements. A weighted score card approach will be used to evaluate the tender submission against the specifications and Employer's requirements.

3.2. Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is **70%.** Should suppliers not meet minimum threshold of 70%, Eskom reserves the right to consider suppliers that obtained from 60% to 69%.

3.3. TET members

The following personnel will form part of the technical evaluation team. When the technical tender evaluation is done at least two participants of the technical evaluation team must be present.

Table 3: TET Members

TET Number	TET Member Name	Designation
TET 1	Bongani Mashaba	EDWL
TET 2	Mary Maunye	Snr Technologist Engineer
TET 3	Douglas Mugweni	C&I LDE Supervisor
TET 4	Nkoskhona Kunene	C&I LDE
TET 5	Riaan Grobler	Electrical LDE Supervisor
TET 6	Siyabonga Ndlovu	Electrical LDE
TET 7	Aluwani Maumela	Civil LDE Supervisor
TET 8	Skhumbuzo Nkosi	Civil LDE

Table 4: TET Member Responsibility

Section	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8
1.1	x	x						
1.2	x	x						
1.3			x	x				
1.4	x	x	x	x	x	x	x	x
1.5	x	x	x	x	x	x	x	x
1.6					x	x		
2.1	x	x	x	x	x	x	x	x
3.1	x	x						
3.2			x	x				
3.3					x	x		
3.4							x	x

3.4. Mandatory Technical Evaluation Criteria

Table 5: Evaluation Criteria

Gatekeepers	
No. 1	**Mandatory Technical Criteria Description**
1.1	Provide a valid ECSA registration certificate of the Professional Engineer (Pr Eng.) or Professional Technologist (Pr Tech Eng.) who will be accountable for the mechanical design activities of the project.
1.2	The nominated engineer/ Technologist must have a minimum of five (5) years post-ECSA registration in Application and design of Compressors. The experience must specifically include as a minimum: • Design of industrial compressor systems (rotary screw, reciprocating, or centrifugal). • Piping design for compressed air systems. • Knowledge and application of ISO 8573 compressed air quality standards.
1.3	The tenderer has at least 1 Qualified Professionally Registered (ECSA) Electrical/Electronic/Computer lead Engineer/Technologist. Provide an ECSA registration certificate of the Professional Engineer (Pr Eng.) or Professional Technologist (Pr Tech Eng.)
1.4	Contractor is an authorized representative or holds OEM-approved status or Contractor is an OEM. Should the contractor not be an OEM. The contractor must submit documentation confirming that: • Contractor is an authorized representative, distributor, or licensee of the OEM, or • Holds an OEM-approved status for the proposed equipment. Required Evidence: • A formal letter on OEM letterhead, signed and stamped if contractor is an authorized representative or holds OEM-approved status. The letter must be current (issued within the last 6 months). • If the Contractor is an OEM, the formal letterhead shall be in their letter confirming that they are the OEM of the Proposed equipment. The letter must be current (issued within the last 6 months).
1.5	OEM Spare Parts Support Confirmation The bidder must submit official documentation from the Original Equipment Manufacturer (OEM) confirming that: • Spare parts for the proposed equipment are readily available and supported within South Africa.

	• The OEM maintains a local or regional warehouse or logistics chain for critical and consumable components. • The OEM provides technical support. Required Evidence: • A formal letter on OEM letterhead, signed and stamped, stating the availability of spare parts locally and local technical support. The letter must be current (issued within the last 6 months).
1.6	The Contractor must have an Installation Electrician (IE) who is registered with the Department of Labour to supervise the electrical work. This person will be responsible for issuing the Certificate of Compliance (COC) and the test report of the installation as per SANS 10142-1. Note, a COC will only be valid when it is accompanied by a test report in the format detailed in 8.7 of SANS 10142-1. Required Evidence: • The IE must provide a copy of the registration card and a letter from the Department of Labour as proof of valid registration.
NB: Tenderers, which do not satisfy these gatekeepers, will not be given further consideration.	

3.5. Qualitative Technical Evaluation Criteria

Disclaimer: Copies of requested documents must be submitted. Where the tenderer is found to be technically suitable, a valid certified copy of the document/s required will be requested as proof for validation process.

