

Strategy

Engineering

Kusile Power Station Tender Title: **Technical Evaluation Strategy** for Installation of Additional

CCTV Cameras

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1. INTRODUCTION

The cameras installed at Kusile Power Station are not enough to cover all critical areas, the various stakeholders have identified more areas that require surveillance for protection of people, plant, systems and monitoring of critical plants where visuals will help controllers to manage and control the plant better.

To design such an integrated system with required interfaces, a comprehensive site survey to support the development of detailed equipment specifications, installation design, and ultimately a thorough system test requires a specialised skill set. These skills and capabilities cannot be sourced within the organisation. An invite will be issued calling for interested parties to participate in the tender process for the design, supply, installation, testing and commissioning of additional CCTV cameras with artificial intelligence features at Kusile Power Station.

2. SCOPE

This document defines the technical tender evaluation strategy for the design, supply, installation, testing and commissioning of additional CCTV cameras with artificial intelligence features at Kusile Power Station. The scope is as described in the Kusile Power Station Installation of Additional CCTV Cameras Specification.

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 strategy document applies to all areas of the Kusile Power Station that require the additional cameras for monitoring and protection of plant and personnel.

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] 240-168966153: Generation Tender Technical Evaluation Procedure.
- [3] 32-1034: Eskom Procurement Policy.

2.2.2 Informative

- [1] Kusile Power Station Installation of Additional CCTV Cameras Specification.
- [2] 240-91190304: Specification for CCTV Surveillance with Intruder Detection.

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[3] 240-55410927: Cyber security standard for Operational Technology

2.3 DEFINITIONS

2.3.1 Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
AGC	Automatic Gain Control
CCTV	Closed-Circuit Television
Al	Artificial Intelligence
DVM	Digital Video Manager
DVR	Digital Video Recorder
FPS	Frames per Second
LCD	Liquid Crystal Display
ONVIF	Open Network Video Interface Forum
RAM	Reliability, Availability and Maintainability
SNR	Signal to Noise Ratio
WBC	White Balance Control
IE	Installation Electrician
MIE	Master Installation Electrician
SD and L	Supplier Development and Localisation
ECSA	Engineering Council of South Africa

2.5 ROLES AND RESPONSIBILITIES

Compiler	The document compiler is responsible for ensuring that this document is up- to-date and that this document is not a duplication of an existing documentation, regarding the document's objectives and content.
Functional	The Functional Responsible Person shall determine if the document is fit
Responsibility	for purpose before the document is submitted for authorisation.
Authoriser	The document authoriser is a duly delegated person with the responsibility to review the document for alignment to business strategy, policy, objectives, and requirements. He/she shall authorise the release and application of the document.
Technical Evaluation Team	Provides input to the technical tender evaluation strategy and associated technical activities.

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2.6 PROCESS FOR MONITORING

The primary process for monitoring will be governed by the Generation Tender Technical Evaluation Procedure (240-168966153), this entails assuring that the service provider achieves the requirements set out in this document.

2.7 RELATED/SUPPORTING DOCUMENTS

Please refer to Section 2.2.

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%.

The following factors will be considered when evaluating the tender submissions.

a) TECHNICAL AREA (70%)

i. Understanding and Compliance with requirements (55%).

The submission should address for each camera installation operational environment, location of the cameras, lenses, camera power requirements, type of camera, total number of each type of camera required, type of housing, type of mounts, type of displays/monitors, type of recorders, type of transmission to be employed, network storage.

- Demonstrate a firm understanding of the requirements and goals set forth in the scope of work?
- Does the submission address each requirement and goal set forth in the specification?
- Does the submission provide technical solutions to indicate requirements and goals will be met?
- ii. Soundness of approach (15%)

The submission must clearly indicate that the Service Provider has performed adequate planning to accomplish the tasks as defined in the specification.

