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**ESKOM**

**KOEBERG NUCLEAR POWER STATION**

**User Requirement Specification (URS)**

**THE PROVISION OF MARINE DREDGING  
SERVICES OF THE COOLING WATER INTAKE  
BASIN AT KOEBERG OPERATING UNIT**

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## 1. DESCRIPTION

The service is the provision of a maintenance dredging service in the Cooling water intake basin, whereby surplus volumes of sand/sediment are removed and disposed of at a predetermined location. This URS considers the objective and scope of the works. All details relating to the labour, quality and equipment associated with the work are specified herein.

## 2. OBJECTIVE

The primary objective of the contract is to render a service to Koeberg Operating unit, for the maintenance dredging of the cooling water intake basin.

## 3. SCOPE OF WORK

The *Contractor's* scope entails the following:

The Contractor is required to mobilize all the necessary equipment that will be required to successfully dredge the cooling water intake basin. The Contractor is to establish site and successfully dredge from the cooling water intake basin, for a period of two weeks before mobilization will be paid. The material to be dredged is generally sea-born materials and fine sand. The contractor must install and maintain the necessary infrastructure (transformer, cables, pipes etc) required to dredge the cooling water intake basin. Material to be dredged shall be deposited south of the outfall channel. The Contractor would be required to provide ad hoc services i.e. skipper, ski-boat, support to the Koeberg emergency response teams in the event of marine threats (jellyfish) etc.

The area and depth to which the basin is to be dredged is shown on attached drawing. The contractor is not to dredge with a cutter engaged (if cutter suction) within 50m of the cooling water pump stations (while the Plant is Online), breakwater and lateral arm capping, to prevent damage to the toe of the breakwater.

There is dredging that is required during every Outage. That dredging is executed within 50m from the walls of Cooling Pump Station. The estimate is twice a year.

## 4. DELIVERABLES

The Service Provider shall provide Eskom with the following deliverables before commencing the work.

- Health and Safety File
- Updated staff authorisation file (including divers as per diving regulation)
- Quality Assurance Plan

**Other deliverables:**

- **Maintenance dredging**

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- Provide the report to KNPS and include data calculations and outage report. Include recommendations and conclusions and original photographs.
- Provide deliverable report after each task/ scope is complete.

**Note:** Deliverables shall be Task/Purchase Order specific as and when required. All reports to be submitted with original photographs and original footages (where there are footages).

All the reports to be signed by Engineers who are professionally registered with the Engineering Council of South Africa (ECSA).

**Note:** The final report to be submitted to Koeberg Operating Unit (Inspection & Test -Contract Manager) within 14 days after the completion of the task/ work scope.

## 5. CATEGORIES OF LABOUR REQUIRED

The Service Provider and his representatives appointed to perform the work shall be competent in the field for which they are appointed. The Service Provider is to provide Eskom with a list of similar projects demonstrating his competency and experience. Eskom reserves the right to examine the certification of appointed personnel. The Service Provider must ensure that all staff is qualified and certified. The Service Provider must personally verify and ensure that only skilled and properly authorised specialists are supplied to Eskom.

All staff must be able to communicate in English.

## 6. OCCUPATIONAL HEALTH & SAFETY REQUIREMENTS

The Service Provider is required to comply with the requirements of the Construction Regulations and Occupational Health and Safety Act, which require the following:

- The Contractor shall be registered with the Occupational Health and Safety Commission.
- Submit to the Employer or its appointed Agent a Health and Safety Plan for work to be performed.
- The Health and Safety Plan shall include a Risk assessment of all activities associated with this project.
- The Health and Safety Plan shall be implemented and monitored to ensure its integrity.
- Details of its appointed Health and Safety Committee members shall be included and appointed in writing.
- The Contractor shall appoint all competent person/s in writing.
- The Contractor is required to comply with Eskom specific procedures including KGA-073-SHE specification guide.

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## 7. TIMING AND PLANNING

The Contractor is required to submit a work programme. The program should specify the plan of execution, start and finish dates and indicate all activities with milestones and deadlines.

## 8. SHIFT REGIME

The activity (or any ad hoc activities) that are directly related to outage, overtime and shift work may be required. This will be communicated by the Contract Manager as applicable and when required. The contract will be 8 (eight) Years.

## 9. TRAINING

### 9.1 Generic Training

Prior to the commencement of any intrusive work on site, the selected Service provider and the personnel appointed to perform the work are required to complete the following training.