Table 6: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Tender Returnable	Reference to Technical the Specification	Criteria Weighting (%)	Score	Sub Criteria Weighting (%)
2.	**General**				**20%**		
	2.1	The contractor must provide confirmation of training inclusion on the operation and maintenance of the electric rotary oil-flooded screw compressors will be provided to Eskom personnel by the contractor/OEM including the relevant manuals. NB: The manuals shall be supplied in English, both in print and digital format.	Letter from Contractor: Confirmation of training inclusion on the operation and maintenance of the electric rotary oil-flooded screw compressors will be provided to Eskom personnel by the contractor/OEM including the relevant manuals.	Section 4	Proof: Letter from contractor provided confirmation of training inclusion on the operation and maintenance of the electric rotary oil-flooded screw compressors will be provided to Eskom personnel by the contractor/OEM including the relevant manuals.	5	100%
					Irrelevant or no documents submitted	0	
3.	**Technical**				**80%**		

	3.1	**Mechanical**		**Section 4**			**30%**
	3.1.1	Provide the technical specification, data sheet and drawings for the electric rotary oil-flooded screw compressors both Control air and Service air Compressor, it should include the following information as a minimum: • Flow capacity • Discharge pressure • Moisture dew • Power rating • Equipment drawings • Layout of equipment • Size of the motor • Dimensions and weight • Real time monitor • Corrosion protection specification **NB!** There are two distinct types of compressors required for this project: Control Air Compressor and Service Air Compressor. Two separate and complete information packs must be submitted — one for each compressor type. Each information pack must include the information stated above. Partial information provided is when any information above was not submitted, for example flow capacity not submitted.	The technical specifications, data sheets, and equipment drawings for both the Control Air and Service Air electric rotary oil-flooded screw compressors are the tenderer returnable.		All technical specification, data sheet and drawings submitted	5	50%
					Partial information provided data sheets and drawings of the compressor submitted.	4	
					Data sheets or drawings of the compressor are submitted	2	
					No data sheets submitted of the compressor	0	

	3.1.2	The contractor shall submit proof of at least three (3) previously completed projects involving the supply, installation, and commissioning of electric rotary oil-flooded screw compressors of similar size and for a similar industry (e.g., power generation, petrochemical, mining, or heavy industrial sectors). NB: Each project submission must include: • Client Name and contactable reference (name, email, and phone number). • Project Description, • Signed letter of completion or sign reference letter from the client.	Submit proof of three previous projects (supply, installation and commissioning of compressors of similar size and for similar industry)		Submitted proof of 3 previous projects of similar size and similar industry	5	50%
					Submitted proof of 2 previous projects of similar size and similar industry	4	
					Submitted proof of 1 previous project of similar size and similar industry	2	
					No proof of experience submitted, or proof submitted but does not comply with requirements	0	
	3.2	**Control and Instrumentation**		**Section 4**			**25%**
	3.2.1	Experience: At least 1 Professional Registered Electrical/Electronic/computer lead Engineer/Technologist with a track record of 5 completed projects as a minimum; for design, construction, and commissioning of the SPPA T2000/T3000 DCS interface or similar control systems.	Returnable: Tender returnable – Reference letters with contactable individuals for the 5 completed projects and a CV for the lead Engineer/Technologist.		Formal BSc/Btech qualification or equivalent international acknowledgement and has 5 or more completed projects.	5	25%
					Formal BSc/Btech qualification or equivalent international acknowledged qualification and has 3 but less than 5 completed projects.	4	
					Formal BSc/Btech qualification or equivalent international acknowledged	2	

					qualification and has 1 year but less than 3 completed projects.		
					Has less than 1 completed project and no formal BSc/Btech qualification or equivalent international acknowledged qualification.	0	
	3.2.2	Interface details of how the proposed compressors will interface with the current DCS SPPA T2000/T3000.	Submit interface details of how the proposed compressors will interface with the current DCS SPPA T2000/T3000.		Interface details submitted	5	30%
					No Interface details submitted.	0	
	3.2.3	Submit details of the proposed system design, which include Methods statement Design layout Control descriptions Process flow diagrams	Submit details of the proposed		All 4 of the required documents were submitted.	5	25%
					Only 3 of the required documents were submitted	4	
					Only 1 to 2 of the required documents were submitted	2	
					Irrelevant or no documents submitted	0	
	3.2.4	Suppliers will provide a letter stating that the control of the compressors is performed via the DCS and onboard controller.	Submit letter		Interface details submitted.	5	20%
					No Interface details submitted.	0	
	3.3	**Electrical**		**Section 4**			**25%**

