PART 3: SCOPE OF WORK

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C3.1: EMPLOYER'S SERVICE INFORMATION

Contents

1 Description of the *service*

1.1 Executive overview

Grootvlei Power Station Outage Department needs Hydrogen Skid and Gas station services contract on an as and when required basis for a period of 60 months, for Unit 1, 2 and 3, and this document specifies the required spares, quantities of spares to be supplied by the Supplier/OEM, required plant modifications and maintenance of the Unit 1, 2 and 3 H2 skids, H2 dryers and CO2 evaporators for 5 years. The scope included here does not substitute procurement procedures that will be followed during the procurement process.

1.1.1 MAINTENANCE WORK DURING OPERATION

The following activities are to be performed by the Supplier/Contractor during operation or when one of the units is offline for a short period of time i.e., these are weekend opportunity shutdown or unit shutdown due to breakdowns.

1.1.1.1 H_2 DRYER

1. Test blower motors and replace if damaged.

2. Test heater functionality and replace if damaged.

3. Check and clean water traps.

4. Check and replace the tower thermocouples where applicable.

5. Check, test and calibrate the dew point probes and issue calibration or verification certificate where applicable.

6. Check, test and perform functionality test on the PLC where applicable.

7. Check, test and perform functionality test on the temperature controllers.

8. Check, test and perform functionality tests on the dew point display equipment.

9. Install new dew point manual sampling point, to verify online dew point measurements.

10. Replace dryer desiccant.

11. Replace media filter in the OVF.

12. Calibrate the safety valve and provide certificate.

13. Pressure tests the dryer and issue a gas test certificate.

14. Perform a leak test at rated pressure and repair all identified leaks.

15. Check if the dew point readings observed on the dryer are similar to those seen on the DCS. Any deviations must be corrected on the dryer meters or on the DCS instruments.

16. Perform dryer functional tests.

17. Clean the dryer and area around it after the maintenance.
18. Dispose of all the waste in designated bins

1.1.1.2 H_2 SKID

1. Replace H_2 pressure regulator.

2. Check and calibrate pressure regulator.

3. Check all isolation valves for leaks, replace seals if necessary.

4. Check all flanges for leaks.

5. Check all screwed connections.

6. Check, calibrate the O_2 analyser. and issue calibration or verification certificate

7. Check, calibrate the Tri-gas analyser and issue calibration or verification certificate.

8. Check the flame arrestors for any oil blockages and advice Electrical Engineering on the SOW required to solve defect.

9. Check and calibrate all measuring transducers and gauges and issue calibration and verification certificate.

10. Check the functionality of the flow indicators and correct if defective.

11. Replace all diaphragms on valves.

12. Perform the required modifications as per the SOW from Electrical Engineering.

13. Test the activation of the LLDs and confirm that the signal is received at the DCS.

1.1.1.3 CO_2 EVAPORATOR

1. Check, test and perform functionality test on the temperature controllers.

2. Test blower motors and replace if damaged.

3. Test heater functionality and replace if damaged.

4. Check, test and perform functionality test on the PLC where applicable.

5. Check, test and perform functionality test on the temperature controllers.

6. Check and calibrate pressure regulators and issue calibration or verification certificate.

7. Check all isolation valves for leaks, replace seals if necessary.

8. Check all flanges for leaks.

9. Check all screwed connections.

10. Check and calibrate all measuring transducers and issue calibration or verification certificate.

11. Replace all diaphragms on valves.

12. Calibrate the safety valve and provide certificate.

13. Pressure test the CO_2 evaporator and issue a gas test certificate.

14. Perform a leak test at rated pressure and repair all identified leaks.

15. Perform purging station functional tests.

16. Replace defective temperature switches, pressure switches and controllers

1.1.1.4 Gas analysers

1. Calibrate the CO_2 analyser cell and issue calibration or verification certificate.

2. Calibrate the O_2 analyser cell and issue calibration or verification certificate.

3. Calibrate the H_2 analyser cell and issue calibration or verification certificate.

4. Set regulators and flow meters.

5. Clean the analyser panel.

6. Replace defective analysers or analyser sub-components including valves and regulators

1.1.2 UNIT 1 TO 3 ONCE OFF MODIFICATION SOW

The Supplier shall execute the following general SOW:

