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1 Description of the works

1.1 Executive overview

This project involves an adequate upgrade of the security systems and infrastructure at Leander Substation. The aim of the project is to upgrade the Security Barrier Fence in compliance with OHS act and Eskom policies and standards. This substation formed part of National Security Project Phase 1 Build 2a and 2c under which the security systems are upgraded. The scope of work for this project was based on recent security threats and will cover the implementation of the following security measures:

- Upgrade of the non-lethal electric fence to a 24-strand galvanised wire with concrete plinth on either side for the prevention of vegetation grown/interference.
- Energisers that provide 8 Joules of energy (Energisers as per Eskom NTCSA Specifications) and alarm detection. The non-lethal fence design to be in accordance with 240-136739222 and 240-78980848
- Upgrade the Perimeter Lighting along the fence; lights to be energy efficient and with day/night switch and sensors. Lighting to illuminate the prescribed area as set out in Standard 240-139282493.
- Upgrade the Access Gates; upgrade the current sliding gate at the entrance that provides the continuity of the electrified fence. Replace Inner gate to convert from swing gate to sliding gate.
- Refurbish the inner safety fence (making use of existing posts)"

PTMC Scope of Work

LEA20P11-P-SE-S12 Security Scope of work for Leander Substation_VN is attached.

Substation Engineering Scope of Work

LEA23P08-SE-E82 SOW Rev 2 is attached.

1.2 Employer's objectives and purpose of the works

The document serves as a technical guideline for the enquiry for a Non-Lethal Energized Perimeter Detection System (NLEPDS) Project and stipulates technical scope and deliverables for the project.

The objectives of the team to realise the Project Objectives are as follow:

- Complete the project with the minimum impact on the normal day to day production and within the acceptable tolerance of outages.
- Complete the project within the required time frame to limit the current risks associated with the existing supply as far as possible.
- Complete the project as per approved Project Schedule.

- Complete the project within the specified Cost Estimate.
- Develop and construct the project within the Health and Safety specification as to meet Eskom's Zero Harm goal.
- Construct the project as per Environmental Management Plan and guidelines.

1.3 Interpretation and terminology

Abbreviation	Meaning given to the abbreviation
AC	Alternating Current
DC	Direct Current
NEC	New Engineering Contract
JB	Junction box
VTJB	Voltage Transformer Junction box
TDB	Transformer Distribution board
SDB	Station Distribution board
PM	Project Manager
QS	Quantity Surveyor
EA	Engineering Assistant
HV	High Voltage
kV	Kilo volt
ORHVS	Operating Regulations for High Voltage Systems
LME	Line Matching Equipment
CVT	Capacitive Voltage Transformers
PVC	Polyvinyl Chloride
HDD	Horizontal Directional Drilling
QITP	Quality Inspection Test Plan

2 Management and start up.

2.1 Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and	When required	ESKOM – MWP	<i>Employer and</i>

compensation events.		head office / MS Teams	<i>Contractor</i>
Site construction progress and feedback.	BIWEEKLY	Leander Substation / MS Teams	<i>Employer, Contractor, Supervisor, and project team.</i>
Daily commissioning meeting.	As and when required	Leander Substation / MS Teams	<i>Employer, Contractor, Supervisor</i>
Adhoc Meeting	As and when required	ESKOM – MWP head office / Leander Substation / MS Teams	<i>Employer, Contractor, Supervisor</i>

NB: Meetings can also be held on virtual platform when and as needed.

2.2 Documentation control

The Contractor shall submit all documentation (including correspondence and drawings) to NTCSA (Employer) standards and to the Project Manager's requirements in accordance with the Project Manager's document control procedure. The Contractor shall use his own suitable document control system for the control, maintenance and handling of all relevant documentation and drawings issued to him.

The layout report is agreed with the project manager. Although the Project Manager does not intend duplicating the Contractor's programming and progressing effort, portions or high-level extractions of the contractor's programme may be used in an overall project programme if this is deemed necessary for control purposes.

All contractual communication shall be in writing on an official letterhead and signed by the authorised parties. All attached documentation shall be in the format of Microsoft Word/ Excel. All contractual communication letterheads and attached documentation shall be emailed as per PDF format.

2.2.1 Documents Required:

- a) Report selecting all of the Employer's activities-(computer generated)
- b) Project Programme
- c) Recourse schedule and histogram
- d) Cost curve "S-curve"-(computer generated)
- e) Quality inspection test plan
- f) As built drawings
- g) Drawings
- h) Procedure reports
- i) All stringing and cabling documentation as speculated in the specification.
- j) QITP for installation of CVT.
- k) QITP for installation of SA.

2.2.2 Progress reports required:

The progress report includes the following items:

- a) Updated summary of site progress - (computer generated)
- b) Key event report - (computer generated)

- c) Report selecting all the contractor's activities - (computer generated)
- d) Updated bar charts
- e) Updated resource schedule and histogram (If changed)
- f) Statement and report on sections of the works ahead and behind progress
- g) 'S' curve with actual cost/progress to date.
- h) SAT reports

2.3 Health and safety risk management

NO WORK ON SITE WILL BE ALLOWED TO COMMENCE BEFORE ALL THE ACCESS PERMITS AND THE RELEVANT HEALTH AND SAFETY FILES ARE IN PLACE AND APPROVED– ACCORDING TO THE ESKOM STANDARD TST41-61, as amended.

