

#### **Standard**

Cape Coastal Cluster (Eastern Cape)

Title: TECHNICAL EVALUATION
CRITERIA FOR NEW (VIRGIN)
MINERAL INSULATING OIL FOR
UNINHIBITED OILS OF UNITS ≤
132KV (TYPE U) SUPPLIED IN
210L DRUMS

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**TECHNICAL EVALUATION CRITERIA FOR NEW (VIRGIN)** MINERAL INSULATING OIL FOR UNINHIBITED OILS OF UNITS ≤ 132KV (TYPE U) SUPPLIED IN 210L DRUMS

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# Introduction

Insulating mineral oil is widely used within the Eskom Distribution's Cape Coastal Cluster Eastern Cape Operating Unit (hereafter referred to as the Operating Unit) and is an integral material crucial to the distribution of electricity in the Operating Unit.

Although the national specification (240-75661431<sup>[2]</sup>) exists for this material, no technical evaluation criteria currently exists to enable the procurement thereof through contract and/or once off purchases. This document was therefore necessary to enable transparency of the technical evaluation within the procurement management processes.

The method of evaluation is detailed in this document and based on the tender returns stipulated in Appendix A.

# **Supporting Clauses**

#### 2.1 Scope

This document covers specifically only the technical evaluation criteria for new (virgin) oil for uninhibited oils of units ≤ 132kV (Type U) supplied in 210 litre drums. It does not cover the requirements as these are stipulated in the specification<sup>[2]</sup> reference in section 2.2.1 of this document.

#### 2.1.1 Purpose

The purpose of this document is to record the standardized scoring method for the above scope.

# 2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited Distribution Division's Cape Coastal Cluster Eastern Cape Operating Unit.

#### **Effective date** 2.1.3

The date from which this document is effective is the same as the authorisation date of this document as per the "Authorized by" signatory in the document cover page.

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#### 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

The following documents are indispensable for the application of this document and should be used together with this document.

- [1] ISO 9001 Quality Management Systems
- [2] 240-75661431, Standard for Mineral Insulating Oils (Uninhibited and Inhibited): Purchase, Management, Maintenance, Testing and Disposal
- [3] Occupation Health and Safety Act (OHS Act) No 85 of 1993 Regulations for Hazardous Chemical Agents (RHCA)

#### 2.2.2 Informative

The following documents are further sources of information referenced in this document.

- [4] 32-1034 Eskom procurement and supply management procedure
- [5] 240-53207174 Practice note and guide on the implementation of the Preferential Procurement Policy Framework Act (PPPFA)

#### 2.3 Definitions

The following definitions are applicable to this document.

Definition	Explanation
Contractor	Refers to the supplier or bidder
Mark(s)	Means a point in the scoring system
Point(s)	Means a mark on the scoring system
Technical evaluator	End-users, technical experts nominated by the end-user and Divisional technical functionaries with the necessary technical expertise.  NB: The mineral oil technical evaluation shall be performed by the technical representatives in the Commodity Cross Functional team.
Tender returns  A document(s), populated or compiled by the bidder, returned as a response to and were part of the requirements at the time of issuing the enquiry.	
Threshold for Qualification	This is the threshold that has been determined by Eskom Technical evaluation, which the submission must meet to proceed with the technical evaluation after scoring stage.

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#### 2.4 Abbreviations

All abbreviations stated in the specification 240-75661431<sup>[2]</sup>, apply. The following additional abbreviations are also used in this document.

Abbreviation	Explanation
CCC-EC	Eskom's Distribution Division Cape Coastal Cluster Eastern Cape Operating Unit
CCC-WC	Eskom's Distribution Division Cape Coastal Cluster Western Cape Operating Unit
OU	Operating Unit
RHCA	Occupation Health and Safety Act (OHS Act) No 85 of 1993 – Regulations for Hazardous Chemical Agents (RHCA)
SDS	Safety Data Sheet
SME	Subject Matter Expert

# 2.5 Roles and Responsibilities

All the Eskom Distribution Cape Coastal Cluster Eastern Cape employees and/or appointed bodies involved in the tender technical evaluation shall use this criterion.

#### 2.6 Process for Monitoring

This document and its relevance will be periodically evaluated by the author and/or relevant technical teams.

# 2.7 Related/Supporting Documents

The specification requirements in document 240-75661431<sup>[2]</sup> shall form part of the technical evaluations conducted based on this criterion. Furthermore, the specification shall take precedence.

The latest available letter titled "Technical Instruction – Eskom Approved Insulating Oils – April 2017 rev 1" forms an integral part of this document.

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# 3. Evaluation Method and Requirements

# 3.1 Methodology

The technical evaluation shall constitute two separate stages namely:

- a. A desktop evaluation exercise of evaluating the tender returns based on
  - mandatory requirements and
  - discretionary requirements as well as
- b. An onsite factory/OEM/supplier/bidder capability assessment.

