

	SHE SPECIFICATION Cross-Over Plant Refurbishment (Mechanical) for Kendal Power Station	Template Identifier	240-73416879	Rev	2
		Document Identifier	*1015696	Rev	3
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CROSS-OVER PLANT REFURBISHMENT (MECHANICAL) FOR KENDAL POWER STATION

Project Address: Kendal Power Station

Scope of the project: Cross- over plant refurbishment (mechanical) for Kendal Power Station

 09/06/2023

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1. Introduction

Eskom's responsibility and commitment is to ensure a safe working environment is in line with its safety, health, environmental and quality policy, along with legislative obligations.

This SHE specification is minimum requirements which are required to be met for the specific contract and for the duration of the contract period by contractors and where required, the delivery organisation.

The contractor is expected to develop a SHE plan which meets these requirements as well as all the relevant applicable legislation they conform to.

Eskom in no way assumes the contractor's legal responsibilities. The contractor is and remains accountable for the quality and the execution of his/her health and safety programme for his/her employees and appointed contractor employees.

This SHE specification reflects minimum requirements and should not be construed as all encompassing.

Note 1: All the requirements listed hereunder are in relation to the contract and do not supersede or replace any organizational SHE requirements.

Where requirements listed are already in place, then the organisational requirements must be taken cognisance of and listed in the respective SHE plans. If there are any additional Eskom and or legislative requirements listed in the SHE specification, then these must be addressed.

2. Supporting Clauses

2.1 Scope

This SHE specification lists the legislative and Eskom requirements and where applicable, any requirements pertaining to local authorities / municipal by-laws / environmental legislation that must be met by the contractor.

2.1.1 Purpose

This document will provide a standardised approach to the compilation of SHE specifications throughout Eskom for contracts, standards and NEC 3 contracts.

2.1.2 Applicability

This SHE specification is applicable to any contracting organisation who intends tendering for the contract.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

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2.2.1 Normative

- [1] Basic conditions of employment act No 75 of 1997.
- [2] Occupational health and safety act and regulations No 85 of 1993.
- [3] National Disaster Management Act 57 of 2002
- [4] National environmental management act 107 of 1998.
- [5] National road traffic Act 93 of 1996.
- [6] 32-37 Eskom substance abuse procedure.
- [7] 32-136 Eskom contractor health and safety requirements
- [8] 240-62196227 Eskom life- saving rules
- [9] 32-95 Eskom environmental, occupational health and safety incident management procedure
- [10] 32-727 Eskom SHEQ policy
- [11] 240-62946386 Eskom vehicle and driver safety management procedure
- [12] 32-520 Eskom risk assessment procedure
- [13] Eskom plant safety regulations

2.2.2 Informative

- [1] SANS 1186 Symbolic Safety Signs
- [2] Constitution of the republic of South Africa No 108 of 1996
- [3] SANS 863:2011
- [4] Eskom standard 36-397 Transportation of transport of power station electric motors
- [5] SANS 1561—1:2006

2.2.3 Definitions



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Definition	Explanation
Appointed contractor	Means a contractor appointed by the principal contractor
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
Business unit (BU)	(32-296) means any defined unit within the Eskom environment, operating as a business under a particular cost-centre number. In the context of this document and in terms of health and safety, any reference to a BU includes a defined unit within any Eskom division and its subsidiaries
Client	(OHS Act) Eskom representative (Internal – Asset Owner), also referred to as the contract administrator/custodian or agent or project manager (as defined in the contract). He/she is the person responsible for ensuring that the works or services are executed in terms of the contract, as well as adherence to legislation pertaining to the contract.
Competent person	(OHS Act) means any person having the knowledge, training, experience, and qualifications, specific to the 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)
Contractor	(OHS Act) means an employer as defined in section 1 of the Act who performs contracted work and includes principal contractors



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Definition	Explanation
Construction work	Any work in connection with the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure. the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or the moving of earth, clearing of land, the making of excavation, piling or any similar civil engineering structure or type of work.
Consultant	means a person providing professional advice
Controlled disclosure	controlled disclosure to external parties (either enforced by law or discretionary)
Covid-19	means Corona Virus 2019
Duty of care to the environment	(32-136) anybody who causes or has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring. If such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, such person must minimise and rectify such pollution or degradation of the environment
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 or is entitled to receive any 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 a TES (ex labour broker) as defined in section 1(1) of the Labour Relations Act 1956 (Act No. 28 of 1956)
Environment	(32-94) means: the land, water, and atmosphere of the earth; micro-organisms and plant and animal life; and any part or combination of (a) and (b) and the interrelationships among and between them, and the physical, chemical, aesthetic, and cultural properties and conditions of the foregoing that influence human health and well-being
Environmental Management plan	A detailed plan of action prepared to ensure that recommendations for enhancing or ensuring positive impacts and limiting or preventing negative environmental impacts are implemented during the life-cycle of a project. This Environmental Management Plan should preferably form part of Eskom's Environmental Management System
Eskom requirements	Eskom requirements flowing from directives, policies, standards, procedures, specifications, work instructions, guidelines, or manuals
Fall protection plan	(OHS Act) means a documented plan of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk
Hazard	(OHS Act) means a source of, or exposure to, danger



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Definition	Explanation
Hazard identification	(OHS Act) means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work or work being executed or to be executed
Health and safety file	(OHS Act) means a file or other record in permanent form, containing the information required in relation to the contract.
Health and safety plan	(OHS Act) means a document plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control hazards identified
Health and safety specification	(OHS Act) means a document specification of all health and safety requirements pertaining to associated to a contract, so as to ensure the health and safety of persons.
Health and safety requirements	means comprehensive health and safety requirements for a contract, project, site, and scope of work. This specification is intended to ensure the health and safety of persons, both workers and the public, and the duty of care to the environment. The health and safety requirements must be specific to each contract, project, site, and scope of work
Lifesaving Rules	(240-62196227) a rule that, if not adhered to, has the potential to cause serious harm to people
Medical Certificate of fitness	(OHS Act) means a certificate valid for one year, issued by an occupational health practitioner, issued in terms of the regulations, whom shall be registered with the Health Professions Council of South Africa
Medical surveillance	(OHS Act) means a planned programme or periodic examination (which may include clinical examinations, biological monitoring, or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner
Method statement	(OHS Act) means a written document detailing the key activities to be performed in order to reduce, as reasonably as practicable, the hazards identified in any risk assessment
Organisation	may be defined as a group of individuals (large of small) that is cooperating under the direction of executive leadership in accomplishment of certain common objects
Pre-job meetings	(34-227) means a meeting that is held prior to the commencement of the day's work and that is attended by all the relevant employees associated with the work task
Principal contractor	(In the text of this document) Means an employer, as defined in section 1 of the OHS Act, who intends to tender for or has signed a contract with Eskom for services rendered.
Provincial director	(OHS Act) means the provincial director as defined in Regulation 1 of the General Administrative Regulations under the Act
Responsible Manager	Is a Manager of a department, section or operating/business unit who has been appointed as part of the Eskom delegation of authority process with the aim to assist the applicable 16(2) assigned person in executing his/her duties in terms of the Occupational Health and Safety Act
Risk assessment	(OHS Act) means a programme to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to remove, reduce, or control such hazard.



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Definition	Explanation
Site	(34-228) means an Eskom department, unit, complex, building, specific project, work site, or the site where agents, clients, principal contractors, contractors, suppliers, vendors, and service providers provide a service to Eskom, directly or indirectly
Service provider	any private person or legal entity that provides any service(s) to Eskom for compensation
Subsidiary	(32-94) an enterprise controlled by another (called the parent) through the ownership of greater than 50% of its voting stock
Supplier	(32-1034) means a natural or legal person who renders a service and may include the following current or potential supplier vendor, contractor, consultant
Task	(34-227) a segment of work that requires a set of specific and distinct actions for its completion
Toolbox talks	(34-227) where the team leader, after conducting pre-task planning, shares all the tasks at hand and discusses task allocation, the identified risks, and the control measures with all his/her team members on site before commencing a specific task and documenting the agreed strategy. (This shall be done to ensure common understanding of the tasks, risks, and control measures required.)
The Act	(OHS Act) means the Occupational Health and Safety Act No. 85 of 1993, as amended, and the Regulations thereto
Visitor	any person visiting a workplace with the knowledge of, or under the supervision of, an employer.

