

	Scope Of Work	Bulk Material Services
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Title: **Maintenance of Coal, Ash, Flue Gas** Document Identifier:

Desulphurization(FGD), Units and

Auxiliary Plant services for Kusile

Power Station

on an “as and when required basis”

Alternative Reference **Not Applicable**

Number:

Area of Applicability: **Eskom Rotek Industries
SOC Ltd**

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1. Introduction

Eskom Rotek Industries (ERI), Bulk Material Services (BMS) has a maintenance contract with Eskom Generation on a 10-year contract. The SOW entails the Materials Handling value chain from coal plant to Ash disposal facilities. This partnership comprises of coal stockyard management, ash dump and dam management, overall plant maintenance including FGD plant maintenance, operating, cleaning, monitoring and inspection.

1.1 Purpose

The purpose is to preserve the status of the plant availability and reliability through maintenance of the assets and maintaining of good housekeeping standards.

1.1.1 Applicability

This document shall apply to the site with attached addendum.

This document shall be effective from the authorisation date.

The stations where the services are required are

Site	Operation
Kusile	Coal, Ash, Flue Gas Desulphurization Plant services (FGD), Units and Auxiliary fixed plant area

2. Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs and additional site-specific ones.

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2.1 Normative

1. ISO 9001 Quality Management Systems
2. OSHAS 1800 Safety Management Systems
3. Occupational Health and Safety Act and Regulations (85 of 1993)
4. 36-681_Generation Plant Safety Regulation
5. 240-62196227_Eskom Life Saving Rules
6. 32-95_Environmental, Occupational Health and safety Incident Management Procedure

2.2 Informative

1. Criminal Procedures Act 51 of 1977
2. National Road Traffic Act 93 of 1996
3. Labour Relations Act 66 of 1995
4. Basic Conditions of Employment Act 75 of 1997

2.3 Definitions

Description	Definition
Appointed Contractor	Means a contractor appointed by the principal contractor.
Appointed Person	A person who has been authorised in terms of 36-681_Generation Plant Safety Regulation to: (i) Determining appropriate and effective isolations for the anticipated work to be carried out safely. (ii) Ensuring that the isolation and de-isolation on the plant covered by a permit to work is effectively carried out taking health and safety precautions into account. (iii) Issuing of prepared permits once all the associated test certificates are available and the required risk assessments have been presented to the appointed person by the responsible person for review in terms of these regulations.
Baseline Risk Assessment	(32-520) baseline operational risks refer to the health and safety risks associated with all standard processes and routine activities in the business

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Cleaning Activity	Means the safe cleaning of transfer chutes from the outside by the disabling of mechanisms to inhibit starting of the plant during the cleaning process, which is done in accordance with formulated safe procedures.
Contractor (includes appointed contractor)	means an employer as defined in section 1 of the Act who performs contract work and includes principal contractors
Competent Person	(OHS Act) means any person having knowledge, training, experience, and qualifications, specific to work or task being performed, provided that, where appropriate, qualifications and training are registered in terms of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995).
Danger/Dangerous	Means a condition/substance that constitutes a risk of personal injury, impairment of health, or death
Employee	(OHS Act) means, subject to the provisions of subsection (2), any person who is employed by or works for an employer and who receives remuneration or who works under the direction or supervision of an employer or any other person.
Employer	(OHS Act) means, subject to the provisions of subsection (2), any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him/her, but excludes TES (ex. labour broker) as defined in section 1(1) of the Labour Relations Act.
Field / Plant Operator	Employee designated to conduct routine Plant inspections, Preventative Maintenance (PM) and (report) defect any breakdowns or abnormal Plant conditions
Lifesaving Rules	(240-62196227) a rule that, if not adhered to, has the potential to cause serious harm to people.
Permit To Work	Means the printed form containing sections entitled application, permits to work, suspension, suspension revocation, clearance and revocation, and used for the authorisation of all work to be carried out on the plant in terms of these regulations.
Plant	Means structure, machinery, low voltage electrical equipment or equipment, which does not fall within the scope of the Operating Regulations for High-

