

Title: **Tender technical evaluation for arc flash PPE**

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### CONTROLLED DISCLOSURE

## 1. INTRODUCTION

Tutuka Power Station requires a 5-year contract with an approved service provider for the provision of arc flash PPE as and when required.

## 2. SUPPORTING CLAUSES

### 2.1 SCOPE

Supply and delivery of arc flash PPE for the period of five years, on an as when required basis to Eskom, Tutuka Power Station.

Arc flash PPE Category 2 (2a) and 4 with minimum arc rating of 12cal/cm<sup>2</sup> and 50cal/cm<sup>2</sup> respectively.

The product complies with professional engineering practice and Generation Safety Measures against the Thermal Hazard of an Electrical Arc for Metal-Enclosed Switchgear (up to 15kV) Standard. The quality of the end product is the responsibility of the Contractor.

#### 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. Mandatory

#### 2.1.2 Applicability

Applicable to Tutuka Power station.

## 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] 240-48929482: Tender Technical Evaluation Procedure

## 2.3 DEFINITIONS

None

### 2.3.1 Classification

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

## 2.4 ABBREVIATIONS

Abbreviation	Description
ATPV	Arc Thermal Protective Value (in calories per centimeter squared)
OEM	Original Equipment Manufacture

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Abbreviation	Description
kV	Kilo Volt
PPE	Personal Protective Equipment
TET	Technical Evaluation Team

## 2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

## 2.6 PROCESS FOR MONITORING

N/A

## 2.7 RELATED/SUPPORTING DOCUMENTS

Tender Technical Evaluation Scoring Form

## 3. TENDER TECHNICAL EVALUATION STRATEGY

### 3.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

### 3.2 TET MEMBERS

**Table 1: TET Members**

TET number	TET Member Name	Designation
TET 1		Senior Technology Electrical
TET 2		Senior Electrical Engineer
TET 3		Electrical Maintenance
TET 4		Risk and Assurance

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**3.3 MANADATORY TECHNICAL EVALUATION CRITERIA**

**Table 2: Mandatory Technical Evaluation Criteria**

Number	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria	YES/NO
1)	The tenderer must provide proof of the testing laboratory's compliance with the requirements of ISO/IEC/SANS 17025 where Material and PPE were type-tested.	ISO/IEC/SANS 17025 general requirements for the competence of testing and calibration laboratories.	Assurance of quality product.	
2)	Material used in the construction of garments shall comply with the requirements of IEC 61482-2 or ASTM F 1506. The tenderer must provide type-test report and or certificate as evidence.	Certificate/report which indicate testing in accordance with standards IEC 61482-2 or ASTM F 1506	Safety of personnel	
3)	The tenderer shall be a manufacturer or a distributor. Compliance to 3.1 OR 3.2 is required.		Reliability of the PPE Warranty reservation	
3.1	If tenderer is an original equipment manufacturer (OEM): Submit proof of declaration in writing that he/she is an OEM	Signed letter of declaration	Reliability of the PPE Warranty reservation	
3.2	If tenderer is a distributor: The following documents shall be submitted:  The distributors or agents provide a copy of the contract agreement (licence) made with the OEM for the distribution of their equipment and the duration of the agreement should match that of Eskom contract.	Contract agreement/licence with OEM indicating duration of contract which must match Eskom contract duration.	Reliability of the PPE Warranty reservation	

3.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

Nr	Criteria	Clause	% Sub-weight	% Weight	Score 0	Score 2	Score 4	Score 5	Weighted Score %
1.	The arc rating expressed in ATPV (Cal/cm <sup>2</sup> )	240-70044736 clause 3.3.1a)	100%	5%	Not submitted in ATPV	N/A	N/A	Submit in ATPV	0
2.	Number of cleaning cycles for Garments (minimum 100 cycles)	240-70044736 clause 3.3.1g)	100%	5%	less than 40 cycles	40-74 cycles	75-99 cycles	100 or greater cycles	0
3.	Compliance with 240-70044736	Compliance schedule	100%	20%	0% - 40%	40% - 74%	75% - 89%	90%-100%	0
4.	Are the submitted type test reports compliant for the following tests in accordance with IEC/SANS 61482-2 or ASTM F2621. a) Any concerns on the type test report test results that are inconsistent with the above-mentioned standards.	with IEC/SANS 61482-2 or ASTM F2621	75%	25%	Fail	N/A	N/A	Pass	0
	b) The garments provided shall correspond to the submitted type test report (identification, model number or style of). Trouser (minimum 12cal/cm <sup>2</sup> ) Jacket (minimum 12cal/cm <sup>2</sup> ) Trouser (minimum 50cal/cm <sup>2</sup> ) Jacket (minimum 50cal/cm <sup>2</sup> )		25%		Fail	N/A	N/A	Pass	0
5.	Are the submitted type test reports on face protection equipment compliant in accordance with EN 166 and ASTM F2178.1 or ANSI Z 87.1 and ASTM F2178.1?	EN 166 and ASTM F2178.1 or	75%	10%	Fail	N/A	N/A	Pass	0
	The garments provided shall correspond to the submitted type test report (identification, model number or style of) Hood (minimum 50cal/cm <sup>2</sup> ) Balaclava (minimum 50cal/cm <sup>2</sup> )	ANSI Z 87.1 and ASTM F2178.1	25%		Fail	N/A	N/A	Pass	0
6.	Are the submitted type test reports on hands protection equipment compliant in accordance with ASTM F 2675/ F 2675M-13?	ASTM F 2675/ F 2675M-13	75%	10%	Fail	N/A	N/A	Pass	0
	The garments provided shall correspond to the submitted type test report (identification, model number or style of) Hand Gloves (minimum 50cal/cm <sup>2</sup> )		25%		Fail	N/A	N/A	Pass	0

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7.	Is/are catalogues showing all the arc flash PPE items submitted? The catalogue/s must be printed in colour. The catalogue/s to show the following arc flash PPE items:			10%					
	a) Face protective equipment		25%		Not Available on catalogue	N/A	N/A	Available on catalogue	0
	b) Hands protective equipment (gloves)		25%		Not Available on catalogue	N/A	N/A	Available on catalogue	0
	c) Personal protective clothing garments (trousers, shirts, jackets and etc)		50%		Not Available on catalogue	N/A	N/A	Available on catalogue	0
8.	Drawings for marking and labelling The following information shall be shown on the marking and labelling of the arc flash PPE item (e.g the garment):	240-70044736		15%					
8.1	The manufacturer's name or trademark,	Clause 3.4	10%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.2	Year of manufacture or garment serial number for purposes of tracking,	Clause 3.4	10%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.3	The size designation,	Clause 3.4	10%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.4	The arc rating designation ATPV	Clause 3.4	10%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.5	The composition of the material in accordance with SANS 10235 or ASTM F 1506,	Clause 3.4	10%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.6	The care-labelling instructions in accordance with SANS 10011 or ASTM F1506,	Clause 3.4	20%		Incorrect information on drawing	N/A	N/A	Correct Information	0

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					or no drawing			on label drawing	
8.7	The service life, and	Clause 3.3.1 (f)	20%		Incorrect information on drawing or no drawing	N/A	N/A	Correct Information on label drawing	0
8.8	A drawing that shows the arc-rating designation applicable to the material that will be shown on the garment. Drawing to include Eskom logo and Zero Harm identification.	Clause 3.4(c)	10%		Incorrect information on drawing or no drawing	N/A	N/A	Drawing showing ATPV, Eskom Logo and Zero Harm	0
				<b>100%</b>					

**3.5 TET MEMBER RESPONSIBILITIES**

**Table 4: TET Member Responsibilities**

<b>Mandatory Criteria Number</b>	<b>TET 1</b>	<b>TET 2</b>
1	X	X
2	X	X
<b>Qualitative Criteria Number</b>	<b>TET 1</b>	<b>TET 2</b>
1	X	X
2	X	X
3	X	X
4	X	X
5	X	X
6	X	X
7	X	X
8	X	X

**3.6 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS**

**3.6.1 Risks**

**Table 5: Acceptable Technical Risks**

Risk	Description
1.	
2.	
3.	
4.	
5.	
6.	
7.	

**Table 6: Unacceptable Technical Risks**

Risk	Description
1.	
2.	
3.	
4.	
5.	
6.	
7.	

3.6.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	
1.	
2.	
3.	
4.	
5.	
6.	

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	
2.	
3.	
4.	
5.	
6.	
7.	

#### 4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
	Electrical Engineering Manager	
	Engineering Manager	

#### 5. REVISIONS

Date	Rev.	Compiler	Remarks
May 2024	1		Original document

#### 6. DEVELOPMENT TEAM

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

#### 7. ACKNOWLEDGEMENTS

None

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