

 Eskom	Report	Technology
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Title: **TECHNICAL EVALUATION
CRITERIA FOR STANDBY
BATTERIES**

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Area of Applicability: **Engineering**


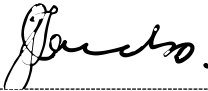

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1. Introduction

This document provides an overview of Eskom's technical evaluation criteria to be used when evaluating the tender submissions for the supply of standby batteries in Eskom. It has Annexes developed to address various aspects required to perform technical evaluations.

2. Supporting Clauses

2.1 Scope

This document contains the technical evaluation criteria and associated documents relating to a commercial enquiry for the technical evaluation, testing and acceptance of Flooded Lead Acid – and Nickel Cadmium standby batteries, accessories and ancillary equipment within Eskom Holdings SOC (Ltd).

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 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 Procedure, Rev 4.
- [2] 240-48929482, Tender Technical Evaluation Procedure
- [3] ISO 9001 Quality Management Systems.
- [4] ISO 14001 Environmental Management Systems.
- [5] 240-56360034, Stationary Vented Lead Acid Batteries Standard.
- [6] 240-56360086, Specification for Vented, Nickel Cadmium Cells and Batteries
- [7] 240-51999453, Standard Specification for Valve-regulated Lead-acid Cells

2.2.2 Informative

None

2.3 Definitions

Definition	Description
Enquiry	A competitive or non-competitive request for information, interest, quotations or proposals made to a supplier, a group of suppliers or the market at large.
Tender	A tender refers to an open or closed competitive request for quotations / prices against a clearly defined scope / specification.

2.3.1 Disclosure classification

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

2.4 Abbreviations

Abbreviation	Description
LAP	List of Accepted Products
n/a	not applicable
OEM	Original Equipment Manufacturer
OU	Operating Unit
PDE	Power Delivery Engineering
SME	Subject Matter Expert
TET	Technical Evaluation Team

2.5 Roles and Responsibilities

As per 240-48929482, Tender Technical Evaluation Procedure

2.6 Process for monitoring

None

2.7 Related/Supporting Documents

None

3. Tender Technical Evaluation Strategy

This section details the methodology to be employed by Eskom in scoring the “Technical” category of the tender evaluation. This evaluation exercise is performed by the appointed Eskom TET.

Tenderers are encouraged to do the following in support of a more efficient evaluation process:

- a) Submit the MS Excel spreadsheets of the Technical Schedules A&B in the native (electronic) format.
- b) Submit all supporting documents (including drawings), stated in the relevant Reference column on the Technical Schedules, in electronic (e.g. acrobat file) format.

3.1 Technical Evaluation Threshold

The minimum weighted final score (threshold) required for a tender to be acceptable from a technical perspective is 80%.

3.2 Technical Evaluation process

The technical evaluation procedure is generic to all battery technologies. The evaluation process has two main parts; Level 1 and Level 2, which are related.

