

 <b>Eskom</b>	<b>Report</b>	<b>Technology</b>
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Title: **TECHNICAL EVALUATION CRITERIA FOR SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11KV, 22 KV AND 33 KV**

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Area of Applicability: **Engineering**

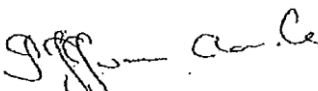

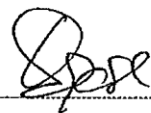
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## **1. Introduction**

This document has been developed to standardise the technical evaluation criteria to be used when evaluating tender submission for OUTDOOR, MV, POLE-MOUNTED, SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11kV, 22 kV AND 33 kV within Eskom Holdings SOC (Ltd Annexures addresses the detailed requirements that tenderers are required to meet with respect to the various aspects required to perform the paper technical evaluation.

This technical evaluation report /methodology are made up of respective stages within which the tender is evaluated. Stage 1 and 2 is an evaluation on paper. Stage 3 (factory visit) is applicable only to those tenderers who have passed the stipulated requirements of stages 1 and 2.

## **2. Supporting Clauses**

### **2.1. Scope**

This document covers the technical evaluation criteria for OUTDOOR MV, POLE-MOUNTED, SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11kV, 22 kV AND 33 kV.

#### **2.1.1. Purpose**

This document sets out the standardised technical evaluation criteria to be used when evaluating tender submissions with respect to OUTDOOR MV, POLE-MOUNTED, SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11kV, 22 kV AND 33 kV.

#### **2.1.2. Applicability**

This standard is applicable to all technical evaluations where enquiries are issued for OUTDOOR, MV, POLE-MOUNTED, SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11KV, 22 KV AND 33 KV within Eskom Holdings SOC (Ltd).

## **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] ISO 9001: Quality Management Systems.
- [2] 32-9: Definition of Eskom documents.
- [3] 32-644: Eskom documentation management standard.
- [4] 240-75670959 (474-65): Operating Manual of the Steering Committee of Wires Technologies (SCOWT)
- [5] 240-75660124: Standard for Pole-mounted, Single-Phase, Step, Automatic Voltage Regulators at Nominal AC Voltages of 11, 22 and 33kV Part 1.
- [6] 240-71083832: Standard for Pole-mounted, Single-Phase, Step, Automatic Voltage Regulators at Nominal AC Voltages of 11, 22 and 33kV Part 2.
- [7] 240-51017654: Procedure for the Evaluation of Product Suitability.

### **2.2.2 Informative**

None

## 2.3. Definitions

### 2.3.1 General

**Note:** See also specification/standard 240-75655528 definition and abbreviations.

Definition	Description
Duly Authorised	A person who is given the authority to stand in the place of another.
Eskom Technical evaluating Representative(s)	The person(s) appointed by Eskom to perform evaluation of tender submission(s) in line with Eskom requirements.
Stage	A point, period, or step in a process of evaluation
Technical Gatekeepers	The actions that oversees the technical criteria that must be met to proceed with the process.

### 2.3.2 Disclosure Classification

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

## 2.4. Abbreviations

Abbreviation	Description
OEM	Original Equipment Manufacturer
P & SCM	Procurement & Supply Chain Management
SD & L	Supplier Development & Localisation

## 2.5. Roles and Responsibilities

To be used by technical evaluating teams when undertaking a technical evaluation for the specified products.

## 2.6. Process for monitoring

Not applicable.

## 2.7. Related/Supporting Documents

Not applicable.

## 3. Document Content

This document sets out the standardised technical evaluation criteria and annexures with respect to OUTDOOR, MV, POLE-MOUNTED, SINGLE-PHASE, STEP, AUTOMATIC VOLTAGE REGULATORS AT NORMAL AC VOLTAGES OF 11KV, 22 KV AND 33.

This technical evaluation methodology has 2 main parts, namely a paper evaluation (stages 1 and 2) and a factory visit (stage 3). The requirements of each stage must be met as stipulated in order for tenderer to proceed to the next stage. Stage 3 (factory visit) will not be undertaken if tenderer has not passed minimum requirements/threshold of stages 1 and 2 for the paper evaluation, which are related.