The Contractor shall control his activities and processes in accordance with the Occupational Health & Safety Act No. 85 of 1993 and Eskom's Contractor Health and Safety Requirements 32-136, as amended. The contractor when on site shall adhere to all of Eskom standards and procedures listed in the, **Health and Safety specification TPD-MAN-SP84 Rev 5**.

The Contractor is to compile a complete environmental file 2 weeks before commencement. The file needs to be audited and approved by Transmission, Southern Portfolio, Safety Department.

2.4 Environmental constraints and management

The Contractor shall control his activities and processes in accordance with Eskom's Environmental Requirements TST41-120. The NTCSA EMP provides the Aspects and Impacts that will require management and must be followed strictly for duration on site. For tendering purposes, the Contractor shall prepare a separate mitigation plan (method statement / EMP) for all environmental concerns raised through the EMP.

Any changes to the approved environmental mitigation plan (method statement / EMP) shall be reported and approved by the Grid Environmental Advisor and Project Manager, prior to the commencement of work and during construction. If applicable, the Principal Supplier must ensure that all sub-contractors' environmental mitigation plan comply with legal and other requirements and also include all the environmental risks associated with the scope of work. The main (principal) contract shall define the specific system elements applicable to the subcontractor's scope of work or supply.

In addition, the Contractor is required to ensure that all goods, services or works supplied in terms of this tender also conform to all applicable environment legislation(s), EPC32-727.

The Contractor is to send a flash report for any environmental incidents that have occurred on site as soon as possible or within 24 hours to the Grid Environmental Advisor and PM, clearly stating any impact to the environment.

No environmental records shall be destroyed or discarded by the Supplier. NTCSA and the Supplier shall agree that the Supplier retains certain environmental records.

Waste generated during project must be disposed of at a registered site and Contractor shall retain records of disposal. Contractor shall comply with **TDP Waste Management Plan TDPMAN-TN-53 Rev 5** and **Eskom Waste Management Standard 32-245 Rev 5**.

Deviations from these requirements will be regarded as a non-conformance. Should there be concerns regarding Environmental performance and non-conformance to Environmental requirements, management engagements and interventions will be introduced to determine a

means of addressing the shortfalls. Once these interventions have been explored and exhausted, then the NTCSA Supplier disciplinary process will be followed.

NB: The Contractor is to compile a complete environmental file 3 weeks before commencement. The file needs to be audited and approved by Transmission Environmental Department prior to commencement of work. The Contractor shall comply with the environmental criteria and constraints stated in the **Environmental Requirements for Contractor and/or Supplier – PDPMAN-ST-37 Rev 2**.

2.5 Quality assurance requirements

The Contractor shall comply with the quality specification, **Supplier Quality Management specification**.

The Contractor shall control his activities and processes in accordance with NTCSA's Quality Requirements for Procurement of assets, goods & services, as amended.

2.6 Programming constraints

The Contract programme, progress reports, subsequent updates, revisions and supplementary programmes as detailed in this section are an essential part of the project control system used by the Employer for managing the works and in monitoring the progress of the work under the Contract. The information and data provided by the Contractor pursuant to this procedure must therefore be reliable, accurate and timely in presentation.

2.6.1 Programme submission

A copy of the Contractor's First Programme shall be submitted with the Tender Document returnables that shall comply with the requirements as indicated in the Works Information. The Contractor's Detailed Programme shall be submitted in both hard and soft copy forms within two weeks of award using a computer software package approved by the Project Manager. The preferred software package is Microsoft Projects or recognised computerised planning system for which the Project Manager's acceptance in writing is obtained.

The contractor submits one programme that incorporates all his sub-contractors' activities within 14 days from the contract date; at least a summary bar chart shall be submitted with the tender. A programme that is properly tracked shall be available at all site meetings and progress meetings. A programme that is properly tracked shall be available at all site meetings and progress meetings.

2.6.2 Contract programme (baseline)

The Contractor's First Programme, agreeing with the tender submission, shall become the "Contract Programme" or "baseline" against which actual time performance will be compared. Once the baseline has been established, all subsequent programmes will have baseline (target) bars shown against each activity. This programme will be used as the basis on which all variations, extensions of time and changes to methods of delivery shall be assessed. Identified deviations from the baseline shall be addressed by the Contractor by either demonstrating that the deviation does not constitute a problem to the overall Contractor's Programme or providing a course of action to remedy the deviation.

2.6.3 Revisions to contract schedule

The Project Manager's written approval of any revised contract programme shall be given prior to the revised contract programme becoming the new contract programme. Additional detail may be inserted into the Contract Programme at the request of either the Contractor or the Project

Manager. In such cases, the overall start and finish dates of the detail activities shall not vary from the original summary activity(s) that were replaced. All revisions to the contract programme shall be prepared by, and at the cost of the Contractor. The revised programme should reflect the effect of the change on the programme, completion date and cost before acceptance by the project manager within 7 days.