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	voltage Systems, and excludes, mobile, portable lifting equipment, domestic circuits, appliances and tools.
Responsible Person	Means a person who has been authorised in terms of these regulations to be responsible for ensuring that the work on the plant covered by a permit to work can be carried out and executed taking health and safety precautions into account and within the terms of 36-681_Generation Plant Safety Regulation
Safe/Safely/Safety	Means a condition not posing any danger, an activity that can be carried out without danger, or protection against danger.
Shall and Should	The word “shall” is to be understood as mandatory and “should” as recommended.
Skilled Person	Means a person who has been trained, has adequate knowledge for the task at hand and declared competent in writing.
Supervision/Supervise	Means to oversee the actions of a person(s) to such an extent as to prevent any dangerous act, as far as reasonably practicable. Such a supervisor must be trained in risk assessment techniques and be able to understand the dangers / hazards associated with the task and who has the authority to ensure that precautionary measures taken are implemented.
Visitor	Any person visiting a workplace with the knowledge of, or under the supervision of, an employer.

2.4 Abbreviations

Abbreviation	Explanation
RA	Risk Assessment
AP	Appointed Person
LAR	Limited Access Register

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Abbreviation	Explanation
RA	Risk Assessment
AP	Appointed Person
ERI	Eskom Rotek Industries
OHSACT	Occupational Health And Safety Act
OEM	Original Equipment Manufacturer
RP	Responsible Person
PPE	Personal Protective Equipment
PTW	Permit To Work
H&S Rep	Health and Safety Representative
RA	Risk Assessment
-	-

3. Supporting Clauses

3.1 Scope (Maintenance)

The scope of work is the provision of all Control and Instrumentation, Electrical and Mechanical Maintenance of Coal, Ash, and Flue Gas Desulphurization Plant the **duration of 36 months, on an “as and when required basis”**, at Kusile Power Station

- The scope of work will include all FGD fixed plant area maintenance; this is maintenance of the FGD reagent preparation, unitised plant and dewatering plant, Limestone Conveyors and Gypsum Conveyor components at Kusile Power Station.

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- The SOW will also include maintenance Coal handling equipment from the coal stockyard to the units, Ash handling mechanical equipment from the coarse ash conveyors to the co-disposal dump and/ 60 years ash dump.
- The SOW will also include Turbine and Boiler Electrical Maintenance Activities and Auxiliary Plant, Electrical and Mechanical Maintenance Service

3.1.1

- The scope of work will include all Coal/Coarse Ash/Ash silos fixed plant area maintenance; this is maintenance of the Coal, Ash and Flue Gas Desulphurization, Units and Auxiliary Plant at Kusile Power Station
- Provide Responsible Persons on all shifts on a 24 hour basis
- Provide seasoned skilled persons to maintain the Coal, Ash and Flue Gas Desulphurization Plant fixed plant on a 24 hour basis.
- This service delivery will include all maintenance personnel, tools, equipment, site infrastructure and heavy machinery required to perform the task.
- The development of maintenance and safe working procedures will be a joint venture between Generation Power Stations and ERI and the contractor
- The maintenance work includes, mechanical preventative maintenance, breakdown maintenance, corrective maintenance.
- Investigate plant failures within the Coal, Ash and Flue Gas Desulphurization Plant fixed plant
- Provide recommendations to improve the Coal, Ash and Flue Gas Desulphurization Plant fixed plant performance

3.1.2 Mechanical Maintenance (FGD)

- Provide Responsible Persons on a 24 hrs shift cycle to be available for the issued outage SOW.
- Provide seasoned skilled persons to do corrective Maintenance on the FGD plant as per the outage Scope. This persons must be available on a 24hrs shift cycle

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- This service delivery will include all maintenance personnel, tools, equipment, site infrastructure and heavy machinery required to perform the task.
- The development of safe working procedures will be a joint venture between Generation Power Stations and ERI
- The maintenance work includes mechanical corrective maintenance for outages on the following systems
 - Ball Mills:
 - Hydro Cyclones
 - Limestone feeder
 - Reclaimer
 - Limestone Stacker
 - Mobile Feeder
 - Limestone Conveyors
 - Dewatering System
 - Dewatering Pumps
 - Vacuum Pumps
 - Gypsum Conveyors
 - Dew Conveyors
 - Absorbers (K1 to K6)
 - Recirculation Pump
 - Bleed System
- Provide recommendations to improve the FGD Reliability and Availability

3.1.3 Electrical Maintenance

- Provide Responsible Persons on all shifts on a 24 hour basis
- Provide seasoned skilled persons to maintain the Coal/Coarse Ash/DHP/Ash silos fixed plant on a 24 hour basis.
- This service delivery will include all maintenance personnel, tools, equipment, site infrastructure and heavy machinery required to perform the task.

