





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|  Eskom | Strategy | Matla Power Station Generation |
|---|----------|-----------------------------------|

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|-------|---|------------------------------|-----------------------|--|
| Title | Tender Technical Evaluation Strategy – Matla unit 1 to unit 6 Main and BFPT Condenser, Various Turbine Coolers, and screens HP Cleaning and Screens Inspections and Repairs | | Unique Identifier | |
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1. INTRODUCTION

Matla Power Station is intending to request *Contractors* to tender for HP cleaning of Main and BFPT condensers, Turbine oil coolers and EFP oil coolers and inspection and refurbishment of main and BFPT Screens

2. SUPPORTING CLAUSES

2.1 SCOPE

- HP cleaning of Main and BFPT condensers,
- HP cleaning of Turbine oil coolers,
- HP cleaning of EFP oil coolers,
- Inspection and refurbishment of main and BFPT Screens

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

Applicable to Matla 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

2.3 DEFINITIONS

None

2.3.1 Classification

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

2.4 ABBREVIATIONS

| Abbreviation | Description |
|--------------|--------------------------|
| QC | Quality Control |
| QCP | Quality Control Plan |
| BFPT | Boiler Feed Pump Turbine |

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| Abbreviation | Description |
|--------------|--|
| EFP | Electric Feed Pump |
| HP | High pressure |
| CE | European Economic Area Conformity Marking |
| HPWJ | High Pressure Water Jetting Pressure from 700 – 1700 bar |
| ID | Internal Diameter |
| OD | Outside Diameter |
| psi | Pounds per Square inch |
| QCP | Quality Control Plan |
| WJA | Water Jetting Association UK |
| WJTA | Water Jet Technology Association |

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

Tender Technical Evaluation Scoring Form

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%

3.2 TET MEMBERS

Table 1: TET Members

| TET number | TET Member Name | Designation |
|------------|-------------------|---------------------------|
| TET 1 | Thandeka Mkhonza | System Engineer (Turbine) |
| TET 2 | Onkokame Setdisho | System Engineer (Turbine) |
| TET 3 | Collins Phooko | System Engineer (Turbine) |

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3.3 MANDATORY EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

| | Mandatory Evaluation Criteria | Reference to Technical Specifications | Motivation and Comments |
|--|-------------------------------|---------------------------------------|-------------------------|
| | N/A | | |
| | | | |

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

| KPA - Area of Evaluation | Weight (%) | KPI - Criteria Evaluation Indicator | Minimum Criteria Evaluation Requirements | Source | Unit | Scale | | | | Score | TOTAL RATING |
|--|------------|-------------------------------------|---|---|------|--|--|---|---|-------|--------------|
| Company Technical resources availability (Human) | 10% | Experience | • Project / site manager / accountable person with 2 years minimum relevant experience (incl CV) or Supervisor with 2 years minimum relevant experience (incl CV) | CV including technical qualifications /Experience and employment | % | No evidence of the recognized certificate to operate the high-pressure water jetting equipment =0% | Experienced Project / site manager /supervisor and less than 2 years' experience in said position (incl CV) =40% | Experienced Project / site manager /supervisor and 2-3years experience in said position (incl CV) = 80% | Experienced Project / site manager /supervisor with 3+ years in said position (incl CV) = 100% | | |
| Company Technical resources availability (Human) | 10% | Technical resources | 6x High Pressure Wash Jet (HPWJ) Machine Operators with 2 years minimum relevant working experience and trained and certified by an independent affiliate WJA or WJTA | The qualifications and experience of the resources (CV) shall demonstrate reasonable knowledge in the field of (HPWJ) All resources shall have a minimum of 2 years working experience in HPWJ Operators shall submit the certificates of operating the HPWJ issued by an independent affiliate WJA or WJTA | % | Not submitted= 0% | 4 trained certified operators with 2 years minimum relevant experience in HPWJ (incl CV) = 40% | 4 trained certified operators with 2-3 years minimum relevant experience in HPWJ (incl CV) = 80% | 4 trained certified operators with 3-4 years minimum relevant experience in HPWJ (incl CV) = 100% | | |
| Company Capability (5 1 3) | 20% | Experience | Venifiable Reference list HPWJ cleaning (minimum of 500 bar working pressure) of industrial heat exchangers in the last 5 years Venifiable references of at least 3 shell and tube heat exchanger projects successfully conducted in the past 5 years | Reference list of works executed where HPWJ was done list must contain - contact details of where previous works was completed, and the scope of work performed with cleaning pressures and heat exchangers detailed | | Did not submit information of previous work on HPWJ=0% | Venifiable references of at least 3 shell and tube heat exchanger projects successfully conducted in the past 5 years at a minimum of less than required 300 -499 bar in the past 5 years= 40% | Venifiable references of at least 3 shell and tube heat exchanger projects successfully conducted in the past 5 years at a minimum of 500-699 bar = 80% | Venifiable references of at least 3 shell and tube heat exchanger projects successfully conducted in the past 5 years at a minimum of 700-1000 bar = 100% | | |

