



prasa

PASSENGER RAIL AGENCY
OF SOUTH AFRICA

REQUEST FOR QUOTATION (RFQ)

RFQ NUMBER: KZN/PRASA/2026/05/06/Q

REQUEST FOR QUOTATION (RFQ) FOR THE APPOINTMENT OF A SERVICE PROVIDER FOR CATEGORY A BROWN, TRACTION LINESMAN PHASE 3, ELECTRICAL POWER SYSTEMS (EPS), ELECTRICAL TRACTION SYSTEMS (ETS) AND EXAMINATION OFFICER TRAINING FOR A PERIOD OF 12 MONTHS AS AND WHEN REQUIRED FOR PRASA KZN



**SECTION 1: SBD1
PART A INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF PASSENGER RAIL AGENCY (PRASA)

BID NUMBER:	KZN/PRASA/2026/05/06/Q	CLOSING DATE:	10 June 2026	CLOSING TIME:	12:00
DESCRIPTION	APPOINTMENT OF A SERVICE PROVIDER FOR(1) CATEGORY A BROWN,(2) TRACTION LINESMAN PHASE 3,(3) ELECTRICAL POWER SYSTEMS (EPS), (4)ELECTRICAL TRACTION SYSTEMS (ETS) AND(5) EXAMINATION OFFICER TRAINING FOR A PERIOD OF 12 MONTHS AS AND WHEN REQUIRED FOR PRASA KZN				

BID RESPONSE DOCUMENTS SHALL BE ADDRESSED AS FOLLOWS:

BID RESPONSE DOCUMENTS MUST BE DEPOSITED IN **TENDER BOX NO.07**, SITUATED AT:
PRASA OFFICES KZN
65 MASABALALA YENGWA AVENUE, GREYVILLE, DURBAN STATION, 4001

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO

CONTACT PERSON	Lindeni Cele
TELEPHONE NUMBER	031 8130105
E-MAIL ADDRESS	Lindeni.cele@prasa.com

SUPPLIER INFORMATION

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA.....

2.1 ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	2.2 ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
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QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? YES NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? YES NO

IF THE ANSWER IS “NO” TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B: TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED– (NOT TO BE RE-TYPED) OR IN THE MANNER**
- 1.3. **PRESCRIBED IN THE BID DOCUMENT.**
- 1.4. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER’S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE.”

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID NVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

(Proof of authority must be submitted e.g. company resolution)

DATE:

NB:

- **Quotation(s) must be addressed to PRASA before the closing date and time shown above.**
- **PRASA General Conditions of Purchase shall apply.**

SECTION 2

NOTICE TO BIDDERS

1. RESPONSES TO RFQ

Responses to this RFQ [Quotations] must not include documents or reference relating to any other quotation or proposal. Any additional conditions must be embodied in an accompanying letter.

Proposals must reach the PRASA before the closing hour on the date shown on SBD1 above and must be enclosed in a sealed envelope.

2 COMMUNICATION

Respondent/s are warned that a response will be liable for disqualification should any attempt be made either directly or indirectly to canvass any SCM Officer(s) or PRASA employee in respect of this RFQ between the closing date and the date of the award of the business.

3 BIDDERS COMPLAINTS PROCESS

3.1 Bidders are advised utilize this email address (SCM.Complaints@prasa.co.za) for lodging of complains to PRASA in relation to this bid process. The following minimum information about the bidder must be included in the complaint:

3.1.1 Bid/Tender Description

3.1.2 Bid/Tender Reference Number

3.1.3 Closing date of Bid/Tender

3.1.4 Supplier Name

3.1.5 Supplier Contact details

3.1.6 The detailed compliant

4 LEGAL COMPLIANCE

The successful Respondent shall be in full and complete compliance with any and all applicable national and local laws and regulations.

5 CHANGES TO QUOTATIONS

Changes by the Respondent to its submission will not be considered after the closing date and time.

