

In partnership with



E1635CXMWP-UPGRADE AND REPLACEMENT OF THE SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) AT THE KOMATI WATER SCHEME

GENERATION, PRIMARY ENERGY

20 AUGUST 2025



Agenda

	Description	Time allocated (minutes)	Responsibility
1	Welcome, opening and introduction	10	Lehlo Mabula
2	Commercial	10	Penny Shabangu/Malesela Madiba
3	Technical	20	Frits Thuynsma/ Yolisa Motsepe/ Njabulo Makhanya
4	Price evaluation (Pricing schedule)	5	Nolukhanyo Rabalago
5	Contractual requirements	10	Penny Shabangu/Malesela Madiba
7	Health & Safety	10	Eric Mohlodine
8	Quality	10	Nontobeko Tikana
9	Supplier Development and Localisation (SD&L)	10	Phinda Ndabula
10	Finance	10	Mel Marion
11	Common mistakes/lessons learnt	10	Penny Shabangu
12	Questions and answer section	15	All participants
	Closing	5	Lehlo Mabula

The objective of this session is to present and clarify the enquiry documents for the E1635CXMWP:

Upgrade and Replacement of the Supervisory Control and Data Acquisition (SCADA) System at the
Komati Water Scheme

UPGRADE AND REPLACEMENT OF THE SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM AT THE KOMATI WATER SCHEME

Name : Malesela Madiba
E-mail : madibamb@eskom.co.za
Landline : +27 11 800 6698
Enquiry closing date : 4 September 2025
Enquiry closing time : 10:00 am

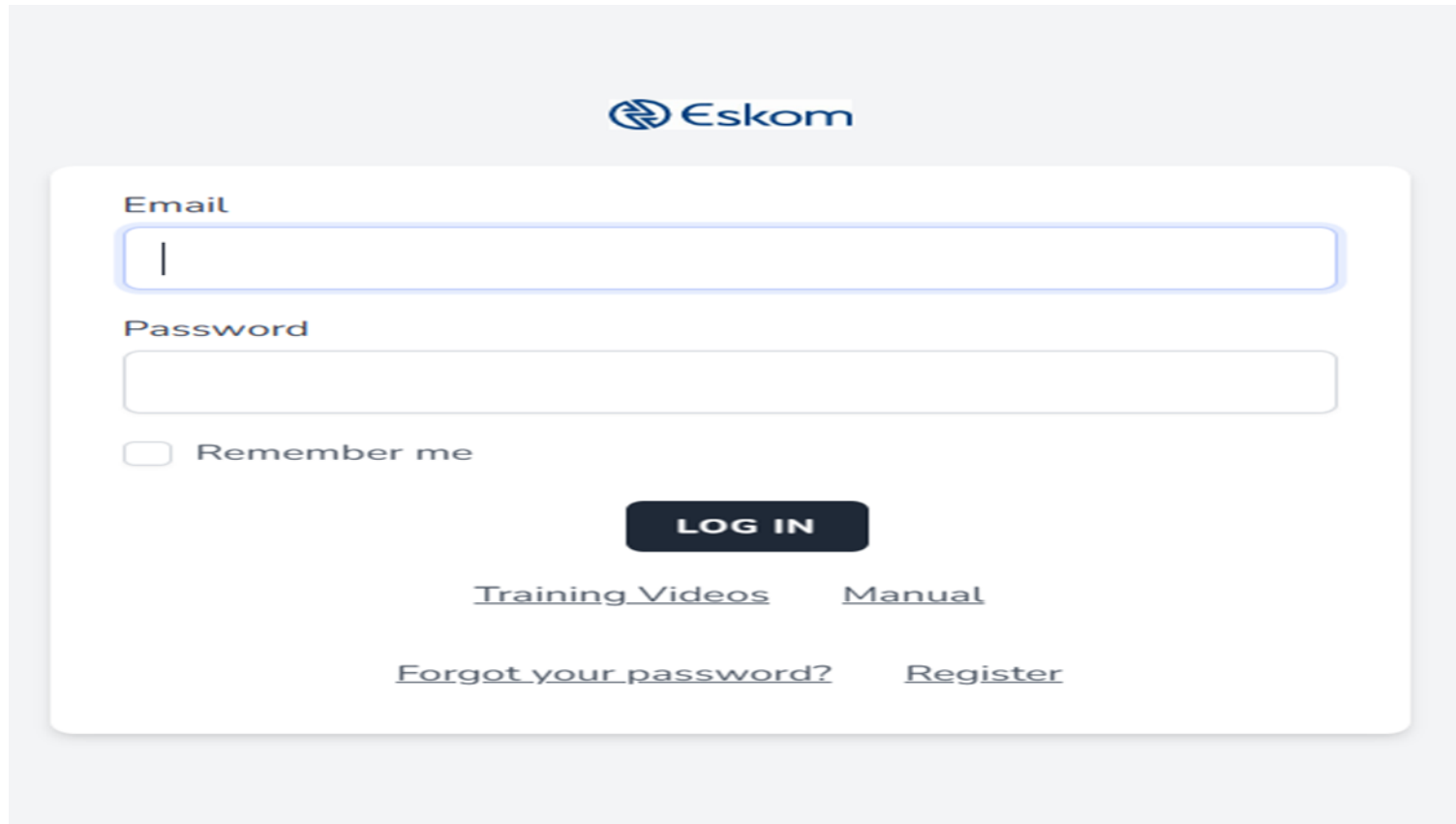
All enquiries during and after the tendering process shall be directed to the above Buyer as stipulated in the enquiry document E1635CXMWP