2.4 Abbreviations

Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CE	Chief Executive
CNC	(Eskom) Customer Network Centre
CR	Construction Regulations of the OHS Act
COID Act	Compensation for Occupational Injuries and Diseases Act
Covid-19	Corona Virus 2019
DMR	Driven Machinery Regulations
DoL	Department of Employment and Labour (Inspection and Enforcement services – Provincial office)
EAP	Employee Assistance Program
EP	Emergency Preparedness
ERfW	Environmental Regulations for Workplaces
GAR	General Administrative Regulations
GSR	General Safety Regulations
HCA	Hazardous Chemical Agents



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Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CE	Chief Executive
LDV	Light Delivery Vehicle
LoG	(COID) Letter of Good Standing
SDS	Safety Data Sheets
NEMA	National Environmental Management Act
OHS Act	Occupational Health and Safety Act and Regulations, 85 of 1993
PSR	Plant Safety Regulations
SABS	South African Bureau Standard
SANS	South African National Standard

2.5 Roles and Responsibilities

2.5.1 Commitment

Visible commitment is essential to providing a safe work environment. Managers, supervisors and employees at all levels must demonstrate their commitment by being proactively involved in the day to day operations, in particular the Occupational Health and Safety aspects of any project / contract. Legislation requires that each employee must take reasonable care of themselves and their fellow workers, from management level down to the lowest employee level.

2.5.2 Principal contractors and appointed contractors

Note 1: Most of the roles and responsibilities listed apply to both principal contractors and any appointed contractors. Where some of the listed do not apply to both, then the specific responsibilities will be listed and titled. The contractors shall:

1. Carry out all duties as listed in section 8, 9 and 10, the various other regulations that form part of the OHS Act.
2. Carry accountability and responsibility for the safety and health of their employees and their appointed contractors within their working area, as contemplated by section 37(2) of the OHS Act.
3. Shall keep a record of all employees including the appointed contractor employees, including date of induction, relevant skills and licenses and be able to produce this list at the request of the Eskom Project Manager.
4. Ensure that all their appointees are made aware of their accountabilities and responsibilities in terms of their appointment and that they advise and assist these appointees in the execution of their duties.

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5. Ensure that the minimum legislative, regulatory and Eskom SHE requirements are complied with on all work sites.
6. Give the Eskom project managers and line managers / responsible managers their full participation and cooperation.
7. Compile a SHE (health and safety) file where all relevant health and safety records must be kept for each work site.
8. The principal contractor must hand over a consolidated (to include any appointed contractors files) health and safety file to the Eskom project manager on completion of the project. This is to include all drawings, designs, lists of materials used and other applicable information about the completed project, as well as the list of appointed contractors, the agreement, and the type of work completed.
9. Contractors must hand over a consolidated (to include any appointed contractors files) health and safety file to the principal contractor on completion of the project. This is to include all drawings, designs, lists of materials used and other applicable information about the completed project, as well as the list of appointed contractors, the agreement, and the type of work completed.
10. The principal contractor must provide the project manager with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes. The letter of good standing shall reflect the name of the contractor's company. Similarly, the principal contractor must provide the Eskom project manager with all the valid letters of good standing from their appointed contractors.
11. Contractors must provide the principal contractor with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes. The letter of good standing shall reflect the name of the contractor's company.
12. Appoint competent staff to perform the project work and ensure that all employees are trained in the health and safety aspects relating to such work and that the employees understand the hazards associated with all other work being carried out on the project.
13. Ensure that all employees are conversant with all relevant work procedures and that they adhere to such procedures. Similarly (without removing the appointed contractors' responsibilities), ensure that their appointed contractors and their employees are conversant with all relevant work procedures and that they adhere to such procedures.
14. Co-ordinate the activities of all the appointed contractors in the interests of safety and health;
15. Ensure that potential contractors (whom they intend appointing) submitting tenders have made detailed provision for the cost of safety and health measures throughout the project.
16. Stop his /her employees and any appointed contractors if project work is not in accordance with the health and safety plan or if such work poses a threat to the health and safety of persons or a risk of degradation to the environment.

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17. Take reasonable steps to ensure cooperation between all their appointed contractors.
18. Only appoint contractors to do work, if satisfied that the contractor has the necessary competencies and resources to perform the work safely.
19. Appoint full-time competent employees in writing to supervise the performance of all specified work throughout the contract period.

Note 2: No work may commence and or continue without the presence of the appointed project manager or project supervisor during performance of the contracted work.

20. Ensure that the supervisor or manager do not supervise work on any site other than the site for which such supervisor has been appointed for.

Note 3: In determining the number of appointed competent supervisors, the nature and scope of work being performed, shall be taken into consideration.

Note 4: If a sufficient number of competent employee(s) have been appointed to assist the construction supervisor, the construction supervisor may supervise more than one site.

21. Not victimise or dismiss employees, by virtue of the employees divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements;
22. Follow a process of disciplinary action if any of their employees or their appointed contractor employees have transgressed any of the requirements of the health and safety specification, safety and health plans, site rules or any other requirements.
23. Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of a construction site against all risks that may arise from such site.
24. Before the commencement of any work, conduct risk assessments which shall include public safety. This should be done by a competent person appointed in writing with a view to identify hazardous and potentially hazardous work operations.
25. Ensure that pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task or not.
26. Take prime responsibility for all aspects of environmental management associated with the project activity for which they are responsible.
27. Provide any appointed contractor who is making a bid or is appointed to perform work on Eskom's behalf, with the relevant sections of the documented Eskom's SHE Specification.
28. Principal contractors are required to approve appointed contractor's health and safety plans if they meet all the requirements.
29. Must ensure that an organisation medical surveillance programme for the duration of the contract is in place and maintained.

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30. Prior to having pre-employment and periodic medicals fitness examinations conducted, person/man job specifications must be compiled and handed to the occupational health practitioner.
31. Ensure that pre-employment, periodic and exit medicals are carried out on their employees. Medical assessments must be conducted by a registered Occupational Health Practitioner. During the pre-employment medical, where employees will be required to work at heights, they will also be required to undergo the required employee physical and psychological fitness examinations.
32. Ensure, prior to the commencement of the contracted work that all persons involved in the project work, as well as the appointed contractors, have received a health and safety induction training session. Similarly, ensure that all visitors to site undergo the site's induction training.
33. Ensure, prior to the commencement of contracted work, that all their employees involved in the project work, as well as the appointed contractors, have received task-specific training.
34. Issue risk-based personal protective equipment (PPE) as a measure of last resort to their employees, inspect such equipment regularly and ensure recipients of PPE are trained in the proper use, care and where necessary, the maintenance of PPE;

Note 5: should the principal contractor or his/her appointed contractors entertain visitors on site, they will be held responsible for the provision and wearing PPE.

35. Erect their own site offices, temporary buildings, storage areas, toilets, fencing, and any other structure as may be required. Any such structures shall be positioned and erected in compliance with any instructions from the Eskom project manager and the relevant site safety and fire prevention requirements;
36. On completion of the work remove all structures erected by them, and where required by law rehabilitate the environment.
37. Where performing work with the environment, ensure that minimal damage is done and that where an Environment Management Plan is in place, then adhere to the plan.
38. Respect the rights of land owners/lessors and the preservation of their registered activities;
39. Must have a substance abuse program which must be in line with the requirements of the OHS Act.
40. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on the work sites.

Note 6: Eskom will not tolerate the presence of anyone who is or who appears to be under the influence of alcohol or any other intoxicating substance whilst performing work for them or on any work site.

41. Ensure that all equipment and tools used comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these;
42. Ensure that all incidents are reported and investigated timeously by competent incident investigators.
43. Be involved in all of their appointed contractor's investigations.

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44. Establish health and safety committees, hold such committee meetings on all sites, and ensure that appointed contractors participate in their health and safety meetings.
45. Chair their own health and safety committee meetings and record such meetings.
46. When appointing contractors, advise the project manager in writing timeously and obtain his/her approval prior to them commencing work.
47. Shall keep a record of all employees including the appointed contractor's employees, including date of induction, relevant skills and licenses and be able to produce this list at the request of the Eskom Project Manager.

2.5.3 Contract / Project Managers

Note 1: No work may commence and or continue without the appointed supervisor or manager during the performance of the contracted work.