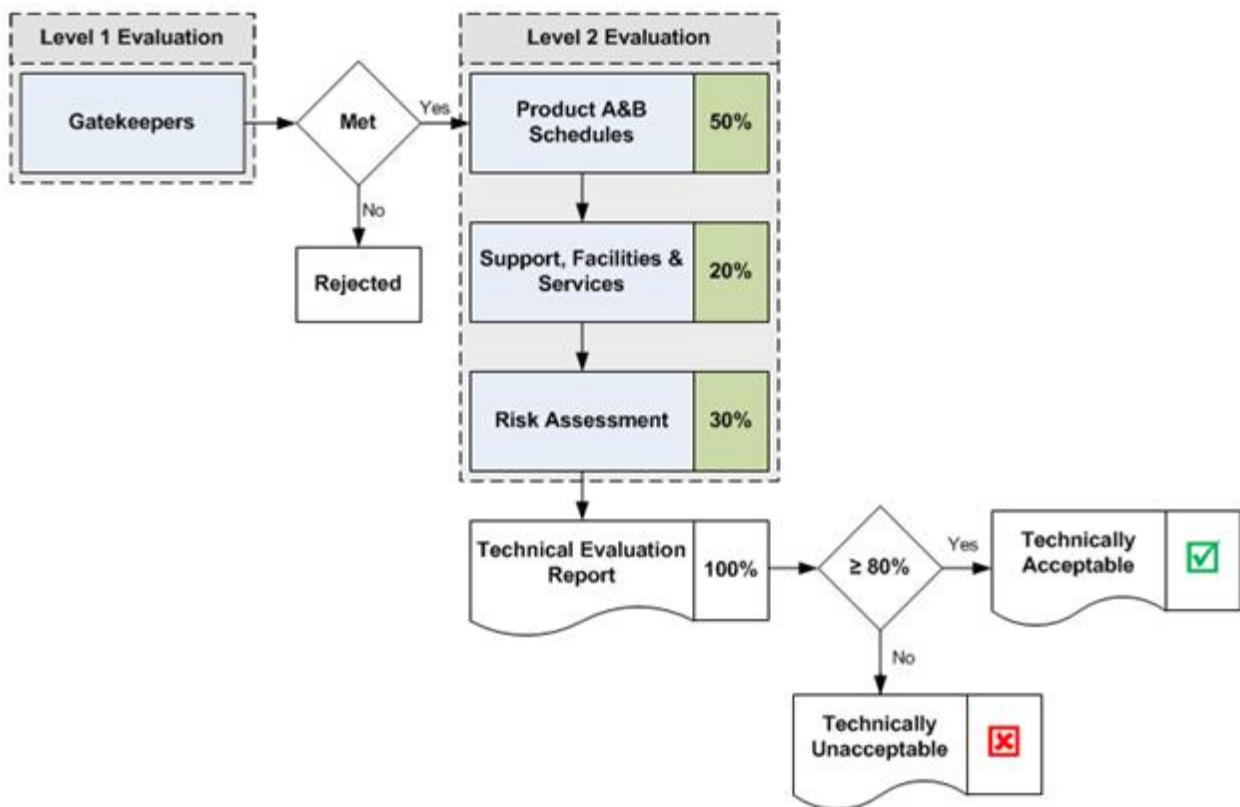


Figure 1: Technical evaluation process

3.2.1 Level 1 evaluation

This part of the evaluation starts when submissions are opened for the first time. It begins with the evaluation of the Technical Gatekeepers (see Table 2). Tenders not meeting any of the Technical Gatekeepers shall be immediately excluded from further evaluation, and shall be assigned a Technical score of 0%.

3.2.2 Level 2 evaluation

Tenders which pass the Technical Gatekeepers shall be adjudicated a score out of 100%, made up of scoring in three sub-categories:

- a) Technical sub-category 1: Product A&B Schedules (Weight = 50%).
- b) Technical sub-category 2: Suppliers support, facilities & services (Weight = 20%).
- c) Technical sub-category 3: Risk (Weight = 30%).

3.2.2.1 Sub-category 1: Product A&B Schedules

- a) This section shall comprise scoring of the technical schedules of the products. Not all items will be scored so as to maintain the focus of the evaluation on critical functionality.
- b) Compliance with non-scored items (including non-scored components), and major deviations to scored items shall be addressed in Sub-category 3: Risk and Support.
- c) The A&B Schedules use a default weight of 1 for each scored item. Critical items are assigned higher weights. For example, a weight of 3 indicates that the item will count the same as three items with weight 1.
- d) Each item will be assigned a score, in line with Table 1, by the Eskom evaluation team based upon the tendered response and cross-checked with the supporting documents provided.

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Table 1: Scoring of items in Technical Schedules A&B

Criteria	Score
Fully compliant	5
Partially compliant (minor deviation)	2
Non-compliant (major deviation)	0

- e) The score for each item will be multiplied by its weight to obtain the total score per item.
- f) All scores for the A&B Schedule will be tallied and a percentage shall be calculated based on the maximum possible score. This will be recorded as the percentage score per product type.
- g) The scores per product type in turn will be weighted to obtain an overall score for all products (see Table 3).

