Eskom	Strategy	Generation

Title:	**Kriel PS Scope of work for 5-year Maintenance Support Contract for Units DCS System and Common Plant Tender Technical Evaluation Strategy**	Unique Identifier:	**555-ECI2079**
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Compiled by	Approved by	Authorised by
[redacted]	[redacted]	[redacted]
C&I Engineer	**C&I Engineering Manager**	**Engineering Manager**
Date: 08/11/2023	Date: 08/11/23	Date: 08/11/2023

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TABLES

1. INTRODUCTION

This document describes the process to be followed in performing technical evaluations during the tender evaluation for Kriel PS Scope of work for 5-year Maintenance Support Contract for Units DCS System and Common Plant Tender Technical Evaluation Strategy.

The evaluation of tender is based on the tenderer's ability to meet both mandatory and qualitative requirements specified for this scope of work. A weighted score card approach will be used to evaluate the tenders against the Employer's requirements.

2. SUPPORTING CLAUSES

2.1 SCOPE

The purpose of this document is to provide the technical evaluation strategy for the execution of maintenance on the Kriel PS Scope of work for 5-year Maintenance Support Contract for Units DCS System and Common Plant Tender Technical Evaluation Strategy.

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 is applicable to Kriel 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.

2.2.1 Normative

[1] 240-48929482: Tender Technical Evaluation Procedure

[2] ISO 9001 Quality Management Systems

2.2.2 Informative

2.3 DEFINITIONS

2.3.1 Classification

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

2.3.2 Enquiry

A competitive or non-competitive request for information, interest, quotations, or proposals made to a supplier, a group of suppliers or the market at large.

2.3.3 Tender

A tender refers to an open or closed competitive request for quotations / prices against a clearly defined scope / specification.

2.4 ABBREVIATIONS

Abbreviation	Description

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

- Access Control Maintenance Scope
- 240-53716746: Tender Technical Evaluation Report Template
- 240-53716712: Tender Technical Evaluation Results Form Template
- 240-53716726: Tender Technical Evaluation Scoring Form Template
- 240-53716769: Tender Technical Evaluation Strategy Template

3. TENDER TECHNCIAL EVALAUTION 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 EVALUATION SCORING TABLE

Tenderers that have met all the Mandatory Evaluation Criteria shall be evaluated against the Qualitative Criteria as defined in this 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 1 below: Qualitative Evaluation Criteria Scoring Table, for each technical qualitative criterion.

Each TET member shall populate a Tender Technical Evaluation Scoring Form for each tenderer.

Note: Individual Qualitative Criteria scores shall only be finalised after all clarification sessions have been concluded.

Table 1 Qualitative Evaluation Criteria Scoring Table

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		

3.3 TET MEMBERS

Table 2: TET Members

TET number	TET Member Name	Designation	Signature
TET 1	[redacted]	C&I Engineer	
TET 2	[redacted]	Senior C&I Engineer	
TET 3	[redacted]	Senior C&I Technologist	

3.4 MANDATORY TECHNICAL EVALUATION CRITERIA

Table 2 defines all Mandatory Evaluation Criteria to be used as well as reference to specification and motivation for use of criteria. These criteria will not be scored. Each tender will be assessed on a YES/NO basis. If any answer below is NO, the tenderer may be eliminated from the tendering process.

Table 3: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1.	Training Certificate on Operational Technology Computer/Control Systems (Hardware & Software)	*Contractor or Supplier to provide ALL the following training certificates:* • *Simatic S7 Programming Course* • *Simatic PCS7 or WinCC and TIA portal* • *Simatic Industrial Networks* • *I&C Maintenance SPPA-T3000* • *OSI Soft Certification* • *SPPA T3000 DCS Administrator and Advanced Engineering*	Kriel Power Station currently requires an experienced skilled PCS7 Simatic S7 PLC or WinCC-SCADA, S7-400H/S7-1200 PLCs and SPPA T3000 Admin and advanced Engineering to ensure the integrity and baseline setting and configuration of the systems is not disturbed or violated.

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Compliant tenders will be evaluated against a set of weighted qualitative evaluation criteria. The evaluation criteria have been broken down into sections and a percentage weighting for each section is allocated. The Tenderer must ensure that his submission/proposal contains all relevant data/proof to substantiate the *Employer*'s weighted criteria as populated in Table 3: Qualitative Technical Evaluation Criteria. If no information from the submission file is available per criteria to be evaluated, the weighted score for those criteria will result in a zero without further clarification. Only information, which is presented, but ambiguous to the evaluators, will be allowed for further clarification.

Table 4: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	**General requirements**			**100**	
	1.1	Company Structure	Provide company structure indicating Service Manager and Technical resources (*permanent/temporary employee or sub-contractor*) that shall work on the contract with their contactable details for confirmation *Service Manager* **and** 2x Resources – Engineer/Technician – **Score 5** *Service Manager* **and** 1x Resources – Engineer/ Technician – **Score 2**		30