1. Not supervise work on any project site other than the site they have been appointed to supervise;
2. Assist the contractor and/or the appointed safety officer in conducting site induction training for new staff and site visitors;
3. Instruct and train all employees under their control on any hazardous and related work procedures, before any work commences and thereafter, at such times as may be determined by a risk assessment;
4. Ensure that the minimum legislative and Eskom SHE requirements are complied with on all work sites;
5. Stop any work that is not in accordance with the safety and health plan or if such work poses a threat to the safety and health of persons or a risk of degradation to the environment;
6. Ensure that risk-based personal protective equipment (PPE) has been issued and employees wear/use the PPE as instructed.
7. Inspect such PPE on a regular basis and record the inspections;
8. Ensure that all incidents are reported to the client and are investigated.
9. Be involved in all investigations that occur within their area of responsibility.
10. Carry out audits and or inspections on their contractors at least monthly and any appointed contractors on instructions of their contractor.
11. Ensure that employees under their control are conversant with all relevant work procedures and that they adhere to such procedures;
12. Before the commencement of any work, where possible, assist in the conducting of risk assessments and ensure that appropriate mitigating measures have been considered and implemented.
13. Ensure that daily or pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task. Ensure that the team are involved in the abovementioned risk assessments;
14. Hold tool box talks at the start of each day/ task to discuss health and safety issues as well as confirming the requirements of the daily risk assessments;
15. Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of the project site against all risks that may arise from such site.
16. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management;

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17. Ensure that all equipment and tools used on site comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these.
18. Ensure that they and their contractor managers give clear and unambiguous instructions for the project work, to the employees for whom they are responsible for.
19. Not victimise their employees by virtue of their employees divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements (reference – section 26 of the OHS Act).
20. Where any work is performed which involves the environment, ensure that minimal damage is done to the environment and that where an Environment Management Plan is in place, then the plan adhere to the plan.
21. Stop any employee or contractor from performing work which is not in accordance with the principal contractor's and or appointed contractors health and safety plan which poses a threat to the health and safety of persons.

2.5.4 Contractor / Project site supervisor

Must:

1. Be competent to perform the required supervisory tasks;
2. Ensure their employees and all appointed contractors comply with the required statutory and Eskom project requirements;
3. Inspect all work done by the contractors to ensure adherence to Eskom's standards and specifications
4. Conduct follow-up inspections to ensure findings are closed out and preventative action is in place.
5. Monitor contractors for adhere to statutory requirements and safety standards.
6. Monitor contractors overall SHE performance on site in order to achieve excellent results
7. Ensuring a Safe working environment is established and maintained by the contractor for the elimination of unsafe acts by all people whilst on the project site.
8. Discuss all SHE related problems with the relevant contractor management timeously in the first instance and thereafter the Eskom project manager in the second instance relating to procedure requirements, non-conformance's identified, corrective actions, audits and inspection schedules.
9. Ensuring that quality records are maintained in accordance with legislative and Eskom requirements;
10. Continual liaison between the principal contractor, appointed contractors and employees.
11. Ensures that employees and appointed contractors are aware of latest standards, procedures, work instructions and safety regulations issued by Eskom:
12. Conduct site Inspections for compliance to SHE requirements and compiles the relevant inspection reports.
13. Submit the observation reports to the relevant management.
14. Have meaningful participation in the project statutory health and safety committee meetings.
15. Participate in all appointed contractor incident investigations.
16. Participate in the principal contractors emergency preparedness planning.
17. Ensure that their own employees and those of any appointed contractor are competent to perform the tasks assigned.
18. Issue site instructions on behalf of the principal contractor where and when the appointed contractors deviate from safety requirements.

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19. Assist the principal contractor with the handing over process, in particular the SHE file and relevant documentation.

2.5.5 Employees

Must:

1. Be responsible for their own safety and health and that of their co-workers;
2. Co-operate with their employer to meet all of the employer's as well as legislative and Eskom requirements;
3. Familiarise themselves with their responsibilities during induction and awareness training sessions, some of which are:
 - a. familiarising themselves with their workplaces and safety and health procedures;
 - b. working in a manner that does not endanger them or cause harm to others;
 - c. ensuring that the work area is kept tidy;
 - d. reporting all incidents and near misses;
 - e. protecting fellow workers against injury by performing job observations;
 - f. reporting unsafe acts and unsafe conditions;
 - g. reporting any situation that may become dangerous; and
 - h. carrying out lawful orders and obeying safety and health rules;
4. Who become aware of any person disregarding a safety notice, instruction, or regulation, immediately report this to the person concerned. If the person persists, stop that person from working, and report the matter to contractor management and/or Eskom's project manager or supervisor immediately.
5. Not damage alters, remove, render ineffective, or interfere with anything that has been provided for the protection of the site or for the health and safety of persons this includes any guarding of machinery or equipment.
6. Obey any safety signs and adhere to any site demarcation at all times.
7. When entering or leaving the site, do so via the official designated access/departure routes. Where reflective jackets/bibs are required to be worn, wear them.
8. Be subjected to any disciplinary action, if having transgressed any of the requirements of the health and safety site rules, Eskom requirements, company requirements, or legislative requirements.
9. Avoid any act that may endanger their own health and safety or that of fellow employees, members of the public, or visitors who may be affected by their acts and/or omissions at work.
10. Have the right to obtain proper information from their employer regarding health and safety risks and measures related to the work processes.
11. Use facilities placed at their disposal and not misuse anything provided for their own protection or that of others.
12. Have the right to remove themselves from danger when they have good reason to believe that there is an imminent and serious danger to their health and safety and have the duty to inform their supervisor immediately of such danger.
13. Report to their supervisor (in the first instance), the principal contractor (in the second instance), and/or the Eskom project manager, any substandard acts and/or conditions that have come to their attention and that have not been rectified or acted on by their contractor management timeously.
14. Have the right and the duty at any workplace to participate in ensuring healthy and safe working conditions, to the extent of their control, over the equipment and methods of work adopted.
15. Maintain the surrounding area of the work site in a neat and tidy condition.
16. Have meaningful participation in regular health and safety meetings.
17. Have the right to refuse to perform or continue to perform any task/job on the grounds of health, safety, and environmental concerns.
18. When given instructions, understand the instructions and be permitted to clarify those instructions.

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2.5.6 Contractor Health and Safety officer

1. Promote a SHE culture within the organisations involved in the project / contract.
2. The contractor's safety and health officer shall assist in the control of all health and safety-related matters on the sites.
3. Be involved in the developing the project SHE plan and SHE policy.
4. Be in constant liaison and cooperate with Eskom's SHE professionals responsible for providing them with a health and safety service.
5. Ensure that this SHE specification is adhered to by his/her principal contractor and is submitted to any appointed contractors.
6. Conduct audits and inspections of all work sites for the duration of the project.
7. Be involved in the organisations incident investigations when required.
8. Participate in the organisation's statutory and non-statutory health and safety committees meetings.
9. Conduct organisational, site and visitor induction training.
10. Stop any employee or contractor from performing constructed work which is not in accordance with the principal contractor's and or appointed contractors health and safety plan which poses a threat to the health and safety of persons.
11. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.
12. Make themselves available and ensure co-operation of employees under their control to undergo breathalyser and drug testing while entering and/or being on any Eskom work site by Eskom.
13. Carry out audits and or inspections on their contractors at least monthly and any appointed contractors on instructions of their contractor;
14. Carry out frequent behaviour observations of employees under their control at least monthly and any appointed contractors on instructions of their contractor.

2.6 Related/Supporting Documents

Eskom OHS Act section 37 (2) agreement to be signed at procurement during the signing of the NEC contract, it is the responsibility of the project manager to ensure that the 37(2) agreement is signed and a copy be kept in the contractor file at procurement.

