

	<b>Scope of Work</b>	<b>Hendrina Power Station</b>
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## **1. Introduction**

To enhance business efficiency and meet the requirements of 32-124 Eskom Fire Risk Management Standard, it is paramount to have a service provider who will be able to render a service to Hendrina Power Station. Therefore, a maintenance and servicing contract is required to keep all the firefighting equipment an acceptable standard and condition as required by Occupational Health and Safety Act, Act 85 of 1993, National Building Regulation no.103 of 1977 and Fire Brigade Services Act 99 of 1987. It is also required to supply fire and emergency equipment on as and when required basis. The contract duration will be for a period of five (5) years.

## **2. Supporting Clauses**

### **2.1 Scope**

The required performance of Inspection, Testing and Maintenance of fire and rescue equipment and the Supply and Delivery of additional fire equipment as and when required. This requirement will be limited as described in this document. The scope of work described in this document will be performed according to set criterion, to meet and exceed statutory and non-statutory requirements.

#### **2.1.1 Purpose**

To ensure that the goal and objective of Fire Risk and Emergency Management can easily be achieved, by mitigating injuries to all employees and business partners on-site, protecting life and property, thus ensuring that the “Zero Harm” value and the “Blue Flag” status are achieved.

#### **2.1.2 Integrated Business Improvement objectives**

- Engineered controls:      Equipment performance (E1)  
   Equipment condition (E2)  
   Inspection and testing (E4)  
   Maintenance programme (Corrective and prevention & condition based) (E5)
- Formal controls:              Error Prevention related (F7)  
   Response to Operational requirements (F8)
- Management, Assurance and Oversight controls: Management Planning (M1)  
   Management Oversight (M5)  
   Assurance Management (M6)  
   Housekeeping Management (M10)
- Cultural controls:              Individual Accountability (C6)  
   Compliance (C7)

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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**

- [1] Occupational Health and Safety Act (Act No. 85 of 1993)
- [2] 32-124 – Eskom Standard Fire Risk Management
- [3] 240-126468603 – Operational Standard for Fire Management in Generation
- [4] 474-13523 – Fire Systems and Fire Management Generation Engineering Strategic Report
- [5] 32-107 – Eskom Standard for Fire-Fighting Training Programme
- [6] 32-108 – Eskom Standard Fire-Fighting Organisation
- [7] 32-128 – Technical Specification on Personal Protective Clothing and Equipment for Firefighters
- [8] 240-126467668 – Operational Standard for Inspection, Testing of Fire and Rescue Non-Plant Equipment in Generation
- [9] 32-1034 – Eskom Procurement and Supply Chain Management Procedure
- [10] ISO 9001: 2015 – Quality Management System
- [11] National Building Regulation no.103 of 1977
- [12] SANS 10400(T): Fire Protection
- [13] SANS 10400(W): Fire Installations
- [14] SANS 10090: Community Protection Against Fire

### **2.2.2 Informative**

- [1] 36-681 – Eskom Plant Safety Regulation
- [2] Fire Brigade Services Act (Act No. 99 of 1987)
- [3] National Veld and Forest Fire Act (Act No 101 of 1998)
- [4] NFPA 1855: Standard on Selection, Care, and Maintenance of Protective Ensemble for Technical Rescue Incidents
- [5] NFPA 1852: Standard on Selection, Care, and Maintenance of Open-circuit Self-contained Breathing Apparatus
- [6] SANS 50137 – Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus with full face mask – Requirements, testing, marking
- [7] SANS 10019 – Transportable pressure receptacles for compressed, dissolved and liquefied gases – Basic design, manufacture, use and maintenance
- [8] NFPA 1989 – Standard on Breathing Air Quality for Emergency Services Respiratory Protection
- [9] NFPA 1981 – Standard on Open-Circuit Self-Contained Breathing Apparatus for Emergency Services

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[10] NFPA 1937 – Standard for the Selection, Care and Maintenance of Rescue Tools

## 2.3 Definitions

**2.3.1 Appointed Competent Person for Fire Management:** A person who is appointed by the BU in a permanent and full-time capacity to manage the station's fire management. The incumbent must be qualified at a minimum NQF Level 6 or 7 in Fire Technology.

**2.3.2 Approved Service Provider:** A service provider who has proven competence in providing services related to the OEM requirements for servicing, repair and maintenance of mobile firefighting equipment and in accordance with SANS 10090. An institution or person recognised or authorised to supply or do inspection, testing and maintenance work on specialised fire, rescue and hazardous materials equipment.

**2.3.3 Contract Manager:** A person responsible for managing the implementation of the contract in accordance with the approvals granted by the DAA and the terms and conditions of the contract.

**2.3.4 Criteria:** The relevant standard with which the executed Scope of Work is required to meet.

**2.3.5 De-rusting:** The process of eliminating rust and other impurities from a metal surface

**2.3.6 Ensemble:** A group of items viewed as a whole rather than individually, e.g. SCBA Pressure gauge, Regulators and pressure hoses.