# 3.2 Desktop Evaluation Exercise

The desktop evaluation exercise will be staggered i.e. meeting all the mandatory requirements is a pre-requisite for progressing to the discretionary requirements evaluation. Furthermore meeting the discretionary requirements evaluation threshold is a qualification for the second stage viz. onsite factory/supplier/bidder capability assessment.

The mandatory requirements and the evaluation criteria thereof are as tabulated in Appendix A. A "No" in any of the mandatory requirements will result in disqualification of the Supplier/Bidder. In case the Supplier/Bidder supposed that Eskom made a typo, it must be clarified in time.

Discretionary technical requirements and the evaluation criteria thereof are tabulated in Appendix B. The qualification threshold for scored discretionary technical requirements is ninety percent (90%).

# 3.3 Onsite factory/OEM/supplier/bidder capability assessment

Onsite factory/OEM/supplier/bidder capability assessments are a pre-contract requirement and are mandatory for each factory/supplier/bidder that is intended to supply new (virgin) mineral insulating oil for uninhibited oils of units ≤ 132kV (Type U) supplied in 210l drums to the Operating Unit.

Factory/OEM/supplier/bidder with a valid accreditation, as per the Eskom list or are in possession of the relevant accreditation letter that is not older than twelve months, will be considered for exemption from the onsite capability assessment requirement. The Eskom technical evaluation and tender evaluation teams however reserve the right to conduct these capacity assessments.

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# 4. Acceptance

This document has been seen and accepted by:

Full Name and Surname	Designation
Sikelela Mkhabela	Senior Manager Maintenance and Operations Eastern Cape
Dumza Masingata	Middle Manager Plant Management Eastern Cape
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Tsepho Zekani	Senior Supervisor Power Plant Maintenance
Noncedo Kona	Senior Supervisor Power Plant Maintenance
Ronald Anderson	Senior Supervisor Power Plant Maintenance

# 5. Revisions

Date	Rev.	Compiler	Remarks	
August 2025	1	Tebello Mahlaba	First issue specific to the Operating Unit.	

# 6. Development Team

This document was developed by the following employees.

Tebello Mahlaba Chief Engineer Maintenance and Operations, CCC-WC

Monwabisi Gcobo Technical Official Transformers, CCC-EC

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# 7. Acknowledgements

The author acknowledges all contributions made to the development of this document through the Cluster TCIF document management process.

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# Appendix A - Mandatory Technical Requirements - Completeness of Submitted Documents

#	Description	Proof to be submitted with the tender	Score [Yes/No]	Remarks
1.	Is the offered mineral insulating oil an oil Approved for Use in Eskom Applications as per the letter titled "Technical Instruction – Eskom Approved Insulating Oils – April 2017 rev 1" dated 8 May 2017 and issued with the tender enquiry or a later version thereof as per section 3 of the Eskom specification 240-75661431 <sup>[2]</sup> ?	Letter of confirmation from the Bidder providing the original manufacturer name and original manufacturer product name for the offered oil.		
2.	Has the Supplier/Bidder guaranteed, in the form of a certificate/report issued by a SANAS accredited laboratory, that new oil delivered will comply with the "zero PCB" requirement as per section 3 of the Eskom specification 240-75661431 <sup>[2]</sup> ?	Certificate/test report issued by a SANAS accredited laboratory confirming the that the offered oil complies with the "zero PCB" requirement.		
3.	For the oil offered, has the Supplier/Bidder provided a certificate(s)/report(s) issued by a SANAS accredited laboratory, that indicates results for the parameters stipulated in Table 6 titled "Recommended limits for oil properties of new (virgin) oil for uninhibited oils of units ≤ 132kV (Type U)" in Eskom specification 240-75661431 <sup>[2]</sup> ?	Certificate(s)/report(s) issued by a SANAS accredited laboratory, that indicates results for the parameters stipulated in Table 6 of the Eskom specification 240-75661431 <sup>[2]</sup> , for the offered oil.		
4.	For the oil offered, has the Supplier/Bidder provided a certificate(s)/report(s) issued by a SANAS accredited laboratory, for Dissolved Gas Analysis results?	Certificate(s)/report(s) issued by a SANAS accredited laboratory, that indicates results for Dissolved Gas Analysis for the offered oil.		

**Note:** "No" in any of these items will result in disqualification. In case the Supplier/Bidder supposed that Eskom made a typo, it must be clarified in time.

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# Appendix B - Discretionary Technical Requirements - Scored Requirements

All evidence is to be provided in writing at tender submission as stipulated in the evaluation tables below.

