

	<b>Scope of Work</b>	<b>Kusile Power Station</b>
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Title: **Kusile Power Station Supply and Delivery of Boiler spares Scope of work**

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## **1. Introduction**

Kusile Power Station management has decided to do a once off purchase for replenishment of boiler spares required. These spares are considered essential due to their potential to cause partial or complete unit load losses, as well as their role in planned maintenance and emergency situations. To safeguard production continuity, these items are prioritized to minimize operational disruptions and maintain consistent efficiency and reliability across the plant.

## **2. Supporting Clauses**

### **2.1 Scope**

The Scope of Work (SOW) outlines the specific spares to be provided by the Supplier under a single, once off purchase order. The scope included here does not substitute procurement procedures that will be followed during the procurement process.

#### **2.1.1 Purpose**

The purpose of this document is to ensure that all maintenance spares that are being procured by Kusile Power Station are correct and correctly specified.

#### **2.1.2 Applicability**

This document is applicable to Kusile Power Station.

#### **2.1.3 Effective date**

This document will be effective from the date of its authorisation.

## **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] 36-681 Generation Plant Safety Regulations
- [3] 32-727 SHEQ Policy
- [4] 240-84513751: Material Specification and Certification Guideline for Power Generation Plant
- [5] 240-54820279: Receive Materials

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## 2.2.2 Informative

## 2.3 Definitions

Abbreviation	Explanation
Contractor	Service provider contracted to provide specific spares & documentation to Kusile Power Station. Referred to as the Supplier on this document.
Employer	Kusile Power Station

## 2.4 Abbreviations

Abbreviation	Description
OEM	Original Equipment Manufacturer
PCLF	Planned Capability Loss Factor
QCP	Quality Control Plan
SOW	Scope of Work
UCF	Unit Capability Factor
UCLF	Unplanned Capability Loss Factor
SSC	Submerged Scrapper Conveyor
QA	Quality assurance
QC	Quality Control
NDT	Non-Destructive Testing
PCM	Process Control Manual
OD	Outside Diameter
PSCM	Procurement and Supply Chain Management
C&I	Control and instrumentation
WT	Wall Thickness

## 2.5 Roles and Responsibilities

### 2.5.1 Contractor/Supplier

- a) Provide a quotation for each listed item in Appendix A / Pricing Data as part of tender deliverable
- b) Supply procured spares as requested by the Employer
- c) Provide technical support services as requested by the Employer
- d) Confirm correctness of the supplied spares information.
- e) Provide spares technical information in accordance with this SOW.

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- f) Timeously inform the Employer of any delays or when outstanding or additional information from the Employer is required
- g) Responsible to ensure that a quality product is delivered
- h) Responsible to ensure that the correct spare is supplied
- i) Responsible to ensure that every effort is made to keep to the agreed program and plan
- j) Provide all required technical datasheets and/or product brochures
- k) Provide Materials Management with populated DCFs for cataloguing of spares and record keeping
- l) Conform to all the other requirements stipulated in this document
- m) Supply all the necessary test sheets/results, where applicable
- n) All Supplier employees entering site shall comply with Eskom's policies and site regulations,
- o) adherence to Eskom's Life Saving Rules, adherence to Generation Occurrence Management
- p) Procedure, Smoking Policy, zero tolerance on alcohol usage, etc. These requirements will be detailed during the induction training process.
- q) Ensure that all staff brought onto site in connection with this SOW should be able to fluently speak, understand and write in English language.
- r) The Contractor ensures that all staff brought to Kusile PS site have a valid fitness certificate
- s) based on the specified plant man-job specification.

### **2.5.2 Employer: End-user**

The responsibilities of the Employer include the following:

- a. Compile and submit scope of work with technical specifications.
- b. Performs Quality Control of all spares on delivery at the Employer premises.
- c. Liaise with all relevant stakeholders for any input
- d. Ensure that the Works Information is in accordance with Eskom policies and procedures.
- e. Provide all necessary information to assist in spares and technical support services Procurement
- f. Participate in technical evaluation of the tender documents
- g. Assist with the preparation of all the reports to different tender committees, where applicable
- h. Provide technical assistance to Maintenance, Materials Management and Procurement
- i. Perform Quality Checks on procured spares and accompanying documentation
- j. Verification and acceptance of all supplied documentation including DCFs
- k. Responsible for QC at delivery of procured spares

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- l. Departments during the execution of this Works Information
- m. Provide Materials Management with populated DCFs for cataloguing of spares and record keeping