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- Maintenance will be a full maintenance of the Coal/Coarse Ash/DHP/Ash silos fixed plant, 24 hours a day, based upon a 4 x 4 shift cycle (2 day 12 hours, 2 nights 12 hours, 4 days off) shift cycle.
- The development of maintenance and safe working procedures will be a joint venture between Generation Power Stations and ERI and the contractor
- The maintenance work includes, mechanical preventative maintenance, breakdown maintenance, corrective maintenance.
- Investigate plant failures within the Coal/Coarse Ash/DHP/Ash silos fixed plant
- Provide recommendations to improve the Coal/Coarse Ash/DHP/Ash silos fixed plant performance

3.1.4 Electrical Maintenance

- Provide Responsible Persons on a 24 hrs shift and be available for outage work during working days and Weekends
- Responsible for all electrical Maintenance works on the station and its associated plant.
 - All routine maintenance on transformers and all transformer auxiliaries will be maintained according to the Employer's procedures.
 - All routine, outage and opportunity maintenance, testing, fault finding and repairs to all 6.6kV and 3.3kV boards. This includes the following: Breaker testing, Breaker pressure testing, Breaker under-voltage close and trip testing, Routine and breakdown maintenance on breaker mechanism Bus bar and bus bar link maintenance, Control and indication of breakers
 - All routine, outage and opportunity maintenance, testing, fault finding and repairs to all 380V boards feeding from the Kusile Power Station electrical reticulation system. This includes the following: Clean and check of breakers during outages; all breakdown maintenance on 380V boards; 380V Incomer maintenance Bus bars maintenance; Volt and Ammeter check and replacements; Repairs as a result of all abnormal incidents on this system will be performed as part of the works.

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- All routine, outage and opportunity maintenance, testing, fault finding and repairs to all DC boards. This includes the following: Clean and checking of bus bars; Indication; Volt and Ammeter check and replacements; Locating of DC earth faults & DC earth relay maintenance
- All routine, outage and opportunity maintenance, and cleaning on the 15.75kV breaker, earth switch and breaker auxiliaries.
- All routine, outage and opportunity maintenance, testing, fault finding and repairs on the Generator, exciter, star and load point and generator auxiliaries. This includes the following: (Brush gear inspection, maintenance and repairs; Polarity change of Generator rotor and Exciter rotor; Earth and voltage brush inspection and brush replacements; Disconnection and reconnection of Exciter during outages; Ad Hoc testing of generator stators, generator rotors, exciter stators and exciter rotors during unplanned outages and incidents as part of fault finding; Cleaning of star and load point cubicles; Ensuring reliability of the Field Breakers on the exciter and ensuring generator brush gear and exciter stator filters are in a good condition and sealing properly)
- All routine, outage and opportunity maintenance, fault finding, testing and repairs on all the 380VAC, 220VAC and 220VDC Motors. Disconnection and reconnection of motors; Direction testing of motor & Testing of motors
- All routine, outage and opportunity maintenance, fault finding, testing and repairs on all the 3.3kV and 6.6kV motors (Disconnection and reconnection of motors Direction testing of motors
- All Electrical Actuators and Solenoids will be responsible for disconnection and reconnection testing
- All routine, outage and opportunity maintenance, fault finding, testing and repairs on the diesel generators and associated equipment. Work will be carried out according to the Employer's procedure NWS1562.
- Undertake all outage and opportunity maintenance, fault finding, testing and repairs on the station electrical reticulation. All electrical reticulation related tasks on the 6.6kV, 3.3kV, 380VAC, 220VAC, 220VDC and 24VDC systems
- Undertake all maintenance, testing, repairs, modifications and fault finding on the 220VAC single phase electrical circuit. This shall exclude all offices and buildings that falls outside the units. Distribution board maintenance and repairs, 220VAC cabling

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maintenance, replacements and repairs, 220VAC outlet maintenance, replacements and repairs, Issuing of Certificates of Compliance (CoC), changes to the existing system, repairs to the existing system, earth leakage testing, safety inspections to portable electrical equipment and testing of portable electrical equipment on request

- Undertake all general fault finding and repairs on switchgear, motors, transformers, generators, excitation system, generator auxiliaries, DC system and cables.
- Undertake all routine, outage and opportunity maintenance, testing, fault finding and repairs on all lighting circuits and lights.