No	Description	Proof to be submitted with the tender	Weight %	Score%
1.	Does the provided Certificate(s)/report(s) issued by a SANAS accredited laboratory, confirm that the offered oil complies to the requirements of Table 6 titled "Recommended limits for oil properties of new (virgin) oil for uninhibited oils of units ≤ 132kV (Type U)" in the Eskom specification 240-75661431 <sup>[2]</sup> .  20% - All parameters comply with the requirements in Table 6.  0% - One or more parameters do not meet the requirements of Table 6.	Certificate(s)/report(s) issued by a SANAS accredited laboratory, that indicates results for the parameters stipulated in Table 6 of the Eskom specification 240-75661431 <sup>[2]</sup> , for the offered oil.		
2.	Does the provided Certificate(s)/report(s) issued by a SANAS accredited laboratory for Dissolved Gas analysis, confirm that the offered oil complies to the requirements of section 3.8.1 "Gas in oil limits" of Eskom specification 240-75661431 <sup>[2]</sup> .  NOTE: that for new oil the maximum limits are those stipulated in the column titled "Detected new oil (vpm)" in Table 8 "Recommended gas in oil limits". Only "Note 1" under this table is applicable to new oil purchases. The note on the utilisation of the degassing process is applicable to improving values that are already BELOW these set maximum limits. New oil with detected gas values ABOVE the values in the afore mentioned column will not be acceptable. In essence there should be no gases present in new oil. However, the limits provided in column "Detected new oil (vpm)" in Table 8 have been provided because due to the sampling and testing parameters some traces of these gases may present in the oil when tested.	Certificate(s)/report(s) issued by a SANAS accredited laboratory, that indicates results for Dissolved Gas Analysis for the offered oil.		
	20% - All parameters are within the limits stipulated in Table 8.			
	0% - One or more parameters do not conform to the limits in Table 8.			

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No	Description	Proof to be submitted with the tender	Weight %	Score%
3.	Has the Supplier/Bidder provided confirmation that the oil will be supplied in white drums, as recommended in section 3.4 of Eskom specification 240-75661431 <sup>[2]</sup> and the drums will be marked as OTE (electric transformer oil) with an orange lightning bolt?	Confirmation letter from the Supplier/Bidder on the colour of drums to be used and the marking thereof.		
	20% - Confirmation that oil will be supplied in WHITE drums and marked as required above.			
	10% - Confirmation that oil will be supplied in drums that are not white and marked as required above.			
	0% - No confirmation of what colour drums will be used to supply the oil nor confirmation of above required marking or only confirmation of marking provided.			
4.	Has the Supplier/Bidder provided proof that they have a technical Subject Matter Expert (SME) on mineral insulating oil within their employ?	Proof of employment by Supplier/Bidder, curriculum vitae and		
	15% - Proof of employment by Supplier/Bidder, curriculum vitae and certified copies of qualifications of SME.	certified copies of qualifications for Subject Matter Expert within the		
	0% - One or more of the above required documents has not been provided.	employ of the Supplier/Bidder.		

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No	Description	Proof to be submitted with the tender	Weight %	Score%
5.	Has the Supplier/Bidder provided confirmation of at least three separate experiences in the supply of mineral insulating oil which is listed in the list of oils Approved for Use in Eskom Applications as per the letter titled "Technical Instruction – Eskom Approved Insulating Oils – April 2017 rev 1" and issued with the enquiry?  10% - Adequate proof of experience in the form of purchase/task orders and supporting remittance advices or completion certificates, in the supply of mineral insulating oil has been provided.  0% - Insufficient or no proof of experience has been provided.	The submitted proof of experience should include at least three separate completion certificates or task orders or purchase orders, which are supported by remittance advices/goods receipts. The following must be included in the provided proof of experience: project name, quantity of oil supplied in drums (in liters), client name, start date and end date.		
6.	Has the Supplier/Bidder provided confirmation that the drums will be sealed at the point of loading by the supplier and a batch certificate will be supplied and will conform to Table 6 in Eskom specification 240-75661431 <sup>[2]</sup> ?  10% - Confirmation that drums are sealed at the point of loading and a batch certificate will be provided which conforms to Table 6.  0 - % No confirmations or only confirmation of supply of batch certificate is provided but no confirmation of sealing at point of loading.	Confirmation letter from the Bidder/Supplier on the sealing of drums at the point of loading and supply of a batch certificate.		

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No	Description	Proof to be submitted with the tender	Weight %	Score%
7.	Has the Supplier/Bidder provided a valid South African Safety Data Sheet for the offered oil, in line with OHS Act and RHCA <sup>[3]</sup> requirements?	South African Safey Data Sheet for the offered oil.		
	5% - South African safety data sheet provided is in line with the above Act and regulations.			
	0% - No South African safety data sheet in line with the above not provided or Safety Data Sheet provided is an international safety data sheet and not a South African one.			