6 PRICING

All prices must be quoted in South African Rand on a fixed price basis, including all applicable taxes.

7 BINDING OFFER

Any Quotation furnished pursuant to this Request shall be deemed to be an offer. Any exceptions to this statement must be clearly and specifically indicated.

8 DISCLAIMERS

PRASA is not committed to any course of action as a result of its issuance of this RFQ and/or its receipt of a Quotation in response to it. Please note that PRASA reserves the right to:

- Modify the RFQ's goods / service(s) and request Respondents to re-bid on any changes;
- Reject any Quotation which does not conform to instructions and specifications which are detailed herein;
- Reject Quotations submitted after the stated submission deadline or at the incorrect venue.

Should a contract be awarded on the strength of information furnished by the Respondent, which after conclusion of the contract, is proved to have been incorrect, PRASA reserves the right to cancel the contract.

PRASA reserves the right to award business to the highest scoring bidder/s unless objective criteria justify the award to another Respondent.

Should the preferred fail to sign or commence with the contract within a reasonable period after being requested to do so, PRASA reserves the right to award the business to the next highest ranked Respondent provided that he/she is still prepared to provide the required goods at the quoted price.

9 LEGAL REVIEW

Proposed contractual terms and conditions submitted by a Respondent will be subjected to review and acceptance or rejection by PRASA's Legal Counsel, prior to consideration for an award of business.

10 NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE

Respondents are required to self-register on National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. PRASA is required to ensure that price quotations are invited and accepted from prospective bidders listed on the CSD. Business may not be awarded to a respondent who has failed to register on the CSD. Only foreign suppliers with no local registered entity need not register on the CSD. The CSD can be accessed at <https://secure.csd.gov.za/>.

11 PROTECTION OF PERSONAL DATA

In responding to this bid, PRASA acknowledges that it may obtain and have access to personal data of the Respondents. PRASA agrees that it shall only process the information disclosed by Respondents in

their response to this bid for the purpose of evaluating and subsequent award of business and in accordance with any applicable law.

Furthermore, PRASA will not otherwise modify, amend or alter any personal data submitted by Respondents or disclose or permit the disclosure of any personal data to any Third Party without the prior written consent from the Respondents. Similarly, PRASA requires Respondents to process any personal information disclosed by PRASA in the bidding process in the same manner.

12 EVALUATION METHODOLOGY

PRASA will utilise the following criteria [not necessarily in this order] in choosing a Supplier/Service Provider, if so required:

EVALUATION CRITERIA	WEIGHTING
Stage 1 – Compliance	
Stage 1A	Mandatory Requirements
Stage 1B	Other Mandatory Requirements
Stage 2	
Price	80
Specific Goals	20
TOTAL	100

13 ADMINISTRATIVE RESPONSIVENESS

The test for administrative responsiveness will include completeness of response and whether all returnable and/or required documents, certificates; verify completeness of warranties and other bid requirements and formalities have been complied with. Incomplete Bids will be disqualified.

14 VALIDITY PERIOD

- 14.1 PRASA requires a validity period of 60 **Working Days** from the closing date.
- 14.2 Respondents are to note that they may be requested to extend the validity period of their response, on the same terms and conditions, if the internal processes are not finalized within the validity period. However, once the delegated authority has approved the process the validity of the successful respondent(s)' bid will be deemed to remain valid until finalization of the of award.

15 PUBLICATION OF INFORMATION ON THE NATIONAL TREASURY E-TENDER PORTAL

Respondents are to note that, bid awards, amendments and cancellations will be published on the e-tender portal (*where applicable*) and or media used to advertise the bid. For the award of business, PRASA is required to publish the prices and preferences claimed of the successful and unsuccessful Respondents *inter alia* on the National Treasury e-Tender Publication Portal, (www.etenders.gov.za), on CIDB website for construction related RFQ's. (*where applicable*).