<table>
<tr>
<td></td>
<td>1.2</td>
<td>Relevant Qualifications</td>
<td>Admin Technician (1) and/or Engineer (1),
• BSC or BEng or B-Tech or National Diploma in Electrical/Electronics/ Computer Engineering
<table>
<tr><th>Number of years' experience</th><th>Multiple of Criteria Sub Weighting</th></tr>
<tr><td>0 = No Qualification</td><td>0</td></tr>
<tr><td>2= Matric Only</td><td>2</td></tr>
<tr><td>4=National Diploma in Electrical/Electronics/Computer System</td><td>4</td></tr>
<tr><td>5=BSC/BEng or BTech in Electrical/Electronics/Computer Engineering</td><td>5</td></tr>
</table>
</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Company Technical Resources ((permanent/temporary employee or sub-contractor) relevant experience</td>
<td>Provide a CV with contactable references on the relevant experience of at least more than 3 years working on Simatic and SPPA Control systems on PCS7 or SPPA T3000 or WinCC SCADA
Engineer and/or Technician
5 years and above = Score 5
3 years and above = Score 4
Less than 3 years = Score 2</td>
<td></td>
<td>10</td>
</tr>
</table>

<table>
<tr>
<td></td>
<td>1.4</td>
<td>Company Work Experience on Projects Completion Certificates/Purchase Orders executed on following systems
• SPPA T3000 DCS</td>
<td>• Provide work orders minimum at least 3 x PO order, or contract/project with contactable references within Eskom Power Stations working on SPPA T3000 DCS
<table>
<tr><th>Number of above categories provided (fully)</th><th>Multiple of Criteria Sub Weighting</th></tr>
<tr><td>1. No PO Order</td><td>0</td></tr>
<tr><td>2. 1 x PO Orders</td><td>2</td></tr>
<tr><td>3. 3 x PO Orders</td><td>4</td></tr>
<tr><td>4. 4 or more PO Orders</td><td>5</td></tr>
</table></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>Company Work Experience on Projects Completion Certificates/Purchase Orders executed on following systems
• PCS7/STEP 7
• WinCC SCADA/TIA Portal</td>
<td>Provide work orders minimum at least 2 x PO order, or contract/project with contactable references within Eskom Power Stations working on Siemens PCS7, Simatic WinCC SCADA
<table>
<tr><th>Number of above categories provided (fully)</th><th>Multiple of Criteria Sub Weighting</th></tr>
<tr><td>1. No PO Order</td><td>0</td></tr>
<tr><td>2. 1 <= PO Orders</td><td>2</td></tr>
<tr><td>3. 3 <= PO Orders</td><td>4</td></tr>
<tr><td>4. 4 or more PO Orders</td><td>5</td></tr>
</table></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>1.6</td>
<td>Method of Statement on the Maintenance of the SPPA T3000 DCS</td>
<td>Provide method statement detailing maintenance strategy to be executed for the SPPA-T3000 DCS.
1. Pi OPC Interface and PI server fault diagnostics</td>
<td></td>
<td>10</td>
</tr>
</table>

2. How to perform system network health checks i.e AP, Servers Redundancy Faults, Scalances
3. How to check for Process related faults from PLC on the DCS
4. How to conduct redundancy tests on a Server and PLCs

Number of (informative)method statement provided for the above different plant systems	Multiple of Criteria Sub Weighting
0	0
1 and 2	2
1, 2, 3	4
ALL	5

<table>
<tr>
<td></td>
<td>1.7</td>
<td>Method of Statement on the Maintenance of the Auxiliary Plant (SO3 Plant, Water Treatment Plant and other Outside plant/ Common Plant OT Systems)</td>
<td>Provide method statement detailing maintenance strategy to be executed for the following Systems.
PCS7, Simatic S7 PLC and WinCC SCADA System
1. How to check for System Faults on PLCs or SCADA or PCS7/TIA Portal
2. How to check status of Network/Server of the WinCC SCADA or PCS7/TIA Portal
3. How to check for Process related faults from PLC or SCADA or PCS7/TIA Portal
4. How to conduct redundancy tests on a Server and PLCs
<table>
<tr><th>Number of (informative)method statement provided for the above different plant systems</th><th>Multiple of Criteria Sub Weighting</th></tr>
<tr><td>0</td><td>0</td></tr>
<tr><td>1 and 2</td><td>2</td></tr>
<tr><td>1, 2, 3</td><td>4</td></tr>
<tr><td>ALL</td><td>5</td></tr>
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<td colspan="3"></td>
<td>Total (%)</td>
<td>100</td>
<td></td>
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</table>

3.6 TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3
1.	X	X	X
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**
1.1	X	X	X
1.2	X	X	X
1.3	X	X	X
1.4	X	X	X
1.5	X	X	X
1.6	X	X	X
1.7	X	X	X

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	None
2.	

Table 7: Unacceptable Technical Risks

Risk	Description
1.	Contractors with no experience and training in PCS7, Simatic S7 WinCC and SPPA-T3000 DCS Admin, Engineering and Commissioning
2.	

3.7.2 Exceptions / Conditions

Table 8: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	None
2.	

Table 9: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	None
2.	

4. AUTHORISATION

This document has been seen and accepted by:

Name & Surname	Designation
[redacted]	Kriel PS C&I Engineering Manager
[redacted]	Kriel PS Senior C&I Engineer
[redacted]	Kriel PS Engineering Manager
[redacted]	Kriel PS C&I Engineer
[redacted]	Kriel PS Senior C&I Technologist

5. REVISIONS

Date	Rev.	Compiler	Remarks
October 2023	1	[redacted]	First Issue

6. DEVELOPMENT TEAM

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

- [redacted]
- [redacted]
- [redacted]

7. ACKNOWLEDGEMENTS

None