### **2.5.3 Employer: Materials Management**

- a) Catalogue the spares after completion of DCFs
- b) Confirm that the information supplied by the engineer is enough for cataloguing
- c) Perform QC on all submitted DCFs
- d) Make provision for storage of procured spares
- e) Work together with engineering and maintenance when accepting spares into stores

### **2.5.4 Employer: Procurement Department**

- a) Perform all procurement processes outlined in this Works Information
- b) Issue invitation to tender to the Supplier
- c) Supply engineering with Supplier information for sole source justifications, where applicable.
- d) Set up clarification meetings between Supplier and Employer
- e) Act as communication link between Supplier and Employer
- f) Ensure all necessary payments are affected timeously and keep record thereof.
- g) Arrange technical evaluation sessions.
- h) Compile and present mandate to negotiate and arrange negotiation meetings if and when required and give feedback to relevant tender committee.
- i) Keep record of all tender documentation

### **2.5.5 Employer: QC Technician / End-user**

- a) Perform inspections and QC on spares upon delivery
- b) Ensure spare items are stored properly by Materials Management as per relevant storage recommendations by the respective manufacturers
- c) Ensure Spares are used sparingly and appropriately for the duration of the contract.

## **2.6 Process for Monitoring**

This document will be a for annual service of diesel engines for Kusile Power Station.

## **2.7 Related/Supporting Documents**

Receiving and Issuing of Materials

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### 3. Scope

The Scope of Work (SOW) outlines the specific spares to be provided by the Supplier under a once off purchase order. The scope included here does not substitute procurement procedures that will be followed during the procurement process.

Material	Short Text	Quantity requested
0030571	BRG BAL:CONRAD;DOUBLE SHIELD;ID 60 MM	1
0501493	SEAT VLV:DISCHARGE;310 X 210 MM;STL	6
0501495	SEAT:VALVE;ID 90 X OD 200 MM;STL	6
0574038	TRANSMITTER PRESS:0-400 BAR;O/P 4-20 MA	1
0579195	BOX:VALVE;WD 160 MM;LG 250 MM;73 MM;STL	240
0608668	REPEATER LGHT SGNL:GALVANIC ISOLATOR	1
0609103	COUPLING SHFT FLEX:ELASTIC;19 MM;70 NM	1
0612017	VALVE GLB:450 MM;300 MM;AUTOMATIC;1.5145	1
0616304	MOTOR ELEC:7.5 KW;2915 RPM;132M;14/8.1 A	1
0616806	TRAP STEAM:SLUDGE VESSEL;BW 50 MM;1.4903	1
0621538	BRG PLN:PA FAN BEARING DRIVE END;ID 200	1
0621538	BRG PLN:PA FAN BEARING DRIVE END;ID 200	1
0621758	COMPENSATOR:FABRIC EXPANSION	1
0621977	SPIDER CPLG:SPACER;STL;ID 28 X 22.2 MM	1
0622119	SCRW SET:8 MM;0.7 MM;35 MM;SOCKET HEX	1
0631149	TUBE:BYPASS;LG 5000 MM;OD 70 MM;ID 64 MM	1
0639692	JOINT EXPSN:COMPENSATOR;WD 916 X HT 237	1
0643302	VALVE:CONTROL;150 MM;MANUAL	1
0646099	TRANSMITTER TEMP	1
0646174	VALVE RELF	1
0647617	BLADE FAN	1
0647620	BRG PLN	1
0647621	SEAL LBRNTH	1
0653599	SEAL:KVH DN100 PN40	1
0653600	SEAL	1
0654568	BRG PLN	1
0654570	COUPLING SHFT:TAPER GRID RESILIAN	1
0654760	ELBOW PIPE:90	1
0654767	ELBOW PIPE:90	1
0654773	ELBOW PIPE:15	1
0654775	ELBOW PIPE:15	1
0654776	ELBOW PIPE:90	2
0654779	ELBOW PIPE:90	2
0654780	ELBOW PIPE:15	2