3. The Mechanical Refurbishment of the Cross Over Plant for Kendal Power Station

3.1 Scope of work

Overview and purpose of the *goods and services*

3.1.1 The mechanical refurbishment of the cross over plant for Kendal Power Station.

3.1.2 Detailed Scope of Work

Sludge drying bed

- Cleaning and removal of ash on both sludge drying bed 1 and 2

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- Repair damaged concrete wall of both sludge drying bed 1 and 2
- Refurbishment of isolation gates
- Replacement of all missing isolation gates
- Installation of surf guards to prevent foreign objects from entering the sludge sump

Sludge sump

- Complete removal of ash inside the sludge sump
- Removal, strip, assess and service of sludge pump 2 (if the pump can't be repaired or serviced then a new pump must be purchased)
- Purchase of new sludge pump 1
- Installation of new pipe work and valves
- Installation of sludge pump 1 and 2
- Installation of lighting
- Restore electrical power and C&I controls
- Installation of electrical panel roof for rain cover

Clarifier oil separator plant

- Replacement of all 12 clarifier separator vertical pipes/tubes with stainless steel tubes
- Replacement of 2 all clarifier discharge valves
- Replacement of all 8 clarifier sludge sump pump supply isolation valves
- Servicing of both pneumatic pump system
- Replacement of all filters
- Replacement of oil separation compressor system
- Empty and clean oil catchment tank
- Replacement of all missing pipework on the oil catchment tank
- Replacement of all plastic piping and fittings for oil separation system to stainless steel
- Clean and remove weeds on all 4 coalescence streams
- Draining and inspection of supported propylene plates installed at a 60' angle of inclination in rectangular packs.
- Removal all 4 clarifier sludge pumps
- Conduct detail technical assessment on the pumps and if found to be serviceable then service or refurbish all 4
- If the pumps are not repairable then purchase 5 new pumps including a spare
- Install all 4 sludge pumps
- Replace all rusty and defective pipe work
- Replace all defective isolation gates
- Installation of roof across the clarifier plant to prevent rain water from entering electrical panels
- Restoration of electrical power and C&I controls and protections
- Assure all electrical systems and lighting are restored to good working condition

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Thicker

- Installation of the gearbox
- Installation of filters
- Electrical connections
- Refurbishment of the Eimco Thickener Consisting of the following
 - o An open reinforced concrete tank, full bridge truss structure, central rotating drive mechanism, submerged rotating rake arms, blades, central feed well baffle, central 45" conical discharge outlet and cone scrapers.
- Bridge Truss structure refurbishment.
- Refurbishment of all submerged rotating arms, blades, baffles, outlets, and scrapers
- Commissioning the plant

Underground pumping system

- Cleaning and removal of underground water and debris
- Removal of both underground centrifugal pumps since the casings are rusted
- Removal of all rusted and defective piping
- Purchase of new centrifugal pumps and piping
- Installation of pipe work
- Installation of new centrifugal pumps
- Installation of electric motors
- Replacement of isolation valves
- Replacement of defective lighting

Clean and dirty water inlet

- Replacement of all defective sluice gates
- Replacement of all defective screens

Civils

- Repair all damaged concrete walls

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**Note: Contractor shall refer to NEC for detailed scope of works.
 A copy of the scope of works must be retained by the contractor.**

Note: The contractor who will be awarded this contract will be known as the “principal contractor” and any contractor appointed by the principal contractor will be known as the “appointed contractor.”

3.2 Legal Compliance

3.2.1 Section 37(2) (Legal) Agreement

A section 37(2) agreement must be signed between Eskom and the principal contractor at the time of awarding the contract. The principal contractor must ensure that a section 37(2) agreement is compiled between the principal contractor and all their appointed contractors for the contract.

The original copy of the section 37(2) Agreement must be retained by the contractor and a copy retained by the responsible project manager.

A copy of all the agreements must form part of the respective contractor’s SHE file.

3.2.2 Hazardous work by children (Child Labour)

The constitution of the Republic of South Africa, in the “Bill of Rights” is clear on the rights of children, especially when it comes to:

1. being protected from exploitative labour practices;
2. not to be required or permitted to perform work or provide services that
 - i. are inappropriate for a person of that child’s age; or
 - ii. place at risk the child’s well-being, education, physical or mental health or spiritual, moral or social development;

and the Basic Conditions of Employment Act, Chapter six Section 43 “Prohibition of employment of children”.

Before resorting to the use of child labour, due consideration must be given to the rights of the child in terms of the constitution. Where work is being performed which is not prohibited in terms of the constitution, then such work must be conducted in terms of the OHS Act “Regulations on Hazardous Work by Children in South Africa” with emphasis on paragraph 2 Purpose and Interpretation. Eskom does not condone the use of child labour and therefore all effort must be exercised and child labour should not be used.

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3.1.3 OHS Act

The principal contractor and appointed contractors shall have an up to date copy of the OHS Act and regulations which will be available to all employees.

3.2.4 Legislative compliance

All contractors will comply with all the legislation pertaining to this contract being:

The principal contractor and all appointed contractors will comply with all the legislation pertaining to this project being:

- The Constitution of the Republic of South Africa (particularly Section 24 of the Bill of Rights).
- Occupational Health and Safety Act 1993 (Act 85 of 1993) and its Regulations.
- National Disaster Management Act 57 of 2002
- National Environmental Management Act 1998 (Act 107 of 1998).
- Environment Conservation Act 1989 (Act 73 of 1989).
- Civil and Building Work Act.
- National Road Traffic Act 93 of 1996.
- Compensation for Occupational Injuries and Diseases Act.
- SANS Standards –Contractor shall use the relative standards applicable to the project.

3.2 Eskom Requirements

All contractors shall, before commencement of the project ensure that all their employees are familiar with the relevant Eskom SHE documentation that is applicable to contract services.

3.3 SHE Policy

SHE policy is a statement of intent and a commitment by the organisation’s CE and senior management in relation to the relevant SHE roles and responsibilities, the achievement of their strategic objectives, values of integrity, customer satisfaction, excellence, and innovation.

The principal contractor and all appointed contractors, if already not in place, will be required to compile an organisational SHE policy in line with their SHE responsibilities. The policy must be signed by the organisation’s CE or the appointed assistant to the CE OHS Act Section

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16(2). The policy must be displayed in a prominent place within the workplace. A copy of the policy must be filed in the contractor SHE files and attached as an annexure in the SHE Plan.

3.4 COID

The principal contractor and all his/her appointed contractors shall be registered with an appropriate employment compensation commissioner and have available a valid letter of good standing (LoG) from such commissioner. The obligation lies with the contractors to ensure that the LoG remain valid throughout the contract period. A copy of the LoG must be filed in the contractor SHE files.

3.5 Costing for SHE within the Project

The costing for SHE must be itemised based on the overall scope of the project (i.e.) Training, provision of PPE, safety equipment purchases etc.

3.6 Statutory Appointments

For the duration of the contract, the principal contractor and all appointed contractors shall appoint competent employees who will meet the requirements of the OHS Act. Where appointments are made, contractors shall ensure that the appointees have been suitably trained and or informed of their responsibilities before getting them to accept such appointment. The relevant statutory appointments shall be made in accordance with the requirements of the OHS Act which includes the requirement of a competent person being appointed in the relevant roles.

Note: construction regulations may not necessarily be referenced for non-construction scope of work.

Statutory or non-statutory appointments should include but not limited to the following

Legal appointments	Recommended minimum training /proof of competency
OHS Act: section 16(1) employer (n/a)	OHS act and regulations ,COIDA, Incident investigation, HIRA ,legal liability
OHS act: section 16(2) employer/ Project manager	OHS act and regulations, COIDA, construction regulations, Incident investigation, HIRA, legal liability
GAR 9(2) Incident/accident investigator	RCAT / incident investigation

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OHS act: section 19 Chairperson of SHE Committee meeting	OHS act and regulations
OHS Act: Section 8 (e) Site supervisor	Supervisory course for safety, HIRA, OHS act and regulations, COID, Incident investigation, ORHVS
Health and Safety Officer (part-time)	SAMTRAC or equivalent
OHS act 8 (2) Person to Compile Risk Assessments	Hazard Identification and Risk assessment
Vehicle and mobile plant inspector	Driver's license
Lifting equipment Operator/Inspector	Rigging competence
ERW 9 Evacuation warden	Evacuation officer training

3.7.1 Other statutory /non-statutory appointments

- Registered person in terms of electrical installation regulations
- Non-Statutory meeting chairperson person

3.7 Eskom Life-saving Rules

1. Eskom views health and safety in high esteem and encourages that any organisation who performs work for Eskom in Eskom adopt the same view.
2. Five Life-saving rules have been developed that will apply to all Eskom Employees, agents, consultants, and **contractors**. Failure to adhere to these rules by any Eskom employee or employee of a Principal Contractor or appointed contractor will be considered a serious transgression. These rules are being implemented to prevent serious injury or death of any employee, labour broker or contractor working in any area within Eskom.
3. If any contractual work will be performed on any Eskom premises (including delivery of any product), then the rules **shall be obeyed** by any contractor and their employees.

The rules are:

RULE	DESCRIPTION OF RULE
Rule 1	OPEN, ISOLATE, TEST, EARTH, BOND, AND/OR INSULATE BEFORE TOUCH (That is plant, any plant operating above 1000 V)

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Rule 2	HOOK UP AT HEIGHTS Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into.
Rule 3	BUCKLE UP No person may drive any vehicle on Eskom business and/or on Eskom premises: Unless the driver and all passengers are wearing seat belts.
Rule 4	BE SOBER No person is allowed to be under the influence of intoxicating liquor or drugs while on duty
Rule 5	PERMIT TO WORK Where an authorisation limitation exists, no person shall work without the required permit to work.

