Document reference	**OUTAGE TURNAROUND IMPLEMENTATION STRATEGY.**
	This cover page
C3.1	*Employer*'s Service Information
C3.2	*Contractor*'s Service Information

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1 Description of the service

1.1 Executive overview

Eskom has an extreme shortage of capacity, with power stations in the clusters having an unmanageable 5007.05 days for the last five years financial years. Currently most outages are forced UCLF)

- The Outage performance for the last 12 months

KPI	Target	Actual
ORI	80%	67.09%
DDP	75%	25%
ODR	6%	0.51%
PO-UCLF	16%	33.84%

- The state of the boilers and turbines is critical and exasperated by a spare's shortage and long delivery lead times
- The older stations are not as efficient and require substantial ongoing maintenance. Due to the age of some units, spares need to be custom made adding to further delivery times for replacement parts
- Scope creep led to 116 days of outage slips in last 12 months, due to turbine related scope creep and failure complete within allocated duration.
- 16 days of slip during last 12 months are due poor workmanship. Boiler tube and valve leaks account for over 11.1% of slip the average Weld Repair Rate for the last 12 month is 2.13%, compared to the target of 3%
- Some of the critical senior resources and expert skills have left the Eskom

1.2 The High-Level Activities

- Eskom Generation is embarking on a drive to improve Eskom Power station performance, across the Eskom Coal Fired Power Station fleet. An evaluation is being conducted in accordance with known best practice and systems process information. All Eskom processes at each power station are being analysed and assessed with subsequent reports, recommendations, and action plans. Power Stations performance is being measured against world class operational standards.
- This tender enquiry seeks to procure the services of a competent professional service provider who has the requisite proven skills, competency and experience to improve Outage performance by the implementation of **World Class Outage and Maintenance Processes and Practices**"

1.3 Detailed Scope of works

Power stations within the cluster are Majuba, Duvha, Kriel, Camden and Komati

- The Cluster requires Specialized Technical, Management and Commissioning Resources that will perform a complete analysis and assessment of the outage environment at specified sites within the Generation fleet. The resultant report with the recommendations and action plans will then be utilized as a base/reference for continuous improvement and implementation of best practices within the specified Power station outage departments.
- The service provider will set up an integrated outage management support structure comprising the specialized resource team who will support the site teams in the planning, execution, finalization and close-out evaluation of all outages within the respective power stations.
- The service provider will drive the implementation of the identified performance improvement initiatives together with the teams at the power station.
- The service provider will support outage personnel to ensure they consistently control outage activities and acquire, analyse, process and report data from a number of interfacing sources, and in the process, provide timely and accurate progress information on all facets of the project
- Develop the outage management methodology for the cluster
- Develop management tools to implement outage management methodology
- Develop tools or processes to integrate Maintenance Strategies & Manage Work into Outage planning execution
- The Service provider to drive the step-change into the planning and execution of outage, maintenance, and project scopes
- Drive Quality management processes when it comes to outage execution
- Provide critical skills to manage the implementation of outage methodology

1.3.1 Project scope defining the need and desired outcome

- Outage due date performance must be improved
- Post Outage UCLF Unplanned Capability Loss factor must improve.
- World class Outage and Maintenance processes and practices must be implemented
- Outage reporting through planning, execution and finalization phases must be accurate and transparent
- Contractor quality and productivity must be optimized
- Improved Contractor/Partner communication, quality, and productivity.
- Improved communication between all outage stakeholders
- Improved Governance processes especially within the commercial context.
- Continuous learning must be the ethos within the Outage and maintenance environment
- Cultivation of a continuous learning ethos within the outage and maintenance environment
- Improvement of quality of Maintenance strategies and execution

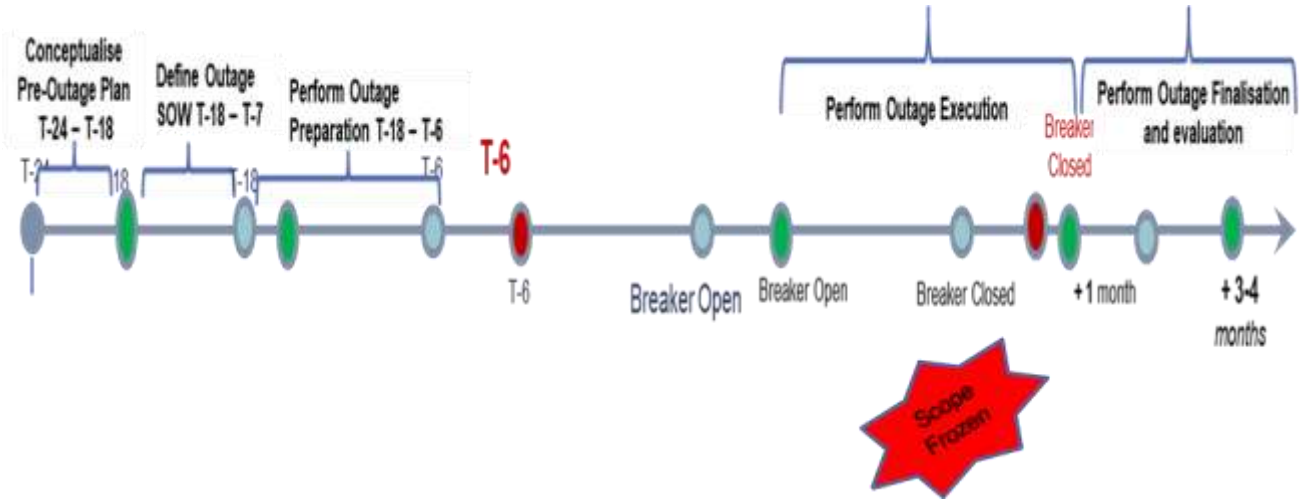
- Improvement in the integration of Maintenance Strategies into Outage processes
- Improvement of the outage data capturing and configuration management
- The Service provider to drive the step-change into the planning and execution of outage, maintenance, and project scopes
- Drive Quality management processes when it comes to outage execution
- Provide critical skills to manage the implementation of outage methodology
- Improved quality work planning and execution