**2.3.7 Flow Test:** An SCBA's performance test to verify the breathing machines functionality according to manufacturer specifications, to ensure adequate air delivery and safety.

**2.3.8 Inspection:** A visual examination of an item, system, or portion thereof to verify that it appears to be in operational condition and is free from physical damage.

**2.3.9 Load Test:** A test performed to simulate real-world scenarios by subjecting equipment to various levels of workload to assess its performance and scalability under different conditions.

**2.3.10 Maintenance:** Work performed to keep equipment operable, or to make repairs.

**2.3.11 Refurbish:** To restore something old to a good state of repair.

**2.3.12 Service:** The performance of routine maintenance and repairs to equipment to ensure reliability

**2.3.13 Testing:** Testing of portable and mobile fire protection components or equipment (such as hydraulic spreaders, cutter and extension ramps, water flow tests, alarm tests, dry-pipe, deluge or pre-action valve trip tests, system actuation tests and the like) to confirm that it operates as intended.

## 2.4 Abbreviations

Abbreviation	Explanation
NFPA	National Fire Protection Association
SANS	South African National Standard
AFFF	Aqueous Film Forming Foam

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Abbreviation	Explanation
DAA	Delegated Approval Authority
CPR	Cardio-Pulmonary Resuscitation
SCBA	Self-Contained Breathing Apparatus
BU	Business Unit
NQF	National Qualifications Framework
ISO	International Organization for Standardization

## 2.5 Roles and Responsibilities

Role	Responsibility
<b>Contract Manager</b>	<p>Ensure that task orders are created timeously for services required.</p> <p>The Contract Manager is responsible for managing the implementation of the contract in accordance with the approvals granted by the DAA and the terms and conditions of the contract.</p> <p>The Contract Manager is responsible, in particular, to ensure that the contractor's performance meets contractual requirements in accordance with the terms of the contract and that all processes, procedures, standards and tools for the management of contracts are adhered to.</p> <p>The Contract Manager is further responsible for the closing out of the contract; managing take-over; terminating the contract prior to completion if necessary; administering close-out of retention; issuing the contract final certificate; performing final account close-out; and closing out bonds and guarantees and conducting a post-contract review.</p> <p>The Contract Manager must also ensure that an original or certified copy of a valid B-BBEE certificate or sworn affidavit, is available during the contract period to enable Eskom to report on B-BBEE spend.</p>
<b>Approved Service Provider</b>	<p>The Approved Service Provider is responsible to render a service that meets all the contractual requirements in accordance with the terms of the contract and that all processes, procedures, standards, and tools for the execution of the contract are adhered to.</p> <p>The Approved Service Provider must also ensure that an original or certified copy of a valid B-BBEE certificate or sworn affidavit, is sent to the Contract Manager before the commencement of the contract period</p> <p>The Approved Service Provider must keep record and provide documents and evidence to support a claim of payment for what is due.</p>
<b>Appointed Competent Person for Fire Management</b>	<p>The Appointed Competent Person for Fire Management shall ensure that the Technical Evaluation score sheet is supplied to the tender evaluation committee.</p> <p>The Appointed Competent Person for Fire Management shall verify that the service provider/partner executes this scope of work accordingly.</p>

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	The Appointed Competent Person for Fire Management will conduct a monthly assessment to monitor work progress and compliance.
<b>Procurement Department</b>	<p>Settle all contractual obligations and pay all monies owing within the prescribed or agreed period.</p> <p>To lead the Sourcing of prospective Approved Service Providers, the Tendering and Evaluation process, report checking, tender award approval and establishing the Contract</p> <p>To control, authorise and implement changes in the Scope of work.</p>

## 2.6 Process for Monitoring

**2.6.1 Internal Audit:** Fire Risk Management is subjected Compliance Inspections, which also focuses on how contracts are being managed and monitored.

**2.6.2 Self-Assessments:** Fire Risk Management is also expected to do self-assessments to evaluate its own performance, compliance, or systems against defined standards or criteria.

## 2.7 Related/Supporting Documents

### 2.7.1 Not Applicable

## 3. Scope of Work

The required work to be executed by the Appointed Service Provider is to Service, Test, Maintain and Supply fire service equipment, such as and when required by Eskom Hendrina Power Station. The equipment supplied and the work carried out must be in alignment with industry norms and standards.

The Scope of Work comprises of the following.