16 RETURNABLE DOCUMENTS

Returnable Documents means all the documents, Sections and Annexures, as listed in the tables below. There are three types of returnable documents as indicated below and Respondents are urged to ensure that these documents are returned with the quotation based on the consequences of non-submission as indicated below:

15.1. Mandatory Returnable Documents

Failure to provide Mandatory Returnable Documents at the Closing Date and time of this RFQ may result in a Respondent's disqualification. Respondents are therefore urged to ensure that all documents are returned with their Quotations.

SECTION 3

1 EVALUATION CRITERIA:

Stage 1A – Mandatory Requirements

If you do not submit/meet the following mandatory documents/requirements, your bid will be automatically disqualified.

Only bidders who comply with stage 1A will be evaluated further.

No.	Description of requirement	
d)	Bidders to fill and sign the closing /submission register on submission of tender documents.	

Stage 1B –Other Mandatory Requirements

If you do not submit/meet the following mandatory documents/requirements, PRASA may request the bidder to submit the information within five (5) working days. Should this information not be provided, your bid proposal will be disqualified.

Only bidders who comply with stage 1B will be evaluated further.

No.	Description of requirement	
a	Completion of RFQ	
b	Tax Clearance Certificate (Valid as at the closing date of this RFQ) Or supply Sars pin.	
c	Company CSD registration number	
d	Signed Joint Venture, Consortium Agreement or Partnering Agreement (if applicable)	
1	<u>Category A Brown</u>	
a	Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.	
b	Provide proof of accreditation (Accreditation certificate). (must be TETA accredited)	
c	The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course.	
2	<u>Traction Linesman Phase 3</u>	
a	Previous Experience; Supply detailed information of recent Traction Linesman training programs that you (service provider) conducted and successfully completed with traceable references.	
b	Provide proof of accreditation as outlined in clause 1.2 above (must be TETA accredited)	
c	The Service Provider shall submit a detailed training programme in point form, or other means acceptable to the Project Manager, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course.	

<u>3</u>	<u>ELECTRICAL POWER SYSTEMS-EPS</u>	
a	Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.	
b	Provide proof of accreditation (Accreditation certificate). (must be TETA accredited)	
c	The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).	
<u>4</u>	<u>ELECTRICAL TRACTION SYSTEMS-ETS</u>	
a	Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.	
b	Provide proof of accreditation (Accreditation certificate).	
c	The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).	
<u>5</u>	<u>EXAMINATION OFFICER TRAINING</u>	
a	Previous Experience: Supply detailed information of recent Examining Officer training programs that you (service provider) conducted and successfully completed with traceable references.	
b	Provide proof of accreditation (Accreditation certificate).	
c	The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).	

Stage 2

2.1 Stage 3- Price and Specific Goals

The following formula, shall be used to allocate scores to the interested bidders:

The maximum points for this tender are allocated as follows:

DETAILS	POINTS
PRICE	80
SPECIFIC GOALS	20
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS	100

FORMULA FOR PROCUREMENT OF GOODS AND SERVICES

POINTS AWARDED FOR PRICE

THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis:

80/20

$$PS = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

POINTS AWARDED FOR SPECIFIC GOALS

- 3.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)	Evidence
B-BBEE (Minimum Level 2)	10		BEE Certificate / Affidavit (in case of JV, a consolidate scorecard will be accept)
EME or QSE 51% Black Owned	6		Audited Annual Financial/ B-BBEE Certificate / Affidavit
51 % Black Owned	4		CIPC Documents / B-BBEE Certificate/Affidavit
TOTAL	20		

