PART 3: SCOPE OF WORK

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C3.1: EMPLOYER'S SERVICE INFORMATION

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1 Description of the service

1.1 Executive overview

Kusile Power Station and Eskom's Management has decided to outsource the Overhead Crane, Hoist and Crawler Beam Maintenance Service and Spares Supply scope of service function to a suitably qualified, experienced and well established *Contractor*. This document describes the detail of the applicable plant areas, scope of work, standards, quality, requirements, specifications, terms & conditions for the Lifting Equipment scope of work.

More details can be found on the Scope of Work document: 240-97824050 Kusile Power Station: Overhead Crane, Hoist and Crawler Beam Maintenance Service and Spares Supply Scope of Work and the *Contractor* must comply to all requirements stipulated in this document.

1.2 Employer's requirements for the service

1.2.1 Applicable scope of work

The Contractor shall provide Lifting Equipment Services and Provision of Spares according to the Employer's scope of work document 240-97824050 Kusile Power Station: Overhead Crane, Hoist and Crawler Beam Maintenance Service and Spares Supply Scope of Work

The Contractor's scope of work includes, but not limited to, the following:

- a) Perform overall mechanical, electrical and C&I maintenance services for the site lifting equipment as required by the *Employer*.
- b) Perform lubrication in all plant equipment identified in the scope of work by the Employer.
- c) Procure and supply all spares identified in the spares list.
- d) Procure and supply all maintenance equipment and tools required for this service.
- e) Maintain all lifting equipment identified by the Employer.
- f) Perform load testing and inspection on all lifting equipment as prescribed by Document Identifier: 240-103766040 Kusile Power Station Maintenance Execution Strategy for Cranes and Hoists inline with the requirements of the OHSAct and its regulations.
- g) Participate in improvement programmes as stipulated by the Employer.
- h) Attend meetings as instructed by the Employer.
- i) Manage and handle spares and equipment as per *Employer's* requirements.
- j) Provide services and 24/7 plant coverage outside normal working hours on request by the *Employer* at agreed rates and response time.
- k) Adhere to safety, health, environment, and quality requirements as stipulated by the Employer.
- I) Comply with the *Employer*'s maintenance requirements.
- m) Compile work instructions, procedures and reports as instructed by the Employer.
- n) Employ qualified, competent, and experienced staff as per *Employer*'s requirements.

1.2.2 Maintenance

- a. The Contractor shall ensure that all Lifting equipment remain 100% available from one maintenance/service interval to the next. The Contractor Ensures that sufficient standby is available to address breakdowns and failures of all lifting equipment.
- Contractor shall be responsible for the lubrication of all equipment, supply of all required lubricants and sampling of all lubricants required for the plant.
- c. The Contractor submits a maintenance strategy for acceptance by the Employer
- The Contractor submits a spares management strategy for acceptance by the Employer