All new electrical installations or changes to the existing electrical system on the Power Station's 24VDC, 220VAC, 220VDC and 380VAC electrical system. Modification process must be followed

3.2 PERFORMANCE SPECIFICATION

- The employees must be in a mental and physical healthy condition to be able to work an average of 12 hours per shifts for the night shift, and a full 9 hour day shift
- Working of overtime as per operational requirements when needed.
- Employees must be medically fit.
- Minimum educational requirements for **Site Manager** is a **National Diploma (Electrical/Mechanical/Control & Instrumentation)** with a minimum of 5 year's experience in a power plant environment of which 2 years is at a supervisory/management level.
- Minimum educational requirement for **Senior Technical Supervisor** is a **Fitter/Electrician/boilermaker trade test plus a National N Diploma and or National Diploma Mechanical/Electrical Engineering** with a minimum of 5 years of work experience in maintenance of a power plant.
- Minimum educational requirements for a **Control and Instrumentation Technician** is a **National Diploma in Electrical Engineering (Process)** with a minimum of two years experience in a power plant environment.
- Minimum educational requirements for a **Mechanical Technician** is a **National Diploma in Mechanical Engineering** with a minimum of 2 years experience in maintenance of a power plant
- Minimum educational requirements for a **SHE Officer** is a **National Diploma- Safety management or Environmental/Health with 3 years or more experience in safety; occupational health, Environmental field and quality**

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- Minimum educational requirement for **Fitter Artisan** is a Section 13/Section 26D **Fitter trade test** with a minimum of 2 years of work experience in maintenance of a power plant.
- Minimum educational requirement for **Boiler maker Artisan** is a Section 13/Section 26D **Boiler Maker trade test** with a minimum of 2 years of work experience in maintenance of a power plant.
- Minimum educational requirements for a **Utility man** is a Grade 12 with a minimum of a year experience in a power plant/heavy industry.

3.2.1 Working times

- The work hours for day personnel at Kusile maintenance will be 07h00-16h15, thereafter standby and overtime will be applicable.
- The work hours for shift personnel at Kusile maintenance will be 07h00-19h00 dayshift and 19h00-07h00 nightshift shift basis depending on each site shift roster
- Safety officers and Technicians will work normal day shift and standby.
- Site Manager will work normal day shift and be available to resolve site issues after hours and during weekends.
- The shifts are 12hrs to cover the 24hr day and the starting times will be communicated upon commencement of contract
- The shift cycle is 4 x 4 shift cycle and the roster will be communicated upon commencement of contract
- The maximum number of hours to be paid for a shift worker per month is 183hrs on a basic rate of pay
- A shift allowance of 15% of the basic rate of pay
- Overtime shall be paid in accordance with the current directive
- The supplier must provide a cover in case someone is on leave at their own cost
- The payment of the shift workers must be aligned to what is prescribed as per the Basic Conditions of employment act

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3.3 Roles and Responsibilities

3.3.1 Site Manager

- Overseeing all site activities
- Organising and mobilising of resources
- Communication with the client
- Issuing instructions to supervisors and other team members
- Conducting of SMATS
- Managing spares availability
- Ensuring that all safety processes are adhered to
- Ensuring that work execution is done to the acceptable quality standards
- Documentation of all activities
- Submitting required reports to the employer
- Financial management
- Scope management
- Time management

3.3.2 Senior Supervisor Technical

- Conduct planning of activities for all teams (deploy resources as necessitated by business needs)
- Routine plant visit/walk to area of responsibility
- Ensure that all plant repairs are conducted qualitatively.
- Provide on job training to subordinates.
- Co-ordinate Maintenance of plant in accordance with laid down procedures and instructions.
- Co-ordinate permit to work process within section.
- Ensure all duties are carried out as per instruction.
- Ensure good housekeeping in area of responsibility.
- Ensure that plant inspections are done as per the planned maintenance orders and feedback given to the planning section to generate follow up work.