Eskom will take a stance of zero tolerance on these rules.

Non-compliance to a Life Saving rule will be considered serious misconduct and will lead to serious disciplinary action, which may include dismissal.

This is to ensure that **every person** who works on or visits an Eskom **returns home safely to his or her family.**

3.8 Substance Abuse

1. Alcohol and substance abuse poses a significant threat to any business, more so in industrial incidents and the driving of vehicles. Eskom is therefore, entitled to take reasonable steps to ensure that intoxicated persons are identified and prevented from entering Eskom.
2. General Safety Regulation 2A is clear on the legal stance regarding intoxication.
3. The alcohol and drug permissible level is 0%.
4. All contractors shall comply with Eskom's procedure 32-37 ("Substance Abuse Procedure"), taking in to account that this is an Eskom Life-saving Rule number 4: BE SOBER", this means anyone entering the Eskom will be subjected to ad hoc alcohol testing.

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5. Contractors are encouraged to compile their own manual and to carry out regular alcohol testing of their own employees. The legislative alcohol level is deemed to be zero.
6. Test records must be treated as “Confidential” and filed in the employees’ personal file.

3.9 Contractor organisational Structure

3.10.1 Principal Contractor Organogram

The principal contractor must provide an organisational organogram related to this contract, depicting all the levels of responsibility from the CE down to the supervisors responsible for the contract. List the relevant positions held, names of appointees and legal appointments.

The principal contractor must ensure that all appointed contractors comply with this requirement. The principal contractor is responsible for keeping copies of all the organograms’ as well as submitting them with the SHE plan. All organograms shall be updated timeously when appointments are changed.

This diagram must be kept up to date and filed in the project SHE files.

3.10.2 Appointed Contractor/s Organogram

1. Appointed contractors are required to compile their company organogram for the project, listing the reporting structure from their CE down to their project supervisors. The diagram must list the names, positions held and any appointments made.

Note: all project specific appointments to be included in the organogram.

2. This diagram must be kept up to date, a copy of which must be given to the principal contractor and a copy filed in the relevant project SHE files.
3. This diagram must be kept up to date and filed in the project SHE files.

3.10 Risk assessment (refer to 32-520)

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to carry out risk assessments, to establish which risks and hazards are attached to the health and safety of persons due to any work which is performed, any article or substance which is, handled, stored, transported. A risk assessment is defined as an identification of the hazards present in an organisation and an estimate of the extent of the risks involved, taking into account whatever precautions are already being taken.

It is essentially a three stage process:

- identification of all hazards;
- evaluation of the risks;

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- Measures to control the risks.

Risk assessments are required to be maintained. This means that significant changes to a process or activity, or any new process or activity should be subjected to a risk assessment and that if new hazards come to light during the work process, then these should also be subjected to risk assessments. Risk assessments for long term processes should be periodically reviewed and updated. Method statements or written safe work procedures are an effective method as information and record of the way jobs / tasks must be performed. Daily or issue based or task specific or on the job risk assessments must be conducted at the place where work is to be performed/ conducted to allow managers and employees to assess any inherent risks that could have been overlooked during the initial risk assessment or any changes that might have occurred in a period of absence. For example if a job / task is extended over a day or halted due to inclement weather.

Guidelines for actual steps involved in a job/task specific risk assessment are:

- Each activity is listed;
- Specific hazards are identified and listed against each activity;
- The magnitude of each risk is rated as Low. Medium or High;
- All known documentary and supervisory controls are listed. For instance: What safe work procedures exist for ladders;
- The relevance, effectiveness and sufficiency of these controls are assessed;
- In the event of insufficient or deficient controls for the particular activity, steps to be taken to rectify this shall be recorded, and safe working procedures drawn up;
- Persons responsible for implementing and supervising the task shall be identified, nominated and duly assigned;
- Persons responsible for monitoring the task and carrying out the planned job observation must be nominated;
- Completed risk assessment shall be handed to the Eskom project manager representative for comment and approval.

The relevant section of the risk assessment shall be issued with a Transmittal Note to the Supervisor nominated as the responsible person; and the names of workmen who have received instruction on the work content and the sequence of the activities listed in the risk assessment shall be recorded, and their competence established. This instruction shall be done through an interpreter if required and recorded on the Pre-Job Brief (Daily Safe Task Instructions), with reference to applicable Risk Assessments.

3.11 Safe work procedures / method statements

Method statements / written safe work procedure are control measures used to prevent an incident from occurring during the execution of the project. A written safe work procedure/

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method statements provide guidance how to execute the task safely. A safe working procedure should be written when:-

- a. Designing a new job or task;
- b. Changing a job or task;
- c. Introducing new equipment or substances; and

The safe working procedure should identify:

- d. The supervisor for the task or job and the employees who will undertake the task;
- e. The tasks that are to be undertaken that pose risks;
- f. The equipment and substances that are used in these tasks;
- g. The control measures that have been built into these tasks;
- h. Any training or qualification needed to undertake the task;
- i. The personal protective equipment to be worn;
- j. Actions to be undertaken to address safety issues that may arise while undertaking the task.

3.13. SHE Communication systems

Principal Contractor/s and their appointed contractors must develop a communication strategy outlining how they intend to communicate SHE issues to their staff, the mediums they will employ and how they will measure the effectiveness of their SHE communication. Below is a brief on how communication should take place. Where project meetings are conducted on site, SHE shall be included as a standing agenda point and minutes of these meetings shall be available on site at all times. Minutes of meeting must be compiled and filed in the relevant SHE files. All employees shall have access to these minutes. Attendance register shall be kept for all the health and safety meetings.

3.13.1 Statutory health and safety committees

Note: Contractor to observe and comply with requirements within his organization.

1. The principal contractor shall establish statutory health and safety committee in terms of Section 19 of the OHS Act. Similarly, appointed contractors shall establish their own statutory health and safety committee.
2. All appointed contractors shall be members of the principal contractor's safety committee.
3. The Committee shall meet to discuss SHE issues concerning the current work being performed, training, upcoming work and SHE requirements, incidents and lessons learned specific SHE problems, safety performance, action plans and other relevant SHE issues. Listed below is a preferred agenda.

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4. SHE representatives for a workplace shall be members of the relevant workplace safety committees (Refer to Section 19 (2) (a) of the OHS Act).
5. The number of persons nominated by employer must not be more than the Health and Safety Representatives on that specific statutory health and safety committee. (Refer to Section 19(2)(c) of the OHS Act)
6. A statutory health and safety committee meeting shall be held at least 3 monthly (where medium to high risk work is involved, more frequent if required), and all appointed members of the committee shall attend the meeting.
7. Statutory health and safety committees may make recommendations to the principal contractor and the project manager and the Inspector at DoL.
8. All health and safety committees shall discuss all projects related OHS Act Section 24 and 25 incidents and other notified serious incidents.
9. Health and safety committees shall follow up on incident investigation recommendations and shall keep record of all recommendations made by the committee.
10. Statutory health and safety committees may make recommendations for the revision of current standards, procedures and practices.
11. The principal contractor and appointed contractors shall ensure that statutory and non-statutory health and safety committees carry out their duties.
12. The chairperson of the health and safety committees shall be selected and appointed by the contractor. The appointed chairperson must be competent to chair meetings and be able to make informed decisions.