1. The supplier shall install, test and commission new sampling points for the different stages of CO_2 purge.

2. The supplier shall install, test and commission two-inch pipes and valves to enhance flow of CO_2 during the purging process and for the prevention of CO_2 expansion and freezing and clogging of pipeworks

3. The supplier shall ensure that NDT are carried out on the two-inch pipeworks, this activity shall be witness by the System Engineer

4. The sampling points shall comply with all the requirements of the Eskom Hydrogen Standard: 240-56227413, by ensuring that the hydrogen gas is released in a safe and controlled manner (double valve configuration)

5. The supplier shall install, test and commission an O_2 analyser, the new installed analyser shall comply with all the requirements of the Eskom Hydrogen Standard: 240-56227413 in terms of drift, response time and accuracy.
6. The O_2 analyser shall comply with all the requirements of the Management of Hazardous Locations: 240-5653605 Standard, and it shall have an IA certificate to prove that it is certified to operate in a hazardous location.

7. The supplier shall install, test and commission a secondary Hydrogen purity meter, with a display equipment to continuously measure and display Hydrogen purity levels as required by the Eskom Hydrogen Standard.

8. The newly installed Hydrogen purity meter and display equipment shall comply with all the requirements of the Management of Hazardous Locations: 240-5653605 Standard, and it shall have IA certificates to prove compliance in hazardous locations.

9. The newly installed analysers shall be protected from oil contamination, by an oil detection mechanism with an auto-shut off valve, which shall shut off supply to the analysers once oil has been detected on Hydrogen Skid System.

10. The oil detection mechanism shall incorporate LLD, an auto-shut off magnetic valve, oil visual indicator, drain valves, micron filters and light display equipment to warn OPS staff whenever there is oil ingress into the system so for oil to be drained from the system

11. The liquid level detector and the auto- shut off valve shall comply with the requirements of the Management of Hazardous Locations: 240-5653605 Standard, and it shall have IA certificates to prove compliance in hazardous locations.

12. The LLD drain valves shall be key operated to ensure that release of hydrogen into the atmosphere is done in a safe controlled manner, to avoid incidental release of hydrogen into the atmosphere.

13. All instrumentation and display equipment shall be rated at 4-20mA at 24V DC (OEM Data Sheet to be consulted for actual rating of instruments).

14. The new O_2 analyser shall be supplied from the current existing 24V DC supply.

15. New 24V DC Supply shall be provided on the currently existing C & I H_2 Skid Customer Interface Panel for the supply of the LLD, auto-shut off valve, secondary H_2 purity meter and the indication light in case of oil ingress into the H_2 skid.

16. The supplier shall provide drawings which shall show pipework and valve configuration, instrumentation and the general arrangement of the entire system and dimensions.

17. The supplier shall prove C & I loop diagrams as well as Operating and Maintenance Manuals

18. The supplier shall provide training to the Operating, Maintenance and Engineering personnel on how to operate the new system.
19. Optimise the CO_2 evaporator plant, advice Electrical Engineering on the required modifications.

20. Replace or modify the existing cable conduits on the hydrogen dryer plant to prevent H2 ingress into the H_2 dryer plant.