1.3.2 Coaching and Mentoring

- The Cluster Outage Support Team will assist the power station outage management team to enhance its turnaround strategy by identifying skill and competency gaps within the outage business and establish a coaching and mentoring strategy/plan with mutually agreed criteria and a corresponding action plan with defined outputs and timelines
- The Cluster Outage Support Team will assist the integration of station maintenance team and outage teams

1.4 Cluster Outage Plan

1.4.1 Summary of outage planning timeline (cycle) for planned/philosophy and outages > 21 days



1.4.2 Current Outage Plan (Subject to Change)

OutageID	Outage Code	Station	Unit	Planned/Actual Start Time	Planned/Revised End Time	MW Loss	MW Loss Percent	Outage Description	Status	Planned Duration
17012	CD04UST-20-05-2022	Camden	4	2022/05/20 07:27:00	2022/07/10 07:26:00	175	100	Risk based scope Outage	EXE	51.00
17993	CD07UST-13-09-2022	Camden	7	2022/09/13 00:00:00	2022/11/07 23:59:00	190	100	Risk based scope Outage	ROLLSCHED	56.00
17994	CD08UST-18-11-2022	Camden	8	2022/11/18 00:00:00	2023/01/12 23:59:00	185	100	Risk based scope Outage	ROLLSCHED	56.00
18004	CD06UST-18-01-2023	Camden	6	2023/01/18 00:00:00	2023/04/19 23:59:00	186	100	Risk based scope Outage	ROLLSCHED	92.00
17991	CD05UST-08-12-2023	Camden	5	2023/12/08 00:00:00	2024/02/01 23:59:00	180	100	Risk based scope Outage	ROLLSCHED	56.00
17867	KR03UMO-09-09-2022	Kriel	3	2022/09/09 00:00:00	2022/11/17 23:59:00	475	117.3	MO	ROLLSCHED	70.00
13882	KR02UGO-23-12-2022	Kriel	2	2022/12/23 00:00:00	2023/03/30 23:59:00	475	117.3	GO	ROLLSCHED	98.00
17863	KR01UGO-30-10-2023	Kriel	1	2023/10/30 00:00:00	2023/12/24 23:59:00	475	117.3	MO	ROLLSCHED	56.00
13883	KR04UMO-06-01-2024	Kriel	4	2024/01/06 00:00:00	2024/01/26 23:59:00	475	100	MO	ROLLSCHED	21.00
13880	KR05UMO-02-02-2024	Kriel	5	2024/02/02 00:00:00	2024/04/11 23:59:00	475	100	MO	ROLLSCHED	70.00
13887	KR06UMO-19-04-2024	Kriel	6	2024/04/19 00:00:00	2024/06/13 23:59:00	475	100	MO	ROLLSCHED	56.00
13889	KR05UGO-03-07-2025	Kriel	5	2025/07/03 00:00:00	2025/10/08 23:59:00	475	100	G.O.	ROLLSCHED	98.00
24803	KR03UMO-01-08-2024	Kriel	3	2024/08/01 00:00:00	2024/09/25 23:59:00	475	117.3	MO	SCHED	56.00
13885	KR02UMO-14-01-2025	Kriel	2	2025/01/14 00:00:00	2025/03/10 23:59:00	475	117.3	MO	SCHED	56.00
17864	KR04UGO-21-04-2025	Kriel	4	2025/04/21 00:00:00	2025/07/27 23:59:00	475	100	GO	SCHED	98.00
17868	KR01UMO-01-08-2025	Kriel	1	2025/08/01 00:00:00	2025/09/25 23:59:00	475	117.3	MO	SCHED	56.00
17865	KR06UMO-07-01-2026	Kriel	6	2026/01/07 00:00:00	2026/03/03 23:59:00	475	100	MO	SCHED	56.00
24551	KR05UMO-01-06-2026	Kriel	5	2026/06/01 00:00:00	2026/07/26 23:59:00	475	100	MO	SCHED	56.00
24540	KR03UGO-25-08-2026	Kriel	3	2026/08/25 00:00:00	2026/11/30 23:59:00	475	117.3	GO	SCHED	98.00
17866	KR02UMO-01-02-2027	Kriel	2	2027/02/01 00:00:00	2027/03/28 23:59:00	475	117.3	MO	SCHED	56.00
24546	KR04UMO-01-05-2027	Kriel	4	2027/05/01 00:00:00	2027/06/25 23:59:00	475	100	MO	SCHED	56.00
19089	MJ05UMO-26-07-2022	Majuba	5	2022/07/26 00:00:00	2022/11/07 23:59:00	663	100	Mini GO	ROLLSCHED	105.00
19094	MJ04UIN-07-10-2022	Majuba	4	2022/10/07 00:00:00	2022/11/10 23:59:00	663	100	HSSD	ROLLSCHED	35.00
40002	MJ06UST-08-10-2022	Majuba	6	2022/10/08 00:00:00	2022/11/11 23:59:00	663	100	HSSD	SCHED	35.00
19084	MJ03UIR-25-11-2022	Majuba	3	2022/11/25 00:00:00	2022/12/19 23:59:00	606	100	IR	ROLLSCHED	25.00
19091	MJ01UIR-22-12-2022	Majuba	1	2022/12/22 00:00:00	2023/01/18 23:59:00	606	100	IR	ROLLSCHED	28.00
19093	MJ06UMO-08-12-2023	Majuba	6	2023/12/08 00:00:00	2024/03/16 23:59:00	663	100	Mini GO	ROLLSCHED	100.00
19087	MJ02UIR-01-04-2024	Majuba	2	2024/04/01 00:00:00	2024/04/28 23:59:00	606	100	Interim repairs	ROLLSCHED	28.00
19097	MJ03UGO-09-05-2024	Majuba	3	2024/05/09 00:00:00	2024/07/18 23:59:00	606	100	GO	SCHED	71.00
19096	MJ04UMO-23-05-2024	Majuba	4	2024/05/23 00:00:00	2024/06/20 23:59:00	663	100	Interim Repairs	SCHED	29.00
21920	MJ05UIR-27-04-2025	Majuba	5	2025/04/27 00:00:00	2025/05/24 23:59:00	663	100	IR	SCHED	28.00
21924	MJ06UIR-31-07-2025	Majuba	6	2025/07/31 00:00:00	2025/08/27 23:59:00	663	100	IR	SCHED	28.00
21925	MJ01UGO-05-09-2025	Majuba	1	2025/09/05 00:00:00	2025/11/06 23:59:00	606	100	GO	SCHED	63.00
21927	MJ03UIR-16-01-2026	Majuba	3	2026/01/16 00:00:00	2026/02/19 23:59:00	606	100	IR	SCHED	35.00
21930	MJ02UIR-13-04-2026	Majuba	2	2026/04/13 00:00:00	2026/05/17 23:59:00	606	100	IR & Hydro	SCHED	35.00
21921	MJ02UGO-15-09-2026	Majuba	2	2026/09/15 00:00:00	2026/11/16 23:59:00	606	100	GO	SCHED	63.00