3.13.2 Non-statutory health and safety committees

1. Where there are large worksites, then non-statutory sub-committee must be established within that worksite to assist with the communication of health and safety related matters between the statutory health and safety committee and the workplace.
2. The duties and responsibilities of the non- statutory health and safety committees will be the same as the statutory safety committee

3.13.3 Agenda

1. The following serves as the guideline for the SHE Committee meeting agenda.

List of agenda items:

- Matters arising from previous minutes
- Matters arising from Contractor's SHE meetings.
- Audit results and feedback
- Review Health and Safety Representative Inspection Reports

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- Review
 - Incident investigation reports
 - Non-Conformances
 - Announcements (near miss/injury/damage)
 - Follow up on recommendations made by the employer in incident investigation reports
- Accident Prevention – Safety Promotion
 - Planned Job Observations
 - SHE Training
 - Protective clothing and equipment
 - Incident Announcements / Recall
- Forthcoming High hazard activities.
- Non-conformances.
- Housekeeping.
- Work permits.
- Work procedures.
- Hazardous materials / substances.
- Fire Prevention
- Occupational Hygiene Assessments, Health Risks and Actions
- Security
- Construction vehicles and mobile equipment
- Rules, Instructions
- Public Safety
- Environmental Management
- Emergency Preparedness
- Statistics report
- Closure

3.13.4 Minutes and action items for all health and safety committee meetings

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1. Minutes and record of action items shall be kept of all health and safety committee meetings.
2. Action column with target dates and responsible person shall be clearly visible on the minutes and shall be completed during the meeting.
3. Statutory health and safety committee meeting minutes and record of action items shall be kept for the duration of the project or a minimum period of three years.
4. Non-statutory health and safety committee meeting minutes shall be kept for the duration of the project or a minimum period of 12 months.
5. All other meeting minutes where SHE is on the agenda, shall be kept for a minimum period of 12 months.
6. The original copy of the minutes and record of the action items must be signed by the chairperson.
7. The relevant project manager and principal contractor shall endorse the relevant minutes with his/her recommendations and return the minutes to the relevant contractors chairperson within 14 calendar days of the meeting.

3.13.5 Tool box talks / Daily team talks / pre job meetings

1. A meeting must be held prior to the commencement of the day's work with all relevant personnel associated with the work task in attendance. The job, relevant procedures, associated hazards, safety measures, i.e. the task risk assessments shall be discussed. Each employee who attends the briefing shall sign an attendance list of that pre-job brief form undertaking that they have an understanding of the tasks, risks and control measures required.
2. Where possible, tool box talks can be included in the pre-job brief meetings. The toolbox talk topics will be based on SHE issues pertaining to the project. The topic contents shall be in writing. Attendance registers with the topic listed shall be kept.

3.14. SHE Training

1. The principal contractor, when making a bid for this project shall provide a breakdown list of the SHE training requirements and the costing of such requirements. Similarly, appointed contractor must provide the same requirements when bidding with the principal contractor.
2. The scope of training includes but is not limited to the type of work being performed and the relevant procedures. Additional to the requirements, will be that the principal contractor and appointed contractors must have the appropriate qualifications, certificates and employees should always be under competent supervision.

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3. Where legislative and Eskom recommended appointments are made, the relevant training shall be given to those appointees prior to the acceptance of those appointments.
4. When there is an amendment to the acts and/or to the regulations, SHE specification and SHE plan, all affected staff shall undergo the applicable refresher training.
5. Appropriate time must be set aside for training (induction and other) of all employees.
6. Records of all training and qualifications of all contractor employees must be kept on the SHE file.

3.14.1 Induction training

1. The principal contractor shall ensure that all his / her employees, appointed contractors and their employees have undergone the Kendal SHEQ induction training prior to commencing work on site.
2. Attendance registers must be completed of any induction training given, which must indicate that they have received and understood the induction training.
3. Prior to attending the induction training, all employees must undergo a pre-employment medical examination and found fit for duty. A copy of the certificate of fitness must be kept in the SHE file on site for the duration of the project.
4. All employees and visitors on site shall carry the proof of induction training.

3.14.2 Site specific induction training

The principal contractor shall ensure that all his / her employees and appointed contractor employees undergo site specific work induction with regard to the approved project SHE plan, general hazards prevalent on the project site, project risk assessment, rules and regulations, and other related aspects. The induction training should also include identification of sensitive features such as wetlands/vlei areas, prohibited/ no entry areas, etc.

3.14.3 Visitors to site induction

1. Visitors to the site shall be required to undergo and comply with the client and principal contractor's site-specific safety induction prior to being allowed access to site.
2. All visitors must remain in the care and custody of a person (host) who has been properly inducted. No visitors are permitted to undertake any work onsite, of any nature.
3. Visitors who have completed site induction must be provided with a record of proof of Induction training.

3.14.4 General training

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The principal contractor will be required to ensure that before an employee commences work on the project, the respective supervisor informs the employee of his scope of authority, the hazards associated with work as well as the control measures to be taken. This will include man-job specifications, the discussion of any task procedures or hazardous operational procedures to be performed by the employee. The Principal Contractor is to ensure that the supervisor has satisfied himself that the employee understands the hazards associated with any work to be performed by conducting task/job observations.

3.15 Vehicle and Transport safety

1. It is the responsibility of the driver to ensure:
 - a. Their passengers wear seat belts whilst the vehicle is in motion.
 - b. Comply with all traffic road rules, safety, direction and speed signs.
 - c. Ensure that vehicle loads are properly secured prior to moving off.
 - d. Ensure that vehicles are not overloaded.
2. No drivers or operators may text, talk on cell phones or two way radios whilst driving, unless a hands free kit is used.
3. All drivers of construction vehicles are to have valid medical fitness certificates.
4. Each Project site that is enclosed by demarcation will have system/ process to manage vehicle access to site.
5. Contractor must maintain their vehicles in a roadworthy condition and a vehicle license must be valid at all times.
6. Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30 (thirty) meters must be left clear between such a vehicle and such a machine
7. Contractor vehicles can be subject to inspections by the Client/Agent's representative. Vehicles which are not roadworthy will not be permitted to be used on the project.
8. Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to secure all loads properly. Loads projecting from vehicles shall be securely loaded and in daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting material.
9. Fleet Safety is high on Eskom's safety program, not only in regard to its own vehicle fleet, but requires contractors to afford the same importance to their vehicles and mobile equipment fleet. Contractors shall adhere to the Vehicle and Driver Safety Management procedure 240-62946386.

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10. Eskom does not approve the conveying of passengers in the back of vehicles designed to carry equipment/loads (any truck/trailer), irrespective of whether crew cabs are fitted and seating with four-point seat belts is fitted.

3.16. Housekeeping and order

1. All contractors shall maintain a high standard of housekeeping within their sites and vehicles for the duration of the project.
2. Prompt disposal of waste materials, scrap and rubbish is essential.
3. Materials/objects shall not be left unsecured in elevated areas –falling objects may cause serious injuries/fatalities.
4. Nails protruding through timber shall be bent over or removed so as not to cause injury.
5. All packaging material including boxes, pallets, crates, etc. to be removed from the work area immediately.
6. On completion of his / her work, the contractor is responsible for clearing his / her work area of all materials, scrap, temporary buildings and building bases to the satisfaction of the client/agent.
7. In cases where an inadequate standard of housekeeping has developed, compromising safety and cleanliness, anyone has the responsibility to bring it to the attention of the principal contractor in the first instance and the Eskom project in the second instance.
8. The Eskom project manager has the right to instruct the principal contractor and appointed contractors to cease work until the area has been tidied up and made safe. Neither additional costs nor extension of time to the contract shall be allowed as a result of such a stoppage. Failure to comply with this requirement will result into site cleaning by another cleaning contractor company at the cost of the principal contractor.
9. The principal contractor shall carry out regular safety/housekeeping inspections (at least weekly) to ensure maintenance of satisfactory standards. The principal contractor shall document the results of each inspection and shall maintain records for viewing.
10. All contractors must compile a waste management plan before commencing of work.
11. A register of hazardous waste must be kept which will include a record of disposal.

3.17. Workplace Signage and colour coding

1. Symbolic safety signage shall be displayed where it is required by legislation.
2. All symbolic safety signage shall conform to the requirements of SANS standard 1186.
3. Signs shall be positioned to be seen from most positions within the work sites / areas.
4. All signage must be clear at all times and be replaced timeously when worn out.

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5. The location of every first aid box; fire extinguisher and emergency exit is to be clearly indicated by means of a sign.
6. Contractors shall provide signage where work is conducted and where unauthorised entry is prohibited and/or where alerting and cautioning passers-by to be aware of potential dangers.
7. The meanings of the appropriate symbolic signage must be discussed during induction training and toolbox talks.

3.18. Tools and Equipment

1. Contractors shall ensure that all tools and equipment are identified, safe to be used and is maintained in a good condition.
2. Contractors shall ensure that all tools and equipment are listed on an inventory list, be regularly inspected at least monthly or as required by legislation and risk assessments. The equipment should be numbered or tagged so that it can be properly monitored and inspected.
3. Where applicable, tools and equipment must have the necessary approved test or calibration documentation prior to being brought onto the project and the records shall form part of the SHE plan. Maintenance calibration shall be undertaken in terms of the manufacturer's requirements.
4. Eskom Kendal Power Station reserves the right to inspect tools or items of equipment brought to site by contractors for use on this project personnel find any item that is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, the Eskom personnel shall advise the contractor in writing and the contractor shall forthwith remove the item from site and replace it with a safe and adequate substitute.