2.6.4 Supplementary programmes

The Project Manager may at any time, and at the cost and expense of the Contractor, direct the Contractor to produce supplementary programmes to highlight a particular aspect of the work under the Contract. The Project Manager shall not unreasonably request supplementary programmes.

2.6.5 Cash flow

The Contractor shall submit to the Project Manager a detailed monthly cash flow chart based by the 20th of each month on the contract programme showing the anticipated cash flow as represented by expected payment claim submissions, not only payments received.

2.6.6 Progress reporting

To demonstrate the actual progress of the work under the Contract the Contractor shall, on a monthly basis, update and submit the contract programme and the progress to the Project Manager. The contract programme shall be in the form of a three week look ahead schedule, and shall show the following two separate bars for each activity so as to enable comparison of the actual progress to the contract programme:

- The contract programme “baseline” activity bar
- The current schedule activity bar identifying the currently forecast start and finish dates of the activity, and the status (% completion of each activity).

2.6.7 Progress monitoring and review

Monitoring and review of the progress of work under the Contract shall consist of an assessment of all activities currently in progress. The following shall be determined:

- Contract start date
- Possession date
- Site construction commencement date
- Percentage complete;
- forecast completion date;
- Hold, inspection and Witness points
- Payment milestones (linked to completion of specific activities)
- Design review meetings
- deviations from the baseline programme; and
- actions required to remedy any deviations.

All relevant activities shall be shown in order to monitor the progress on site or in the workshop. All major interfaces of services and or other contracts logically required for completion are clearly shown. The programme shall indicate ALL dependencies on the Employer. The programme shall also reflect 2 weeks period for inspection and correcting of defects before the final completion dates

2.6.8 Monthly status report

The Contractor shall provide a written status report by the 20th of each month or such other reporting period as may be required by the Project Manager from time-to-time. The report shall summarise progress and problems encountered during that month in respect of all parts of the work under the Contract. As a minimum the report shall include:

- Statement and report on activities where slippage against programme has occurred, together with the reasons why delay has occurred and plan denoting the location to be taken and the period of time necessary to recover such delay;
- Statement and report on those sections of the works that are currently ahead of programme
- The impact of any programming changes arising is reflected in revised forecast rate payment schedules and resource schedule.
- progress against the current approved contract programme.
- summary of progress achieved during the period.
- list of milestones achieved during the period.
- status of design, procurement, and off-site works.
- status of on-site works.

2.6.9 Resource Schedule

Resource information for manpower, plant and equipment on the accepted programme/ works methodology and reflected in the resource histograms is provided. The contractor to ensure that resources are available at Leander Substation.

2.6.10 Detailed Workshop Manufacturing programmes

The Project Manager request detailed workshop manufacturing schedules which fit into the logic and time span of the accepted programme and meet the manufacturing completion dates.

2.6.11 Time analysis

Should the contractor require to reserve built in float to control subcontractors, shipping facilities and transport, such float is shown as an activity named "project float" thus eliminating unrealistically long activity durations.

The total "float" or "slack" of an activity is defined as the difference between the earliest completion and the latest completion dates of the activity.

Automatic manipulation of "lags"" overlaps" "leads" "relations" or "dummies" (with positive, zero or negative durations) to cause the float to remain constant when updates are performed is not acceptable.

2.6.12 Time reporting

Reporting on remaining duration:

The method for reporting on activities in progress is by remaining duration, i.e. the time, in working days, needed to complete the activity from the report date. Once an activity has started, the remaining duration is assessed for each update. Automatic reduction of remaining duration as the report date moves forward is not accepted.

Actual dates:

When completion of any activity is confirmed by quoting document numbers, these numbers are given in a remark's appendix, e.g. suborders, drawings, inspection, certificates, delivery notes, etc. the actual starting and completion date of all activities is reported.

2.7 Contractor's management, supervision and key people

The Contractor shall make an adequate, experienced, and stable project team available for the duration of the contract. Every effort must be exercised by the Contractor to minimise replacement

of individual project team members to ensure optimum contract management continuity. It is a requirement of this contract that the Contractor employs a full time, fully qualified and experienced site manager who has been delegated sufficient authority to manage the contract efficiently on-Site during erection and commissioning. The site manager is required to be fluent in English, both in writing and orally. An organogram of all the Contractor 's people who will be directly involved with the management and execution of this contract down to supervisory level, showing each key person named to do the job as stated in the Contract Data, shall be submitted with the Tender Document Returnables. The Contractor shall provide a site Supervisor or Project Manager to supervise, monitor, control and coordinate all activities during the execution of the project. Construction Manager, Safety rep etc must be registered with SACPCMP.

2.8 Invoicing and payment

Local invoice:

The tax invoice should be submitted via e-invoice to: Invoicesntcsalocal@ntcsa.co.za

Invoices submitted in any other manner will not be considered for payment, for example, invoices sent directly to the Project Manager.