2 Standards, specifications, and Guidelines

The *Contractor* complies with the following Eskom Standards/Specifications/Guidelines

NO	Description
Act no 85 of 1993	Occupation, Health and Safety
32-421	Life Saving Rules Directive
32-327	SHE Policy
240- 105658000 (QM 58)	Supplier Quality Management Specification
36-681	Generation Plant Safety Regulations
240-100979499	Personal Protective Equipment for Work at Heights Specification
32-95	Environmental, Occupational Health and Safety Incident management procedure
32-136	*Contractor* Health and Safety Requirement
32-345	Vehicle Safety Specification
32-418	Working at Heights
240-44175132	Eskom Personal Protective Equipment (PPE)
240-68626554	Outage Management - PCM Compliance and Effectiveness Review Standard
240-47532542	Outage Readiness Review Standard

It is the *Contractor*'s responsibility to ensure that he obtains the latest copy of the above standards

2.1 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Description
BU	Business Unit
COID	Compensation for Occupational Injuries and Diseases
NEC	New Engineering Contract
PPE	Personal Protective Equipment
QCP	Quality control plan
SANS	South African National Standards
SANAS	South African National Accreditation System
SOW	Scope of Work
SHE	Safety, Health and Environment

3 Management strategy and start up.

3.1 Flexibility with the start of outages

1 The outage start-date is stated on the Task Order.
2 Movement to Outage dates can take place due to the country's demand for electricity.
3 Any movement to Outage dates will be communicated in writing by the *Service Manager* at least 12 Hours before outage
4 Notification of change to the outage date to the *Contractor* before 12 Hours to the outage start date will have no claims for compensation.
5 The *Contractor* will be entitled to claim actual accommodation, travel and staff expenses incurred, if the *Contractor* received notification of outage movement within 24 hours of the actual start date of the outage as agreed upon in the latest Task Order revision.

3.2 The Contractor's plan for the service

1. The *Contractor* submits a program in MS Project / Primavera format (confirmation required upfront)
2. The program includes:
   a. Activities
   b. Durations in hours
   c. Predecessors
   d. Successors

e. Total float
f. No constraints (linking to be done properly)
g. No resources
h. No unnecessary calendars (remove all)
i. No empty lines

3. Daily feedback on progress required for duration of each task order program
4. The *Contractor* draws up a Quality Control Plan prior to commencement of the work, for approval by the *Employer*. The *Employer* and the *Contractor* agrees on hold and witness points.

3.3 Management meetings

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

Title and purpose	**Approximate time & interval**	**Location**	**Attendance by:**
Contractors Safety Meeting	Monthly	Cluster Offices/ Station, Specific conference room TBA/MS Teams	Services Manager and Contractor Contracts Manager
Assessment meetings	After completion of each task order	Cluster Offices/ Station, Specific conference room TBA/MS Teams	Services Manager and Contractor Contracts Manager
Adhoc Meetings	As and when required by any Party	Cluster Offices/ Station, Specific conference room TBA/MS Teams	Services Manager and Contractor Contracts Manager

2. Meetings of a specialist nature may be convened at times and locations to suit the Parties.
3. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.
4. All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting.
5. Such minutes or register shall not be used for confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

3.4 Contractor's management, supervision and key people

3.4.1 Skills, Experience

The *Employer* may, having stated reasons, instruct the *Contractor* to remove a key person. The *Contractor* then arranges that, after one day, the key person has no further connection with the work included in this contract.
The *Contractor* may not replace any of the key persons, without prior written request and approval thereof from the *Employer*.