Note: In such cases, the contractor shall not be entitled to extra payments or extensions of time in respect of delay caused by Eskom Kendal Power Station's instructions.

5. Where defective tools and equipment's are identified, such tools and equipment shall be removed out of site immediately, locked away to prevent further use until such time as the tool or piece of equipment has been repaired.
6. Contractors shall ensure that the appropriate records are kept for all tools and equipment used on the project. Such tools and equipment's shall be subjected to regular inspections.

3.18.1 Hand tools

1. All hand tools (hammers, chisels, spanners, etc.) must be recorded on a register and inspected by the personnel designated on a monthly basis as well as by users prior to use.

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2. Tools with sharp points in tool boxes must be protected with a cover.
3. All files and similar tools must be fitted with handles.
4. No make shift tools are permissible on the project.

3.18.2 Material handling

1. When handling material ergonomics factors shall be considered to prevent related incidents.
2. Employees to be given awareness on safe handling of material/ cylinders
3. Risk assessment to be done prior to carrying out the activity.

3.18.3. Lifting Equipment

Owing to its versatility, lifting equipment is often abused and/or misused. This nearly always results in damage to and/or the failure of equipment, leading to incidents and serious injuries.

All types of lifting equipment are governed by regulation 18 of the OHS Act: Driven Machinery Regulations, as follows:

- Construction Regulations –material hoists and tower cranes.
- Driven Machinery Regulations – goods hoists, lifting machines and lifting tackle (which includes all the lifting machine codes as listed in the regulations and the national code of practice for the training providers of lifting machine operators).

When working in close proximity (with tower cranes) to power lines, the contractor shall apply for a permit. See the Eskom Plant Safety Regulations and/or Operating Regulations for High-Voltage Systems and Electrical Machinery Regulations 19(4) and 19(5) of the OHS Act.

3.19. Auditing

3.19.1 Approval and compliance of principal contractor SHE plan

The Contractor's SHE Plan will be audited against compliance checklist so as to verify compliance to the requirements of the Eskom Kendal Power Station SHE specifications. Once there is compliance only then will the principal contractors SHE plan be approved by the project manager or an appointed Eskom Kendal Power Station contract custodian. The implementation of the SHE Plan shall be assessed / audited by Eskom personnel on a regular basis. This will include physical conditions evaluation.

3.19.2 Eskom SHE audits

Eskom shall evaluate all contractors' SHE performance on an ongoing basis against the legal, Eskom requirements, SHE specification and the contractors SHE plans.

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Note: Eskom reserves the right to conduct unannounced audits on contractors

Audits will be conducted by Eskom safety department on the principal contractor/s and/or appointed contractors in line with the risk audit matrix. These audits shall be attended by the contractor's site manager or his representative.

If there are any findings / non-compliance identified as serious in these audits, an activity will be stopped for that specific Principal Contractor and appointed contractor. Refer to section on "Work Stoppage" in this SHE Specification.

3.19.3 Contractor audits

Principal Contractors are required to conduct internal audits on both their employees and their appointed contractors on the implementation of their SHE Plan on a regular basis or when the scope of work changes. A summary of the findings and the proposed corrective actions shall be submitted to Eskom Kendal Power Station project manager within one week after completion of the audit. Where appointed contractors are audited by the principal contractor a copy of the audit report shall be submitted to the appointed contractor within 7 days of the audit.

3.20. Smoking

The national smoking policy must be observed and smoking is permitted in designated areas only (Eskom Smoking Procedure 32-36).

3.21. Cellular Phones

The national requirements regarding the use of cellular phones must be observed, in particular when driving and or operating mobile equipment and or machinery.

3.22. Occupational Health, Hygiene and Rehabilitation

All contractors are required to develop an Occupational Health, Hygiene and Rehabilitation program. The program is intended to ensure that the risks to health are identified and controlled.

3.22.1 Medicals

Note: Eskom Kendal Power Station will only accept medical surveillances conducted by an Occupational Health Practitioner who holds a qualification in occupational health.

1. Principal contractors must ensure that their employees and their appointed contractor employees have a medical surveillance program whereby their employees under go entry, periodic and exit medical fitness examinations.
2. In order for the appropriate medical examinations to be conducted, each employee must have a man job specification, which must indicate the description of work, list of

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hazards and potential occupational exposure limits, physical hazards and required physical attributes.

3. Medical fitness certificates shall be renewed annually for employees who are working on site. This shall be maintained until completion of the contract.
4. The Principal Contractor must ensure that his / her employees and appointed contractor employees have undergone pre-entry medical examination before starting work on the contract.
5. The principal contractor shall provide a documented process for managing those employees who are issued with a conditional certificate of fitness.

3.22.2 Noise

1. All employees who are exposed to noise must be educated, trained and made aware of the harmful effects of long-term exposure to high noise levels. They must be provided with adequate hearing protection where necessary and record must be kept of equipment issued.
2. The following areas should be considered, e.g. where compressors, jack hammers, explosive tools, riveting tools, etc. are used.

3.22.3 Illumination

1. Adequate and sufficient illumination is essential and where it is insufficient the contractor must make additions and provide portable lights to ensure safe working conditions at all times.
2. Ensure that all roof lights; light fittings and fanlights are kept clean and unobstructed. When use is made of artificial lighting where machinery is being used, all moving parts must be clearly visible. Illumination provided must be so designed to avoid glare, reflections and stroboscopic effects.

3.22.4 Dust

1. All employees must be made aware of the inherent dangers of dust. Employees must take such measures as may be necessary to decrease the generation of dust in the workplaces.
2. Warning signs must be posted where dust exposure is likely to exceed the occupational exposure limit (OEL).
3. The use of thermal Insulation materials containing asbestos is not allowed at Eskom Properties.
4. Where any process necessitates the breaking up, demolition, stripping, grinding, pulverizing, crushing or cutting of asbestos cement products, Safety risk management must be notified of the quantity and location. Such an activity can only proceed with permission from the Safety Risk Management after consultation with the department of labour.
5. Employees performing the task will be trained accordingly.
6. Where employees are exposed to dust such as silica, asbestos cement, fibreglass and cement etc. Adequate protective clothing and appliances must be provided.

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Note: The use of compressed air to blow areas or individuals cleaning is strictly prohibited.

3.22.5 Health and wellness HIV / Aids

Contractors shall submit details of their employee health and wellness programme as part of their health and safety plan which should include awareness training, support for contracted illness and sharing knowledge with members of the public in the immediate work environment.

3.22.6 EAP

Where principal contractors and contractors do not have EAP service providers, then Eskom's EAP service provider is available to provide assistance.

All costs are to be borne by the principal contractor. Details are: ICAS – Tel. No.: 0800 611 059.

3.22.7 Thermal Conditions

1. Contractors must protect their employees against the natural thermal conditions, by providing sufficient and suitable cold weather gear for the winter months and suitable rain wear for the rainy seasons.
2. In hot conditions, contractors must prevent the effects of heat fatigue and heat exhaustion by providing sufficient rest periods, shade cover and re-hydration mineral replenishment fluids.
3. Where the heat index and the humidity levels reach the required dangerous levels, contractors shall stop work for that period. Suitable drinking water shall be provided.

3.22.8 Rehabilitation

Where any contractor's employee is injured at work to the extent that they require rehabilitation, then this must be given, using the services of an appointed rehabilitation organisation.

3.22.9 Covid19 Requirements

The Contractor and his contractors shall ensure compliance with the requirements of the Disaster Management Act, 2002 (Act No.57 of 2002), COVID-19 Direction on health and safety in the workplace GG 43400. The Contractor shall ensure all COVID related cases are managed in terms of the requirements of this direction and that there is immediate reporting to the client. Retain and maintain COVID 19 related documentation in the SHE file not limited to Risk assessment, Policy, appointment of compliance officer, PPE issue records etc.

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3.23. Safe Work Procedures and Practices / Safe Operating

There must be written safe work procedures for all activities, risk activities the safe work procedures must be aligned with the risk assessments.