- e. The Contractor must manage and ensure the availability of all required spares necessary for ensuring smooth plant/equipment operation. The Employer and Contractor will discuss and agree on on-site/off-site spares strategy necessary to meet the accepted strategy.
- f. Should the Employer become aware of any changes to the activity schedule (programme of notifications), the Employer may issue the Contractor with a revised programme.
- g. The Contractor shall ensure that all maintenance is executed as per Employer's processes and systems.
- h. The Contractor shall compile improvement programmes to enhance plant performance and achieve cost reductions and the Employer will evaluate and approve such programmes.
- i. The Contractor shall be responsible for all Mechanical, Electrical and Control & Instrumentation maintenance activities within this Scope of Work and supply / re-conditioning of spares during the execution of the work associated with this scope of work.
- j. The Contractor shall be responsible for technical support/advice, inspections, maintenance, repair, calibration, bench testing and replacement of all types of components / equipment associated with this SOW.
- k. Statutory load testing of all lifting equipment associated with the plant as per the statutory requirements and supply proof of such tests to the Employer. The Contractor shall provide inspection reports and Load Test Certificates for all statutory work done.
- Contractor shall provide Operating, Maintenance and Engineering Technical Support to the Employer.
- m. The Contractor provides the following complementary services to improve Plant and labour performance;
 - i. Project management
 - ii. Value engineering
 - iii. Procedure, reports and documentation writing
 - iv. Compile and improve task list's
 - v. Implement approved design and modification
 - vi. Spares management
 - vii. Technical advice
 - viii. Operational and production process review
 - ix. Asset management in accordance with ISO 55000
 - x. Component failure analysis reporting
- n. The Contractor is to ensure that any service rendered does not interfere with the Employer's scheduled work and should align himself with the Employer's work control management process.
- o. Work against this contract can only be performed upon receipt of a task order.
- All works will be subject to anytime inspection from the Employer.
- q. The Contractor strives to maintain the agreed base crew at Kusile Power Station for the duration of the Contract, should there be any changes to the crew, the Employer shall be notified and the replacement crew member shall be at the same skill level or higher.
- r. The Contractor shall utilise the rotable process for all refurbishable spares item. Employer to provide appropriate training. The Employer and contractor to agree on what repairs should be done onsite and off-site
- s. Housekeeping in all the areas worked is the responsibility of the Contractor.
- t. The Contractor shall apply QCP process on all the tasks to be executed and all the old spares to be retained for inspection by the Employer before they can be disposed off.

- u. The Contractor shall ensure the plant is adequately labelled as per the labelling standards (KKS), ensure that the integrity of the labels is maintained at all times and that deficiencies identified are reported immediately. Missing labels after work is done by the Contractor shall be replaced at the cost to the Contractor.
- v. The Contractor must ensure that they have responsible persons (in terms of PSR and ORHVS) for any work performed on plant. All maintenance technically qualified (above semi-skilled) Contractors will be trained and authorised (in terms of PSR and ORHVS) within 6 months of the contract start date. The Supervisor and the Crane Technician shall be authorised within 6 months.
- w. The Contractor to provide all required tools (including special tools).
- x. The Contractor shall assist in the implementation, recommendations and corrective actions which are identified by the Kusile Power Station Condition monitoring programme.
- The Contractor shall implement a program of continuous improvement to optimise Plant performance and reduce system and equipment failures.
- z. The Contractor shall participate in improvement programs as stipulated by the employer.
- aa. The Contractor submits weekly performance and monthly system health reports.
- bb. The Contractor is responsible for identifying and reporting defects on lifting equipment on site.

1.2.3 Breakdowns

This refers to emergency breakdowns requiring immediate action to be taken. It is a corrective maintenance (retro-active strategy) whereby action is only taken when a system or component failure has occurred. The *Contractor* will be responsible for arranging all the resources (this include but is not limited to manpower, tools, special tools and consumables) required to attend to breakdowns. The *Contractor* shall provide a 24-hour per day, 7-day per week stand-by service for emergencies/breakdowns/defects of the Lifting Equipment after the *Contractor*'s regular working hours and the *Contractor* must be on site within 60 minutes of a call-out as and when required.

If the *Contractor* does not have a team available at the time of a breakdown s/he will be responsible to arrange for a sub-contractor to do the work under the same conditions and pricing structure as agreed upon under this contract, unless otherwise agreed with the *Employer*.

In addition to the repair of the breakdown, the *Contractor* will also conduct a thorough inspection in order to determine the root cause of the failure and issue a comprehensive failure report to the *Employer*. Where necessary, the *Contractor* will recommend corrective actions to the *Employer*.

The *Contractor* must provide warrantees and or guarantees for all the maintenance, services, refurbishments and repairs done on the lifting equipment on site.

The *Contractor* will be responsible for the cleaning of the surfaces and surrounding areas on each of the areas where work was performed. On completion, all oil and grease spillages will be properly cleaned and other materials will be removed and disposed of by the *Contractor* in accordance with the *Employer's* policies and procedures. In case where the services of a subcontractor have been obtained by the *Contractor*, the *Contractor* shall also be responsible for the cleaning of the work area.