21. Install an Ex rated cable, Ex rated cable glands on the H_2 dryer control panel.

CRITICAL SPARES	**PART NO**	**MIN HOLDING**	**MAX HOLDING**
H2 AND CO2 CYLINDER HOSES	SS-TP8-SS8 (8 METER)	12	15
H2 BULL NOSE NUT AND STEM	W003081	6	9
CO2 BULL NOSE NUT AND STEM	W003079	6	9
H2 CYLINDER SUPPLY REGULATOR	S8500AGM	3	6
U-TUBES- MADE UP PER SKID UNIT H2 AND CO2 WITH QUICK CONNECTORS PRICE PER SET	SS-1610-1-16RP-1" QC FNPT-BRZ/BRZ	3	6
100 DIAL PRESSURE INDICATORS- RANGE TO BE DETERMINED UPON REQUEST	PBB-10-SS-D 1/2"	10	15
HDF120A FLOAT DRAIN HYPERDRAIN	HDF-120-A HYPERDRAIN	2	4
CO2 TEMPERTURE CONTROLLER	16CT-F-B-00	2	4
CO2 TEMPERATURE SWITCH	16-JC-B-B-00	2	4
DRYER HMI ALLEN	2711R-T4T	1	2

BRADLEY (OLD HMI OBSOLETE)			
DRYER PLC AB (OLD PLC OBSOLETE)	2080-L50E-24AWB	1	2
DRYER MOTOR STARTER PROTECTOR	3RV1021-1CA10	4	8
DRYER HEATER AND MOTOR CONTACTORS	3RT2017-1AK61	4	8
CO2 EVAPORATOR FLANGED HEATER ELEMENT	50KW 3LD	1	2
CO2 EVAPORATOR UE PRESSURE SWITCH	UE-J120, EX (800)	1	2
CO2 EVAPORATOR INLET ACTUATOR SOLENOID	ASCO-1/4" 10001/21	1	2
CO2 EVAPORATOR INLET VALVE ACTUATOR	BRKTVLN-25-SW-150	3	6
DRYER TEMPERATURE CONTROLLERS	16-JF-B-B-00-CY	2	4
DRYER INLET AND OUTLET DEW POINT PROBES	AMS-0110/4-20	2	4
DRYER INLET AND OUTLET DEW POINT DISPLAYS	DS8B-IRRB	2	4
DRYER 1064W HEATER ELEMENTS	1064-5 FRAME-120VAC (12-14OHMS)	2	4
DRYER BLOWER MOTORS	110144.00	2	4
1 INCH DIAPHRAGMS	88015139-600 25M 4	12	18
1 INCH DIAPHRAGMS WITH VALVE BONNET	88027412-9675 25Z	2	4
1-1/2" DIAPHRAGMS	88015140-600 25M 4	2	4
1-1/2" DIAPHRAGMS WITH VALVE BONNET	88027413-9675 25Z	2	4
2 INCH DIAPHRAGMS	88015141-600 25M 4	2	4
2 INCH DIAPHRAGM WITH VALVE BONNET	88027414-9675 25Z	2	4
PRESSURE TRANSMITTER-REPLACEMENT FOR ROSEMOUNT-YOKOGAWA EJX530A	EJX530A (1/2" NPTF)	4	4
LEVEL SWITCH SECONDARY O2 ANALYSER	5124300100120M-E	1	2
FLOW INDICATOR	SW-01.2.1.2.16c.1.6.1.0	1	2

SECONDARY GAS ANALYSER			
O2 CELL SECONDARY O2 ANALYSER	A59022	1	2
CO2 CONTROL RELAY HOUSINGS	Relay Module - PLC-RSC-120UC/21-21 2967086	10	15
CO2 CONTROL RELAY UNIT	Relay Module - PLC-RSC-120UC/21 - 2966197	10	15

The *Contractor* shall:

1. Carry out all works as stipulated in the task order schedules issued by the *Employer*.
2. Complying with the *employer's* administration program.
3. Compliance with all legal safety aspects shall be ensured.
4. The *contractor* provides a program and a resource schedule for the works and for each task order, bar chart or other reporting formats as may be required by the employer are provided for all task orders indicating start, inspections and completion dates, resources, and costs.
5. The *contractor* provides a quality check plan (QCP) with intervention points for the *employer* to review, check and monitor progress.
6. In case of any major breakdowns, a repair plan of action must be submitted to the *employer* within 24 hours. Repair work to commence on the exact time agreed between the *employer* and the *contractor* on hid plan of action.
7. A computer aided planned maintenance activity program will be generated for each specific type of equipment.
8. Planning and scheduling meetings will be held when necessary and the *employer* will inform *contractor* of the format and time of those meetings.
9. Shall apply the Hydrogen Skid and Gas station method that will not harm the plant.
10. Shall use Hydrogen Skid, Hydrogen dryer and Gas station that are not harmful to humans, the environment and plant