SECTION 4

PRICING AND DELIVERY SCHEDULE

Respondents are required to complete the attached Pricing Schedule

- 1 Prices must be quoted in South African Rand, inclusive of all applicable taxes.
- 2 Price offer is firm and clearly indicate the basis thereof.
- 3 Pricing Bill of Quantity is completed in line with schedule if applicable.
- 4 Cost breakdown must be indicated.
- 5 Price escalation basis and formula must be indicated.
- 6 To facilitate like-for like comparison bidders must submit pricing strictly in accordance with this price schedule and not utilise a different format. Deviation from this pricing schedule could result in a bid being declared non-responsive.
- 7 Please note that should you have offered a discounted price(s), PRASA will only consider such price discount(s) in the final evaluation stage on an unconditional basis.
- 8 Respondents are to note that if price offered by the highest scoring bidder is not market related, PRASA may not award the contract to the Respondent. PRASA may:
 - 9 negotiate a market-related price with the Respondent scoring the highest points;
 - 10 if that Respondent does not agree to a market-related price, negotiate a market-related price with the Respondent scoring the second highest points;
 - 11 if the Respondent scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the Respondent scoring the third highest points;
 - 12 If a market-related price is not agreed with the Respondent scoring the third highest points, PRASA must cancel the RFQ.

I / We _____ (Insert Name of Bidding Entity) of

_____ code

(Full address) conducting business under the style or title
of: _____ represented by:

_____ in my capacity
as: _____ being duly authorised, hereby offer to

undertake and complete the above-mentioned work/services at the prices quoted in the bills of quantities / schedule of quantities

or, where these do not form part of the contract, at a lumpsum, of R

_____ (amount in

numbers); _____

_____ (amount in words) Incl. VAT.

DELIVERY PERIOD: Suppliers are requested to offer their earliest delivery period possible.

Delivery will be effected within working days from date of order. (To be completed by Service provider).

SECTION 5

PRASA GENERAL CONDITIONS OF PURCHASE

General

PRASA and the Supplier enter into an order/contract on these conditions to supply the items (goods/services/works) as described in the order/contract.

Conditions

These conditions form the basis of the contract between PRASA and the Supplier. Notwithstanding anything to the contrary in any document issued or sent by the Supplier, these conditions apply except as expressly agreed in writing by PRASA.

No servant or agent of PRASA has authority to vary these conditions orally. These general conditions of purchase are subject to such further special conditions as may be prescribed in writing by PRASA in the order/contract.

Price and payment

The price or rates for the items stated in the order/contract may include an amount for price adjustment, which is calculated in accordance with the formula stated in the order/contract.

The Supplier may be paid in one currency other than South African Rand. Only one exchange rate is used to convert from this currency to South African Rand. Payment to the Supplier in this currency other than South African Rand, does not exceed the amounts stated in the order/contract. PRASA pays for the item within 30 days of receipt of the Suppliers correct tax invoice.

Delivery and documents

The Supplier's obligation is to deliver the items on or before the date stated in the order/contract. Late deliveries or late completion of the items may be subject to a penalty if this is imposed in the order/contract. No payment is made if the Supplier does not provide the item as stated in order/contract.

Where items are to be delivered the Supplier:

Clearly marks the outside of each consignment or package with the Supplier's name and full details of the destination in accordance with the order and includes a packing note stating the contents thereof; On

dispatch of each consignment, sends to PRASA at the address for delivery of the items, an advice note specifying the means of transport, weight, number of volume as appropriate and the point and date of dispatch; Sends to PRASA a detailed priced invoice as soon as is reasonably practical after dispatch of the items, and states on all communications in respect of the order the order number and code number (if any).

Containers / packing material

Unless otherwise stated in the order/contract, no payment is made for containers or packing materials or return to the Supplier.

Title and risk

Without prejudice to rights of rejection under these conditions, title to and risk in the items passes to PRASA when accepted by PRASA.

Rejection

If the Supplier fails to comply with his obligations under the order/contract, PRASA may reject any part of the items by giving written notice to the Supplier specifying the reason for rejection and whether and within what period replacement of items or re-work are required.

In the case of items delivered, PRASA may return the rejected items to the Supplier at the Supplier's risk and expense. Any money paid to the Supplier in respect of the items not replaced within the time required, together with the costs of returning rejected items to the Supplier and obtaining replacement items from a third party, are paid by the Supplier to PRASA.