Once the invoice has been received by Accounts payable it will be paid in line with payment terms which will start to count from the date the invoice is submitted to the correct email address

The invoice should have the following details:

Addressed to:

NTCSA SOC Limited
Department: Project Delivery
Physical address: Megawatt Park, 1 Maxwell Drive, Sunninghill, 2197

Other information to be reflected on the invoice:

- Name and address of the Contractor and the Service Manager,
- The contract number and title,
- Contractor's company registration number,
- Contractor's VAT number,
- The Employer's VAT registration number 47101303126
- Description of service provided for each item invoiced based on the Price List,
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT,
- Retention monies to be deducted from the invoice.
- Ensure that the NTCSA order number is clearly indicated on your invoice together with the line number on the order you are billing for.

Method of sending the invoice:

- All electronic invoices must be sent in PDF format only.
- Each PDF file should contain one invoice;
 - name of the Project Manager/ Employer's representative/ contracts manager
 - Contract Number/ PO Number
 - The consultant/Contractor/ Service Provider's VAT Registration Number
 - Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.

Invoices to be submitted to Invoicesntcsalocal@ntcsa.co.za

Tax Requirements

- In case of a local invoice a PDF file that was created directly from a system meets the definition of original document and is allowed (including saving documents from excel to PDF, word to PDF etc.)
- An Invoice that was printed and then scanned to PDF by the Vendor is not acceptable as this is not an original tax invoice by SARS definition but a copy.
- The following wording needs to appear on the invoice: "Your invoice is encrypted in order to comply with SARS requirements that invoices and statements sent electronically are tamperproof."
- If there is Cost Price Adjustment (CPA) on your invoice we recommend that you issue a separate invoice for CPA so that if there are any issues on the CPA the rest of the invoice can be paid while resolving the CPA issues.
- Introduction of electronic invoicing does not guarantee payment but will ensure visibility of all invoices and ensure that no invoices get lost. If the goods receipt is not done the invoice will be parked and the system will automatically send an e-mail to the end user to do the goods receipt. This is also tracked by NTCSA through the park invoice report.

2.9 Insurance provided by the *Employer*

Any queries can be directed to NTCSA Insurance Management Services (EIMS). For general information from EIMS contract +27 11 800 4466.

2.10 Contract change management

The Contractor or the Project Manager notifies each other of any event which may lead to a change in agreed terms as per NEC 3.

2.11 Provision of bonds and guarantees

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

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

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

The Contractor is to keep proof/invoices of all costs incurred, that is people employed by the Contractor, Plant and Materials, work subcontracted by the Contractor and Equipment for a compensation event, and submit them to the Project Manager, if requested.

The contractor provides updated site records of people and equipment (including ownership) on a weekly basis and maintains daily rainfall and temperature measurements.

2.13 Training workshops and technology transfer

Not applicable.

3 Engineering and the *Contractor's* design

3.1 *Employer's* design

The following specifications and evaluation criteria are reference throughout the document. The revision as at the date of Contract placement is applicable. The *Contractor* is responsible for obtaining the latest revision of these documents.

Documents marked with an asterisk (*) are available from the *Employer* and are issued with this enquiry.

*	Bill of Quantities
*	LEA20P11-P-SE-S12 Security Scope of work for Leander Substation_VN
	LEA23P08-SE-E82 SOW Rev 2
*	Health and Safety Specification
*	Supplier quality Management Specification.
*	Environmental Requirements for Contractors.
*	Eskom Waste Management Standard.
*	TPD Waste Management Plan.
*	Environmental Incident Procedure.

3.2 Parts of the *works* which the *Contractor* is to design

Not Applicable.

3.3 Procedure for submission and acceptance of *Contractor's* design

Not Applicable.

3.4 Other requirements of the *Contractor's* design

Not Applicable.

3.5 Use of *Contractor's* design

Not Applicable.

3.6 Design of Equipment

Not Applicable.

3.7 Equipment required to be included in the *works*

The contractor is to ensure that all plant is supplied for the successful completion of the scope of works at Pembroke and Neptune substations. Contractor's equipment shall not be used for any other purpose except as required by the contract.

All the Primary and Secondary plant equipment's are listed in the Design reports and the proformas provided.

3.8 As-built drawings, operating manuals and maintenance schedules

The Contractor is to provide NTCSA with detailed "As-built" records where deviations have been made from construction drawings within 14 days after completion.

The Contractor shall provide all the as-built drawings in a Portable Document Format (PDF) and in English.

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed on the Site

The Contractor shall submit within 14 days of the starting date, a list of proposed sub-Contractors for Employer's approval.

The Employer reserves the right to accept or reject such sub-Contractors.

The Contractor shall maintain sound labour relations and will be fully responsible for actions of his personnel on or off site.

All people employed on site by the Contractor shall have Police clearance before work on site can commence. The Contractor's employees shall be sober on site and may be subjected to random breathalyser tests.

4.1.2 SDL&I requirements:

Jobs to be created:

Eskom will retain 2.5% of every invoice (excluding VAT) as security for the fulfilment of all SDL&I Obligations. The retained amounts shall only be released to the Contractor upon fulfilment of all SDL&I obligations at the end of the contract.