COMMERCIAL



Tenders are to be submitted electronically via Eskom E- tendering (<https://etendering.eskom.co.za/>) site by 4 September 2025 at 10:00 am.

No hand-delivered or emailed submissions will be accepted.



The image shows a screenshot of the Eskom E-tendering login page. At the top, the Eskom logo is displayed. Below it, there is a login form with the following elements:

- Email:** A text input field with a cursor inside.
- Password:** A text input field.
- ☐ Remember me
- LOG IN:** A dark blue button with white text.
- [Training Videos](#) and [Manual](#): Links for additional resources.
- [Forgot your password?](#) and [Register](#): Links for password recovery and account creation.

The tender/proposal shall be submitted as follows:

- All tender submissions must be completed electronically via the Eskom E-tendering site by the stipulated closing date and time
- No hand-delivered or emailed submissions will be accepted
- Bidders must ensure all required documents are uploaded in full and in the correct format (PDF, Excel, Word, etc.)
- All mandatory documents as specified in the enquiry must be completed, signed, and submitted before closing date and time
- Late submissions will not be considered

All tender submissions must be clearly structured and divided into the following distinct sections, as per the respective returnables:

- Commercial Technical (As per Commercial tender returnable)
- Technical (As per Technical tender returnable)
- Quality (As per Quality tender returnable)
- Finance (As per Finance tender returnable)

Eskom will utilise the following **evaluation method**:

A responsive tender will be evaluated on the following criteria:

1. Basic Compliance
2. Functionality (Technical evaluation)
3. Price and preference evaluation
4. Contractual requirements
 - a) Quality
 - b) Health & Safety
 - c) Finance
 - d) SDL & I

BASIC COMPLIANCE

Tenders are to be submitted electronically via Eskom E- tendering (<https://etendering.eskom.co.za/>) site by 4 September 2025 at 10:00 am.

Failure to submit /upload tender documents by the closing date and time will render the submission as “non-responsive” and will be disqualified from further evaluations.

TECHNICAL



- The Komati Water Scheme (KWS) supplies water to Arnot, Hendrina, Duvha and Komati Power Stations.
- This project aims to address system hardware and software obsolescence as well as operating limitations currently being experienced.
- The project presents an opportunity to comply with the latest Eskom standards for control systems and cyber security which is included in the works.
- Critical to the success of the project is the integration of the upgraded SCADA system with the existing ABB RTU's. The RTU's are excluded from the works.
- A new Demilitarized Zone (DMZ) and Global Positioning System (GPS) is included in the works.

SCOPE OF WORK (1/2)



- SCADA software upgraded or replaced, migration and/or re-engineering of functions to ensure support, compatibility, integration, and full functionality between new and existing hardware.
- All SCADA hardware replaced to address obsolescence and meet software requirements (compatibility), system functionality, and Employer requirements.
- Network switches, routers, and firewalls replaced to address obsolescence, compliance, and compatibility.
- GPS clock system replaced with redundant system configuration to support time synchronization of the SCADA System and RTU's.
- Network and HMI cabinets can be re-used where possible.
- Electronic Security Perimeter, including a DMZ and Unified Thread Manager (UTM), installed ensuring compliance with codes and standards.
- Integrated SCADA historian for medium-term data storage.
- Stand-alone historian for long-term data storage.
- Backup and recovery system for software and hardware failure.