1.2.4 Base Crew for the Service

The *Contractor* shall maintain a base crew on site for the maintenance of the Overhead Crane, Hoist and Crawler Beams during normal working hours. The base crew shall consist of the following:

- 1 x Site Supervisor
- 1 x Crane Technician
- 1 x Crane Technician Assistant

2 Management strategy and start up.

2.1 The Contractor's plan for the service

The Contractor supplies the Employer with their Contractor's plan. The Contractor must submit the Contractor's plan at the inception of this contract. The Contractor's plan must include but is not limited to the following:

- Quality management system implementation programme.
- A Quality Control Plan (QCP) for each Task Order with: hold, witness and verification points for the Employer to check and monitor progress.
- Safety plan including implementation programme.
- Staff Qualifications and experience and/or time frame for appointment of staff. Staff
 qualifications must be verified by a recognised and accredited Qualifications Verifications
 Institution on an annual basis.
- A program and resource schedule for the *Service* and for each Task Order. Bar charts or other reporting formats, as may be required by the *Employer*, are provided for all Task Orders indicating start, inspection and completion dates, resources and costs.
- Names of the possible /potential candidates/employees.
- Any staff replacement should be accepted by the Employer and the replacement must meet the conditions stipulated above.

Preventative maintenance will be carried out during the *Contractor's* working hours and as required in terms of the 24 hour standby provision. In case of any major breakdowns and/or when required by the *Employer*, a repair plan of action must be submitted to the *Employer*. Repair work must commence no later than the time agreed between the *Employer* and the *Contractor* on his plan of action.

The following reports are required as supporting documentation to the program:

- Time analysis print-out
- Critical activities report
- Key event report
- Quality Control Plan

Planning and scheduling meetings will be held when necessary and the *Employer* will inform the *Contractor* of the format and time of these meetings.

If the *Contractor's* available manpower is not sufficient to meet the *Contractor's* plan, the *Contractor* submits labour alert reports for performance of the work.

During the later stages of completing the *Service* and prior to delivering notice of completion, the *Contractor* submits his plan for demobilisation to the *Service Manager* for acceptance.

The *Contractor* submits a procurement schedule for the procurement and receipt of equipment and subcontracts by the *Contractor* and a monthly status report of all such equipment.

The *Contractor* commences with the work in accordance with the *Contractor's* plan and completes the *service* not later than the Completion Dates indicated on the *Contractor's* plan.

If the *Contractor* fails to complete any part of the *service* according to the *Contractor*'s plan or it becomes apparent to the *Service Manager* that the *service* cannot be completed according to the *Contractor*'s plan and if such failure is due to the *Contractor* then the *Contractor* submits his plan of action to the *Service Manager* to deal with the delay and the *Contractor* reports on the success of his plan of action.

2.2 Management meetings

Regular meetings of a general nature may be convened and chaired by the Service Manager as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
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Risk register and compensation events	Monthly on at	Kusile Power Station	Employer, Contractor and
Overall contract progress and feedback	Monthly on at	Kusile Power Station	Employer, Contractor and
Contract Meeting	Monthly on at	Kusile Power Station	Employer, Contractor and

Meetings of a specialist nature may be convened as specified elsewhere in this *Service Information* or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *service*. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

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

The *Contractor's* representative and *Employer's* representative will hold monthly contract management meetings where all safety, quality and other contract issues will be discussed, which should include the following as a minimum

- a) Review the overall performance of the contract.
- b) Formulate strategies to address loop holes should they be found.
- c) Review contract statutory compliance.
- d) The Contractor does not procure the services of sub-contractors / vendors / suppliers without the prior approval of the Employer's Representative. Furthermore the contract between the Contractor and the sub-contractor must be aligned with this contract.

Meetings of a specialist nature may be convened by either party and at times and locations to suit the Parties, the nature and the progress of the *Service*.

All meetings shall be recorded using minutes and an attendance register (which must be signed by all present) prepared and circulated by the person who convened the meeting. All these documents must be kept safe for the duration of the contract and thereafter stored in the *Employer's* documentation centre. Regular meetings of a general nature may be convened and chaired by the *Service Manager*.