3.24. Personal Protective Equipment Requirements

1. The Principal contractor must provide a detailed programme that includes the issuing, maintenance and replacement of PPE for all his employees and appointed contractors on site.
2. All contractors shall comply with the requirements of GSR 2 of the OHS Act.
3. The risk based PPE matrix must be compiled detailing the types of PPE that is required to be issued to employees performing the respective tasks.
4. Where there are unusual instances where particular activities require additional type of PPE, then a risk assessment must be conducted where such PPE requirements will be identified and the issuing be carried out.
5. All contractors shall ensure that their visitors wear and use the correct PPE whilst on worksites.
6. Where PPE is required and visitors are not in possession of, then it is the individual contractor's responsibility to provide the PPE.
7. All PPE purchased and used by all contractor employees including visitors must comply with the relevant SANS standards.
8. Where deemed as a requirement, then high visibility vests shall be worn.

3.25. Incident Management

All incidents must be reported to the client before the end of the shift as stipulated in Eskom procedure 32-95.

All incidents shall be investigated in terms of OHS Act General Administrative Regulations 8 and 9, using Eskom Procedure 32-95 as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of Labour.

Contractors shall use the standard General Administrative Regulation Annexure 1 "Recording of an Incident" form for all incident investigation reports. The objective of incident investigation, should not only be a legal requirement, but should establish why and how the incident occurred and find out the real root cause of the incident and to decide on precautionary measures that are required to address the root cause to prevent any further recurrences of the same or similar incidents.

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3.26. Emergency Management

1. The art of emergency preparedness and response is to minimise the effects of any emergency and to restore normal activities as soon as practical.
2. If using an Eskom site, then the contractor's emergency plan must compliment the Eskom sites, emergency plan.
3. The Principal Contractor, together with his appointed contractors, will develop their own emergency response plan for both their worksites and offices. Where any office and or site is located within any Local Authorities area, then the plans must include their involvement.

3.27. Non-Conformance and Compliance

1. Any non-compliance to any health and safety requirement in this SHE specification is subject to discipline in terms of the Eskom Procurement and Supply Management Procedure.
2. Principal contractors are required to implement a non-conformance procedure (if not already in place) for issuing to contractors for transgressions. The procedure can include "quality" related non-conformance issues. Similarly, appointed contractors must implement a non-conformance procedure.
3. The procedure for the issuing and closing off of non-conformance reports shall be strictly adhered to.
4. Contractor project management must monitor the close out non-conformances issued, in not doing so; any recommendations made may not be implemented.
5. Where non-conformances are issued by Eskom then one of the close-out steps of the procedure will be for the offender to be called by the responsible project manager to explain the non-conformance issued and what plan is in place to prevent a recurrence of the non-conformance.
6. Should the contractor fail to provide adequate PPE to their employees for the tasks being performed and/or to visitors; failure to enforce the wearing of such PPE will be viewed as a transgression of the legislative and Eskom requirements.

3.28. SHE File

1. A SHE file means a file or other record in permanent form, containing the information about the safety and health management system during construction and all information relating to the post-construction phase after handover to the client, so that the client can maintain the works in a healthy and safe way.
2. All contractors are required to keep a SHE file on every project site. If there is more than one site per project, a file per site shall be kept at that site. Contractors may keep additional files at their head office as additional records. The SHE file shall be maintained by all the contractors on their construction sites and shall be available on request for audit and inspection purposes.

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3. The SHE file shall consist of the requirements in terms of the project's safety specification, the contractor's safety and health plans.
4. The sequence of filing the documentation must be kept in the same sequence as listed in this SHE specification and the SHE plan.
5. Each record shall be separated by partitions to afford easy identification and access. Each partition must be labelled.
6. On completion of the constructed work/project, the principal contractor must hand over a consolidated health and safety file to the project manager. The principal contractor must also hand over all drawings, designs, lists of materials used, and other applicable information about the completed structure, as well as the list of subcontractors, the agreement, and the type of work completed.
7. In case where the project is extended, should the documentation in the SHE files become cumbersome, the older documentation must be archived in boxes which shall be correctly labelled and be available for auditing purposes. The archived documentation must be handed over at the completion of the project.

3.29. Work Stoppage

1. Any person may stop any activity where an unsafe act or unsafe condition that poses or may pose an imminent threat to the safety and health of an individual or create a risk of degradation of the environment. This includes any unauthorised work or service performed by, or legally or contractually non-compliant acts or omissions by, any contractor contracted to work at that site.
2. Work stoppages that are initiated due to SHE concerns, non-compliance, or poor performance related to the contractor's works or services shall not warrant any financial compensation claim lodged against Eskom where the contractor has not met the requirements defined legally or contractually.
3. Where stoppages are carried out, the required non-conformance report shall be raised.
4. All work stoppages ideally should be investigated and documented by contract custodians.

3.30. Hours of Work

The requirements of the Basic Conditions of Employment Act, Chapter Two "Regulation of Working Time" must be adhered to. All contractors are required to maintain an accurate record of time worked by each employee.

3.30.1 Normal work

All work conducted on site shall fall within the legal requirements in accordance with the Basic Conditions of Employment Act. Contractors will notify their Eskom Supervisor or project manager of any work that needs to be performed after hours according to the agreed arrangements. (The application needs to be submitted timeously). Where applicable, the

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notification should include proof of application, for overtime, to the Department of Labour and /or the letter of approval from the Department of Labour.

3.30.2 Night work

When night work is to be performed; contractors shall provide sufficient lighting to enable the entire work site to be illuminated to a degree that employees will not work in dark (un-illuminated) or dimly lit areas. Care must be exercised as not to use few lights with high light intensives as this will cause night blindness.

If work is continuing from day light into night, at dusk, a tool box talk must be held where all employees will be advised of the hazards of night work and the extra precautions which require to be taken, i.e. poor housekeeping, stepping on uneven ground, stepping into holes etc.

3.30.3 Overtime

When overtime is required to be performed, the appointed contractors shall inform the principal contractor of such action. The principal contractor shall inform the Eskom project manager of such function. Contractors shall be aware of the effects of human fatigue and regulate overtime accordingly. The baseline risk assessment must be reviewed to include the management of overtime work.

3.31. Statistical reporting

1. Statistics is an integral part of the framework for measuring health and safety performance and assist in improving the organisation's health and safety performance.
2. The principal contractor must report to Eskom project manager and safety department, by the first of every month, their SHE statistics and those of their appointed contractors for the previous month.
3. The statistical information required is:
 - a. Name of Contractor Company and the project/contract
 - b. Incidents: Lost time, medical; first aid, near misses, mva, property damage etc.
 - c. Manpower numbers per principal contractor and Contractor Company
 - d. Actual man-hours worked
 - e. Status on incidents investigated and recommendations closed out

3.32. Public Safety

- Legislation requires that employers shall be responsible, as far as reasonably practicable, for safeguarding persons other than those in their employment who may be

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directly affected by their activities so that they are not exposed to hazards to their health or safety (section 9 of the OHS act has reference).

- A member of the public is any company non-employed person(s) who could be directly or indirectly exposed to Eskom's/contractors' products or activities.
- Eskom upholds the rights of the members of the public and maintains an awareness and educational programme to protect the public against the risks that may arise out of, and in the course of, Eskom's activities. Similarly, contractors shall share the same respect for the public.
- Contractors, where working in any area where members of the public have access or can approach the work site, will be approached by the public for reasons of inquisitiveness, members airing complaints, vandalism, theft, public unrest, intimidation, stray/wandering animals, etc. and will then implement such measures that will place great emphasis on public safety.
- Contractors shall factor in, in their safety plan, how they intend safeguarding/controlling any members of the public against their activities during the project, without damaging Eskom's name and reputation. Assistance/information in this regard can be sought from the project managers.

3.33. Omissions from Safety and Health Requirements Specification

By drawing up this SHE specification Eskom has endeavoured to address the most critical aspects relating to SHE issues in order to assist the contractor to adequately provide for the health and safety of employees on site.

Should Eskom Kendal Power Station not have addressed all SHEQ aspects pertaining to the work that is tendered for, the contractor needs to include it in the SHE plan and inform Eskom Kendal Power Station of such issues when signing the contract.

3.34. Contract Sign-Off

On completion of the project, all appointed contractors shall close out their project documentation; SHE files and forward such to the principal contractor. The principal contractor shall likewise close out his/her project documentation and SHE files and forward such to the Eskom project manager.

4. Acceptance

Buyelwa Basholo
 Manotsha Malepe
 Andrew Motsuki

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5. Revisions

Date	Rev.	Compiler	Remarks
28-Feb-23	0	Wesley Adam	Project SHE specification minimum requirements that must be met by the relevant contractor who have been awarded with the provision of the mechanical refurbishment of the cross over plant for Kendal Power Station.

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