3.4.2 Police clearance

1. All *Contractor* personnel to undertake Police clearance
2. Certificates to be provided to the Service Manager at least 2 weeks before commencement of work
3. The Service Manager reserves the right to refuse entry to all persons whose criminal records indicate that their presence on site might create an unsafe and insecure environment to the Power Station.
4. The following website can be used to guide the process.
   http://www.saps.gov.za/services/applying_clearence_certificate.php

3.4.3 Management of work done by Task Order

1. Monthly Task orders will be issued to cater for all standard work done in preparation for the outage, these will be assessed monthly.
2. For any specialised work which may include additional resources during outage execution specific task order will be issued before work can commence.
3. The Task Order includes the scope of work for the specific scope.
4. A Task Order is the instruction to commence work.
5. No work shall commence until a Task Order is issued and has been finalised, accepted and signed by both the *Employer* and *Contractor.*
6. All work will be issued on a Task Order system. The Work Order, Purchase Requisition and Purchase Order will be created via the SAP PM system.
7. Assessments will be done after completion of the work for a specific month or outage.
8. Proof of hours worked will be supported by time sheets, preferably from an electronic system which will which should be approved weekly by Employer's representative.

3.4.4 Contract change management

1. The *Service Manager* issues a Task order to the *Contractor* to authorise the execution of work.
2. In the event where it is identified that there is additional work to be done outside the scope of work on the Task Order, the *Contractor* will give the *Service Manger* an early warning with a written quotation.

3. If agreed, the *Service Manager* issues a revised Task Order or additional Task Order.
4. The *Contractor* starts the work on the starting date of the task order.
5. The Task Order is signed by both the *Service Manager* and the *Contractor* before work commences.

3.5 Low Service Damages

1. The low service damages will be applicable if the performance of outages do not meet the performance contract especially on planning.

Low Service Damages Table

Low Service Damage Description	Value of Low Service Damages	Limit of Low Service Damage
1. Outage Readiness Below 80% at any stage of review as per outage readiness review standard.	10% damage of the total value of the monthly task order for the specific month	Limited to 30% of the monthly task order
2. Outage Due Date Performance (DDP) below target for the year	0.5% per total value of the amount invoiced for the year.	Limited to 10% of the total value of the amount invoiced for the year
3. Outage Slip % above target for the year	0.5% per total value of the amount invoiced for the year.	Limited to 10% of the total value of the amount invoiced for the year
4. Failure to submit documents as per agreed upon Contract Document Submittal Schedule in this service agreement	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per day	Limited to 10% of the total value of the Task Order(s) for the Outage / maintenance opportunity
5. Failure to respond to an NCR within 3 days	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per day	Limited to 10% of the total value of the Task Order(s) for the Outage / maintenance opportunity
6. Failure to resolve an NCR within 30 days	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per day	Limited to 10% of the total value of the Task Order(s) for the Outage / maintenance opportunity
7. Using Personnel which are not Qualified as per this service agreement	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per day	Limited to 10% of the total value of the Task Order(s) for the Outage / maintenance opportunity

Low Service Damage Description	Value of Low Service Damages	Limit of Low Service Damage
1. Outage Readiness Below 80% at any stage of review as per outage readiness review standard.	10% damage of the total value of the monthly task order for the specific month	Limited to 30% of the monthly task order
8. *Contractor* sustains a First Aid or Medical Incident	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident
9. *Contractor* sustains a Lost Time Incident	10% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident	10% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident
10. *Contractor* not reporting safety incidents within the same shift to the Eskom Coordinator and Contract Service Manager	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident	0.5% per total value of the Task Order(s) for the Outage / maintenance opportunity per incident

3.6 Documentation control

1. Safety files to be submitted and approved before work commence as per client requirements, two weeks in advance before the work starts
2. The *Contractors* Outage safety file will be handed over to the *Service Manager* after each outage
3. All NEC standard forms should be used e.g., Task orders, Early Warnings, Defect certificates and Assessments.
4. The *Contractor* is responsible to plan the supply of the documentation during the various project stages and to provide the documentation in accordance with the *Contractor* Document Submission Schedule (CDSS). A document is thus any written or pictorial information describing, defining, specifying or certifying activities, requirements, procedures or results.
5. The *Contractor* submits all documentation on a formal transmittal form to the *Service Manager.*
6. All manuals, documents, drawings and engineering documentation shall be presented in British English in both software and hardware.
7. All Communications will be filed and kept on site as it is crucial to have the correct communication structures. These communication documents are to adhere to the NEC 3 Term Service Contract communication requirements.
8. Budget quotation for outage work to be submitted one week after SOW submission/SOW clarification
9. Compensation for Occupational Injuries and Diseases (COID) Certificate and letter of good standing must be valid at all times and submitted to the *Service Manager* at each anniversary of the contract. These documents are to be submitted to the Eskom vendor database by the Contractor, before they expire.

3.6.1 Contractor Document Submission Schedule (CDSS)

Document Name/Description	Date/Time documents to be submitted
Supplier Localisation plan	Two weeks after contract award
Supplier Localisation report	Quarterly at the 2nd of each 4th month after the contract start date
Baseline risk assessment	One week after receipt of Task Order
Contractor's Safety file	Two weeks before start of work for outages, Monthly validated safety file to be kept for personnel permanently on site mainly for planning
Safety file Audit	Every 30 days after approval of initial file until work for specific outage is complete.
Time clocking reports	Monthly with the assessment
Technical report and data pack	Within 5 days of completion of the services
Compensation for Occupational Injuries and Diseases (COID) Certificate and letter of good standing	At each anniversary of the contract or before current expiry dates on the documents.

4 Health and safety, the environment and quality assurance

4.1 Health and Safety Risk Management

1. The *Contractor* complies with the health and safety requirements contained in the General Works Information.
2. Eskom is a national key point and therefore strikes are not permitted. Strikes are to be managed by the *Contractor* at his/her own cost.