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- Ensure that all defective spares removed from the plant are booked back to the stores for repairs through a rotatable process.
- Manage spares availability
- Communicate with stakeholders
- Highlight risk in the plant beforehand.
- Update and sign off log sheet on Flip system.
- Conduct Risk assessment before commencing any task.
- Attend toolbox talk and chair if needed
- Ensure relevant PPE is issued as per risk assessment
- Ensure work instructions, procedures and policies are followed at all times
- Conduct PTW (Permit to work), LARs (Limited access register), spot checks & PJO's (Planned Job Observations)
- Perform JO's on listed critical tasks in order to supervise operational activities and correct behaviour
- Conduct job observations and (SMATS) as per business requirements
- Report all quality and environmental issues
- Strive for the best quality workmanship.
- Promote safety, health, environment and quality at all times.
- Report any incidents, damaged or lost equipment
- Enforce good housekeeping at all time
- Compliance to life saving rules and HPC points
- Carry out any other lawful instruction given out by the next line manager
- Execute duties promptly and safely.
- Safeguard tools and safety equipment issued.
- Keep good relationship with all personnel.
- Be neat, self-sufficient and presentable
- Must be able to work under pressure
- Clean work area.

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- Ensure good team work
- Ensure good communication
- Be available to assist and supervise other plants

3.3.3 Technician

- Conduct planning of activities for all teams (giving support to the teams)
- Routine plant visit/walk to area of responsibility
- Ensure that all plant repairs are conducted qualitatively by conducting quality inspections.
- Inspect all spares before installation to ensure that they are free from defects.
- Co-ordinate Maintenance of plant in accordance with laid down procedures and instructions.
- Take out permit to work process within section.
- Ensure all duties are carried out as per instruction.
- Ensure good housekeeping in area of responsibility.
- Ensure that plant Work orders are up to date in terms of information, and time durations.
- Ensure that a clear scope of work to repair defective spares is issued for quality repairs.
- Manage plant availability
- Manage spares availability
- Communicate with stakeholders
- Make recommendations to improve the plant availability and reliability
- Conduct Risk assessment before commencing any task.
- Attend toolbox talk and chair if needed
- Ensure work instructions, procedures and policies are up to date.
- Ensure all tasks have a safe working procedures and quality control documentation.
- Conduct PTW (Permit to work), LARs (Limited access register), spot checks & PJO's (Planned Job Observations)
- Perform JO's on listed critical tasks in order to supervise operational activities and correct behaviour
- Conduct job observations and (SMATS) as per business requirements

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- Report all quality and environmental issues
- Strive for the best quality workmanship.
- Promote safety, health, environment and quality at all times.
- Report any incidents, damaged or lost equipment
- Enforce good housekeeping at all time
- Compliance to life saving rules and HPC points
- Carry out any other lawful instruction given out by the next line manager
- Execute duties promptly and safely.
- Safeguard tools and safety equipment issued.
- Keep good relationship with all personnel.
- Be neat, self-sufficient and presentable
- Must be able to work under pressure
- Clean work area.
- Ensure good team work
- Ensure good communication
- Be available to assist and supervise other plants

3.3.4 SHE Officer

- Conduct plant inspections and generate inspection reports
- Conduct site induction
- Routine plant visit/walk
- Support Site Manager during audits
- Ensure corrective action measures are implemented and closed out.
- Communicate with stakeholders
- Make recommendations to improve the plant availability and reliability
- Conduct Risk assessment before commencing any task.
- Attend toolbox talk and chair if needed

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- Conduct PTW (Permit to work), LARs (Limited access register), spot checks & PJO's (Planned Job Observations)
- Conduct job observations and (SMATS) as per business requirements
- Report all quality and environmental issues
- Promote safety, health, environment and quality at all times.
- Report any incidents, damaged or lost equipment
- Compliance to life saving rules and HPC points
- Carry out any other lawful instruction given out by the line manager
- Execute duties promptly and safely.
- Keep good relationship with all personnel.
- Be neat, self-sufficient and presentable
- Must be able to work under pressure
- Clean work area.
- Ensure good team work
- Ensure good communication