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0654782	ELBOW PIPE:90	2
0654786	ELBOW PIPE:30	2
0654788	ELBOW PIPE:90	2
0654789	ELBOW PIPE:15	2
0654791	ELBOW PIPE:90	2
0654793	ELBOW PIPE:45	2
0654794	ELBOW PIPE:90	2
0654797	ELBOW PIPE:30	2
0654798	ELBOW PIPE:90	2
0654800	ELBOW PIPE:90	2
0654801	ELBOW PIPE:90	2
0654803	ELBOW PIPE:90	2
0654805	ELBOW PIPE:90	2
0655346	PROTECTOR:PROTECTIVE COVER	1
0655725	PIECE:ARMOURING;PF; BURNERS	1
0655944	SEAL MECH	4
0655952	SET:TAKE UP PULLEY	1
0655953	SET:TAKE UP ROD AND NUT	2
0655957	FLAP:COAL DETECTOR	2
0655958	FLAP:COAL DETECTOR FLAP BEARING	2
0656033	WEIGHT:RAMSEY 10-20-1/SINGLE IDLER	2
0656034	METER:MEASURING INSTRUMENT	2
0656057	KIT:PRIMARY AIR QUICK CLOSING DAMPER	2
0656062	JOINT BALL	1
0656291	SPINDLE:CONTROL VALVE;56 MM;LG 724 MM	2
0656313	SPINDLE:CONTROL VALVE;26 MM;LG 385 MM	2
0665859	SPINDLE:CONTROL VALVE;63 MM;LG 1341 MM	2
0665860	SPINDLE:CONTROL VALVE;60 MM;LG 525 MM	2
0501497	SPINDLE:VALVE;125 MM;LG 1.3 M;1.4122+QT	3

### 3.1 Plant Description

Kusile Power Station is a 4 800MW rated power station, with each of the six (6) Units rated at 800MW.

### 3.2 Description of the works

The works entails the supply and delivery of spares with technical specifications detailed in a spares list (BOQ) that is included herein: Spares Replenishment BOQ.

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### **3.3 Documentation**

The following are the *Employers* requirements from the *Supplier*:

- a. The *Supplier* will ensure proper handling of the spares (from procurement of equipment, storage and transportation)
- b. The spare must be to the exact same specification as installed in the plant and specified on this scope of work document. *Notwithstanding the stipulated condition that the Supplier is responsible for verifying the correctness of the spares information provided by the Employer in relation to the existing installed spare. This may include the Supplier consulting the original supplier of the spare to ensure correctness of information provided by the Employer.*
- c. The *Supplier* will supply any additional information such as brochure, general arrangement drawing, certificates (including material certificates), detailed specification, data sheet, Settings, Documents for programmable electronic cards and spares etc. Check sheets or drawings for quality inspections.
- d. The *Supplier* provides the *Employer* with additional spares information and verifies information required in the attached data capturing forms (DCF).
- e. The *Supplier* shall supply preservation and storage procedure/s, where applicable.
- f. The *Employer* may make clarification sessions available to either prospective *Supplier/s* in order to further assist the prospective *Supplier's* to meet the requirements of the work to be performed by the *Supplier*.
- g. The *Supplier* must ensure that all components supplied must be individually packed in such a way as to protect the parts during transport and storage. The packaging must also include the necessary labels to identify the items.

### **3.4 Acceptance of Spares**

#### **3.4.1 Spares Identification**

Appendix A – Pricing Data will be included in this document when additional material items, beyond those currently listed, are identified for procurement under this Scope of Work (SOW). This list corresponds to the provided electronic copy of the DCF's or SAP Specification.

Each spare is identifiable by means of an Eskom SAP Material number (as is used in the Power Station), part description, OEM and/or OEM part number.

#### **3.4.2 Obsolescence**

The *Supplier* shall inform the *Employer* immediately where spares are found to be obsolete before the alternative spares is supplied, the *Supplier* shall indicate this to the *Employer* and indicate viable alternatives thereof.

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### **3.4.3 Packaging**

- I. All supplied spares shall be packaged in such a manner that they will be transported and stored without damage. This includes preventing damage due to moisture ingress, dust and foreign objects. The contractor's procedure shall be used Transportation and Storage.
- II. Different spare types shall be packaged separately such that each spare type can be stored separately. Packaging shall be such that the spare can be identified without opening the packaging. Packaging shall be of material that will not be damaged, to an extent possible, by harsh weather conditions during transportation. If that is not possible, then the packaging shall be protected against such conditions.
- III. Where possible, packaging to be such that procured spares can be positively identified through the packaging. Where this is not possible, the packaging to be such that it allows opening and closing of packaging and still maintain the packaging integrity thereafter.
- IV. Delivery packaging shall include as a minimum the following details:
  - a) Purchase Order Number
  - b) Part Description
  - c) Part number
  - d) Eskom SAP Material number
  - e) Drawing number, where applicable
  - f) Physical address of Kusile Power Station and the *Supplier*
  - g) Contact details of the *Supplier*
  - h) Delivery note number