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Main and BFPT Condenser, Various Turbine Coolers, and
screens HP Cleaning and Screens inspections and Repairs

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| | | | | | | | | | | |
|--|-----|-----------|--|---|---|---|---|--|--|--|
| Pumps and Hoses technical details and compliance level to the HPWJ specification 5 1 7 & 5 1 8 & 5 1 9 | 40% | Resources | The contractor shall submit the technical datasheets for the HPWJ pumps to be used onsite. The details of the cleaning components connected on the pumps shall be submitted in the schematic format for evaluation. The technical details (flow rates at 1000 bar and pressure ratings) of each component connected on the pump shall be submitted for evaluation. Components to be evaluated for compliance are the following a) HPWJ pumps capacity and total number to be available on site b) Number of nozzles connected on each pump | Pumps and components information shall be evaluated against the specification 240-1076779 40 for compliance | The supplier did not submit the relevant information, or submitted information does not meet requirement as stipulated in section 4 5 =0% | The submitted technical datasheets of the pumps, hoses and foot valves as well as the proposed connection setup is fully compliant to the specification 240-107677940 section 4 5 the minimum nozzle flow rate shall be 50 litre/min at 1 000 bar working pressure with a minimum of a) HPWJ pumps with 1000 bar capacity 3 off for main condenser and 1 off on BFPT condenser b) Number of nozzles connected on main condenser to be 3 off and 1 off on the BFPT condenser = 40% | The submitted technical datasheets of the pumps, hoses and foot valves as well as the proposed connection setup is fully compliant to the specification 240-107677940 section 4 5 the minimum nozzle flow rate shall be 50 litre/min at 1 000 bar working pressure with a minimum of a) HPWJ pumps with 1000 bar capacity 4 off for main condenser and 1 off on BFPT condenser b) Number of nozzles connected on main condenser to be 4 off and 2 off on the BFPT condenser = 80% | The submitted technical datasheets of the pumps, hoses and foot valves as well as the proposed connection setup is fully compliant to the specification 240-107677940 section 4 5 the minimum nozzle flow rate shall be 50 litre/min at 1 000 bar working pressure with a minimum of a) HPWJ pumps with 1000 bar capacity 5 off for main condenser and 2 off on BFPT condenser b) Number of nozzles connected on main condenser to be 5 off and 3 off on the BFPT condenser = 100% | | |
|--|-----|-----------|--|---|---|---|---|--|--|--|

3.5 TET MEMBER

RESPONSIBILITIES Table 4:

TET Member Responsibilities

| Mandatory Criteria Number | TET 1 | TET 2 |
|-----------------------------------|-------|-------|
| 1 | X | X |
| 2 | X | X |
| Qualitative Criteria Number | TET 1 | TET 2 |
| 1 | X | X |
| 2 | X | X |
| 3 | X | X |
| 4 | X | X |

3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.6.1 Risks

Table 5: Acceptable Technical Risks

| Risk | Description |
|------|-------------|
| 1 | N/A |

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| | |
|---|--|
| 4 | |
| 5 | |
| 6 | |

Table 8: Unacceptable Technical Exceptions / Conditions

| Risk | Description |
|------|-------------|
| 1 | N/A |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |

4. AUTHORISATION

This document has been seen and accepted by

| Name | Designation | Signature |
|--------------------|----------------------------|-----------|
| Lindokuhle Ngobese | Acting Engineering Manager | |

5. REVISIONS

| Date | Rev. | Compiler | Remarks |
|-----------------|------|-----------|-------------------|
| 27 October 2022 | 0 | T Mkhonza | Original document |

6. DEVELOPMENT TEAM

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

•T Mkhonza

7. ACKNOWLEDGEMENTS

None

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