## 4. Requirements

### 4.1. Paper evaluation

The paper evaluation exercise is performed by technical evaluators. The technical evaluation begins with assessing the gatekeeper requirements of Stage 1 and then proceeds to Stage 2 and eventually Stage 3, if the respective tenderers have met the stipulated criteria and submitted the mandatory documents in the form prescribed and by the stipulated submission deadlines. These stages are described in more detail in the Annexures.

Stage 1 entails checking that the required mandatory tender returnables are submitted at tender closing deadline. If the stipulated mandatory documents are not submitted by tender closing deadline and in the form prescribed; the respective tenderers will be regarded as non-responsive and the tenderers will be disqualified immediately. Only those tenders that fully comply with Stage 1 gate-keepers will proceed to be evaluated further i.e. Stage 2.

Stage 2 evaluations entails checking that the required clause by clause tender returnables are submitted at tender closing deadline and that they meet the Eskom requirements. Score will be allocated per requirement met: - Example: Standard 240-75660124, Clause 3.1.1 has 15 requirements and only 5 requirements met with a weighting of 4% will result in a score allocation of  $5/15 \times (4\%) = 1.33\%$ .

- Tenderers need to score a minimum of **80%** for Stage 2 in order to be considered for factory evaluations, Tenderers who do not meet the **80%** threshold will be **disqualified** and not evaluated further.

Notwithstanding this, if **no** tenderer meets the stipulated functionality threshold for stage 2, Eskom reserves the right to reduce the functionality threshold to a predetermined lower threshold of **70%**.

**NB.** Stage 3 (factory evaluation) will only be undertaken if the tenderer meets the minimum threshold of **80%** for Stage 2 or the predetermined lower threshold (if applicable).

### 4.2. Factory Evaluation

This assessment is performed at the Original Equipment Manufacturers (OEM) premises to assess the supplier's capability to manufacture the required product and to enter into a contract with Eskom. The factory assessment is by no means a confirmation or guarantee that any contract will be entered into by Eskom and the supplier or that post contract performance has been achieved.

The assessment team 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 assessment team during the assessment and post the assessment has no effect, and does not constitute any liability to Eskom with regards to contract placement or post contract performance guarantees..

#### 4.2.1 Scope

Eskom Commercial representative(s) will arrange to visit the factory of tenderers whose submissions have met the 80% minimum threshold or the lower threshold of **70%** (where applicable).

At the factory, the Eskom evaluating representative(s) conducts the evaluation through the use of the checklists and the evaluation documents. The checklists are used to verify compliance to the equipment specification and tender submission documents. At the end of this exercise, the Eskom evaluating representative(s) lists all the deviations, if any, on the evaluation agreement document. The representative(s) conducts a formal discussion of the deviations in line with Eskom's requirements. At the end, the Eskom, Tenderer/Vendor and OEM representatives sign the evaluation agreement document which continues to be used for concluding the Technical Evaluation report. Where the Tenderer and OEM agree to meet Eskom requirements to be **100 %** product compliant, all of these form part of the contract and verification thereafter.

#### **4.2.2 Confidentiality**

All information reviewed, observed, recorded during and reported as a result of this assessment will be treated as, and remains highly confidential. The procurement team and the supplier's team will be the only parties included in communication pertaining to such information i.e. it will not be released to external parties.

#### **4.2.3 Assessment Methodology**

The assessment will follow a documented supplier capability and capacity assessment criteria as shown in Annexure B. These criteria are intended to assess the technical capabilities of the supplier and the product offered for tender to ensure it meets the tender requirements. During the assessment the following areas are evaluated in detail:

- Confirm information submitted in technical schedules
- Manufacturing Methods
- Work Practices
- Design Practices and Application
- Testing Facility and Practices
- Raw material Procurement, Storage and Sub-contractor practices
- Site and Other Services.

Annexure B has two sections, section 1 the factory assessment and section 2 compliance to standard 240-75660124 and 240-71083832.