Alternatively, the Contractor shall submit a bond equivalent to 2.5% of the Contract Value and shall only be released to the Contractor upon fulfilment of all SDL&I Obligations

4.1.3 BBBEE and preferencing scheme

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all tenders:

- the 80/20 system for requirements with a Rand value of up to R1 000 000 (all applicable taxes included); and

- the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).

1.2 The value of this tender is estimated to exceed R1 000 000 (all applicable taxes included) and therefore the...90/10 system shall be applicable.

1.3 Preference points for this tender shall be awarded for:

(a) Price; and

(b) B-BBEE Status Level of Contribution.

1.3.1 The maximum points for this tender are allocated as follows:

POINTS

1.3.1.1 PRICE

1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION

Total points for Price and B-BBEE must not exceed 100

1.4 Failure on the part of a tenderer to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the tender, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5. The purchaser reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

4.1.4 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

The Contractor complies with and fulfils the Contractor's obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the Contractor's ASGI-SA Compliance Schedule stated below.

The Contractor shall keep accurate records and provide the Project Manager with reports on the Contractor's actual delivery against the above stated ASGI-SA criteria. The Contractor's failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the Contractor to comply with his obligations under this contract.

4.2 Subcontracting

4.2.1 Preferred subcontractors

The employer expects the Contractor to manage his sub-contractors in the same way that the employer manages the contractor. Special attention must be given to the management of the sub-contractors SHEQ compliance in the same way that the employer manages the contractor. The employer must approve all sub-contractors and suppliers that the Contractor employs for this contract.

4.2.2 Subcontract documentation, and assessment of subcontract tenders

The NEC system is compulsory for all subcontract documentation

4.2.3 Limitations on subcontracting

The Contractor shall not subcontract more than 25% of the contract scope and must comply with SD&L requirements.

4.2.4 Attendance on subcontractors

The Contractor is responsible for providing the Works as if he had not subcontracted.

4.2.5 Stability

Section 1: Stability File requirements

The following to be submitted prior contract signing as aligned to the project stability guideline.

- A signed copy of Employers Policies or Procedures for employee recruitment & demobilisation reflecting, Termination of Contract and Removal from Site, Use of Temporary Employment Services, Employment Bargaining council used and alignments process of employee rates with subcontractors within a site.
- A signed copy of the company's stakeholder management guideline
- A signed copy of the Project Communication Protocol reflective of Media Management, Spokesperson guideline, Project Branding Protocols that include project Signage, Uniform and Vehicles
- A signed copy of the Community Liaison protocol
- Methodology for issue and incident management

Section 2: Project Stability Activities

Stability Resources	Description	Qty
CLO and HR onsite	Recruitment of Client Liaison Officers at Task grade level 9 (T9) and Human Resource officer at (T9) level	X 1 X 1
Stability advisor onsite	Not applicable	
Stability Resource Tools of Trade		
Laptop, Network access, Cellphone Allowance	For reporting and project operations and stakeholder management activities	X 2
Transport Mode	Facilitation and attendance of stakeholder management and community liason activities	On request
Stakeholder Management Engagements		

Project Introduction (Municipality) Traditional Councils, Business Chamber, Local Taxi Industry) and emergency preparedness initiatives, Project Introduction to the affected wards	Venue hire , meeting logistics and catering for attendees	As indicated in the workman's information
Stakeholder Forums	Bi-monthly meetings, transportation of members, meeting logistics, catering for attendees	
Community Liaison		
Labour Integration and Labour peace	Recruitment of unskilled as guided by this document. Advertisements for required semi-skilled and skilled personnel as per the local to site definition of the project. Facilitation of interview venues and catering for interviewers, Employee training logistics	
Enterprise Development (Interfacing with SMME's)		
Expression of interest workshop at Site establishment	<ul style="list-style-type: none"> It is advisable that the Contractors source from local to site SMMEs, some of the Core commodities required which include but not limited to, civil works, plant hire and Support Services Facilities Hire & Management, Waste removal, Security, Ablution facilities, Stationery, Plumbing, PPE. However, it should be note that these can be sourced elsewhere if local suppliers are unable to provide these services and proof to that effect will be supplier when required. 	X 1
Employee Transportation		
Integration with local taxi association	Onboarding of local taxi association Utilisation of local taxi association for employee association,	
Total Provision for Stakeholder Management Engagements		
Corporate socio-investment (CSI)		
Corporate socio-investment initiative requests	Not applicable	Once- off

Section 3: Stability Undertaking

Tenderers who complete and submit the undertaking as required, but who do not meet Eskom's targets, will not be disqualified. Project Stability undertakings do not form part of scoring, but commitments will form part of contractual obligations

- The contractor to participate in the stakeholder management platforms for the project and strategizes on project development and mitigate project risks or emergencies interrupting project operations.**
- The tenderer to display commitment to social upliftment of communities where the project is executed through job creation, skills transfer, local SMME inclusion.**
- The successful tenderer in adhering to localized job creation should at least**

adhere to the following aligned with the SDL&I targets:

- a. 100% of General Workers to be sourced from local community (70% from the Impacted ward and 30% from the vulnerable as defined by the employer)**
- b. Semi-Skilled -70%, to be sources within the impacted municipality/province the remaining 30% can be sourced from any other area.**
- c. Skilled-30% sourced from impacted local municipality the remaining 70% may be sourced from any other area.**

Section 4: Project Stability Penalty, Retention and Performance Security

Eskom will apply a penalty of 2.5% of the invoice amount for failure to meet Project Stability obligations.