4.2 Reporting of Incidents

1. The Employer follows an incident prevention policy; refer to 32-95, Environmental, Occupational Health and Safety Incident Management Procedure, which includes the investigation of all incidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incident. The *Contractor* is expected to co-operate fully to achieve this objective. The Employer's Representative must be informed immediately of any incident before the end of the shift.

   NOTE: The reporting of the incident to the Employer's Representative, does not relieve the *Contractor* of his legal obligation to report incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, and Compensation for Occupational Injuries and Diseases Act.

4.3 Work Stoppages

1. The Employer takes safety serious and therefore lessons learned from other safety lost time incidents are shared with the whole workforce. These stoppages are compulsory and the *Contractor* will not be allowed to claim additional compensation for these stoppages.
2. If the *Contractor* experiences a LTI, he/she will be expected to prepare a presentation and present it at a work stoppage that will be arranged by the Employer. The presentation content/template will be provided by the Employer.

4.4 Health and Safety Arrangements

1. The *Contractor* must ensure that all his personnel attend a Health and Safety Induction Course prior to starting with the works. A one- (1) hour course will be provided by the Employer and will be valid for the duration of one- (1) year.
2. The *Contractor* shall comply with the guidelines set out in the Majuba Standard BIA/RM/STD/01 titled “Safety, Health and Environmental specifications to be met by Contractors”
3. Safety Risk Management has the right and authority to visit and inspect the Contractor’s workplace or site establishment to ensure that tools, machinery and equipment comply with the minimum safety requirements.
4. The Employer's Representative shall be entitled to instruct the *Contractor* to stop work, without penalty to the Employer, where the Contractor’s personnel fail to conform to safety standards or contravene health and safety regulations. The Employer's Representative is entitled to instruct the *Contractor* to discipline his employees and to enforce disciplinary action, and submit a report to the Employer's Representative. The *Contractor* shall implement additional health and safety precautions where necessary.
5. The following Health & Safety requirements should be complied with:
    a. The *Contractor* must supply a Certificate of Competency of his/her employees to work under the following conditions:
        i. Confined Spaces
        ii. Heights
        iii. Heat stresses
        iv. Cold stresses
    b. The *Contractor* to provide the Employer with proof of free issue of adequate Personal Protective Equipment (PPE) to be used by his/her employees (preferably SABS approved). All PPE to comply with the Eskom PPE specification 240-44175132
    c. Noisy equipment and tools - no equipment or tools > 105db (A) may be supplied/utilised by the Contractor.
    d. Sub-contractors - the principal *Contractor* must state if a sub-*Contractor* is going to be used and who the sub-contractor/s are. Proof must be given to Eskom that the sub-contractor/s has/have the necessary competence and resources to carry out the work safely and to ensure that due care of the environment will be exercised.
    e. Medical examination processes must be complied with.

4.5 Vehicle and driver safety

1. All drivers, passengers and pedestrians must obey vehicle safety requirements in terms of the National Road Traffic Act, Act No 93 of 1996, as amended, including other relevant provincial or local requirements.
2. Transportation of passengers: open LDV's:
   With effect from 31 May 2006, no Eskom employee or *Contractor* would be allowed to transport passengers on the back of open light delivery vehicles (LDV's). It is a legal requirement to provide safe transportation of Eskom and *Contractor* employees – therefore the following will be enforced:
   a. Ensure that no employee, including *Contractor* employees or any other person, when on an Eskom site and/or performing work for Eskom, is allowed to be transported in the back of open vehicles.
   b. There will be cases where this may not be reasonable or practicable, namely where vehicles are used during line inspections on sites or on private roads, or similar cases, and in these cases such vehicles must be driven at less than 30km per hour or at a speed suitable to the prevalent conditions. In such cases, the carrying of passengers in the back of such open vehicles could be explicitly allowed, after:
      i. a risk assessment has been carried out, indicating a very low risk;
      ii. mitigating factors have been identified to control any risk identified;
      iii. proper seating and handrails have been provided on the back of the open vehicle:
      iv. These measures have been discussed at the relevant Health and Safety Committee Meeting and approved by the *Employer.*
      v. is defined and contained in a formal written division's or BU's policy, including the appropriate mitigating factors;
      vi. Such a policy has been communicated to all employees and contractors.

      The above risk assessment findings/outcomes must be available at all times for audit purposes.
   c. Tools and equipment must be properly secured.
   d. Only authorised drivers may transport passengers.
   e. Proof must be submitted on request in terms of valid roadworthiness of the vehicle/s.
   f. The above must apply to on site and off site transportation of passengers.
   g. No person may be transported in the back of vehicles closed by means of canopies, unless provided with factory-fitted or manufactured-approved, proper seating and safety belts, i.e. Crew cabs.
   h. The driver must ensure that no employees are transported in the back of open vehicles unless it is allowed in terms of a divisional or BU-specific policy as referred to in paragraph b above. This also applies to *Contractor* and *Contractor* employees when performing work for Eskom.
   i. The driver must ensure that all canopies are being properly fitted and secured and that all loose tools and objects in vehicles are properly secured.
   j. The driver must ensure that their passengers are seated and wear seatbelts at all times.