3.3.5 Fitter/Boilermaker/Control & Instrumentation

- Obey all lawful instructions
- Familiarize with:
- The applicable work instructions and procedures in place
- Safe working conditions and procedures
- All legal and contractual requirements
- Discipline
- Inspect the plant thoroughly and report defects
- Maintain plant in accordance with laid down standards
- Execute recommendations from the condition monitoring report and give feedback.
- Give feedback to the supervisor

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- Conduct on job training to utility man
- Communicate with previous operating section
- Verify with plant status.
- Ensure that the plant is clean after working on it.
- Conduct plant inspections as per PM orders on SAP.
- Repair defective plant items as per corrective maintenance
- Report all defects on the plant to Senior Technical Supervisor. Ensure SAP defects is loaded and SAP number is generated.
- Responsible for own safety.
- Responsible for personal protective equipment issued by the company.
- Take full responsibility of the 2 way radio that is issued to you.
- Execute duties promptly and safely.
- Safeguard tools and safety equipment issued.
- Keep good relationship with all personnel.
- Always ensure that SHEQ standards are met.
- Strive for the best quality workmanship.
- Report any incidents, damaged or lost equipment
- Always ensure that SHEQ standards are met.
- Strive for the best quality workmanship.
- Promote safety and quality at all times.
- Be neat, self-sufficient and presentable
- Must be able to work under pressure
- Should be able to perform extra duties required from time to time
- Keep Senior Technical Supervisor informed on plant and task status on a daily basis.

3.3.6 Utility man

- Obey all lawful instructions.

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- Assist Artisans and Technician in executing allocated work
- Keep work area clean before and after executing the task
- Clean tools
- Keep the workshop area clean
- Assisting with barricading the propane gas truck before off-loading it.
- Conduct Risk assessment before commencing any task
- Attend toolbox talk
- Ensure relevant PPE is used as per Risk Assessment.
- Ensure that work instructions, procedures and policies are followed at all times
- Strive for the best quality workmanship.
- Promote safety, health, environment and quality at all times.
- Report any incidents, damaged or lost equipment
- Enforce good housekeeping at all time
- Compliance to life saving rules
- Carry out any other lawful instruction given out by the supervisor
- Execute duties promptly and safely.
- Safeguard tools and safety equipment issued.
- Keep good relationship with all personnel.
- Be neat, self-sufficient and presentable
- Must be able to work under pressure
- Ensure housekeeping is done.

4. PPE

4.1.1 Required PPE (Specification to be supplied under SHEQ)

- Overalls-specific to activity
- Safety boots (that provides protection to the ankles)

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- Eskom approved 3-point chin strap hard hat
- Gumboots
- Welding gloves
- Pigskin Gloves
- Safety goggles
- Face shield
- Ear plugs/muffs
- Dust masks
- Cloth masks
- Full face Respirators with spare cartridges for silica/coal dusty environments
- Safety harnesses
- Welding aprons
- Welding glasses
- Spats
- Reflector vests
- Sun hats
- Rain suits (trouser and jacket)

All specialised PPE will be provided by ERI such as?

4.1.2 Required Tools/Resources

- All maintenance staff tools used in the trade for an individual competency. This is a minimum requirement for the contract in terms of skill requirement.
- The supplier to supply all tools necessary to effectively carry out the scope of maintaining a Dust Handling plant within quality, time and cost effective methodology.

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5. Maintenance Philosophy

Sites to provide operating philosophies, which will be incorporating the contractor operations methodologies and strategies as per site-specific requirements

6. Management strategy and start up

6.1 The *Contractor's* plan for the *service*

Operations services schedule to be supplied by the Contractor after the employer has given them the maintenance plans.

6.2 Management meetings

There will be a monthly meeting for the *Contractor* with the *Employer* held at the *Employer's* premises where contract issues will be discussed i.e. monthly report form the *Contractor* which will include safety meetings, call-out report, incident report an any other issues relating to the service being delivered. The following meetings are to be attended by the *Contractor's* Supervisor:

- Safety meeting (once a month / as and when required)
- Contractor's meetings (to be specified)
- Assessments meetings (end of the month on the 25th)
- Any other meetings relating to the *Contractor's* outputs or necessary for business continuity
- Risk register meeting with the client.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or registers shall not be used for the purpose of identified in the *conditions of contract* to carry out such actions or instructions.