1.1.3 Roles and Responsibilities

1.1.3.1 Contractor

a) Supply spares as requested by the *Employer.*
b) Perform all required modifications as per SOW from Electrical Engineering
c) Provide drawings, O & M manuals for all components used during the execution of modifications.
d) The drawings shall include general arrangement, layouts, including dimensions, P & IDs, Electrical diagrams, Hazloc drawings and C & I loop diagram where applicable.
e) Provide IA certificates for all equipment used in hazardous location as required by Eskom Standards
f) Supply, install, test and commission the integrated system as per SOW from Electrical Engineering
g) Provide project plans, timelines, cost, and deliverables before commencements of any plant modification on the H2 skid.
h) Provide training to OPS, Engineering and Maintenance on how to operate the H2 skid after completion of modification SOW.

i) Assist Grootvlei Power Station with updating of Generator degassing and gassing up procedures for Unit 1, 2 and 3 Generators.
j) Performs all the maintenance activities as described in this scope of works.
k) Confirm correctness of the supplied spares information
l) Provide spares technical information in accordance with this scope of work.
m) Timeously inform the Employer of any delays or when outstanding or additional information from the Employer is required.
n) Responsible to ensure that a quality product is delivered.
o) Responsible to ensure that every effort is made to keep to the agreed program and plan.
p) Provide all required technical datasheets and/or product brochures for all the spares supplied.
q) Conform to all the other requirements stipulated in this document.
r) Supply all the necessary test sheets/results, where applicable
s) Invite the Employer or representative thereof three (3) working days in advance for witness/hold points, if applicable, as agreed.

1.1.4 Process for Monitoring

Not Applicable

1.1.5 Related/Supporting Documents

Not Applicable

1.1.6 SUPPLY OF SPARES

The following are the *Contractor'*s requirement:

a) The *Contractor* will ensure that the correct spare is supplied and will replace or be liable for damage at his/her cost if the incorrect or defective spare/s is supplied. The costs may include, but not limited to, repairs and/or replacement as a result of a defective or incorrect spare.

b) The *Employer'*s (i.e. Eskom Holdings SOC) acceptance of delivered spare/s does not absolve the *Suppliers* of the liability to supply the correct and/or defect free spare.

c) The *Contractor* may, at the *Employer*'s discretion, be given access to the plant to verify the information of the installed spare.

d) The spare must be the same (i.e. same Part Number) as specified on this scope of work and the part number will also be used to perform quality control checks. ***Notwithstanding the stipulated condition that the Contractor is responsible for verifying the correctness of the spare's information provided by the Employer in relation to the existing installed spare. This may include the Supplier consulting the original Contractor of the spare to ensure correctness of information provided by the Employer.***

e) The *Employer* may at his/her discretion make the *Employer*'s Engineer or employees or *others* available to the *Contractor* for the purpose of soliciting additional information or verifying information as the need arises.

f) The *Contractor* will supply any additional information such as brochure, general arrangement drawing, certificates, detailed specification, etc.

g) The *Contractor* provides the *Employer* with additional spares information and verifies information required in the data capturing forms (DCF) if provided at least three months after order placement or

conclusion of the contract or (where lead time is less than three months) a week before delivery of respective spare.

h) The *Contractor* shall supply preservation and storage procedure/s, where applicable.

i) The Spares Procurement maximum limit indicated by the Employer in the attached table as one of the subheadings is the maximum number of spares the *Employer* may require at any given time during the five-year period of the contract. However, the *Contractor* may only supply the quantity as specified by the *Employer* in the individual order instruction and does not imply that the *Contractor* is entitled to supply the total number indicated in the Spares Procurement maximum limit.