4.6 Vehicle Standard minimum specifications

1. *Contractor* vehicles are to comply with the requirements specified in the Eskom Vehicle Safety Specification 32-345.
2. The standard minimum specifications are applicable to all Eskom-owned vehicles and vehicles used when performing work for Eskom Holdings SOC Limited and its subsidiaries, including contractors (subsidised transport, contractors, consultants, and any person insured directly or indirectly by Eskom, driving a vehicle within or beyond the borders of South Africa). This includes vehicles owned, hired or leased by Eskom or its subsidiaries or any vehicle an employee makes available for Eskom-related business purposes.
3. All vehicles used for Eskom business shall meet the following requirements:
    a. Factory-fitted antilock braking system (ABS) for all vehicles.
    b. Factory-fitted driver and passenger air bags.
    c. Alarm/immobiliser, factory-fitted, and if not available by the manufacturer, it shall be fitted at approved fitment centres.
    d. Factory-fitted power steering.
    e. Tyres as per the manufacturer's specifications for the intended purpose.
    f. Two emergency warning triangles.
    g. Factory-fitted air conditioner.
    h. Reverse beeper shall be standard on all heavy commercial vehicles, buses and construction equipment or vehicles being used on construction sites.
    i. Refer to the standard for specific requires for Light Delivery Vehicles (LDVs), Heavy Commercial Vehicles, Minibuses, Midi-buses and buses, Trailers and caravans, Construction vehicles and other requirements.

4.7 Confined Spaces

Such As Vessels, Mills, Culverts, Flues, Furnaces, Ducts, Pits, Sewers, Tunnels and Underground Chambers (Refer General Safety Regulation 5 of the OHS Act)

1. At least one door or manhole giving access to each confined space must be provided with a means to lock such door or manhole in the open position. A confined space warning sign must also be attached next to such entrance of a confined space when entry into this area will be required.
2. The door or manhole concerned must be locked in the open position and a confined space warning sign attached before any person is allowed to enter such confined space. The locking, or other preventative measure, must constitute an integral part of the isolation required before the permit to work is issued. Where such a door or manhole cover must be removed by a maintenance person, provisos similar to those stipulated under (section 17.2 c and 7.11.2 b) must apply.
3. Before any door giving access to a confined space is closed, the person closing such door must ensure that there are no persons inside the confined space, and that all tools, equipment and debris have been removed.
4. Where a confined space can be isolated and adequately ventilated, this must be done before the space is environmentally tested and certified clear of all

dangerous gases. Thereafter a gas test certificate an environmental certificate must be issued before any person is allowed to enter. In addition:

a. Adequate ventilation, gas monitoring and thermal stress monitoring (heat stress – WBGT index - cold stress) must be maintained while persons remain in the space.
b. Only approved lighting and portable electrical tools shall be allowed, (Refer Electrical Machinery Regulation 10 of the Act.
c. A permit to work must be issued.

5. Where there is a possibility of dangerous substances being present in a confined space which cannot be effectively isolated and adequately ventilated, the following measures must be taken before any person is allowed to enter that space:

a. All practical steps must be taken to prevent the ingress of dangerous substances.
b. Every person who enters the confined space must wear approved self-contained breathing apparatus and must have competency for the equipment.
c. Every person who enters the confined space must wear a safety harness to which a rescue line is attached.
d. A rescuer must remain on duty outside the confined space and this person must maintain communication with those inside the confined space. The rescuer must control the rescue line(s) attached to the safety harness (s) and must assist in the removal of any person from the confined space in the case of an emergency. An additional set of breathing apparatus must be available for the use of the rescuer.
e. Adequate steps must be taken to ensure that all persons wearing breathing apparatus are withdrawn from the confined space before the end of the specified working duration of the breathing apparatus.
f. A permit to work must be issued.

6. Where it is not possible to reduce the WBGT index to be below 30 for manual work, access shall only be allowed, if relevant training has been done and a local procedure is in place that explains in detail the access control and health and safety precautions as described in the environmental regulations. (Refer Environmental Regulations for Workplaces 2(4) of the Act).

7. If the original scope of work changes, a new permit to work must be issued, or if hazardous substances are used, the risk assessment, pre-work checklist, the environmental certificate, gas test certificate shall be re-evaluated and re-issued as required.

4.8 Working on Heights

General

1. Wherever reasonably practicable, preference is given to the performance of work at ground level as opposed to in an elevated position.
2. Where work in an elevated position is necessary, preference is given to fall prevention measures such as, but not limited to, effective barricading and the use of work platforms.
3. Persons may only work from a fall risk position if a site-specific fall protection plan is in place and correctly implemented and consists of the following:

a. All appointments for the fall protection plan developer and implementer are in place.

b. One risk assessment, which is specific and incorporates the working at height risk assessment, as well as the site-specific risk assessment, has been completed for the work to be conducted.
c. Safe working procedure/task analysis and work instructions, approved by a competent person, are in place.
d. A fall rescue plan, along with necessary equipment and trained rescuers, is in place.
e. Appropriate training, as determined by the risk assessment, has been provided.
f. Appropriate height safety equipment and personal protective equipment have been issued to the individual.
g. There are equipment inspection procedures and up-to-date inspection records.
h. Individuals are medically fit to work at height, and records of this are kept.
i. A site-specific risk assessment is performed.

4. While work is in progress, adequate warning signs and/or barricades shall be used in all areas where there is a risk of persons being injured by materials or equipment falling from the work area. Barricades should be continuous and easily visible.
5. A drop zone shall be established with appropriate warning signs and barrier tape or barricading, warning personnel below of workers above and potential falling objects.