3.2.2.1.1 Sub-category 2: Suppliers support, facilities & services

- a) This assessment is performed on the basis of assessing the supplier's capability to enter into a contract with Eskom with respect to a specific product and service.
- b) The product will be the actual batteries and accessories supplied and this assessment will be done at the Original Equipment Manufacturer (OEM) factory. The project shall have right to decide if the OEM shall be visited or if the local agent facilities shall be sufficient, based on tender submissions and other business factors.
- c) The services will include the supply, transportation, de-commissioning, disposal, formation, installation and commissioning at site of the batteries supplied.
- d) This services portion will be assessed at the local agent or tenderer facilities. If any portion of the services are sub contracted this must be evaluated at the subcontractor's facilities.
- e) This section shall be scored by the technical evaluation team following a one day visit to each Tenderer's local offices.
- f) Supplier visits shall be conducted during the tender evaluation phase.
- g) Only those suppliers that have met the Technical Gatekeeper criteria shall be visited.
- h) Suppliers (OEMs/local agents) shall be advised of their qualification for the visit, and on the exact date of the visit within six weeks after tender closure.
- i) Scoring of sub-sections in this this sub-category shall be assigned by the TET as indicated in Annex A.

3.2.2.1.2 Sub-category 3: Risk

This sub-category shall comprise scoring in two main areas:

Product risk (60%) – A narrative compiled by the Eskom Technical evaluation team, summarising major non-conformances to the standards/specifications, and excessive or re-occurring minor non-conformances between products. This summary shall be used to assign a product risk score in the scale:

- 1) 100% - Low risk
- 2) 80% - Acceptable risk
- 3) 40% - High risk
- 4) 0% - Unacceptably high risk

Performance questions (40%) – A score derived from responses to questions below:

1)	Has a regional track record been supplied	30%
2)	Has an international track record been supplied	20%
3)	Information on equipment limitations and failure modes and product design enhancements	10%
4)	Do you have the local expertise to provide in-depth back-up support	15%
5)	Do you have in-house abilities to provide all required services	15%
6)	OEM support on technical issues	10%

3.3 Technical Evaluation report

This report and any actions that are listed or recommended as a result of this assessment, is by no means a confirmation or guarantee that any contract will be entered into by Eskom and the supplier or that battery supply contract performance has been achieved.

Any actions undertaken by the supplier as a consequence of this report is for the suppliers account. Any liability for the said actions undertaken by the supplier is not transferrable to Eskom in any way.

The TET has no authority or responsibility in the decision taken by Eskom with respect to contracting for a product or service.

Any statements, intentions and/or actions expressed by the TET during the assessment and post the assessment has no effect, and does not constitute any liability to Eskom with regards to contract placement or battery supply contract performance guarantees.

3.4 TET members

The technical evaluation team shall consist of at least three active members of the Batteries Care Group which shall be selected by the Project Leader of the enquiry.

3.5 Mandatory Technical Evaluation Criteria

Table 2: Mandatory Technical Evaluation Criteria

#	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1	All tenderer information shall be in English and captured on the electronic spreadsheets (Technical Schedules A&B) issued. All references to supporting documents shall be stated in the relevant column on the Technical Schedules.	As per tender instructions	Ensure all information supplied as requested to enable proper technical evaluation.
2	All required supporting documentation shall be available (including drawings).	As per tender instructions	Full compliance to all certificates, type tests, reports, quality ISO certification, etc.
3	Formal OEM - agent agreement stating the distribution agreement, technical support offered and the warranties offered for this enquiry.	As per tender instructions	Minimise risk for Eskom with regards to local agents.
4	Detailed track records for all offered equipment. (Companies, contact details, sites, etc.)	As per schedule A & B	Track record to confirm acceptable performance of cells offered.
5	Tenderers shall have a permanent South African office for supply and support of standby batteries. Advanced-level support shall be available from the South African office on all tendered products for the duration of the contract.	As per tender instructions	Ensure local support in place. Sub-contractors if used to be specified for the full duration of the contract.
6	All battery cabinets and stands must be manufactured local.	As per schedule A & B	Ensure all cabinets and stands comply to specifications and local back-up available

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3.6 Qualitative Technical Evaluation Criteria

Table 3: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)
1	General requirements	As per applicable clause/s in Technical standard	10%	
2	Electrical performance requirements		25%	
3	Mechanical requirements		10%	
4	Operational requirements		15%	
5	Ancillary equipment		10%	
6	Tests		20%	
7	Packaging, labelling, marking and transport		10%	

3.7 TET Member Responsibilities

Table 4: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	... TET n
All Items	X	X	X	X
Qualitative Criteria Number	TET 1	TET 2	TET 3	... TET n
All Items	X	X	X	X