j) The *Employer* reserves the right to exclude the supply of some spare's items included in the contract with the *Contractor* should the *Employer* become aware that National Supply Contract exists or is placed by the *Employer* with Others in respect to those specific spares items.

k) If deemed necessary, the *Employer* may subject the *Contractor* to a quality assurance assessment at the *Contractor* s or *sub- Contractor* s premises as part of the technical evaluation or before the contract placement or at any time during the contract period.

l) Where the spare requires testing, the *Contractor* will inform the *Employer* to invite or make available the *Employer*'s representatives to witness the tests.

m) Should the *Employer* be dissatisfied with all or certain aspects relating to a specific spare test (including but not limited to suspected inferior quality or non-compliance) the *Contractor r* will make good, rectify the faults, or supply a new spare at his/her cost.

n) Complete price breakdown must be supplied with the quotation and must include the cost of transport to Grootvlei Power Station. However, the *Employer* reserves the right to use the *Employer*'s own transport.

o) Spares will be opened for inspection, counting and quality control check at the *Employer*'s stores.

p) The *Employer* has provided the Bill of Material table with part numbers in order to assist the *Contractor* to meet the requirements of the Work to be performed by the *Contractor*.

q) The *Employer* may make clarification sessions available to either prospective *Supplier*/s in order to further assist the prospective *Contractor*'s to meet the requirements of the Work to be performed by the *Supplier*.

1.1.7 SPARES IDENTIFICATION

a) Section 10 lists all the spares to be procured under this scope of work. If DCFs exist, they will be provided to assist the Supplier with information for all spares to be procured. Each spare is identifiable by means of component/part description, OEM and/or OEM part number. Where the information available on the spares list in Section 09 or that supplied by materials management as catalogued is not sufficient to positively identify the applicable spare, the Supplier shall notify the Employer such that the Employer can assist the Supplier in identifying the correct spare.

b) The spares to be provided to be the same as the original component, in all technical respects, as those utilised on the equipment it is intended for. This includes, but is not limited to, design (including dimensions and material specifications) and manufacturing (including manufacturing processes, standards, and acceptance testing).

c) The *Supplier* shall be liable to replace a supplied spare that is found to be defective and/or wrong.

1.1.8 INFORMATION TO BE PROVIDED

If DCF's exist, they will be provided to the *Supplier* by Materials Management; the information contained in the forms can assist the *Supplier* to procure the correct spares. The DCF is required by the *Employer*'s Material Management System to be able to book the item in the stores and the information should be sufficient to procure the goods in future. Where a field is populated, the *Supplier* needs to review and verify/correct the information against the OEM part number for correctness.

The following information to be provided with the spares:

a) Documentation detailing the technical characteristics of the procured spare item. This may be in the form of data sheet or brochure. The Employer reserves the right to reject the documentation if it is not deemed sufficient.

b) Any other additional information that has not been specified on the DCF / scope but necessary for storage, installation, and utilisation of spares where applicable.

c) Supply preservation and storage procedures of goods, where applicable

d) Any spares information which has been omitted which is deemed relevant for spares identification, storage, maintenance, etc.

e) In instances where the *Supplier* uses another company, other than the item OEM, to provide required information, this to be declared in advance to the *Employer*

1.1.9 SPARES QUANTITIES

The spares quantities to be provided as stipulated in Section 10.

1.1.10 REPLACEMENT PARTS UPGRADED/MODIFIED

Where equipment or spares, including the whole assembly, have been upgraded / modified the *Supplier* shall indicate this to the *Employer* as part of the tender. The *Employer* shall be made aware immediately where the upgrade/modification to the component is only identified subsequent to the tender being issued. The detailed compatibility to the existing component shall be indicated. If the components to be supplied will be obsolete, or envisaged to be obsolete, in the 3 years subsequent to tender being issued, the *Supplier* shall indicate this to the *Employer* and indicate viable alternatives thereof.