##### **Section 1**

A minimum threshold of 70% is required to pass the factory and practical assessment of section 1. The total of 45 points in section 1 corresponding to each point on the right-hand side as "Yes" or "No" blocks. A "Yes" answer means that the factory complies with the requirement while a "No" answers means the factory does not-comply. Evaluation member(s) will mark the "Yes" or "No" blocks during the evaluation, to indicate compliance or non-compliance. A "Yes" answer is equal to one (1) point and a "No" answer is equal to zero (0) point. At the end of the exercise all points will be tallied and divided by 45 to give a score in terms of a percentage. The score will be allocated as per requirement met in section 1: - Example, 45 requirements and only 34 requirements met will result in a score allocation of 76%. (Test score =  $34/45 \times (100\%) = 76\%$ )

##### **Section 2**

The minimum threshold required passing the compliance to standard 240-75660124 and 240-71083832 is 100% at the factory. Section 2 has a total of 26 points and corresponding to each point on the right-hand side are "Yes" or "No" blocks. A "Yes" answer means that the product complies with the requirement while a "No" answers means the product does not-comply. Evaluation member(s) will mark the "Yes" or "No" blocks during the evaluation, to indicate compliance or non-compliance. A "Yes" answer is equal to one (1) point and a "No" answer is equal to zero (0) point. At the end of the exercise all points will be tallied and divided by 26 to give percentage points. Example, 26 requirements and only 13 requirements met will result in a score allocation of 50%. (Test score =  $13/26 \times (100\%) = 50\%$ ). The factory must also have the capability to do all routine tests and the tested sample / specimen must pass all routine tests. All the Type Tests must be valid/pass (less than 10 years old) and done by an independent test authority before it will be accepted.

## **5. Requirements for the Technical Tender Submission**

### **5.1. General**

**The technical requirements /technical file must be submitted as an original hard copy document and a complete copy of that original hard copy.** The technical requirements/file must be clearly marked "Technical - Original and Technical - Copy

These technical requirements/files (including drawings, test reports, etc.) must be in the English language only.

Soft electronic copies are also required and must be in one of the following formats only ((i.e. MS Word, MS Excel and/or Adobe Acrobat PDF), and shall be contained in a “Compact Disk” CDR-R, USB Stick ....., etc.).

The digital storage device submitted etc. must be labelled as Technical – Electronic/soft copy. It must be a complete copy of the original and must include the following minimum information on the external cover:-

- the applicable Eskom enquiry number,
- the tenderer’s organization name, and
- the words: “Technical file – electronic/soft copy .

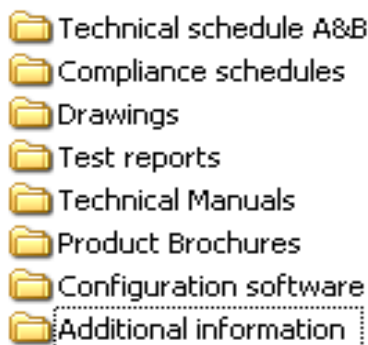
**Caution:** Marking of CD’s, etc. by means of odd sized stick-on labels must be strictly avoided. A suitable marking pen should be used instead.

## **5.2. Format**

- The submission shall be structured in a logical format that is user friendly.
- Folders with descriptive titles and structured in a logical hierarchy should be utilized to group relevant information, **for example:**

Example:

AVR 1 (INLAND) – VOLT REGULATOR 1 PH 33kV 200A INLAND



- Documents should be submitted in separate files as far as possible, e.g. do not combine the entire submission in one or two PDF document(s).
- Duplication of documentation should be avoided.
- The location (i.e. folder names) of relevant documentation should be indicated in column 3 of the compliance schedule

## **5.3. Documentation**

The technical submission shall contain the following documentation as a minimum:

- Covering letter, containing a list of items offered and brief summary of each item (e.g. product name, ratings, etc.
- Completed Technical A&B Schedules - MV VOLT REGULATOR requirements, 240-75660124.
- Completed Compliance schedules for part 1 - 240-75660124.
- Completed test report summary sheet,

- Copies of test reports; clearly labelled and arranged in the same order as the type test report summary sheet,
- Training requirements,
- Cost of training requirements
- Additional information,
- Technical manuals and product brochures,

## **6. Revisions history**

<b>Date</b>	<b>Rev</b>	<b>Compiler</b>	<b>Remarks</b>
June 2019	2	S van Aarde	New factory assessment requirements added
June 2017	1	S van Aarde	New document number and format change
Aug 2016	1	S van Aarde	First issue as PDRP_2012-11

## **7. Authorization**

This document has been seen and accepted by:

<b>Name and surname</b>	<b>Designation</b>
B Ntshangase	Senior Manager PDE HV Plant
S van Aarde	Senior Adviser - Power Delivery
M Khan	MV & LV Study Committee Chairperson
Sakkie van Aarde	MV Equipment Care group Chairperson

## **8. Development Team**

- Sakkie van Aarde
- Thando Ramulondi

## **9. Acknowledgement**

Mohamed Khan



### Annex A – Gatekeepers & Scoring

240-75660124 & 240-71083832, POLE-MOUNTED AUTO RECLOSERS FOR OVERHEAD LINE NETWORKS AT NORMAL AC VOLTAGES OF 11kV, 22 kV AND 33 kV (**Paper exercise only**).