In the case of service, the Supplier corrects non-conformances as indicated by PRASA.

Warranty

Without prejudice to any other rights of PRASA under these conditions, the Supplier warrants that the items are in accordance with PRASA's requirements and fit for the purpose for which they are intended and will remain free from defects for a period of one year (unless another period is stated in the Order) from acceptance of the items by PRASA.

Indemnity

The Supplier indemnifies PRASA against all actions, suits, claims, demands, costs, charges and expenses arising in connection therewith arising from the negligence, infringement of intellectual or legal rights or breach of statutory duty of the Supplier, his subcontractors, agents or servants, or from the Supplier's defective design, materials or workmanship.

The Supplier indemnifies PRASA against claims, proceedings, compensation and costs payable arising out of infringement by the Supplier of the rights of others, except an infringement which arose out of the use by the Supplier of things provided by PRASA.

Assignment and sub-contracting

The successful Respondent awarded the contract may only enter into a subcontracting arrangement with PRASA's prior approval. The contract will be concluded between the successful Respondent and PRASA, therefore, the successful Respondent and not the sub-contractor will be held liable for performance in terms of its contractual obligations.

Governing law

The order/contract is governed by the law of the Republic of South Africa and the parties hereby submit to the non-exclusive jurisdiction of the South African courts.

Special Conditions: Funding Contingency

1. Paragraph 8.4 of the PFMA SCM Instruction No. 3 of 2021/22 states that the Accounting Authority may not invite price quotations or bids if no or sufficient provision is made in the budget of the institution.
2. PRASA has, in terms of section 79 of the PFMA, obtained approval from National Treasury, for a departure from paragraph 8.4 of the PFMA SCM Instruction No. 3 of 2021/22.
3. PRASA is currently in the process of making provision and allocation of budget for the services required in this RFQ, which provision and/or budget allocation has not yet been completed at the time of the issuance of this RFQ.
4. PRASA will, however, ensure that provision and/or budget allocation is made prior to the award of business in this RFQ.
5. Accordingly, any award pursuant to this RFQ is strictly subject to PRASA, inter alia:
 - 5.1. securing the necessary funding allocation; and
 - 5.2. confirming that sufficient budget exists to meet the intended award.
6. PRASA undertakes to keep bidders reasonably informed of the progress and status of the funding allocation and budgeting process.



7. By submitting a bid, bidders expressly acknowledge and agree that PRASA reserves the right to cancel this RFQ at any stage prior to award, in the event that PRASA is unsuccessful in making sufficient provision and/or budget allocation for the required services.

8. PRASA shall not be liable for:

8.1. any claim, loss, or damages of whatsoever nature arising from or in connection with a failure to source funding; or

8.2. the non-award of tender due to a failure to source funding; and

8.3. bidders waive any right to institute proceedings against PRASA in respect of the circumstances contemplated above.

SIGNED at _____ on this ____ day of _____ 20__

Signature of Witness

1 _____

Name _____

Signature of Witness

2 _____

Name _____

Signature of Bidder's Authorised Representative: _____

Name: _____

Designation: _____"

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:
.....
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise

whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:
.....
.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.
I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature	Date
.....
Position	Name of bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and Specific Goals	100

1.4 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.5 The organ of state 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 organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULA FOR PROCUREMENT OF GOODS AND SERVICES

3.2. POINTS AWARDED FOR PRICE

3.2.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 is allocated for price on the following basis:

80/20

$$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

- Ps = Points scored for price of tender under consideration
 Pt = Price of tender under consideration
 Pmin = Price of lowest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)	Evidence
B-BBEE (Minimum Level 2)	10		BEE Certificate / Affidavit (in case of JV, a consolidate scorecard will be accept)
EME or QSE 51% Black Owned	6		Audited Annual Financial/ B-BBEE Certificate / Affidavit
51 % Black Owned	4		CIPC Documents / B-BBEE Certificate/Affidavit
TOTAL	20		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.2. Name of company/firm.....

