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|  Eskom | Standard | Technology |
|--|-----------------|-------------------|

Title: **TECHNICAL EVALUATION
STANDARD FOR AIR CORE
REACTORS**

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1. Introduction

This document is aimed at outlining the standard to be adhered to when performing technical tender evaluations for tender submissions for air core reactors for any application. This document was compiled in accordance with [1].

2. Supporting clauses

2.1 Scope

This document covers the technical evaluation criteria to be used during tender technical evaluations.

2.1.1 Purpose

This document is in place to ensure that the technical evaluations on air core reactors is carried out according to the requirements of Eskom Holdings SOC (Ltd)..

2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited Divisions.

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] 32-1034, Eskom procurement and supply chain management.
- [2] 240-4258702, Specification for air core reactors.
- [3] 240-56030435, outdoor ceramic station post insulators for systems with nominal voltages up to 765kV specification
- [4] 240-79707491, technical evaluation standard for outdoor ceramic station post insulators for systems with nominal voltages up to 765kV
- [5] ISO 9001, Quality Management Systems

2.2.2 Informative

- [6] 32-9, Definition of Eskom documents.
- [7] 32-1034, Eskom Procurement and Supply Management Procedure
- [8] 32-644, Eskom documentation management standard
- [9] 474-65, Operating manual of the Steering Committee of Technologies (SCOT)
- [10] QM58, Supplier contract quality requirements specification

2.3 Definitions

2.3.1 General

| Definition | Description |
|---|---|
| Eskom Assessment Representative(s) | The person(s) appointed by Eskom to perform evaluation of tender submissions in line with Eskom requirements. |

| Definition | Description |
|------------------------------------|--|
| Sliding scale points system | Refers to allocating maximum points to the tenderers whose value in question is higher according to the most superior performance amongst others and proportionally deducting points from those tenderers who are lower than that reference value. |

2.3.2 Disclosure classification

Public domain: published in any public forum without constraints (either enforced by law, or discretionary).

2.4 Abbreviations

Not applicable.

2.5 Roles and responsibilities

The Air Core Reactor Care Group Coordinator must ensure that this document is updated, renewed and current at all times.

2.6 Process for monitoring

This process will be monitored and governed by the procurement process.

2.7 Related/supporting documents

Not applicable.

3. Technical evaluation procedure

The technical evaluation criteria are compiled according to Eskom's procurement procedure [7], where technical evaluation accounts for a score of 40 points in the total evaluation process and is evaluated on a point deduction basis. There are two qualifying levels:

Critical functionality: These are the criteria, which are critical and non-negotiable and will result in a point deduction of 26 points, if not met.

Scored criteria: These are criteria, which will result in a point deduction of 15 points, if not met, and 10 points, if partially met.

The evaluating representatives will allocate scores to each tender submission, based on the scoring matrix in Annex A.

The total score will be taken into consideration when awarding the tender, with a minimum score of 20 points indicating technical acceptance with the overall functionality threshold set at 80 points.

4. Authorization

This document has been seen and accepted by:

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5. Revisions

| Date | Rev. | Compiler | Remarks |
|------------|------|------------|---|
| March 2015 | 1 | K Pickster | New document required for air core reactors |

6. Development team

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

- Keri Pickster
- Mpho Moiane

7. Acknowledgements

Not applicable.

Annex A – Technical evaluation criteria for air core reactors

| Specification | | 240-4258702 Specification for air core reactors | | |
|---|--|---|--|---------------------|
| 1. Level 1 – Tender deliverables and Mandatory Technical Requirements | | | | |
| Activity | | Clause | Points deduction | Qualification level |
| 1.1) | Compliance with reactor ratings | AB schedules | -26 | Critical |
| 1.2) | Compliance with post insulator specification | AB schedules | -26 | Critical |
| 1.3) | Has every specified requirement been included in the tender price? | AB schedules | -26 | Critical |
| 1.4) | Is all information supplied in English? | | -26 | Critical |
| 1.5) | All tests offered (at correct test levels) | 3.10 | -26 | Critical |
| 1.6) | Drawings (formal prelim design drawings) | 3.11 | -26 | Critical |
| 1.7) | Reference list with comparable references, including contact details | 3.20 | -26 | Critical |
| Level 2 – Scoring/Rating on discretionary items (only on submissions that pass Level 1) | | | | |
| Activity | | Clause | Weight | Qualification level |
| 2.1) | Interchangeability | 3.2.2 | -10: Partially compliant -15: Not compliant | Scored |
| 2.2) | Acoustic levels | 3.5 | -10: Partially compliant -15: Not compliant | Scored |
| 2.3) | Instruction/maintenance manuals | 3.11 | -10: Partially compliant -15: Not compliant | Scored |
| 2.4) | Design safety margin | 3.17 | -10: Partially compliant -15: Not compliant | Scored |
| 2.5) | Overload capability demonstrated | 3.16 | -10: Partially compliant -15: Not compliant | Scored |
| 2.6) | Short circuit capability (calculations provided) | 4.3, 5.3, 6.3, 7.3...as applicable | -10: Partially compliant -15: Not compliant | Scored |
| 2.7) | Temperature rise calculations and measurement methods | 4.1, 5.1, 6.1, 7.1...as applicable | -10: Partially compliant -15: Not compliant | Scored |
| 2.8) | Are deviations declared and submitted? | Deviation schedule, 3.19 | -10: Partially compliant -15: Not compliant | Scored |