#### Stage 1 GATEKEEPER

The tender submission that does not meet *all* the Stage 1 gate-keepers is *immediately disqualified*

#### TASK / MEASURE

Activity	Source of Evidence	Acceptance	Comments
Completed A&B Schedules submitted	240-75660124	Yes / No	
Completed Compliance schedules	240-75660124	Yes / No	
Completed Compliance schedules	240-71083832	Yes / No	
Type test reports submitted	240-75660124	Yes / No	
Technical deviations submitted		Yes / No	
Technical Manual		Yes / No	
Outcome of Gatekeeper Evaluation (Pass/ Fail)			
Comment:			

#### Stage 2 Scoring General

The factory evaluation will only be done if the supplier meets the minimum requirements of Stage 2 which is a total score of 80% and above:

Note: Score will be allocated per requirement met: - Example: Standard 240-75660124, Clause 3.1.1 has 15 requirements and only 5 requirements met with a weighting of 4% will result in a score allocation of  $5/15 \times (4\%) = 1.33\%$ .

#### General Technical Requirements to Standard 240-75660124

Activity	Reference Clause	Source of Evidence	Weighting	Score
1. Does it meet Eskom <b>service conditions</b> ?	3.1.1	A/ B Schedules	4%	
2. Does it meet Eskom <b>general requirements</b> ?	3.1.2	A/ B Schedules/ Product Drawings	4%	
3. Does it meet Eskom <b>rating requirements</b> ?	3.1.3	A/ B Schedules	4%	
4. Does it meet Eskom <b>mounting requirements</b> ?	3.1.4	A/ B Schedules/ Product Drawings	2%	
5. Does it meet Eskom <b>bushing requirements</b>	3.1.5	A/ B Schedules/ Product Drawings	2%	
6. Does it meet Eskom <b>material and finish</b> requirements?	3.1.6.	A/ B Schedules/ Product Drawings	2%	
7. Does it meet Eskom <b>series surge arrestor</b> requirements?	3.1.7	A/ B Schedules/ Product Drawings	2%	

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Stage 2 Scoring General				
The factory evaluation will only be done if the supplier meets the minimum requirements of Stage 2 which is a total score of 80% and above:				
Note: Score will be allocated per requirement met: - Example: Standard 240-75660124, Clause 3.1.1 has 15 requirements and only 5 requirements met with a weighting of 4% will result in a score allocation of 5/15 x (4%) = 1.33%.				
8. Does it meet Eskom <b>control cabinet</b> requirements?	3.1.8.	A/ B Schedules/ Product Drawings	2%	
9. Does it meet Eskom <b>electronic control equipment</b> requirements	3.1.9.	A/ B Schedules/ Product Drawings	8%	
10. Does it meet Eskom <b>control feature</b> requirements?	3.1.10.	A/ B Schedules/ Product Drawings	5%	
11. Does it meet Eskom <b>measurement functions</b> requirements?	3.1.11	A/ B Schedules/ Product Drawings	2%	
12. Does it meet Eskom <b>local control and indication</b> requirements?	3.1.12.	A/ B Schedules/ Product Drawings	2%	
13. Does it meet Eskom <b>configuration</b> requirements?	3.1.16	A/ B Schedules/ Product Drawings	2%	
13 Does it meet Eskom <b>power supply</b> requirements?	3.1.17.	A/ B Schedules/ Product Drawings	4%	
<b>Total General Score to Standard 240-75660124:-</b>			<b>45%</b>	