### 3.1 Equipment to be Tested

**Table 1: Equipment Requiring Testing**

Component	Test	Criteria	Frequency
SCBA Cylinder	Hydrostatic Test	SANS 10019, NFPA 1852	As and when required
Complete SCBA set	Flow Test or Posi-Check	NFPA 1981, SANS 50137, SANS 10019	As and when required
AFFF 3%	Viscosity Test	EN 1568	As and when required
Holmatro Rescue Pump	Load Test	SANS 60745, NFPA 1937	As and when required
Holmatro Rescue Spreader	Load Test	SANS 60745, NFPA 1937	As and when required
Holmatro Rescue Shears	Load Test	SANS 60745, NFPA 1937	As and when required
Hydraulic Rams	Load Test	SANS 60745, NFPA 1937	As and when required
Hydraulic Pedal Cutter	Load Test	SANS 60745, NFPA 1937	As and when required
Double Extension Ladder	Load Test	SANS 50131	As and when required
Vehicle Winch	Load Test	NFPA 1937	As and when required

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Component	Test	Criteria	Frequency
Rescue Rope	Load Test	Industry Norm	As and when required
Fire Door	Functional	SANS 1253, NFPA 80	As and when required

### 3.2 Equipment to be Serviced and Maintained

**Table 2: Equipment Requiring Service and Maintenance**

Component	Service	Criteria	Frequency
Complete SCBA Set	Functional	SANS 50131	As and when required
SCBA cylinders	De-rusting and chemical treatment to ensure good Breathing Air Quality	NFPA 1989	As and when required
SCBA 1 <sup>st</sup> Stage Compressor	Functional	Industry Norm	As and when required
Portable Ejector pump	Functional	SANS 9906	As and when required
Portable Centrifugal pump	Functional	SANS 9906	As and when required
Pneumatic Lifting bags	Functional	NFPA 1937	As and when required
Carborundum Cutter	Functional	SANS 60745	As and when required
Portable Generator	Functional	Industry Norm	As and when required
Positive Pressure Ventilating Fan	Functional	Industry Norm	As and when required
Foam Generator	Functional	Industry Norm	As and when required
Floating Pump	Functional	Industry Norm	As and when required
Skid Unit	Functional	Industry Norm	As and when required
Chain Saw	Functional	Industry Norm	As and when required
Fire Pump on Toyota Land Cruiser	Functional	Industry Norm	As and when required
Centrifugal Pump on Fire Engine	Functional	Industry Norm	As and when required
Fire Door	Functional	SANS 1253, NFPA 80	As and when required

### 3.3 Equipment to be Refurbishment

**Table 3: Equipment Requiring Refurbishment**

Component	Service	Criteria	Frequency
Inline Foam Inductor	Refurbish	Industry Norm	As and when required
Ground Monitors	Refurbish	Industry Norm	As and when required
2009 MAN TGM 18.240BB SWB Fire Engine Cab	Refurbish	Industry Norm	As and when required
2009 MAN TGM 18.240BB SWB Fire Engine Water Tank	Refurbish	Industry Norm	As and when required
2009 MAN TGM 18.240BB SWB Fire Engine Foam Tank	Refurbish	Industry Norm	As and when required
2009 MAN TGM 18.240BB SWB Fire Engine Equipment Lockers	Refurbish	Industry Norm	As and when required
2010 TOYOTA LAND CRUISER 79 4.2D 4X4 Cab	Refurbish	Industry Norm	As and when required
2010 TOYOTA LAND CRUISER 79 4.2D 4X4 Water Tank	Refurbish	Industry Norm	As and when required
2010 TOYOTA LAND CRUISER 79 4.2D 4X4 Equipment Locker	Refurbish	Industry Norm	As and when required

### 3.4 Equipment to be Supplied

**Table 4: Equipment to be Supplied and Delivered**

Component	Frequency
Altair 4XR MultiGas Detector	As and when required
Altair 5XR Gas Detector	As and when required
Supply of new 25L of AFFF 6% or FFFP	As and when required
Chlorine Kit	As and when required
Pipe Leak Kit	As and when required
Wound Cleaner	As and when required
Anti-Septic wipes	As and when required

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Component	Frequency
Soft Cotton Pads	As and when required
Sterile Gauze	As and when required
Bandage 75mm X 5m	As and when required
Elastic Adhesive Plaster 25mm X 3m	As and when required
Non-Allergic Adhesive 25mm X 3m	As and when required
Disposable Latex Gloves	As and when required
CPR Mouthpiece	As and when required
First Aid Dressing 75mm X 100mm	As and when required
First Aid Dressing 150mm X 200mm	As and when required
Grass Beaters	As and when required

#### 4. Records to be kept

Technical Evaluation Strategy

Budget Letter

SHEQ Requirements

Service Manager Appointment Letter

Non-Disclosure Agreement /Declaration of Interest

Technical Evaluation Strategy Team appointments

Contract Purchase Request

#### 5. Notes / Forms / Appendices / Annexures

- N/A

#### 6. Acceptance

This document has been seen and accepted by:

Name	Designation
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#### 7. Revisions

- N/A

#### 8. Development Team

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

#### 9. Acknowledgements

- N/A

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