As security for the fulfilment of all Project Stability obligations, NTCSA will apply a penalty of 2.5% of every invoice amount (excluding VAT) for failure to submit SDL& I and Project Stability performance monthly reports; or failure to meet the Project Stability obligations in a contract.

Section 5: Reporting and Monitoring

- The suppliers shall on a monthly basis submit a report to Eskom in accordance with monthly report Template on their compliance with the Project Stability Obligations described above.
- Eskom shall review the Project Stability reports submitted by the suppliers within 30 (sixty) days of receipt of the reports and notify the suppliers in writing if their Project Stability obligations have not been met.
- Upon notification by Eskom that the suppliers have not met their Project Stability obligations, the suppliers shall be required to implement corrective measures to meet those obligations before the commencement of the following report, failing which Retention clauses shall be invoked.
- Every contract shall be accompanied by the Project Stability Implementation Schedule which must be completed by the suppliers and returned to Project Stability Representative for acceptance 28 days after contract award.

4.3 Plant and Materials

4.3.1 Quality

All works carried on site to comply with the Eskom's Quality Requirements for Procurement of assets, goods & services – QM 58. All work is carried out under the supervision of an experienced supervisor. The Contractor complies with the Employer's Quality Requirements as specified in

Eskom Standard. When using materials that are required to comply with a standard specification. The contractor shall, if so ordered, furnish the Engineer with certificates showing that the materials do so comply. Where so specified, materials shall bear the official mark of the appropriate standard. Samples ordered or specified shall be delivered to the Engineer's office on the Site. Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the published instructions of the relevant manufacturer. All quality control documentation is submitted to the Project Manager within 7 days of award of the contract.

4.3.2 Plant & Materials provided “free issue” by the *Employer*

The Contractor shall supply all the necessary equipment and material required to execute the Works.

4.3.3 *Contractor's* procurement of Plant and Materials

The Contractor shall make use of SABS approved plant and material. Test certificates shall be given to the Project Manager of the project. The Contractor must take all necessary steps to ensure that all Plants and Materials are adequately protected against damage during shipping, transport and storage. The contractor to arrange storage of material and security on site.

4.3.4 Spares and consumables

Not Applicable.

4.4 Tests and inspections before delivery

Where the Works information requires inspections or tests to be performed, the Contractor shall provide such assistance, labour, materials, electricity, fuel, stores, apparatus, and instruments as may be a requisite and as may be reasonable demanded to carry out such tests efficiently. The Contractor shall ensure that all gauges, templates, tools and other equipment required to check the accuracy of the work are calibrated at regular intervals by a laboratory approved by the National Calibration Services of the Council for Scientific and Industrial Research of South Africa, or by the respective authority in the country of origin of the equipment. Unless the Project Manager otherwise accepts, no Plant or Materials shall be delivered to the working areas until the contractor issues an inspection certificate in respect of such Plant or Materials.

The Contractor is responsible for taking delivery of all Plant and Materials delivered to the working areas. The Contractor does not bring to the working area those plant and material which the works information states are to be tested or inspected before delivery until the supervisor has notified the Contractor that they have passed the test. The associated test and inspection protocol submitted by the Contractor must show the estimated duration for each item on the protocol.

4.5 Marking Plant and Materials outside the Working Areas

All plant and materials outside working areas are to be marked “for Contractor” until such time that they are tested and installed at the site/plan.

4.6 *Contractor's* Equipment (including temporary works).

The contractor is to ensure that all plant and equipment is supplied for the successful completion of the scope of works at Komsberg substation. Contractor's equipment shall not be used for any other purpose except as required by the contract.

4.7 Cataloguing requirements by the *Contractor*

Not Applicable.

5 Construction

5.1 Temporary works, Site services & construction constraints

5.1.1 *Employer's* Site entry and security control, permits, and Site regulations

The Contractor is to have a certified and authorized Operating Regulation for High Voltage Systems (ORHVS) person available on site at all times in accordance with Eskom Transmission Standard Occupational Health and Safety Requirements to be met by Contractors and Sub-contractors Employed by NTCSA. ORHVS authorisation is done by Eastern Grid GMR 2.1 and the Grid Safety Advisor to work in the region. Also, one of his workers must have been current first aider level 2 certified. All workers to have police clearance (No criminal record)

It is the Contractors responsibility to ensure that a permit to work is obtained before access to the work can be given.

The contractor's trucks must have a valid and current crane test certificate with the truck driver and crane operator's certificate. All slings, shackles and crimping tools must have valid and current test certificates, which must be produced on site establishment.

The contractor will only leave site once a written site instruction has been issued by an NTCSA site representative.