Stage 2 Scoring Type Test					
Type tests as specified in standard <b>240-75660124</b>					
The type test must be performed at an accredited test facility.					
All type tests supplied as requested will score 2%. An additional 2 % will be awarded per type test if the type test is not older than 10 years.					
(Test score = 2 + 2= 4%)					
<b>The type test must be performed at an accredited test facility. The type test results must not be older than 10 years</b>					
	Reference Clause	Source of Evidence	Test Passed	Not older than 10 years	Score
1. Impulse tests	3.2.2.2.a)	A/ B Schedules/ Type Test Reports	2%	2%	
2. Temperature rise	3.2.2.2.b)		2%	2%	
3. Short-circuit test	3.2.2.2.c)		2%	2%	
4. Surge withstand capability test	3.2.2.3.a)		2%	2%	
4 Pollution test	3.2.2.4.		2%	2%	

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<b>Total Type Test Score to standard 240-75660124:</b>	<b>20%</b>	
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<b>Stage 2 Scoring: tele-control</b>				
<p>The factory evaluation will only be done if the supplier meets the minimum requirements of Stage 2 which is a total score of 80% and above:</p> <p>Note: Score will be allocated per requirement met: - Example: Standard 240-71083832, Clause 3.1.1 has 3 requirements and only 1 requirements met with a weighting of 2% will result in a score allocation of <math>1/3 \times (2\%) = 0.67\%</math>.</p>				
<b>Technical requirements to Standard 240-71083832</b>				
<b>Activity</b>	<b>Specification/Reference Clause</b>	<b>Source of Evidence</b>	<b>Weighting</b>	<b>Score</b>
1. Does it meet Eskom General External antenna connection requirements?	3.1.1	A/ B Schedules/ Product Drawings	2%	
2. Does it meet Eskom Input/output capability and reporting mechanisms?	3.1.2, 3.1.3, 3.1.4, 3.1.5	A/ B Schedules/ Product Drawings	5%	
3 Does it meet Eskom communication interfaces?	3.1.6	A/ B Schedules/ Product Drawings	3%	
4. Does it meet Eskom Control Cabinet Requirements?	3.1.7	A/ B Schedules/ Product Drawings	1%	
5. Does it meet Eskom Data Acquisition protocols?	3.1.8	A/ B Schedules/ Product Drawings	4%	
6. Does it meet Eskom Power Supply Requirements?	3.1.9	A/ B Schedules/ Product Drawings	1%	
7. Does it meet Eskom software requirements?	3.1.10	A/ B Schedules/ Product Drawings	3%	
8. Does the manufacture supply the required manuals?	3.2	A/ B Schedules/ Product Drawings	1%	
<b>Total General Score to standard 240-71083832:-</b>			<b>20%</b>	

<b>Stage 2 Scoring Test certificates to standard 240-71083832</b>				
The type test must be performed at an accredited test facility.				
	<b>Reference Clause</b>	<b>Source of Evidence</b>	<b>Test Passed</b>	<b>Score</b>
DNP3 certification - Proof of independent testing and verification of the DNP3 protocol functionality shall be provided by the supplier		A/ B Schedules / Product Drawings	10%	
DNP3 Device Profile		A/ B Schedules / Product Drawings	5%	
<b>Total Type Test Score to standard 240-71083832:-</b>			<b>15%</b>	
<b>Result of Stage 1 Evaluation (Pass/ Fail)</b>				
<b>Final Score to standard 240-75660124 and 240-71083832: General + Type Test score (45% + 20% + 20% + 15%)</b>			<b>100%</b>	

### Annex B – Factory Evaluation Criteria

<b>1. GENERAL INFORMATION</b>	
a) Name of Supplier:	
b) Name of Manufacturer:	
c) Registered name and full street address of the factory at which the audit and inspection is done:	
d) Factory Representatives	
Name:	Position:
Name:	Position:
Name:	Position:
Name:	Position:

<b>Section 1</b>			
<b>2. RECEIVING / GOODS INWARDS INSPECTION AND STORAGE</b>			
			<b>Score</b>
a) Are materials, components and sub-assemblies verified by the factory as complying with the applicable requirements	Yes	No	
Comments:			
b) If the factory relies on certificates of conformity of test results from suppliers, do these clearly identify the products, specifications, quantity of items, dated and signed?	Yes	No	
Comments:			
c) Are non-conforming products/components/materials clearly identified and segregated to prevent their use?	Yes	No	
Comments:			
d) Are non-conforming products/components/materials clearly identified and segregated to prevent their use?	Yes	No	
Comments:			

e)	Are records of raw material received kept / saved? In what format and for how long?	Yes	No	
Comments:				
f)	Is there a system in place to manage reception and allocation of raw materials?	Yes	No	
Comments:				