6.3 *Contractor's* management, supervision and key people

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The *Contractor's* staff structure – supervisors and workforce is to be submitted in the form of an organogram. The employer must approve any changes to such staff structure, and after the approval, the contractor shall submit an updated staff structure.

The *Contractor* shall provide a competent representative to be available on site during all normal working hours (Supervisor).

The Contractor's representative will be required to keep the time sheets, which are required, signed at the end of each month.

NB: The Contractor's representative will assume the role of a supervisor or lead for this contract

6.4 Documentation control

The service provider shall submit all proof of purchase, SHE bin certificates, time sheets and delivery note to the employer for assessment. Cleaning control sheets to be signed after each cleaning is completed (in respect of the COVID 19 pandemic)

6.5 Invoicing and payment

Invoicing and payment turnaround time is 30 days. Assessments are to be conducted from the 26th of each month.

6.6 Contract change management

Task Order form to be used when work within the service is instructed to be carried out within a stated period. A task Order will be sent to the *Contractor* via an email. In the case of a compensation event, the *Contractor* must give the *Employer* an early warning and a quotation for the total costs, must be submitted electronically by the *Contractor* for that compensation event by email

6.7 Records of defined cost to be kept by the Contractor

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The Employer will do all hours worked by the Contractor. Timesheets will be submitted to and kept by the *Employer* on a weekly basis, and these will be used for assessment purposes.

6.8 Training workshops

- Any training required by the *Employer* will be provided e.g. Ethics, HIRA, etc however, any other training additional that the *Contractor* will need, the training costs will be for the *Contractor*. Training may not be conducted during working hours, unless permission is given by the *Employer*.
- The *Contractor* will be trained during the Job Specification Induction training that will be provided by the *Employer* at the beginning of the contract. The *Contractor* may also be trained during Work Stoppages and also any other training as per employer's requirements.
- The following training is necessary for the Supervisor and Team leaders. The cost will be for the *Contractor*.
 - Safety, Health and Environment Representative (SHE Rep.)
 - Applying SHE Principles and Procedure
 - Hazard Identification and Response
 - First Aid level 1

7. Health, Safety, Environment and Quality assurance

7.1 Health and safety risk management

The *Contractor* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *services*.

The *Contractor* shall, when coming on site abide by the Lifesaving Rules and COVID-19 safety requirements at all times. The Employer on the start of the contract will provide these. The *Contractor* shall also abide by Safety, Health and Environmental Specifications for Contractors Procedure, which will also be provided by the *Employer*.

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The *Employer* follows an accident/ incident prevention policy that includes the investigation of all accidents/ incidents involving personnel and property. This is done with the intention of introducing control measures to prevent recurrence of the same incidents. The *Contractor* is expected to fully co-operate to achieve this objective. Refer to 32-95_Environmental, Occupational Health and safety Incident Management Procedure

The *Contractor* implements a safety plan and maintains the safety system until completion of the whole of the works. The plan, will as a minimum, contain PPE information, written safe work procedures, job specific risk assessments, safety meetings, etc. The plan will be to the *Employer's* satisfaction and will be accepted prior to the commencement of any work.

The *Contractor* will be subject to periodic audits by the *Employer* in order to ensure compliance with the plan. Any deviations will be corrected to the *Employer's* satisfaction.

The *Project Manager* has the right to stop the *Contractor's* work activities which, in the opinion of the *Project Manager*, is un-safe. The *Contractor* may only continue with work activities when all safety deficiencies have been corrected to the *Service Manager's* satisfaction. The *Contractor* shall have no claim against the *Employer* in respect of delay due to the above.

7.2 Environmental constraints and management

The *Contractor* shall comply with ERI management system. This includes the identification, collection, storage, transportation and disposal of waste. Hazardous waste shall be disposed of in line with the applicable environmental legislation. It is important to note that all spillages must be cleaned immediately and reported to the project manager as soon as possible. It is the responsibility of the polluter to clean all spillages and for the rehabilitation of the polluted land and the cost associated with that.

NB: In cases of inclement weather, the Project Manager will assess the risk of continuing with the works. When it is unsafe to continue, the Project Manager will stop the works and payment will be per the work covered in this instance.