1.1.11 PACKAGING

All supplied spares shall be packaged in such a manner that they may be transported and stored for an extended period of time without resulting in damage to the packaged components. This includes preventing damage due to moisture ingress, especially for electronic components. Where possible, silica gel/desiccant may be included to ensure protection against moisture for at least 3 months. However, this inclusion should not lead to damage to the component.

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.

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.

Delivery packaging to have the following details on it:

a) Order number

b) Physical address of Grootvlei Power Station

c) Delivery notes number

d) Spares part number and quantity

1.1.12 EXCLUSIONS

The following shall be noted as exclusions as per this scope of work:

a) The *Contractor* shall not supply offloading facilities during delivery of spares.

b) The *Contractor r* shall not be responsible for the storage of spares after acceptance at delivery by Employer
c) Subcontracting shall not be permitted, unless declared and accepted prior to contract placement.

1.1.13 ACCEPTANCE OF SPARES

a) No incorrect, damaged, or faulty spares will be accepted.

b) All the spares will be inspected before payment could be processed.

c) Data capturing forms information must be supplied and must meet an acceptable level.

d) Where applicable; test certificates, calibration certificates, IA certificates, material certificate, manuals, data sheet and signature shall be provided as required.

e) The *Contractor* must provide references of the companies that they have supplied similar spares to, and include the respective supply order/contract value, the contact name, physical address, and telephone number.

1.1.14 CONSTRAINTS ON HOW THE *SUPPLIER* PROVIDES THE GOODS

Supply Requirements

The Supply Requirements for this contract are in an Annexure A to the Contract Data provided by the *Purchaser*.

2 Constraints on how the *Supplier* Provides the Goods

2.1 Programming constraints

The contract is as and when required, the supplier to adhere to the conditions stipulated on the contract data.

2.2 Work to be done by the Delivery Date

Goods are to be delivered at the delivery place, in good condition and as per their detailed specifications.

2.3 Marking the *goods*

All goods will be paid once they are delivered at the delivery place as well as after goods inspection or checks is completed.

2.4 Constraints at the delivery place and place of use

Supplier to arrange with the Purchaser prior to delivery of goods, for security access to be arranged. No deliveries will be allowed during weekends and public holidays. Deliveries should be made to the delivery place, during the following times:

Monday – Thursday	:	08H00 - 16H00
Friday	:	08H00 - 11H30

2.5 Services & other things to be provided by the *Purchaser* or *Supplier*

Both parties will assist during offloading and where material handling equipment such as forklift, overhead crane is required the purchaser will provide for the purpose of offloading the goods.

2.6 Management meetings

Quarterly meetings to be held once the contract is up and running to discuss the progress and anticipated next delivery. The meeting to be attended by the Supply Manager or his/her representative, Service Provider representative and the End User. The meeting will be held at Grootvlei Power Station.

The following text could be used as a model for this section:

Title and purpose	Approximate time & interval	Location	Attendance by:
Kick off meeting	Once off after contract placement	Grootvlei Power Station	*Purchaser and Supplier*
Quarterly contract meeting	3 monthly	Grootvlei Power Station	*Purchaser and Supplier*

Meetings of a specialist nature may be convened as specified elsewhere in this Goods Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the manufacture of the *goods*. Records of these meetings shall be submitted to the *Supply 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.

2.7 Documentation control

All communication will be in the form of meeting minutes as well as emails and both parties must have contract file to ensure the details of the contract are stored accordingly.

2.8 Health and safety risk management

The *Contractor* shall always comply with OHS Act 95 of 1993 or ISO 45001, Eskom's SHE rules and requirements. The *Supplier* must identify, assess and manage Safety, Health and Environmental risks related to the scope of work. The methodology used for the risk assessment must be provided together with the BRA.

The Contractor shall adhere to all OHS Legal requirements, OHS corporate policies, standards and procedures to which Eskom subscribes and as indicated on the issued SHE specification.

The Contractor shall, when coming on site (Grootvlei Power Station), abide by the Lifesaving Rules. These will be provided by the Employer on the start of the contract.