	3.3.1	The contractor submits a high-level method statement that will indicate how the electrical works will be executed. The high-level method statement is aligned with the Works information	submits a high-level method statement		Submitted a high-level method statement that indicates how the electrical Works will be executed. The high-level method statement is aligned with the works information	5	25%
					No high-level method statement was submitted, or the submission is not aligned with Works information	0	
	3.3.2	Datasheets and drawings of the motors and soft staters are to be submitted and comply with the requirements of the works information's.	Datasheets and drawings of the motors and soft staters submitted		Submitted datasheets and drawings of the motors and soft starters as per the requirements of works information	5	25%
					Only datasheets provided or the motors and soft starters as per the requirements of the works information. No drawings submitted	4	
					No datasheets or drawings of the motors and softs starters as per the requirements of the works information submitted.	0	
	3.3.3	Provide a letter stating that the soft starters that will be within the Eskom Fleet and can be supported locally.	Tender Returnable: Letter submitted stating that the soft staters		A letter submitted stating that the soft staters that will be supplied have been proven within the Eskom Fleet and can be supported locally	5	25%
					No letter stating that the soft staters that will be supported locally. No proof or traceable reference or proof submitted does not comply with the requirement stipulated.	0	
	3.3.4	The contractor shall submit proof of at least 5 previously completed projects	Tender Returnable: The contractor shall submit proof		A list submitted of at least 5 projects with traceable references and project value for similar work was done	5	25%

		that include electrical works similar to the technical specifications. NB: Each project submission must include: • Client Name and contactable reference (name, email, and phone number). • Project Description, Signed letter of completion or sign reference letter from the client.	of at least 5 previously completed projects.		successfully and completed.		
					A list submitted of at least 3 projects with traceable references and project value for similar work was done successfully and completed.	4	
					A list submitted of at least 2 projects with traceable references and project value for similar work was done successfully and completed	2	
					No proof or traceable references or proof submitted does not comply with the requirements stipulated.	0	
	3.4	**Civil**					**20%**
	3.4.1	CV of an ECSA professionally registered engineer or technologist.	To lead the structural assessment of the existing civil infrastructure to support the new compressors		5 years or more experience in design and assessment of structures	5	50%
					3-4 experience in design and assessment of structures	4	
					1-2 years' experience in design and structural assessment	2	
					No experience in design and structural assessment.	0	
	3.4.2	To state the approach pertaining the structural assessment of the civil infra	Method statement.		Method statement detailed and fully addresses the civil scope of work.	5	50%

		structure and proposed modifications where applicable			Method statement submitted but does not address the entire civil scope of work.	4	
					a) Method statement submitted but it's a repetition of what is on the SOW.	2	
					b) Method statement irrelevant to the civil scope of work or not submitted.	0	

3.6. Foreseen Acceptable / Unacceptable Qualifications

3.6.1. Risks

Table 7: Acceptable Technical Risks

Risk	Description
1.	Minor deviations or clarifications to the technical specification that will not prevent the system to perform

Table 8: Unacceptable Technical Risks

Risk	Description
1.	A compressor and or its auxiliaries that is of lower specification that required
2.	The Designer Engineer is not registered as a Professional Engineer with ECSA
3.	The Designer has no Sound and related experience to the project should be included.
4.	Spare parts are not locally supported and have a very long lead time
	The Contractor does have an Installation Electrician (IE) or Installation Electrician is not registered with the Department of Labour

4. Acceptance

This document has been seen and accepted by:

Full Name and Surname	Designation	Signature
Mary Maunye	Snr Technologist Engineer	
Douglas Mugwenhi	C&I LDE Supervisor	
Nkoskhona Kunene	C&I LDE	
Riaan Grobler	Electrical LDE Supervisor	
Siyabonga Ndlovu	Electrical LDE	
Aluwani Maumela	Civil LDE Supervisor	
Skhumbuzo Nkosi	Civil LDE	
Thabo Skosana	Project Coordinator Technician	

5. Revisions

Date	Rev.	Compiler	Remarks
June 2025	1	Bongani Mashaba	New Technical Evaluation Strategy.
August 2025	2	Bongani Mashaba	Updated Section 3.3, 3.4, 3.5 and 3.6

6. Development Team

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

- Bongani Mashaba
- Mary Maunye
- Nkoskhona Kunene
- Sk[redacted]zo[redacted]
- Riaan Grobler

7. Acknowledgements

Engineering team members