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3.8 Foreseen Acceptable / Unacceptable Qualifications

3.8.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1	No local Eskom track record available for batteries offered.
2	Not full range of cell capacities on offer

Table 6: Unacceptable Technical Risks

Risk	Description
1	No local regional track record available for batteries offered.
2	Non-compliance to type test requirements
3	OEM support and agent agreement letter not in place
4	Using of non-Eskom approved sub-contractors

3.8.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
1	None

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Table 8: Unacceptable Technical Conditions

Risk	Description
1	Local facilities to provide technical support for commissioning of batteries with multiple charging bays not available.
2	Details of all test equipment and battery discharge sets used to do battery commissioning, include calibration certificates not provided.
3	Qualifications of technical personnel or experience in the standby power systems field not provided.
4	Certificates for vehicle transporting hazardous materials (Transporting Hazardous substances) not available
5	Hazmat agreement (Transporting Hazardous substances) not available.

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4. Authorisation

This document has been seen and accepted by:

Name and surname	Designation
Deon van Rooi	Metering, DC & Security Technologies Manager
Musiwa Gidi	Senior Advisor: Procurement
Thomas Jacobs	Chief Engineer: DC & Auxiliary Supplies

5. Revisions

Date	Rev	Compiler	Remarks
Aug 2019	4	C van Zyl	<p>Section 3:</p> <p>Added "Tenderers are encouraged to do the following in support of a more efficient evaluation process:</p> <ul style="list-style-type: none"> a) Submit the MS Excel spreadsheets of the Technical Schedules A&B in the native (electronic) format. b) Submit all supporting documents (including drawings), stated in the relevant Reference column on the Technical Schedules, in electronic (e.g. acrobat file) format." <p>Table 1:</p> <p>Scoring changed to 5, 2 and 0.</p> <p>Table 2:</p> <p>Removed the mandatory requirements that supporting documents shall be in electronic format, in line with the requirements (14.7.9.2 clause 12. c)) of 32-1034, Eskom Procurement and Supply Chain Management Procedure, Rev 4.</p>

Date	Rev	Compiler	Remarks
July 2019	3	C van Zyl	<p>Changed the contents to only apply to Flooded Lead Acid and Nickel Cadmium cells.</p> <p>Removed reference to Desktop evaluation.</p> <p>Updated requirements of Sub-category 2: Suppliers support, facilities & services.</p> <p>3.4 TET members:</p> <p>Updated clause to “The technical evaluation team shall consist of at least three active members of the Batteries Care Group which shall be selected by the Project Leader of the enquiry.”</p> <p>Added Figure 1.</p> <p>Added Annex A.</p>
Aug 2017	2	C van Zyl	<p>Revision of original document.</p> <p>3.4 TET members:</p> <p>Added “During each evaluation, the technical lead shall ensure that at least 50% of the TET members (stated in Table 2) shall be available.”</p> <p>Table 3:</p> <p>Added more detail to the Mandatory Technical Criteria Description.</p> <p>Removed item 5, Offered warranties.</p> <p>Removed the 3 year minimum track record in item 6.</p> <p>Table 4:</p> <p>Changed the Reference to Technical Specification to “As per applicable clause/s in Technical Standard” to make it applicable to all technical standards.</p>
May 2015	1	C van Zyl	New document.

6. Development team

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

- Christo van Zyl
- Thomas Jacobs

7. Acknowledgements

Not applicable.

Annex A – Support, facilities and services checklist

The **Support, facilities and services Checklist** defined in this document is intended to assist with ensuring the required levels of support, quality and service can be achieved by the Battery Supplier through the proper facilities, resources and processes implemented in the routine operations of the supplier.

Familiarity with the technical requirements of the referenced documents is assumed – detailed technical requirements are not interrogated here.

Where any activities are contracted out and not handled in-house the contractors are to be evaluated and approved as well by the TET. These contractors will then also be linked to the contract if successful with the tender and as such cannot be changed on an ad hoc basis with prior consultation with Eskom.

Suggested agenda for visit:

Presentation of supplier’s overall process, staff, team who will be fulfilling orders, unpack offered guarantees and warranties (indicate if guarantees/warranties or both are included in the offered price) – ½ hour.