4.9 Risk Assessment

1. A risk assessment allows for careful examination of what could cause harm to people because of a work activity, and it allows one to take the necessary precautions to prevent the harm from occurring.
2. The following hierarchy of controls has to be observed.
   a. When considering work at height, a risk assessment must be conducted, form part of the health and safety plan to be applied on site and must include;
      i. the identification of the risks and hazards to which persons may be exposed to;
      ii. an analysis and evaluation of the risks and hazards identified based on a documented method;
      iii. a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
      iv. a monitoring plan; and
      v. a review plan
   b. Working at height risk assessments shall take into account factors such as:
      i. the necessity for the work to be done in an elevated position as opposed to on the ground;
      ii. barricading and other fall prevention measures;
      iii. requirements of the safe work procedure;
      iv. restrictions in fall distances and clearances;
      v. mobility required for the task, for example, degree of vertical or horizontal movement;
      vi. height being worked at;
      vii. possible injuries;
      viii. duration of exposure;
      ix. frequency of performing these activities;
      x. type of work and ergonomic considerations;

xi. work site/area congestion;
xii. potential/likelihood/causes of a fall occurring;
xiii. endurance of workers;
xiv. risk control measures;
xv. electrical hazards and safe clearances from overhead power lines;
xvi. structure (ease of access, secure footing, and compatibility with fall prevention and/or fall arrest equipment);
xvii. terrain;
xviii. restrictions with reference to working alone (a rescue must always be executable);
xix. falling objects; and
xx. suitable anchor points.

c. Develop approved written safe work procedures/task analysis and work instructions for all elevated work and make them available to all persons carrying out the work. Standard procedures may be suitable for most work; however, unusual conditions or architectural features may require additional site-specific procedures. The person supervising the work must ensure that safe work procedures/task analysis and work instructions are followed at all times.
d. In the design phase, consider fall risks with regard to minimising risk, ease of access, anchor points, and avoidance as far as reasonably practicable.
e. The risk assessment will determine the selection of suitable work at height equipment and systems for the work to be performed safely.
f. Be aware of hazards resulting from adverse weather conditions, and where necessary, modify the work method accordingly.
g. Determine the content and intervals of planned job observations during the risk assessment.
h. The risk assessment must include the rescue plan.
i. Persons working alone should have a practical way of performing a rescue in the event of an incident.
j. Risk assessments must be performed and documented by competent persons. The mitigation process from the risk assessments must influence the content of the fall protection plan.
k. In the case of live work, work has to be conducted according to standards and procedures while maintaining minimum safe working clearance.
l. Take into account the risks associated with objects falling from heights. Tools and equipment must be safely secured and attached to the body or structure

4.10 Fall Protection Plan

1. A task-/job-specific fall protection plan shall be developed and approved by a competent person for any activity where there is a risk of a fall.
2. A competent fall protection plan developer must be appointed according to 10(1)(a) of the Construction Regulations.
3. The fall protection plan shall include a task-/job-specific risk assessment and requirements relating to the following:

a. Training programme for employees working from a fall risk position
b. Appointments and authorisations
c. The procedure addressing the inspection, testing, and maintenance of all fall protection equipment
d. A risk assessment that is site-specific with regard to fall risks for work to be performed
e. The processes for evaluation of the employees' medical fitness necessary to work in a fall risk position and the records of this (medical surveillance programme)
f. Equipment use and specification
g. Fall prevention, fall arrest, and fall rescue
h. Method statements or safe work procedures/task analysis/work instructions.

4. The fall protection plan and its requirements shall be integrated into the health and safety plan.
5. Adherence to the fall protection plan is mandatory. An induction on the fall protection plan must be carried out for all relevant employees.
6. The fall protection plan must be suitably amended in accordance with the risk assessment, equipment technology, standards, and legislation.
7. The fall protection plan must be monitored and reviewed as required by the work performed and changes in hazards.

4.10.1 FAS Training

1. All users of height safety equipment for working at height must be trained, assessed and declared competent for the specific height safety equipment and associated structures.
2. Only service providers accredited by Eskom to present the basic Fall Arrest System and Rescue Course as per the working at heights procedure will be accepted and recognised as competent to provide competency for working at heights training. A list of the Eskom Accredited Service providers can be obtained from the Service Manager.
3. Validity of FAS and rescue training
   a. There shall be no expiry date on official training, but at least one job observation on each user per annum, for example by a peer.
   b. There shall be no expiry date on the certificate, but only the date of training.
   c. Evaluation to be conducted every three years by an accredited trainer.
4. The need for refresher training is determined by the employer, taking into account factors such as period of inactivity and changing circumstances as determined by risk assessments and job observations.
5. Refresher training/workshops for rescue need to be run on a regular basis, at least six- monthly.
6. At least two persons per team have to be able to perform rescues if work at height is involved.
7. All personnel trained to perform rescues will be trained to first aid Level 2.
8. Documented training records for all work at height training must be maintained.

4.11 Environmental constraints and management

The *Contractor* is required to ensure that all works are carried out as per the ISO 14001 standard and Eskom's Environmental Statement of Intent.
The *Contractor* shall make clear provision for as part of the tender submission and thereafter prepare the following documents upon awarding of the contract:

1. An environmental management plan that is based on applicable legislation, which relates to their activities on site.
2. An appointed, trained and competent person in writing, who will have the responsibilities of implementing all environmental requirements on a specific contract
3. The Aspects/Impacts register and an environmental management plan
4. All method statements, at a minimum addressing the activities that have significant environmental aspects
5. Proof of competence (certificates) of persons performing activities that could have significant impact on the environment.
6. Environmental Management System certificate (if certified) if not, an environmental management manual and/or procedures
7. List of all Hazardous Substances to be used and their MSDS's
8. Environmental file to be kept on site by contractor

The *Contractor* shall ensure that persons in its employment are aware of the significant environmental aspects and related actual or potential environmental impacts associated with their work. The *Contractor* shall be available for Environmental audits during work hours.
The following environmental requirements are complied with at all times:

1. Zero liquid effluent discharge.
2. No chemicals will be dumped into the station drains or on the premises.
3. No oil or waste will be dumped in an unauthorised area or unlicensed waste site.
4. Asbestos will be handled and stored according to Act 15 of 1973 (hazardous substances Act).
5. No materials or waste will be burnt on site. Hazardous substances shall be handled and stored according to the hazardous substances Act no 15 of 1973. No effluent shall be discharged into the public streams.
6. The *Contractor* shall comply to the Construction Safety, Health, and Environmental Management 32-136
7. Environmental incidents shall be reported, captured and investigated as outlined in the latest version of the Environmental, Occupational Health and Safety Incident Management Procedure 32-95.
8. The *Contractor* shall comply with any directive and/or instruction related to legislation and/or Eskom Procedures that is issued from the Environmental Department.