2.3 Contractor's management, supervision and key people

Additional to the base crew, the *Contractor* shall have a SHEQ Officer who will come on site on an ADHOC basis to ensure that the *Contractor* personnel on site complies with all the site requirements.

2.4 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Service Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer*'s right to termination stated in this contract.

2.5 Documentation control

The standard forms to be used by the *Contractor* in the administration of the contract, such as early warning and compensation event notifications are to be submitted to the *Employer* and shall be on the NEC document format which shall be made available to the *Contractor* by the *Employer*.

2.6 Invoicing and payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager*'s payment certificate.

The Contractor shall address the tax invoice to

and include on each invoice the following information:

- Name and address of the Contractor and the Service Manager;
- The contract number and title;
- Contractor's VAT registration number;
- The *Employer*'s VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

2.7 Training workshops and technology transfer

The *Contractor* shall conduct skills transfer to the *Employer's* Maintenance, Engineering and Operating staff. Skills transfer shall also be conducted during breakdown situations by the *Contractor* so that the *Employer's* staff knowledge base on compressors and driers can be enhanced.

The *Contractor* shall also formulate formal training programs and facilitate them in a formal classroom setting to ensure that the *Employer's* staff know how to operate the plant and do first line investigation.

2.8 Design and supply of Equipment

The *Contractor* shall supply inspection and maintenance manuals to the *Employer*. These manuals shall include first line investigation and troubleshooting protocols.

The Contractor shall prepare a Quality Control Plan for the Maintenance and repairs of compressors, driers, air receivers and valves and send it to the *Employer* to include intervention points (Hold, Witness and surveillance) to be adhered to during the refurbishment program.

The Contractor shall not proceed with any repairs or refurbishment points unless all the necessary inspections, witness or tests are conducted according to the Quality Control Plan. The *Employer* shall conduct such inspections to ascertain that work is conducted to the agreed upon quality standard. However, the liability for such designs, refurbishment, supply and use of the Equipment remains with the *Contractor*.

2.9 Management of work done by Task Order

- Work is to be done in accordance with the written Task Order issued by the Employer.
- All work done is valued in accordance with the Price List unless otherwise specified. Actual
 quantities will be determined where applicable based on the requirements of each Task Order. The
 Contractor provides all necessary information required by the Employer to determine the cost at the
 assessment date for monthly costs and for each Task Order.

3 Health and safety, the environment and quality assurance

3.1 Health and safety risk management

	C <i>ontractor</i> shall ment Identifier				and	safety	requirements	contained	in the	SHE	Specificat	ion
3.2	Environmen	ıtal cor	nstrain	ts and	ma	nagei	ment					

The *Contractor* shall comply with the environmental criteria and constraints stated in SHE Specification Document Identifier ______.

3.3 Quality assurance requirements

The *Contractor* shall comply with the quality requirements contained in the SHE Specification Document Identifier ______.

4 Procurement

- a) The *Contractor* shall employ staff who meets minimum requirements of Eskom job descriptions, with additional requirements to be specified.
- b) All staff brought onto site in connection with this work scope should be able to fluently speak, understand and write in English.
- c) The *Contractor* shall submit proof of qualifications and CV (experience records) before any staff is brought on site.
- d) The *Contractor* ensures that all staff being brought onto Kusile site has a valid fitness certificate based on the specified plant man-job specification.

4.1 People

4.1.1 Minimum requirements of people employed

The Contractor shall employ people who meet the following minimum requirement:

Site Supervisor

Qualification: National Technical Diploma in Mechanical or Electrical Engineering

Years of experience: 5 Years experience working with overhead cranes, hoists and all lifting equipment

Site Technician

Qualification: N6 Certificate in Mechanical or Electrical or Electro-Mechanical Engineering and a

Trade Test Millwright qualification

Years of experience: 5 Years experience working with overhead cranes, hoists and all lifting equipment

Assistant Technician

Qualification: Matric or N3 Certificate in Mechanical or Electrical or Electro-Mechanical

Engineering

Years of experience: 5 Years experience working with overhead cranes, hoists and all lifting equipment