The Contractor shall also abide by the Grootvlei High risk Safety, Health and Environmental Specifications 240-73418055, which will also be provided by the Employer.

The Contractor shall, when coming on site (Grootvlei Power Station), make use of approved personal protective clothing such as overalls, safety shoes, safety hat, safety goggles, dust mask and gloves when necessary.

The Employer follows an Incident management procedure (32-95) that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The Contractor is expected to fully co-operate to achieve this objective. The Contractor will report any incident and accidents to Grootvlei Power Station within 24 hours or before end of shift. This report does not relieve the Consultant of his legal obligation to report certain incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act.

The Contractor implements a safety plan and maintains the safety system until the 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 to ensure compliance with the plan. Any deviations will be corrected to the Employer's satisfaction.

The Service Manager has the right to stop the Contractor's work activities which, in the opinion of Service 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.
The *Contractor* shall comply with the health and safety requirements contained in the contract tender package

The *Contractor* shall comply with the health and safety requirements contained in the contract tender package

2.9 Environmental constraints and management

1. Policy, Leadership and Commitment

a) The contractor shall comply with all Eskom Grootvlei Power Station environmental requirements such as policies, standards and procedures (work instructions).

b) The contractor shall appoint personnel in writing with basic Environmental knowledge who will have the responsibilities of implementing all environmental/SHE requirements on a specific contract.

c) Station Waste Management Procedure and colour coding shall be adhered to at all times.

d) Ensure that all Environmental Requirements are communicated to relevant employees.

2. Legal and Other Requirements

a. Adherence to the 'Duty of Care' as stipulated in section 28 of the National Environmental Management Act 107 of 2008.

b. Adherence to applicable Environmental legislations, licences and permits and other requirements.

3. Aspects, Impacts, Objectives and Targets

a. The contractor shall ensure that all aspects and impacts that can result in negative impacts on the environmental through their operations are identified and documented.

b. Objectives and targets shall be established for aspects and impacts that are deemed to be significant. These objectives and targets will need to be documented and conveyed to all contractor personnel.

4. Incident Reporting and Investigation

a. All incidents shall be managed according to Eskom Environmental incident management procedure-**240-133087117.**

b. Polluter pays principles shall apply to all *Contractors*. 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

5. Monitoring and Review

a. Client personnel will conduct regular environmental audits. Contractors are expected to participate and ensure that corrective actions are executed.

b. Eskom Grootvlei Power Station shall issue non-conformances where there are deviations from Grootvlei Power Station Procedures and any other environmental requirements.

c. All environmental system documentation, records, reports etc. shall be made available for review when requested.

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2.10 Quality

The Contractor shall implement 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 and the Eskom Supplier Contract Quality Requirements Specification (240-105658000). The system will be to the Employer's satisfaction and will be accepted prior to the commencement of any work as per services.
The Contractor will be subject to periodic audits by the Employer to ensure compliance with the system. Any deviations will be corrected to the Employer's satisfaction.
The Supply Manager has the right to stop the Contractor's work activities which, in the opinion of Supply Manager, does not meet the requirements of the system and will have a detrimental effect on plant performance.

2.11 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:

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

2.12 Insurance provided by the *Purchaser*

No additional insurance apart from the stated in the contract data

2.13 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Supplier*

Assessments signed by all parties and notification of compensation events should be kept by the *Supplier* as well as the *Purchaser* for future reference, should there be any.

3 Procurement

3.1 Subcontracting

3.1.1 Preferred subcontractors

Tenderers shall subcontract a minimum of 5% of the contract value to the following designated groups:
• an EME or QSE which is 51% owned by black people living in rural or underdeveloped area or townships.

NOTE 1: Tenderers shall submit the following mandatory returnable for Subcontracting:
• Letter of intent to subcontract 5% from Main contractor.

Potential scope to be subcontracted and/or outsourced
• Transportation

Tenderers are required to submit their proposals in the table below

Local Procurement Content	**Eskom target**	**Tenderer Proposal**
	100%	