3. PRODUCTION LINE INSPECTION AND ROUTINE TESTS			
			<b>Score</b>
a)	ASSEMBLY: Do personnel have readily available up-to-date procedures, assembly instructions, photographs, drawings or reference samples?	Yes	No
Comments:			
b)	PRODUCTION LINE TEST: Do personnel have readily available up-to-date procedures, work instructions, and drawings related to required testing to be carried out on the intermediate stage and the final product related to conformance of the finished product.	Yes	No
Comments:			
c)	Are the test results monitored for trends or recurrences and reported to production / quality management?	Yes	No
Comments:			
d)	Are repaired and reworked products re-inspected in accordance with documented procedures?	Yes	No
Comments:			
e)	Do the Production Line Inspection and Routine Tests performed by the factory sufficiently cover all the applicable requirements?	Yes	No
Comments:			
f)	Are personnel involved in the assembly and quality control adequately briefed on their duties and competent to perform them?	Yes	No
Comments:			

4. CALIBRATION OF TEST EQUIPMENT AND TESTING FACILITY			
			<b>Score</b>
a)	Is all equipment used for testing calibrated?	Yes	No
Comments:			
b)	Is the equipment provided with a label or similar method indicating the date of the last calibration and the next due date	Yes	No

Comments:			
c) Are records from equipment calibrations appropriate and kept by the factory.	Yes	No	
Comments:			
d) Do the records indicate that the calibration is traceable to National/International Metrology Standards?	Yes	No	
Comments:			
e) Does the factory have the capability to carry out all routine tests?	Yes	No	
Comments:			
f) Do test reports identify the test specimen, are properly signed and stored?	Yes	No	
Comments:			

5. FACTORY CAPABILITY AND QUALITY MANAGEMENT SYSTEM			
			<b>Score</b>
a) Does the factory have a documented Quality Management System?	Yes	No	
Comments:			
b) Does the factory regularly perform internal audits of its quality management system, and periodically check that all documented procedures, including those required for certification, are followed?	Yes	No	
Comments:			
c) Are records from internal audits and corrective actions available and are they sufficiently detailed to demonstrate that the Quality Management System is effective?	Yes	No	
Comments:			

6. COMPLAINTS / NON-CONFORMANCE			
			<b>Score</b>
a) Does the factory have a documented system for handling complaints?	Yes	No	
Comments:			
b) Does the factory review complaints from customers or others, and take appropriate action?	Yes	No	

Comments:			
c) Are records kept of the complaints and of corrective actions taken?	Yes	No	
Comments:			

7. CHANGE CONTROL			
			Score
a) Is there a documented procedure covering control of products and production process changes	Yes	No	
Comments:			
b) Does the procedure cover the review and approval of product or production process changes by responsible personnel / management?	Yes	No	
Comments:			
c) Are there provisions to ensure that changes to the product construction are accepted by competent / authorised personnel?	Yes	No	
Comments:			
d) Is there an up-to-date parts list or similar evidence available specifying the components/parts to be used during production of the products?	Yes	No	
Comments:			

8. DESIGN PRACTICES			
			Score
a) Are designs done in-house?	Yes	No	
Comments:			
b) Does the company have design tools and guidelines?	Yes	No	
Comments:			
c) Is there a design process workflow system?	Yes	No	
Comments:			
d) Is there a documented process for verification and validation of	Yes	No	



designs?			
Comments:			
e) Are new designs approved and verified by competent personnel?	Yes	No	
Comments:			
f) Following final design approval, is there a process in place to link the new design to the manufacturing process?	Yes	No	
Comments:			
<b>Score of section 1</b>			
<b>Section 1 Result (Pass/ Fail) (70% Minimum)</b>			
<i>Note: Section 1, example: 45 requirements and only 34 requirements met will result in a score allocation of 76%. (Test score = <math>34/45 \times (100\%) = 76\%</math>)</i>			

<b>Section 2</b>			
<b>9. COMPLIANCE TO STANDARD 240-75660124 and 240-7108382</b>			
<b>9.1. COMPLIANCE TO STANDARD 240-75660124.</b>			
<b>9.1.1. Technical Requirements</b>			
			<b>Score</b>
a.) Compliance to the system and service requirements (3.1.1)?	Yes	No	
b.) Compliance to the general requirements (3.1.2)?	Yes	No	
Comments:			
c.) Compliance to the rating requirements (3.1.3)?	Yes	No	
Comments:			
d.) Compliance to the mounting requirements (3.1.4)?	Yes	No	
Comments:			
e.) Compliance to the bushing requirements (3.1.5)?	Yes	No	
Comments:			
f.) Compliance to the material and finish requirements (3.1.6)?	Yes	No	
Comments:			

g.) Compliance to the series surge arrester requirements (3.1.7)?	Yes	No	
Comments:			
h.) Compliance to the control cabinet requirements (3.1.8)?	Yes	No	
Comments:			
i.) Compliance to the electronic control requirements (3.1.9)?	Yes	No	
Comments:			
j.) Compliance to the control features requirements (3.1.10)?	Yes	No	
Comments:			
k.) Compliance to the measurement function requirements (3.1.11)?	Yes	No	
Comments:			
l.) Compliance to the local control and indication requirements (3.1.12)?	Yes	No	
Comments:			
m.) Compliance to the remote control and indication requirements (240-71083832)?	Yes	No	
Comments:			
n.) Compliance to the local engineering requirements (3.1.15)?	Yes	No	
Comments:			
o.) Compliance to the configuration software and firmware requirements (3.1.16)?	Yes	No	
Comments:			
p.) Compliance to the power supply requirements (3.1.17)?	Yes	No	
Comments:			
q.) Compliance to the rating plate requirements (3.1.18)?	Yes	No	
Comments:			

**9.1.2. Type Tests in accordance with ANSI/IEEE C57.15: IEEE****Score**

a.) Impulse test (3.2.2.2.a)	Yes	No	
Comments:			
b.) Temperature rise test (3.2.2.2.b)	Yes	No	
Comments:			
c.) Short-circuit test (3.2.2.2.c)	Yes	No	
Comments:			
d.) Surges withstand capability test (3.2.2.3.a)	Yes	No	
Comments:			
e.) Arc under oil test (3.2.2.3.b)	Yes	No	
Comments:			
a.) Pollution test (3.2.2.4)	Yes	No	
Comments:			

<b>Section 2</b>			
<b>9.2. COMPLIANCE TO STANDARD 240-7108382</b>			
<b>9.2.1. Technical Requirements</b>			
			<b>Score</b>
a.) Compliance to the external antenna connection requirements (3.1.1)?	Yes	No	
Comments:			
b.) Compliance to the remote control requirements (3.1.2)?	Yes	No	
Comments:			
c.) Compliance to the remote indication requirements (3.1.3)?	Yes	No	
Comments:			
d.) Compliance to the control requirements (3.1.4)?	Yes	No	
Comments:			
e.) Compliance to the analog requirements (3.1.5)?	Yes	No	
Comments:			

f.) Compliance to the communication requirements (3.1.6)?	Yes	No	
Comments:			
g.) Compliance to the control cabinet requirements (3.1.7)?	Yes	No	
Comments:			
h.) Compliance to the tele-control protocol requirements (3.1.8)?	Yes	No	
Comments:			
i.) Compliance to the power supply requirements (3.1.9)?	Yes	No	
Comments:			
j.) Compliance to the configuration software requirements (3.1.10)?	Yes	No	
Comments:			
k.) Compliance to the remote configuration requirements (3.1.11)?	Yes	No	
Comments:			
l.) Compliance to the regulator functional requirements (3.1.12)?	Yes	No	
Comments:			
Tests in accordance with 240-07108382			
f.) Prototype testing (3.3.1.1.)	Yes	No	
Comments:			
<b>Score of section 2:-</b>			
<b>Section 2 Result (Pass/ Fail) (100% Minimum)</b>			
<i>Note: Section 2, example: 26 requirements and only 13 requirements met will result in a score allocation of 50%. (Test score = 13/26 x (100%) = 50%)</i>			
<b>Total Score of section 1 and 2:-</b>			

**10. FINDINGS**

11. CONCLUSION

<b>12. RECOMMENDATION(S)</b>

Date:
Technical Evaluation Leader:
Signature: