 Eskom	Report	Transmission
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Title: **North East Grid Plastic Bird Perch Diverter Supply and Delivery Scope of Work**

Unique Identifier: **240-156074231**

Project Unique Identifier: **LES-GP-142**

Document Unique Identifier: **LES1371**

Area of Applicability: **Engineering**

Documentation Type: **Report**

Revision: **3**

Total Pages: **7**

Next Review Date: **N/A**

Disclosure Classification: **CONTROLLED DISCLOSURE**

Compiled by



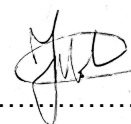
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Date: 09 March 2022

Date: 09/03/2022

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1. INTRODUCTION

This project is justified as an important requirement. Transmission lines faults have been identified as one of the key factors that affect the overall performance of transmission lines. In the 2019/20 financial year bird faults contributed ~43% (326) of the total number of line faults experienced on the Transmission network. Bird faults are one of the significant contributors to System Minute losses, in the event of trip & lock-outs. Improvement of line performance has been identified as one of the key objectives of the performance Operational Excellence (OE) stream, driven by the Group Executive hence this project to install plastic bird perch diverters.

2. SCOPE OF WORK

The scope of work is for supply and delivery of plastic bird perch diverters and stainless steel straps for the lines in the North East Grid. Delivery addresses being as follows:

North East Grid: Eskom Park Building 75

Physical address

Cnr Jellicoe & Watermeyer street

Eskom Park

Emalahleni

1035

The plastic bird perch diverters and stainless steel straps and any other related material are to be supplied and delivered as per the packaging and specifications provided below under paragraph 2.1 and 2.2.

The bird perch diverter should be made of a plastic material that complies with the rapid aging, material composition, pull and drop tests. In addition they should be 575mm tall and 1m long and have intermediate uprights spaced 80mm apart. They should alternate between tall uprights (500mm) and short uprights of 280mm, on a base of 75mm. The plastic wall thickness should be 2.5mm minimum and made of material that complies with the material composition requirements as stipulated in the specification in section 2.2 below. They should also not have sharp points that can cause harm to birds or other wildlife.

The fasteners must be made of stainless steel strap with a quick release mechanism. The dimensions of the stainless straps are 12mm x 0.75mm. The tenderer is required to supply a minimum of 3 x 600mm lengths of strap with each bird perch diverter (**refer to 240-147885960 for a detailed device specification**).

The packaging should be done per line and labelled accordingly.

The base scope is to procure bird mitigation devices for the following lines:

- Camden - Komati No1 275kV Line - 65 towers on this line
- Camden - Normandie No1 400kV Line - 92 towers on this line
- Grootvlei - Matla No1 400kV Line - 212 towers on this line
- Hendrina - Vulcan No1 400kV Line - 96 towers on this line
- Hendrina - Vulcan No2 400kV Line - 60 towers on this line

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2.1 PACKAGING DETAILS

The plastic bird perch diverters and stainless steel straps must be packaged as indicated below for ease of installation process.

Line Name	Bird perch diverters	Stainless Steel straps
Camden - Komati No1 275kV	3 900	11 700
Camden - Normandie No1 400kV	5 520	16 560
Grootvlei - Matla No1 400kV	12 720	38 160
Hendrina - Vulcan No1 400kV	5760	17 280
Hendrina - Vulcan No2 400kV	3600	10 800
TOTAL	31 500	94 500

2.2 DESIGN DRAWING AND STANDARDS

Plastic bird perch diverters and stainless steel straps to be supplied in accordance with the specifications from the standard referenced below:

Document Name	Document Number
Plastic Bird Perch Diverter and Stainless Steel Strap Specification	240-147885960 Rev 2

2.3 DEFINITIONS

2.3.1 Disclosure Classification

Controlled Disclosure:

The information is readily available to Eskom employees (internal use). Information may also be accessed by or disclosed to third parties with specific authorisation or consent (either enforced by law or discretionary).

This information includes a wide spectrum of internal business data that can be used by all employees and can be shared with authorised business partners.

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ANNEX A - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS AND RELATED FASTENERS

1) Scope

This document covers the criteria for the evaluation of the supply of bird perch diverters and fasteners within Eskom Holdings SOC (Ltd). The document addresses the standard documented technical evaluation criteria to be used when evaluating plastic bird perch diverters and fasteners in line with the Eskom Holdings SOC (Ltd) requirements and it is applicable to all the technical evaluations for the related tender submissions.

2) Requirements

The technical tenders received will be evaluated via a document evaluation (desktop assessment) process.

The evaluation exercise is performed by the appointed Eskom technical team. This initial part of the evaluation starts when submissions are opened and assessed for the first time. The submitted documents will be evaluated against the evaluation criteria as stated in this document.

During the evaluation, all material and mechanical test certificates mentioned in section 3.2 (Plastic Bird Perch Diverter and Stainless Steel Strap Specification, doc no. 240-147885960) must be provided and must comply with the limits specified in Schedules A of the referred specification at tender submission stage.

If tenderers do not submit all the required test certificates before tender award, then they will be automatically disqualified.

The evaluations are done to establish whether all the key tender deliverables are met. A minimum total of 70% is required to pass the technical requirements.

item	Requirements	Documentation	Pass criteria
1	Technical criteria requirements	As per Annex A	70%

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ANNEX B - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS AND RELATED FASTENERS

Table 1: Technical evaluation criteria score sheet

Bird perch diverter technical evaluation criteria				
	Criteria	Clauses from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)	Scoring weight	Score
1	All dimensional and functional requirements met			
1a	Bird perch diverter spikes/verticals are securely attached/moulded to base and not removable <ul style="list-style-type: none"> One piece solid unit- (10) Smooth finish with no sharp edges- (7.5) Alternating long and short spikes- (7.5) 	Annex B,	25	
1b	Dimensions of bird perch diverter as per drawing and wall thickness indicated to be a minimum of 2.5mm* <ul style="list-style-type: none"> Length- 1000mm- (5) Height- 575mm from bottom to top of spike tip- (5) Base width-40mm - (4) Base height- 75mm - (4) Short spike height from bottom of base to top –min 355mm - (4) Separation distance between spikes- 80mm - (4). Wall thickness- 2.5mm - (4). 	Annex B	30	
1c	Device is supplied with quick release fasteners	3	8	
1d	Device will not cause harm to birds/wildlife**	3	8	
2	Bird perch diverter should not accumulate/trap any water. Devices must be self-draining.	3	7	
3	Percentage reground material indicated as less than 10%***	3.1	7	
4	Additives and UV stabilisers added conform to Section 3 point 11 requirements	3.1	5	
5	Strapping material 304 grade stainless steel indicated on Schedule B in Annex A (4.2 on Schedule).	3.1	3	
6	Strapping dimensions minimum 12x0.75mm	3.1	3	
7	Quick release fastening method (strap/fastener can be reused during maintenance if required and no special unconventional tools required)	3.1	4	
Total = /100 (Minimum of 70% required for this section)				

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*All dimensions must be within a tolerance of 5mm, except on the material thickness which should be minimum 2.5 and maximum 3.5 mm.

**This should be ensured by a design that has no sharp edges or protrusions that can harm or kill birds or other wildlife. This includes the fastening/strapping device.

***Materials which are reground from excess or reject devices after the manufacturing process and then added to the virgin material for a next batch.

Table 2: Technical evaluation criteria score sheet

	All the required test reports and test certificates indicated below must be submitted as part of technical tender returnable. If test reports and test certificates are not submitted as requested, automatic disqualification will apply.	clause
1	Rapid aging test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
2	Material composition test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
3	Pull test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
4	Drop test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
5	Strength test-Plastic bird perch diverter	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)

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