- Central update and patch management system.
- Security management system.
- Webserver for remote viewing.
- Plant codification and labelling of all Plant supplied as part of the works.
- Earthing of all Plant supplied as part of the works.
- Training of Operating, Engineering & Maintenance staff.
- All activities, services or equipment specified (special tools, consumables etc).
- All software, license, and copyright agreements for the works.
- Estimated duration: 6 months

AREA MAP



Rietkuil Control Room



SCADA Servers Cabinet at Duvha PDC



Eskom Park New Location



HMI Cabinet (Wintershoek, Nooitgedacht, Bosloop & Vygeboom Pumpstations)



Annexure I: Technical/Functionality Evaluation Criteria



	Qualitative Technical Evaluation Criteria	Returnable	Evaluation Range	Weight
A	PROJECT ORGANISATION AND RESOURCES			30%
1.	The consultant / company has at least 5 years' experience in Industrial Electrical and Instrumentation design and installation / installation supervision	Portfolio of evidence with proof of work completed successfully (e.g. previous invoices).	0 points: < 5 years experience. 2 points: ≥ 5 years in reference list and at least 1 project in list of completed work 4 points: ≥ 10 years in reference list and 5 project in list of completed work 5 points: ≥ 10 years in reference list and more than 10 projects in the list of completed work	18%
2.	The validity of the CV's of the Lead Design Engineer(s) with experience in commissioning	CV's of Lead Engineer	0 points: No CV and no ECSA Professional registration 2 points: CV shows that there is less than 5 years' experience in Electrical and Instrumentation Design and commissioning for the Lead Engineer and is ECSA Professional registered. 4 points: The Lead Engineer has more than 8 years' experience in Electrical and Instrumentation design, has ECSA Professional registration and has successfully commissioned at least 5 projects. 5 points: The Lead Engineer meets the criteria for 4 points above and has commissioned more than 8 projects.	12%
B	PROJECT EXECUTION METHODOLOGY			30%
1.	Method Statement for conducting Detail Design Investigative Work and produce designs for Procurement	Method Statement as per the Scope of Work	0 points: No Method Statement 2 points: Method Statement not detailing the Investigative work, locations, and how Equipment selection decisions will be made 4 points: Method Statement detailing the Investigative work, locations, how Equipment selection is made, and gives examples of typical products / systems used for this solution 5 points: Method Statement mentions all above in 4, plus the process followed for ergonomic design of the control room (incl. intended finishes of the room).	15%
2.	Method Statement for technical assistance and commissioning supervision during of the Works	Method Statement as per the Scope of Work	0 points: No Method Statement 2 points: Method Statement describes only installation supervision, does not mention pre-shutdown installation methods and commissioning methods. 4 points: Method Statement installation supervision, pre-shutdown installation methods, and commissioning methods 5 points: Method Statement mentions all in 4 above, as well as testing methods during commissioning as well as training methods.	8%
3.	Project Schedule	Project schedule for execution	0 points: No schedule 2 points: Project schedule and duration of the project is more than 7 months 4 points: Project schedule and duration of the project is more than 6 months but less than 7 months 5 points: Project schedule and duration of the project is less than or equal to 6 months	7%

	Qualitative Technical Evaluation Criteria	Returnable	Evaluation Range	Weight
C	PLANT AUTOMATION AND HUMAN MACHINE INTERFACE			40%
1.	SCADA Functionality	HMI hardware layout, including Servers; Network Layout; SCADA Application Software Options. Proof of familiarity with SCADA Software as per Scope of Work and associated Standards.	<p>0 points: No HMI hardware layout, no network layout, No proof of familiarity with the proposed SCADA Application software. no description of time synchronisation options, no description of how system back up methods and no mention of cyber security methods</p> <p>2 points: Only HMI hardware and SCADA Application software options submitted, no proposed Network Layout submitted.</p> <p>4 points: All above in 2 points plus the Network Layout submitted and an explanation of how the Eskom Standards on Cyber Security will be met.</p> <p>5 points: All above in 4 points, plus proof of familiarity with proposed SCADA software</p>	35%
2.	Licenses and Warranties	Software Licence considerations as well as warranties as per the Scope of Work	<p>0 points: no mention of how licences and warranties will be handled during procurement</p> <p>2 points: only possible list of licenses and how these will be handled during handover is described</p> <p>5 points: all in 2 points above plus a list of warranties on equipment to be supplied. (warranties start applying after Client takeover of the works)</p>	5%

PRICE AND PREFERENCE EVALUATION



Annexure J- Pricing schedule

A	B	C	D	E	F
No.	DESCRIPTION	UNIT OF MEASURE	QTY	RATE	AMOUNT
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
TOTAL TENDERERED AMOUNT					

1. Column F = Column D multiplied by Column E

- An original or certified copy of the B-BBEE certificate / Sworn affidavit in the case of QSE's must be submitted, or
- An original or certified copy of the B-BBEE certificate issued by SANAS Accredited Verification Agency must be submitted