Important: Indicate which of the offered cells are single cells and which are blocks – only single cells will be accepted for these ENC’s.

Walkabout at the facilities to inspect:

- Battery charging and testing facilities,
- Test and safety equipment.
- Introduction of the personnel.
- Works processes such as goods receiving; testing, storing, crating and despatching will be shown.

Supplier details

Enquiry ID and name	
Scope	The design, manufacture at works, testing, quality assurance, delivery to site or stores, off-loading, erection, commissioning, de-commissioning and disposal of valve regulated lead acid cells, battery stands and battery cabinets, and all accessories.
Supplier Name	
Supplier Contact Person – Name and contact details	
Description of products offered	
Checklist results	Score
Issues Identified	
Name, signature, & date	

No	Ref	Standard	Compliant ✓ Part Compliant ½ Non-compliant ✗	Details if not fully compliant
	[1]	Documentation. Works orders for work in progress are available.		
	[1]	Approved working drawings and/or instructions for the work in progress are at hand.		
	[1]	Traceability. Works orders can be traced to customer orders.		
	[1]	Traceability. Stock in hand can be traced customer orders.		
	[1]	Traceability. Delivered items can be traced back to process records and test certificates.		
	[1]	In-coming goods inspection. Incoming goods inspection is documented for all incoming goods.		
		Specifications for items and materials are to be at hand for use by inspectors as required.		
	[1]	Non-conforming goods received. Non-conforming goods are clearly marked and segregated so that it cannot be used.		
		Corrective action processes are in place to deal with non-conforming goods.		
	[1]	In-house charging and testing. Charge and test procedures are documented, with required inspection and test results.		
	[1]	Non-conforming battery tests. Processes are in place to deal with non-conforming battery tests by rework or disposal.		
		Non-conforming battery cells are clearly segregated.		
		Records showing the process are available.		

No	Ref	Standard	Compliant ✓ Part Compliant ½ Non-compliant ✗	Details if not fully compliant
	[1] [8]	Test certificates. Test certificates for stock in hand can be produced when required.		
	[7]	Battery crating for delivery Crating of all batteries must comply with Eskom standards		
	[7]	Crates labelling Must be labelled with cell information, quantity, order number, site name and safety notices.		
	[7]	Storage facilities acceptable. Storage facilities for incoming goods and material, work in progress and completed stock are acceptable.		
	[8]	Charge / discharge facilities acceptable. Appropriate facilities, charge/discharge instruments, test instruments are available and in use.		
	[5] [6]	Installation, commissioning and maintenance procedures. These are at hand and in use.		
	[1]	Competent installation, commissioning and maintenance staff available. Staff is suitably qualified, declared competent and able to perform the requisite processes.		Per presentation...
	[1]	Competent investigation staff Staff must be available to conduct any battery investigations as required per Eskom NCR process		
	[1]	Installation, commissioning and maintenance record keeping. Records are available and complete.		

No	Ref	Standard	Compliant ✓ Part Compliant ½ Non-compliant ✗	Details if not fully compliant
	[7]	Designated Transport company Must be registered as dangerous goods operators. Appropriate certificates available for inspection.		
	[2] [7]	Disposal processes. Recycling processes of spent batteries and electrolytes are acceptable.		
		Disposal of non-conforming batteries, electrolyte or components thereof meets health, safety and environmental regulations.		
Any unacceptable issues identified? List any critical issues.				
Any minor issues identified?				

Sources:

Ref	Document number	Document Title
[1]	ISO 9001 : 2008	Quality Management Systems Requirements
[2]	ISO 14001: 2004	Environmental Management Systems – Requirements with guidance for use
[3]	240-56360034 Rev 2	Stationary Vented Lead Acid Batteries Standard
[4]	240-56360086 Rev 2	Stationary Vented Nickel Cadmium Batteries Standard
[5]	240-143813712 Rev 1	Battery Installation and Commissioning
[6]	240-118705836 Rev 2	Maintenance of Batteries
[7]	240-89797258 Rev 2	The Safe Handling, Transportation and Disposal of Cells, Batteries and Electrolyte.
[8]	SANS 60896-11	Stationary lead-acid batteries – Part 11: Vented types - General requirements and methods of test

Notes: