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| | |
|---------------|---|
| ENQUIRY NO | |
| NAME OF BUYER | |
| NAME OF PM | Mongezi Binda |
| PROJECT | Impala/Athene/Hillside Emergency Bypass- Refurbishment project |
| SCOPE | The replacement of towers, insulators, hardware, ADSS and refurbishment of the lines. |

| CONTRACTOR/SUPPLIER | |
|---------------------|--|
| Name and Details | |

| | |
|-------------------------|---|
| PURPOSE | To assess whether the above-mentioned supplier/s submitted the required technical documentation as required in the Enquiry referenced above, and that the documentation complies with the specified requirements. |
| REFERENCE DOCUMENTATION | <ol style="list-style-type: none"> 1. The standard for the construction of overhead powerlines (TRMSCAAC5)- 240-47172520- rev 5.2. 2. OPGW hardware and installation Requirements for Overhead Lines- 240-110403330. 3. Optical Distribution Frame / Patch panel / patch box - 240-70733995 (Option A) 4. Specification for Overhead Ground wire with Optical Fibres – NRS061-1 5. Detailed Design Report for Athene Hillside Impala 1 & 2 132kV Bypass refurbishment- LES0558. <p>Note: The list of reference documentation could vary depending on the nature of the enquiry</p> |

| EVALUATION CRITERIA |
|--|
| <p>The tender submission score sheet indicating the criteria to be used, the weighting of each criterion and the weighting per discipline in multidisciplinary packages shall be authorised by the relevant senior manager. The approved tender submission score sheet shall be issued with the enquiry document to be used for technical evaluation.</p> |

Notes: The score for all documents will not be exclusively based on submission; the content and quality of the documents will be considered.

Free-issue items:


- Line hardware.
- Glass insulators
- Conductor fittings

Supply and installations by contractor:

- Complete towers- including all miscellaneous items for that tower (224B x 2 , 224C x 4 and 433D x 2 cross-arms)
- ADSS cable
- ADSS hardware (suspension assemblies, strain assemblies, joint boxes, download clamps vibration dampers etc.).
- Substation equipment including duct fibre optic cabling.

Comments field to be populated for all scores. If the contractor complies with the all the requirements, he will achieve the maximum score for each item.

The engineering gatekeeper is 75%. With compulsory minimum's for sections 2, 3, 4 and 5.

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| QUALITATIVE EVALUATION CRITERIA | | | | | |
|--|---|----------------------|------------------------------|------------|-----------------------------|
| DOCUMENT REQUIREMENTS | | | WEIGHT AND SCORE % RESULT | | |
| | | | | | |
| 1. List of Suppliers and Subcontractors to be used on Different Facets | | | | | |
| Item No. | Item | Weighted (10%) | | | |
| | | Weight (W) | Actual (A) | Max (M) | Result(R) (A / M) X W |
| 1.1 | Provide a list of proposed suppliers and subcontractors for the following; Need supplier details plus Drawings of assemblies and individual components. <ul style="list-style-type: none">ADSS hardware- supplier details plus drawings (0.5+0.5).Substation fibre equipment- supplier details plus drawings (0.5+0.5).Towers-224 and 433 series (steel to be sourced locally)- supplier details plus drawings (0.5+0.5). | 3% | | 3 | |
| 1.2 | <ul style="list-style-type: none">ADSS cable – sourced from pre-approved suppliers <u>ONLY</u> Supplier details plus drawings (1+1). | 2% | | 2 | |
| 1.3 | Provide details for fibre installer together with splicer. (installer credentials and splicer details) (2+1). | 3% | | 3 | |
| 1.4 | Provide letters of undertaking stating their willingness and availability to be involved on the project should the bidder get the project. Steel supplier confirmation-1 ADSS cable supplier confirmation-0.5 ADSS cable Hardware supplier confirmation-0.5 | 2% | | 2 | |
| Result (R) = (A / M) X W | | Maximum : 10% | | | |
| Subsection = sum of Result (R) | | | | | |
| Comments | | | | | |
| 1.1 | | | | | |
| 1.2 | | | | | |
| 1.3 | | | | | |
| 1.4 | | | | | |
| | | | | | |



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2. Survey of line and development of construction methodology

| Item No. | Item | Weighted (30%) | | | |
|---------------------------------------|--|----------------------|------------|---------|-----------------------|
| | | Weight (W) | Actual (A) | Max (M) | Result(R) (A / M) X W |
| 2.1 | Provide document on how the line will be surveyed to execute the work. Document must cover, details of crossings, major obstacles , how offloading, assembly and erection of new towers will be done, dismantling of existing towers . (1 points for every highlighted point above). | 10% | | 5 | |
| 2.2 | Provide a construction methodology document covering all steps to be followed when the project is executed. Document must cover aspects of: 1. Dropping and safe keeping of phase conductors on all towers. (1) 2. Protection method used to prevent damage to conductor over the roads, fences etc. (crossing methodologies). (1) 3. Dismantling and safe removal of corroded towers. (1) 4. Assembly and erection of new towers. (1) 5. Connection of new hardware, insulators and existing conductors to new towers. (1) 6. Disconnection of existing ADSS and reconnection of new fibre system. (1) 7. Refurbishment of existing 433 strain towers. (1) | 15% | | 7 | |
| 2.3 | Provide a document to show how splicing and installation of joints boxes will be done. Note that this has to adhere to Eskom document 240-7073288 Fibre Optic Cable System Acceptance Testing | 5% | | 5 | |
| Result (R) = (A / M) X W | | Maximum : 30% | | | |
| Subsection = sum of Result (R) | | | | | |

Comments

2.1

2.2

2.3



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3. Testing and confirmation of material

| Item No. | Item | Weighted (6%) | | | |
|--------------------------------|---|---------------|------------|---------|-----------------------|
| | | Weight (W) | Actual (A) | Max (M) | Result(R) (A / M) X W |
| 3.1 | Provide document to list tests to be done on the new ADSS cable before installation. (Continuity, insertion loss , OTDR, integrity, etc.) | 4% | | 5 | |
| 3.2 | Provide document that will be used to verify material for ADSS cable, ITP's will also be acceptable. | 2% | | 5 | |
| Result (R) = (A / M) X W | | Maximum : 6% | | | |
| Subsection = sum of Result (R) | | | | | |
| Comments | | | | | |
| 3.1 | | | | | |
| 3.2 | | | | | |

4. Safe work procedures.

| Item No. | Item | Weighted (27%) | | | |
|--------------------------------|--|----------------|------------|---------|-----------------------|
| | | Weight (W) | Actual (A) | Max (M) | Result(R) (A / M) X W |
| 4.1 | Provide a safe work procedures for earthing during construction activities, details must include risks and safety measures, equipment to be used, etc. and earthing when working in proximity to energized lines. | 5% | | 5 | |
| 4.2 | Provide safe work procedures for construction: <ul style="list-style-type: none">• Dismantling of existing towers (3)• Disconnection of hardware/ conductor bundle from towers (3)• Assembly and erection of new towers (3)• Re-connection of hardware/ conductor bundle on new towers (3)• Refurbishment of 433 tower beams (3)• Refurbishment of foundations (3)• Re-routing of existing ADSS fibre and installation of new ADSS on new towers (4) | 22% | | 22 | |
| Result (R) = (A / M) X W | | Maximum : 27 | | | |
| Subsection = sum of Result (R) | | | | | |
| Comments | | | | | |
| 4.1 | | | | | |
| 4.2 | | | | | |


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| 5. Previous experience and capability | | | | | |
|---------------------------------------|--|----------------|------------|---------|-----------------------|
| Item No. | Item | Weighted (27%) | | | |
| | | Weight (W) | Actual (A) | Max (M) | Result(R) (A / M) X W |
| 5.1 | <p>Provide a full list of previous similar projects undertaken- must include project name, length of line, voltage, contact persons and actual tasks done on that project.</p> <ul style="list-style-type: none">• Project details supplied with actual tasks done- (5)• Details of contact people provided for each project- (5) | 10% | | 10 | |
| 5.2 | <p>Provide detailed organogram of proposed construction teams to be used for this project. Also provide detailed schedule. CV's of key personnel, like Project Manager, Site supervisor, Linemen and operators to be provided.</p> <ul style="list-style-type: none">• Organogram provided with all details- CEO, project manager, site supervisors, team leaders, workers (6)• Detailed schedule provided- (3)• CV of PM, Site supervisors, linemen, climbers (8) | 17% | | 17 | |
| Result (R) = (A / M) X W | | Maximum : 27 | | | |
| Subsection = sum of Result (R) | | | | | |
| Comments | | | | | |
| 5.1 | | | | | |
| 5.2 | | | | | |

| FINAL TOTAL SCORE EQUALS THE SUM OF SUBSECTIONS 1 to 5 AS A PERCENTAGE | |
|--|--|
| FINAL TOTAL PERCENTAGE OF SUBSECTIONS 1 to 5 | |

| TECHNICAL THRESHOLD |
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| For this project the Technical Threshold will be 75% |

| Overall Comments |
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| TECHNICAL EVALUATORS | | | |
|----------------------|---------------------------|------|-----------|
| Name | Functional Responsibility | Date | Signature |
| Bharat Haridass | Senior Consultant | | |
| Ricarlin Pillay | Engineer | | |
| | | | |

| REVIEWED BY | | |
|-------------|-----------|------|
| | | |
| Name | Signature | Date |

| APPROVED BY | | |
|-------------|-----------|------|
| | | |
| Name | Signature | Date |



RB Pillay
4148942
20/08/19