Working hours will be from 07h30 to 16h30 during weekdays, weekend work to be carried out only on request from Project manager.

Before any work is commenced, it will be the responsibility of the contractor to ascertain from the "engineering assistant or site supervisor" the position of any existing services on site. Once these are indicated to the contractor they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the contractor's account

The contractor shall make his own arrangements for the provision of accommodation for his employees.

The contractor shall control his activities and processes in accordance with the Occupational Health & Safety Act no. 85 of 1993 and Eskom Safety Standard.

The contractor shall control his activities and processes in accordance PDPMAN-ST-37: Environmental Requirements for Contractors and Supplies, TDPMAN-TN-53 TDP Waste Management Plan, 32 - 245 Eskom Waste management standard, ENV17-R249 Environmental Incident Procedure and QM58 : Supply quality Management specification.

5.1.2 Restrictions to access on Site, roads, walkways and barricades

The Contractor's attention is drawn to the fact that other contractors will be on site and access and interfacing with them will be required. The Contractor shall allow safe access for other contractors and NTCSA personnel when required.

The contractor is fully responsible for all temporary works, which may be required. This includes storm water control, de-watering of excavations, excavation support, foundations and runways for construction plant etc, and is to allow for it in his rates.

Access to Leander Substation is controlled by the Site Supervisor, and the contractor will adhere to all procedures set out by them, including acquiring security permits and attending safety induction courses if required. Id's etc will be submitted to NTCSA by all workers on the NTCSA site. There is a single main access control point to the stations and the security is responsible to provide

personnel to maintain these access points during working hours. All employees and visitors to site must undergo an alcohol test which must be carried out by the said contractor personnel.

Access to the area of the works is limited and the contractor should be aware of the conditions on site and allow for this in his rates.

5.1.3 People restrictions on Site; hours of work, conduct and records

The Contractor must clearly indicate their proposed working hours in the tender and specifically in the programme issue with the tender. After award the Contractors will adhere to these agreed working hours and keep detailed and accurate records of such on a daily basis. The Supervisor must sign these records on a daily basis and the Project Manager and Supervisor must have access to these records at any time.

The Contractor must clearly indicate any shift work or extended working hour work that is required in order to meet with the required completion dates of the contract. The Project Manager and SHEQ manager's permission must be obtained prior to working such hours. Permission will only be granted if the longer hours worked have been accepted in writing by the Department of Labour.

5.1.4 Health and safety facilities on Site

The contractor must comply with all NTCSA health and safety regulations and specifications when on site. At all times during the execution of the scope of works the Contractor is responsible for the safety of all persons on the Site and the equipment. The contractor shall have the necessary systems and procedures in place to manage risks.

There are no toilet facilities available on site. **The Contractor is to provide his own toilet facilities on site and ensure that these facilities are kept in clean condition, to NTCSA's satisfaction.** No work on site will be allowed to commence before the toilet facilities are available on site.

5.1.5 Environmental controls, fauna & flora, dealing with objects of historical interest

The Contractor shall control his activities and processes in accordance with Eskom's Environmental Requirements TST41-120, as amended. The Contractor shall establish a refuse control system. All waste is to be collected and disposed of as required by NTCSA and the Local Authority.

5.1.6 Title to materials from demolition and excavation

All the materials from excavation and demolition must be disposed of by the Contractor, except where expressly stated by the PM or the relevant staff from the Grid. All rubble and other materials must be classified, weighed and transported to a registered dumping site. The Contractor should supply the Project Manager with the certificate that validates the legality of the dump site.

The Contractor has no title to an object of value or historical or other interest within the site. The Contractor shall notify the Project Manager when such an object is found, and the Project Manager will instruct the Contractor how to deal with it.

5.1.7 Cooperating with and obtaining acceptance of Others

During the course of the contract, departments of NTCSA and other contractors may be working in the general area surrounding the working area. The Contractor must make allowance for the

necessity to interface with the activities of others, and to allow for safe access and working conditions. The success of the project depends on the effective co-operation of all contractors on site, and the Contractor, if necessary, must discuss his programme on a day-to-day basis with the Project Manager to ensure effective co-ordination.

5.1.8 Publicity and progress photographs

Warning signs and notices must be clearly displayed at all sites where work is taking place. It is the responsibility of the Contractor to ensure that all his/her workers and visitors adhere to all signs. No photographs are to be taken without the permission of the employer.

5.1.9 Contractor's Equipment

All equipment must be registered in the equipment register and as per 32-136. The Contractor is responsible for his own insurance of his equipment. The Contractor is to take stock of his material and equipment on a regular basis and any shortage to be reported to the Project Manager immediately, stating if it is hired or owned.

5.1.10 Equipment provided by the Employer

No equipment, other than the free issue items, will be provided by the Employer

5.1.11 Site services and facilities

All the water necessary for construction purposes must be provided for by the Contractor. It is the Contractor's responsibility to test any water before using it for construction purposes. The Contractor is to submit a Test Certificate for the water used on site.

Electricity is available on site but on request from the Contractor. The Contractor shall provide all connections, extensions, and additional supply points necessary for the works. Any measures which the Contractor may require to maintain continuity and quality of supply shall be arranged by him/her at his/her own expense.