4.2 Subcontracting

- a) If the *Contractor* subcontracts any works in this service, the Sub*Contractor* must meet all requirements stipulated in this service information.
- b) All SubContractors are to be *Employer* approved *Contractors* / vendors / suppliers. If the *Contractor* is uncertain of the approval status of the *Contractors* / vendors / suppliers the *Contractor* formally requests from the Service Manager confirmation of the status.
- c) The Contractor does not procure the services of Contractors / vendors / suppliers without the prior approval of the Service Manager. Furthermore the contract between the Contractor and the subContractor must be aligned with these contracts.
- d) No work shall commence without all employees having done safety and medical checks prescribed by the *Employer*.
- e) The Contractor must submit a safety file at the inception of this contract.
- f) The Contractor complies with all site regulations issued by the Employer.

4.3 Plant and Materials

4.3.1 Contractor's procurement of Plant and Materials

- a) The *Contractor* shall submit a list of all equipment and material purchased and asset register to the *Employer* for record keeping.
- b) All equipment purchased by the *Contractor* and paid for by the *Employer* as part of this service will become the property of the *Employer*.

5 Working on the Affected Property

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

The Contractor provides security necessary for the protection of the works at all times until the Completion of the whole of the works.

The *Contractor* is informed of the access procedures through Site Regulations and note that such procedures may change depending on the prevailing security situation.

All persons entering the Kusile Power Station site pass through the control points at the main access gates and are required to have temporary permits that are issued to *Contractor's* staff on request. All persons submit ID documents with the application for temporary permits. If it is necessary to bring equipment onto site a list is submitted which is verified by security staff prior to equipment entering the security area.

If any *Contractor*'s staff are transferred from Kusile Power Station or leave site, the person's permit is handed over to the Supervisor. The *Contractor* ensures that personnel leaving site are transported out of the security area and that the permit is returned.

No firearms, weapons, alcohol, illegal substances and cameras (including cell phones with cameras) are permitted on Site. No 'Private Work' is carried out for or on behalf of any Eskom employee. Kusile Power Station has zero tolerance to alcohol and drugs. There is 100% alcohol breathalyser testing for all persons coming to site. Any person that tests positive will not be granted access to site and shall be considered to be in violation of the Eskom's Life Saving Rules. If an employee or *Contractor* employee is suspected of being under the influence of alcohol is tested and if proved positive, he/she is refused entry to site. Formal disciplinary action shall be constituted by the *Contractor*.

The generator area and the other units are barricaded and out of bounds and only authorised persons are permitted. Areas outside the site are out of bounds to the *Contractors* staff.

All the assets must be declared and registered with security upon entering site. This includes portable assets such as a laptop. The record must be kept on the OV18 form. No asset shall be removed from site if the OV18 form is not attached.

The Contractor shall have no claim against the Employer in respect of delay at the security main gate

N.B: Under no circumstances shall the *Contractor* recruit outside Kusile Power Station's security gate. An applicable local office for recruitment shall be used. Enquiries must be directed to HR Department

5.2 People restrictions, hours of work, conduct and records

The normal working hours are as follows: Mondays – Thursdays: 07h00 – 16h15

Fridays: 07h00 - 12h00

Lunch breaks are 30 minutes from 12h00

5.3 Records of Contractor's Equipment

All materials, tools and equipment brought onto site are the responsibility of the *Contractor*, and shall comply with the *Employer's* policies and procedures. A proper system of recording these materials, tools and equipment must be in place and submitted for approval by the *Service Manager*. Differentiation must be made between materials, tools and equipment owned or hired by the Contractor.

Any Equipment, or appliances, used by the Contractor conforms to the applicable OHS Act safety standards and is maintained in a safe and proper working condition. The *Service Manager* has the right to stop the *Contractor's* use of any Equipment which, in the opinion of *Service Manager*, does not conform to the foregoing.

5.4 Equipment provided by the Employer

Off-loading and material handling Equipment such as cranes and fork lifts are not available on site and if required is to be provided by the *Employer*.

6 List of drawings

6.1 Drawings issued by the Employer

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Drawing number	Revision	Title