CONTRACTUAL REQUIREMENTS



- Contractual Requirements will be applied after evaluation and will be linked to contract award
- Contractual Requirements may not necessarily be linked to the allocation of points for further scoring
- The following will form part of the Contractual Requirements:
 - Health and Safety requirements
 - Quality requirements
 - Financial requirements
 - SDL & I requirements

Shortlisted tenderers will be disqualified if they do not meet the contractual criteria by the date to be communicated to them by Eskom

HEALTH & SAFETY



1	COIDA – Valid letter of good standing or proof of application issued by the Compensation Fund (COID) or a licenced mutual company
2	Company's SHE policy, signed by CEO or the most senior person in the company. The submitted policy must comply to OHS Act Section 7
3	Health and Safety Plan based on the scope or proposal - (must address the project /scope of work OHS risk(s) and aligned with the health and safety specification or requirements)
4	Baseline Risk Assessment (BRA) of activities based on the scope or proposal - Identification, assessment and management of OHS risks related to the scope of work. The methodology used for the risk assessment must be provided together with the BRA.
5.	Annexure G: Signed acknowledgement form for Eskom's OHS, legal and other requirements to be submitted by the tenderer (form will be provided by Eskom)

QUALITY



REQUIREMENTS

- Completed and signed Form A (Annexure H)
- Quality Management System Requirements ISO 9001
 - Certificate by an authorised body or Quality Method Statement based on scope.
 - Quality Policy Approved by top management.
 - Quality Objectives Approved by top management.
- Evidence of QMS in operation Ref QM-58
 - Documented information for defined roles, responsibilities and authorities. e.g Organogram
 - Documented information for control of externally provided processes, products and services.
- Contract Quality Plan Requirements
 - Draft Contract Quality Plan specific to the scope of work as described in the tender documents (Ref ISO 10005)
 - A document of the supplier's process for delivering the level of quality required by the contract. It is a framework for the contractor's process for delivering quality. Purpose of a CQP is to outline how the results defined in the specifications will be achieved, it can be a procedure/work instruction, or a process flow template

SUPPLIER DEVELOPMENT LOCALISATION & INDUSTRIALISATION (SDL & I)



1. Transformation – BBBEE Improvement or Retention Plan:

Tenderer/s are requested to indicate the extent to which they will maintain or may improve/maintain their B-BBEE status over the contract period.

2. Local Procurement Content:

Tenderers are required to submit their proposals

3. Procurement spends on entities with a minimum 51% black ownership:

Proposals of proportion of the local procurement content, which may be subcontracted to designated black owned enterprises must be submitted.

4. Jobs:

Tenderers are required to submit proposals for the type and number of jobs that will be created and retained in South Africa as a direct result of being awarded a contract.

FINANCE



- ✓ The latest and approved financial statement not older than 18 months after year end, as per requirements of company law, must be submitted
- ✓ Where a new company is unable to provide audited financial statements for the last 18 months they may, at the discretion of Eskom, be permitted to provide audited financial statements for the most recent twelve-month operating period.
- ✓ Tenderers must note that in the case of a joint venture or special purpose vehicle (SPV) especially formed for this tender, audited financial statements for each participant in the JV / SPV is required

ENVIRONMENTAL



- ✓ The appointed service provider to comply with environmental management systems of the site including the operation control procedures (work instructions) such as waste management, water management.
- ✓ An environmental induction will be conducted to the appointed service provider prior commencing with operations on site.

LESSONS LEARNT/ COMMON MISTAKES



Common mistakes by suppliers responding to RFPs

Requirements on the Request For Proposals/Invitation to Tender

- Request For Proposals have **mandatory requirements for evaluation** and mandatory requirements for contracting. **Mandatory requirements for evaluation** should be submitted with the tender documents by the closing date otherwise the tender is non-responsive and it is not evaluated

Common Mistakes by tenderers

- E-mailing the tender documents to the Eskom representative. Tenders must be submitted via Eskom E- tendering (<https://etendering.eskom.co.za/>) site
- Submitting documents that are not signed as well as submitting incomplete/not completed documents
- Submitting documents that are not relevant to the tender while omitting to submit the mandatory documents
- Tenderers submitting documents in formats that are different to the ones issued in the RFP. This may lead to errors in the re-created templates
- Tenderers not supplying mandatory documents for one enquiry because they had already submitted the information in another RFP when responding to multiple tenders
- Sending clarification questions after the deadline has passed (deadline is 5 days before tender closure)
- Submitting tenders after closure time. Tenders close exactly on the time indicated in the RFP

QUESTIONS





THANK YOU