### **3.4.4 Acceptance of spares**

- a. Incorrect, damaged or faulty spares will NOT be accepted.
- b. All the spares will be inspected and accepted by Engineering and/or OEM Technician before payment could be processed.
- c. Data capturing forms information must be supplied and must meet an acceptable level.
- d. The Supplier must ensure that the supply and preservation of spares is done in compliance with preservation specifications and good engineering practice.
- e. The Supplier to advise the Purchasers warehouse/stores on effective storage of spares and preservation.
- f. Upon delivery of the goods at the Eskom stores, an inspection of goods and the receipt must be conducted by the End-user and the Supplier within 48 hours of delivery. There must be an approved list of appointed quality inspectors available with specimen signatures and this must be updated annually. As per Work Instruction, Receive Materials – 240-54820279.
- g. The Supplier must supply the Purchaser with warrantee certificates, test certificates and the complete data book of spares at the time of delivery which shall be uploaded into the SAP system Goods Receipt document as per Work Instruction, Receive Materials - 240-54820279.

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- h. The Supplier must deliver the goods as per the agreed to delivery times.
- i. The Supplier to provide 3.1 Material certificates as a minimum, where applicable.

### **3.4.5 Information to be provided to the Supplier**

The *Supplier* is provided with electronic Data Capture Form (DCF) for each spare required. The *Supplier* is required to ensure that the correct information is captured on the DCF's. The DCF's are required by the *Purchaser's* Material Management System to be able to book the item in the store and the information should also be sufficient to procure the correct spares in future. Most of the DCF's have been populated by the *Purchaser* where information was available. This information may not be correct and needs to be reviewed and verified/corrected as part of the *Services*.

The DCF's are provided in Microsoft Word format. The *Supplier* needs to ensure the 'Track Changes' function is selected 'on' so that any changes to the existing information as well as inserted information can easily be identified and tracked. The following information needs to be provided as detailed as possible on the DCF's.

- a. Verify the existing information that is already populated on the DCF's and make changes where required. Ensure the 'track changes' function is on.
- b. Populate/verify all fields highlighted in 'yellow' on the DCF's, in the electronic format provided.
- c. Supply additional information in the field "Free Format Text" or "Purchase order text" on the DCF's. This includes:
  - i. The standards or specification that the product must conform to.
  - ii. Add any spares information which has been omitted, which is deemed relevant for spares identification, packaging and protection requirements during transportation and storage.
  - iii. The Quality Control requirements for manufacturing and testing of the product to ensure that the spares conform to the correct specifications or standards, including certificates and test results, that is required with delivery of the goods.
- d. Supply any other additional information that has not been specified on the DCF's but necessary for storage, preservation, installation, and utilisation of spares where applicable. Such information includes brochures, technical data, etc. These DCF's with the added information needs to be made available electronically to the employer.
- e. Supply any other additional information that has not been specified on the DCF's but necessary for storage, preservation, installation and utilisation of spares where applicable. Such information includes brochures, technical data, etc.

### **3.5 Spares Management**

**Appendix A – Pricing Data** will be included in this document when additional material items, beyond those currently listed, are identified for procurement under this Scope of Work (SOW). This list corresponds to the provided electronic copy of the DCF's or SAP Specification Printout that contain more information about the required spares.

Each spare is identifiable by means of an Eskom SAP Material number (as is used in the Power Station), part description, OEM and/or OEM part number.

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### **3.6 Equipment Required**

The Supplier and his sub-suppliers must possess the tools and equipment to satisfy the requirements for the scope.

### **3.7 Consumables Required**

The Supplier must supply his own consumables to satisfy the requirements for scope.

### **3.8 Planned KEY PERFORMANCE INDICATORS (KPI)**

The KPI's will be used to determine the successful performance of the scope. The Supplier is required to perform to meet these targets. The KPI's are to be agreed to between parties and are subject to change on a quarterly basis, based on the need.

- i. First committed delivery date
- ii. Quality
- iii. Non-compliance to the agreed Scope of Work and Quality Control Plans

### **3.9 Insurance of the Goods**

Insurance to be the responsibility of the Supplier until delivery.

## **4. Acceptance**

This document has been seen and accepted by:

## **5. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
March - 2031	1		First Issue

## **6. Development Team**

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

## **7. Acknowledgements**

N/A

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## **Appendix A / Pricing Data – Spares Replenishment BOQ**

### A.1 Document Hierarchy

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