The Contractor shall provide everything else necessary for providing the works.

5.1.12 Facilities provided by the Contractor

Facilities provided by the Contractor.

- The Contractor shall provide their supply (generator) points necessary for the works. Adequate and/or continuous supply is not guaranteed and no claims for delay or standing time as a result of insufficiencies or failures will be considered. Any measures which the Contractor may require to maintain continuity and quality of supply shall be arranged by him at his own expense.
- A site for the Contractor's yard will be provided adjacent to the site of the works. The Contractor shall not occupy any site area other than that allocated to him
- Toilet facilities are not available on site; the contractor is advised to provide his own portable toilet facilities. The Contractor is to ensure that these facilities are kept in a clean condition to NTCSA's satisfaction.
- There is no drinking water, and the contractor has to bring their own water.
- Contractor to provide pumping systems to pump water from the bore hole for construction
- It is the Contractors responsibility to provide their own living accommodation outside the substation property and NTCSA's servitudes.
- Contractor to provide own temporary office, telephone and workshops on site.
- Contractor to provide own safe storage for material and plant.

- The Contractor must make his own arrangements for the disposal of sewerage and wastewater. Sewerage may not be disposed on site. NTCSA facilities may not be used
- There is no telecommunication service at site, the contract to provide telecommunication facilities for his use during the execution of the works.
- The Contractor shall provide everything else necessary for Providing the Works.

5.1.13 Existing premises, inspection of adjoining properties and checking work of Others

Before any excavation is commenced, it will be the responsibility of the Contractor to ascertain from the "Site Supervisor" the position of any existing services on site. Once these are indicated to the Contractor they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the Contractor's account

5.1.14 Survey control and setting out of the *works*

The Contractor is responsible for setting out the works as shown on the drawings

5.1.15 Excavations and associated water control

Not Applicable.

5.1.16 Underground services, other existing services, cable and pipe trenches and covers

The contractor to familiarise with the site conditions before commencing construction work. It will be the responsibility of the Contractor to ascertain from the "Site Supervisor" the position of any existing services on site. Once these are indicated to the Contractor they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the Contractor's account.

5.1.17 Control of noise, dust, water and waste

The contractor is required to comply to the SHE regulations and specification for controlling noise, dust, water and waste

The Contractor shall control his processes and procedures so as to minimise noise and dust. All waste is to be collected and disposed of as required by NTCSA and the Local Authority.

5.1.18 Sequences of construction or installation

Works sequencing will be finalised on contract award.

Please note: Sequence can be discussed and changed after contract placement depending on priorities /progress/circumstances on site.

5.1.19 Giving notice of work to be covered up

Contractor will submit schedule of works to be done to the project PM. The project PM will forward the schedule to the site supervisor as notice of work to be covered up

5.1.20 Hook ups to existing works

The Contractor will work in the existing yards, installing equipment as per the specifications.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case, before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

	Item of work	To be completed by
	As built drawings as per installation.	Within 14 days after Completion

5.2.2 Use of the *works* before Completion has been certified

To allow for the erection of electrical equipment, some parts of the bays may need to be made available to the equipment Suppliers before the works are completed. This will be managed by the Site Supervisor to ensure harmony and coordination of all on-going works.

5.2.3 Materials facilities and samples for tests and inspections

As specified in the stringing and cabling Specification.

5.2.4 Commissioning

Commissioning Procedure to be set and approved in conjunction with Secondary Plant, HV Plant, Grid, OEM, National Control etc.

5.2.5 Start-up procedures required to put the *works* into operation

Work permit to be obtained prior to installation of the equipment, cabling and works on Series Capacitor No 1 works on site.

Commissioning Procedure to be set and approved in conjunction with Secondary Plant, HV Plant, Grid, OEM, National Control etc.

5.2.6 Take over procedures

Take over procedures to be accordance to TPC 41-141 and stringing and cabling specification. The Contractor is to arrange an inspection at least 3 weeks before completion to inspect and identify any outstanding or incorrect items

5.2.7 Access given by the *Employer* for correction of Defects

Please refer to Contract Data by then Employer

5.2.8 Performance tests after Completion

Tests as per stringing, cabling and commissioning specifications.

5.2.9 Training and technology transfer

Not Applicable.

5.2.10 Operational maintenance after Completion

Not Applicable.

6 Plant and Materials standards and workmanship

6.1 Investigation, survey and Site clearance

The Contractor is to ensure that the site is cleared after completion of works, as per the Site Supervisor

6.2 Building works

Not applicable

6.3 Civil engineering and structural works

Not Applicable

6.4 Electrical & mechanical engineering works

Electrical and mechanical engineering works to comply to the Stringing and cabling specification.

6.5 Process control and IT works

Not Applicable.

6.6 Other [as required]

Not Applicable.

6.7 Drawings issued by the *Employer*

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

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title

C3.2 *CONTRACTOR'S* WORKS INFORMATION

This section of the Works Information will always be contract specific depending on the nature of the *works*.

It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical subheadings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.