5 Quality assurance requirements

1. Quality and Other Eskom Departments reserve the right to audit/assess the work being done.
2. The Supplier must comply with the QM 58.

6 People

6.1 Minimum requirements of people employed

6.1.1 Supervision

1. The *Contractor* trains enough staff to cover for leave periods as well as night shifts, if required.

6.1.2 Key Competencies and Experience

1. **Supervisors and/or Project Managers/Supervisors:**
   a. Knowledge of PSR
   b. Capability to read and interpret drawings
   c. Ability to read and understand scopes of work
   d. Technically competent on the use Microsoft Packages (excel, outlook, Microsoft word). Proof of training required
   e. Knowledge of how to generate inspection/ refurbishment reports
   f. Maintain high standards despite pressing deadlines
   g. Demonstrates knowledge of the WRB and related procedures
   h. Is alert in a high-risk environment; follows detailed procedures and ensures accuracy in documentation and data
   i. At least 2 years power plant experience, preferably Eskom plant
   j. Course and working Experience in the NEC

7 Subcontracting

7.1 Preferred subcontractors

All subcontractors need to be approved by the Service Manager before the subcontractor gets to site.

7.2 Subcontract documentation, and assessment of subcontract tenders

The *Contractor* prepares subcontract documentation. The use of the NEC system is recommended on how subcontract tenders are to be issued, received, assessed and awarded.

8 Skills Development

The *Contractor* complies with the skills development requirements contained in the SDL requirements section.

9 Tools

9.1 Contractor's procurement of tools

1. All tools and equipment used for planning, execution and closing out of outages (Laptops and Desktops) are supplied by the *Contractor*.

10 Working on the Affected Property

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

The Entry to site is only approved once the following is adhered to:

1. The *Contractor*s Safety file is to be approved by the *Employer*'s Safety department.
2. All personnel must undergo screening for Criminal records and outstanding warrants
3. Site-specific induction is to be done by all personnel.

Refer to the General Works information

10.2 Records of Contractor's Equipment

1. The *Contractor* to declare all equipment and tools via a pre-set up list at the main entrance, where removal permit will be issued by Security personnel.
2. *Contractor* need to have a list of inventory of their equipment on site.
3. Proof of site entrance needs to be provided before equipment can be removed from site.
4. The *Contractor* keeps these records. If the records are lost, the Employer does not have the responsibility to issue a gate release permit and the *Contractor* might have to leave the equipment behind on site.

10.3 Equipment provided by the Employer

1. The *Employer* is entitled to withdraw use of the said Equipment, should proper care not be ensured.

10.4 Permits

1. The *Contractor* will ensure that he/she is informed of all the requirements of Eskom's Plant Safety Regulations and ORHVS and that he/she at all times comply to the requirements of these Regulations.
2. The *Contractor* ensures that at least two of his personnel are trained in terms of the Plant Safety Regulations.
3. Training is provided by Eskom and is done according to a schedule, thus arrangements need to be made with the Service Manager well in advance. Hourly payment of the contractor's staff, while attending the course will be for the contractor's account.

10.5 People restrictions, hours of work, conduct and records

10.5.1 Time Clocking

1 The *Contractor* uses a biometric time clocking system
2 No clocking will result in non-payment. If a person clocked in but not out or did not clock in, but clocked out, the person will not receive payment for that specific day.
3 Proof of clocking to be submitted to the Employer from files directly generated from the clocking system (no manual intervention)
4 In case of clocking system breakdown, the contractor has to report the breakdown immediately to the Service Manager and the system has to be replaced within 24 hours. Manual clocking counter signed by the Eskom Service manager or his/her delegate can be used for the duration while the system is out of service. No signature from the Eskom Service manager or delegate will result in non-payment
5 During GO's, MGO's and IR's costing with supporting timesheets is provided every two weeks together with a forecast for future invoicing.

10.5.2 Hours of work

1. Normal working hours is Eskom working hours:
    a. As arranged with the services manager
2. Overtime rules are adhered to as determined by the Department of Manpower and Eskom Procedures.
3. All Timesheets are to be kept for records purposes i.e. man-hours worked safely etc.
4. Other hours will be determined as per critical path activities during outages and maintenance opportunities.
5. Overtime to be approved by the *Service Manager*
6. Daily time sheet must be kept up to date of normal and overtime worked at all times.

10.5.3 Site Services and Facilities

10.5.3.1 Provided by the Employer

1. Toilets
2. Power points where available own cables to be routed
3. Water points, where available
4. Office area and office furniture

10.5.3.2 Provided by the Contractor

1. Tools, equipment, and consumables
2. Accommodation
3. Transport
4. Meals.
5. Telecommunications
6. Everything else necessary for providing the Service.

11 Invoicing and payment

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

All invoices are to be submitted via e-invoicing.

and include on each invoice the following information:

1. Name and address of the *Contractor* and the *Service Manager;*
2. The contract number and title;
3. *Contractor*'s VAT registration number;
4. The *Employer*'s VAT registration number 4740101508;
5. Description of service provided for each item invoiced based on the Price List;
6. Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;