Staff brought on site shall complete the following *Consultant* Induction FFD (fitness for duty) Program:

- Enrolment on the FFD System
- Criminal Background Verification (Security screening)
- Drug tests (Substance abuse testing)
- Plant Induction Training (PIT)
- Site Induction Training (SIT) OCA (Owner Controlled Area) and the LAA (Limited Access Area) permit holders Only
- Medical examination (to be done prior to and at completion of each task order)
- Radiation Workers training course - Class room training (2½ days or 3 days or re-qual ½ day)
- Human Performance Training (HP)
- Foreign Material Exclusion Training (FME)
- Safety Induction Course before any work commences on site. The duration of this course will vary according to the experience of the individuals.
- ALARA Induction training course (prior to start of work, 2 hours)

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#### Site Access Specific Training:

- Working in confined spaces Training
- Working at height and material handling

**Note:** Training will be updated or reviewed based on Operating Experiences (OE) to mitigate incidents, this will be added to the above-mentioned training. Therefore, the supplier will be informed when additional training is required.

**Note:** Divers to do relevant diving training and provide Eskom with the relevant document as require by Diving Regulations and as per instruction from Eskom Health & Safety Department before any work commences on site.

**Note:** The trainings are categorized as online and classroom training. The technical assessments to be performed at Koeberg FFD System. The Site Representative will provide the information and guidance to the Service Provider staff.

**Note:** The Service Provider to appoint their own FFD Site Representative. The person who will represents the Service Provider staff on site. The person who will make sure that the Service Provider individual/staff meet the requirements of Fitness For Duty (FFD).

**Note:** The Service Provider or subcontractor personnel/staff needs to perform exit procedure when they leave the Supplier/ subcontractor or no longer part of the contract scope.

## 10. ACCESS FORMALITIES

### 10.1 Personnel

All personnel must have a valid identification document or passport. All personnel must be cleared to work at the Site by the South African authorities, prior to being cleared as a Temporary worker (Fitness for Duty). Allow 2 to 3 days for clearance.

Security clearance or refusal thereof will not constitute a compensation event.

On a daily routine all personnel will access and leave the Site via the security-controlled access point, where all are subjected to security screening procedures including alcohol testing.

**Note:** Additional compulsory drug testing or other testing based on OE to mitigate incidents, will be implemented. Therefore, the Service Provider will be informed on time.

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## 10.2 Vehicles and Tools/Equipment

All tools and equipment are subject to a security screening before they are allowed on the Site. All tools and equipment must be listed and specified before they are brought on Site. This list will serve as evidence for removal permits. Vehicles will only be allowed on Site, if proof is provided to the Employer that there is a requirement that such a vehicle is necessary to complete the Works.

The Service Provider is required to provide all relevant equipment for performing the work as defined in section 3.

## 10.3 Photography of KNPS features

All personnel using cameras must be authorized by Eskom. Security must be informed prior to photography. All photos to be given to Eskom and deleted from the Service Provider once not required. The Service Provider will not disclose any photographs, irrespective of the format, to any third party that does not require it for the purpose of engaging in business with Eskom. The Service Provider shall not photograph and security systems or components unless authorized by the security manager.

## 11. ESKOM SCOPE OF SUPPLY

Eskom shall make available all relevant information (specifications, drawings, historic sea water temperature data etc.) pertaining to the work. None of the information provided to the Service Provider shall be copied in any form and shall be returned to Eskom on completion of the work.

Eskom shall provide the Service Provider and his representative with the relevant access to perform the work, provided Eskom is given adequate notification of such requirement. Eskom will provide the Service Provider with an air lift during maintenance diving (if required and when available).

**Note:** The Service Provide personnel to sign a Non-Disclosure Agreement (NDA) prior working on these documents.

## 12. QUALITY REQUIREMENTS

The classification assigned to the items is Q3/L3. The supplier shall have a Quality Assurance Programme that meets the requirements of 238-103 and 238-769T.

ENGINEERING SPECIFICATION & CLASSIFICATION SERVICE

CLASSIFICATION No.: 0001/96Q

QUALITY LEVEL: Q3

SAFETY LEVEL: L3

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SPECIFICATION No: DSG-310-087

IMPORTANCE: N/A

### 13. REFERENCES

- OHSA No 85/93: Occupational Health and Safety Act No 85 of 1993
- DSG 318-087: Quality requirements for the procurement of assets, goods and services
- RD-0034: Quality and Safety Management Requirements for Nuclear Installations
- KGA-073: SHE specification guide
- KWM-MW-MBI-001: Oil Boom Deployment Procedure
- KWM-MW-MBI-002: Jellyfish Deployment Procedure
- KWM-MW-MAR-004: Dredging Management at Koeberg Nuclear Power Station
- KWM-MW-DID-001: Operating Procedure of the Dive Dredge System

### 14. DOCUMENTATION

All reports and documents supplied to Eskom shall be in hard copy and electronic format. Electronic copies of text files shall be in '.doc', '.pdf', '.xls' and drawings in '.dgn' format.

### 15. PRICING STRUCTURE

The pricing structure will be in accordance with the rates in the contract.

### 16. APPENDICES

N/A