- Does the proposal include a complete plan to accomplish each requirement?
- Does the Service Provider's plan demonstrate that appropriate skills and equipment will be available to carry out the requirements?
- Is the proper level of effort directed toward each requirement?

b) MANAGEMENT AREA (30%)

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i. Past Company Performance/Relevant Experience (15%)

Provide evidence that the Company has performed similar type of scope in the industry. This experience must be within the last 5 years to be considered. Maximum relevant company experience in the industry performing similar scope is 10 years. Letters of recommendation are required, with 2 being the minimum number of letters from different sources that can be considered for eligibility. These letters must be from credible, verifiable sources.

iii. Past Employee Performance/Relevant Experience (15%)

Provide evidence that the Employees have performed similar type of scope in the industry. This experience must be within the last 5 years to be considered. Maximum relevant employee experience in the industry performing similar scope shall be at least 2 years.

3.2 TET MEMBERS

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1: Engineering	Joseph Ngqendesha	Chief Technologist
TET 2: C&I Engineering	Harold Marobane	C&I Engineer
TET 3: C&I Engineering	Sibonelo Mtambo	C&I Engineer
TET 4: Electrical Engineering	Vely Sondezi	Electrical Engineer
TET 5: Civil Engineering	Freeman Mnisi	Civil Engineer

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3.3 MANADATORY TECHNICAL EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Source of Evidence	Motivation for use of Criteria
1	Registration ISO 9001 ISO 14001 ISO 45001 (To ensure that the CCTV camera system is designed, installed, and commissioned to the highest international standards).	Contractor must provide valid certificates issued by an accredited body.	 The contractor shall hold valid ISO 9001, ISO 14001, and ISO 45001 certifications to ensure that the design and installation of the CCTV system are executed with the highest standards of quality, environmental responsibility, and occupational health and safety. This integrated management system requirement provides assurance of reliable system performance, legal and regulatory compliance, safe working practices, and sustainable project delivery.

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Notes to tenderer:

- 1. Where no information is offered by the Tenderer no points shall be scored.
- 2. An undertaking is required that resources identified would not be changed on award of the Contract.
- 3. The CV's of Key Personnel should have experience which is comparable in nature to the Works specified in this tender.
- 4. It is a requirement that the key personnel, in particular, have good communication skills in the English language

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Table 3: Qualitative Technical 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

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Table 4: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1.	TECH	NICAL ABILITY		70	
	1.1	Comprehension of Scope	Submitted a comprehensive method statement covering all areas of scope of works with no foreseeable technical risk, and the costing covers > 95%.	= 5	55
			 Submitted a comprehensive method statement covering all areas of scope of works with acceptable technical risk, and the costing covers 80 - 95%. 	= 4	
			Submitted a high-level method statement covering all areas of scope of works and the costing covers 60 - 79% of the list.	= 2	
			 No method statement Provided and not all costs are included (Quoted <60% of the list). 	= 0	
	1.2	Execution Plan (Soundness of approach) The tenderer submits a detailed project programme listing all activities required to execute the scope of services from contract award to handover. The programme shall highlight all major	Submitted a full schedule with start and completion date to complete the scope. The plan shows proper level of effort, and it includes skill and equipment	= 5	15

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	project activities, milestones, and key deliverables. The programme shall include but not limited to the following: • Start date • Critical milestones • Completion date to meet contract requirements. • Realistic activity durations were estimated. • Logical sequencing of activities. • Interrelationship of activities taking cognisance of planned work execution as defined in the scope of work. • Critical path clearly defined.	required to complete the scope. • Submitted a full schedule with start and completion date to complete the scope. The plan shows some level of effort, and it includes some skill and equipment required to complete the scope. • Submitted a full schedule with start and completion date to complete the scope. • No schedules provided. No technical effort displayed.	
2.	2.1 Company relevant experience and refence of similar works: The tenderer submits evidence of completed projects of the main consultant that are equivalent to the service required in this contract. The tenderer submits a list of traceable references and completion certificates which adequately prove that the tenderer has completed at least two (2) projects successfully in the last five (5) years covering similar scope as detailed in the Technical Scope Document. Each relevant project must cover all the below listed as a minimum: CCTV cameras and monitoring control room design showing different zones Power supply design	Company Experience and List of previously completed works of similar scope with traceable references including reference letters. • Above 5 years and more than 2 letters = 5 • 5 Years and 2 letters = 4 • Less than 5 years and 1 letter = No letter or years of experience	= 2