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7.3 Quality assurance requirements

The *Contractor* implements a quality system and maintains the quality system until the completion of the whole of the *works*. The system, will as a minimum, comply with the provisions of the ISO9001 series. The system will be to the *Employer's* satisfaction and will be accepted prior to the commencement of any work on site. The *Contractor* will be subject to self-assessments by the *Employer* in order to ensure compliance with the system. Any deviations will be corrected to the *Employer's* satisfaction.

The *Project Manager* has the right to stop the *Contractor's* work activities, which, in the opinion of *Project Manager*, does not meet the requirements of the system and will have a detrimental effect on plant performance. The *Contractor* may only continue with work activities when all deficiencies have been corrected to the *Project Manager's* satisfaction. The *Contractor* shall have no claim against the *Employer* in respect of delay due to the above.

The *Contractor* ensures that all plant and materials for the *works* are to the standard and quality accepted by the *Employer* and ensures that they are suitable for the purpose intended by the manufacturer.

The *Contractor* will work according to the *Employer's* standards, specifications, guidelines and procedures. Where no standards, specifications, guidelines and procedures are available, the *Contractor* will work according to the Generation Quality manual and professional guidelines. Where possible, standards will be reflected in the Task Order.

The employer shall evaluate, control and monitor the performance and effectiveness of the Contractor

8. Procurement

8.1 People

Eskom Holdings Limited's requirements regarding employment of unskilled or semi-skilled workers are as follows:

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- ERI requires that during recruitment of unskilled or semi-skilled labour, a contractor should make every effort to employ minimum target of 100 % suitable candidates from all disciplines from the local community and will only resort to other avenues if the local community cannot provide the required resources. At Kusile, all non-permanent artisan and semi-skilled resources recruited are to be requested through Eskom GX Local Stakeholder Manager
- **Eskom Rotek Industries is affiliated with various statutory bodies such as the MEIBC. Resources employed or contracted to execute work directly or indirectly as the case may be remunerated in accordance with the MEIBC rates or statutory body in that particular site. As such, it will be assumed that Contractors, Service Providers, Subcontractors, etc have taken this into account and have done the necessary due diligence to ensure stability on all ERI sites and operations as far as reasonably possible.**

8.2 Plant and Materials

8.2.1 Correction of defects

If there is part of work that the *Employer* is not happy with, this will be indicated to the *Contractor* and will have to be rectified by the *Contractor* immediately where reasonably possible or within 5 working days after the defect was reported.

8.2.2 Plant & Materials provided by the *Employer*

- a. Water and Electricity
- b. Lighting and Ventilation
- c. Ablution facilities
- d. Sitting facilities
- e. Kitchen facilities
- f. All required tools
- g. Specialised PPE

NB: The *Contractor* will be responsible for their meals, own accommodation and transport to and from the place of work.

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9. Working on the Affected Property

Under no circumstances will the *Contractor* do the work without proper PPE. The Supervisor on the *Contractor's* side will make it his duty to make sure that this is properly addressed.

9.1 Employer's site entry and security control, permits, and site regulations

The *Contractor's* access to site shall be in line with the Site access procedure. The *Contractor* shall be required to make an application for his employees to enter site for the duration of the contract, including defects period. The permits shall only be issued once the *Contractor's* employees have attended the safety induction training and have undergone medical checks. The safety induction will be for the *Employer's* account. The medical checks will be for the *Contractor's* account

9.2 People restrictions, hours of work, conduct and records

The *Contractor* will carry out the *Works* on an 8-hour basis. Work on Saturdays, Sundays and Public Holidays will be as and when required.

9.3 Records of Contractor's Equipment

The *Contractor's* Supervisor should keep record of all the equipment used by the *Contractor*. The *Contractor* is responsible for the safekeeping of all their equipment.

9.4 Control of noise, dust, water and waste

The contractor must supply their own dust masks and cloth masks as part of PPE. Drinking water is available on site as well as waste bins for disposing waste

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10. List of drawings

N/A

11. Acceptance

This document has been seen and accepted by:

Name	Designation
Avhasei Mudzwiri	HOD Coal Ops 3
Ntwanano Makhubele	HOD Coal Ops 2

10. Revisions

Date	Rev.	Compiler	Remarks
January 2023	1	Tshepo Nkabeni	No existing work instruction

12. Development Team

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

- Bongani Nhlabathi

13. Acknowledgements

None

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