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	Structural support design			
3	IPLOYEES RELATED EXPERIENCE		•	
	Organogram and Staffing The tenderer to submit the proposed organisational structure of all critical and key personnel of the main Consultants and Subconsultants. Note: In case of an association/joint venture/consortium, it should be indicated how the duties and responsibilities are to be shared. If the tenderer intends on making use of the services of the Subcontractor/s for sections of the scope, the delegation of duties and responsibilities should be clearly indicated it should be in line with SD and L requirements. A. The minimum requirements for critical project resources to be listed in the organogram include the following: 1. Electrical/Electronic/Computer/IT Engineer/Technologist with design experience (minimum 5 years) and registered as a professional with ECSA. 2. Certified Fibre optic technician with experience in installation (minimum 5 years) and registered with Fibre Optic Association (FOA) with National Diploma in Electrical/Electronic Engineering. B. The minimum required key project resources to be listed in the organogram include the following:	 Resource qualifications and CV's Proof of registration with the relevant professional body. Certified ID copies 	 A. Critical Resources Engineer/Technologist and Fibre optic technician have 5 and more years' experience = 5 Engineer/Technologist and Fibre optic technician have less than 5 years' experience = 2 B. Key Resources Organogram includes 5 or more key project personnel and CVs included = 5 Organogram includes 4 to 5 key personnel and CVs included= 4 Organogram includes 3 key personnel and CVs included = 2 Organogram includes less than 3key resources = 0 	15

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		TOTAL:	100
4	. Master Installation Electrician (MIE) (minimum 5 years' experience) or Installation Electrician (IE) (minimum 5 years' experience) both must have trade test registration and must be employed by the company submitting the tender.		
3	. Safety personnel with Matric plus relevant qualifications (minimum 1 year experience).		
2	. General Workers (Matric/N3).		
1	. Project Manager (NQF 5 plus registration with SACPMP), minimum 3 years' experience.		

NB: Refer to the Kusile Power Station Installation of Additional CCTV Cameras Specification for more details.

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3.5 TET MEMBER RESPONSIBILITIES

Table 5: TET Member Responsibilities

Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5
1.1	X	Х	Х	Х	Х
1.2	Х	Х	Х	Х	Х
2.1	Х	Х	Х	Х	Х
3.1	Х	Х	Х	Х	Х

3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risks

Table 6: Acceptable Technical Risks

Risk	Description
1.	None

Table 7: Unacceptable Technical Risks

Risk	Description	
1.	Deviations from the scope.	
2.	Exclusion of related experience to perform specified works.	
3.	Exclusion of proof/record of completed projects of similar scope with traceable references.	

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3.6.2 Exceptions / Conditions

Table 8: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

Table 9: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	N/A

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4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation		
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Fulufhelo Netshiongolwe	Engineering Manager (Acting)		
Abel Vuma	Maintenance Manager		
Siyabonga Mahaye	Outage Manager		

5. REVISIONS

Date	Rev.	Compiler	Remarks
April 2024	1	Joseph Ngqendesha	First issue
October 2024	2	Joseph Ngqendesha	Applied changes after site clarification meeting and added TET member.
September 2025	3	Sibonelo Mtambo	Applied changes after scope of work review to include Al Cameras features

6. DEVELOPMENT TEAM

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

- Harold Marobane
- Sibonelo Mtambo
- Joseph Ngqendesha
- Puseletso Ndlovu

7. ACKNOWLEDGEMENTS

N/A