4.3. Company registration number:

4.4. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited

- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

4.5. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

.....

SECTION 11

(1)CATEGORY A BROWN

1. PROJECT PURPOSE

This project specification covers a general description of the project, the facilities available and the requirements to be met. It is about the training of the PRASA KZN staff to be able to undertake work to clearance from exposed "live" high-voltage electrical equipment. The Tenderer shall be responsible for all items indicated on the attached BOQ.

2. DURATION OF CONTRACT

PRASA KZN requires that the Training be completed within 1 month form the date of written notification of acceptance of the quote, or to such later date as may be specified in the advice of award.

3. QUALIFICATIONS

All Service Providers must be TETA (Transport Education Training Authority) accredited. Please provide the accreditation certificate

4. LOCATION OF TRAINING VENUE

Prasa Offices, 65 Masabalala Yengwa Avenue, Durban Station

5. GENERAL DESCRIPTION

- 5.1 The full training will take place in Prasa Offices at Durban Station on the address mentioned above.
- 5.2 Electrical Engineering Safety Instruction- BBF3690 Version 3 and Substation Handbook – BBF8190 latest edition shall be used as a training manual.
- 5.3 The Duration of the refresher course of **Category "A" Brown** shall be **5** days.
- 5.4 This training is for PRASA employees. It should cover the following aspects:
 - Facilitation & Assessment
 - On Job Training Evaluation
 - Final Integrated Assessments
- 5.5 Training materials to be supplied by the service provider are as follows:
 - Training Manuals
 - Certificate of competency
 - Pens and examination pads
 - Data projector and laptop
 - Training tools and equipment for the successful completion of the training
- 5.6 The theoretical training will cover the following topics:
 - Introduction to traction systems and the negative return circuit
 - Schematic layout of traction substations
 - High Voltage disconnecting Switches
 - HV AC circuit breakers(oil,vacuum,SF₆)
 - Traction Transformers
 - Current Transformers
 - High Voltage Surge Arrestors
 - Si Diode Rectifiers
 - High Speed Circuit Breakers
 - Batteries
 - Protection and Control Equipment
 - Substation earthing maintenance
 - Telecontrol
 - Responsibilities of electricians and traction linesman at H-frames, switch structures and negative return circuits
 - HV fuses
 - Vector diagrams, vector symbols and parallel operation of transformers
 - Licence to work (category "A" – brown)

6. CONTROL OF WORK AND QUALITY ASSURANCE

It is an essential element of this contract that the control of the work, the Quality Control and Quality Assurance falls under the direct control of the Service Provider. Should the Tenderer have a specialist sub-contractor, special arrangements will be required in terms of their contractual arrangement to ensure that the above control is possible. Such arrangements are to the Tenderers discretion but the Tenderer must demonstrate that the arrangement is functional and workable to the entire satisfaction of the organisation.

7. OCCUPATIONAL HEALTH AND SAFETY ACT

The Service Provider shall ensure that he is fully conversant with the latest edition of the Occupational Health and Safety Act.

8. REQUIREMENTS

For the purpose of this quote the service provider must ensure that he/she submits proof of the outlined requirements below, failure to do so, will render the service providers quote unsuccessful:

- 8.1 Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.
- 8.2 Provide proof of accreditation (Accreditation certificate).
- 8.3 The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).
- 8.4 The Service Provider shall be responsible for travelling and accommodation of its own facilitator and the rates must be incorporated on the Bill of Quantities.

9. PENALTIES

The service provider will be charged a penalty of 0.3% of the contract price per day delayed after the contractual

Duration: 5 days

Venue: Durban Station (Training Department)

Bill of Quantities-Category A Brown

NO	ITEM DESCRIPTION	UOM	QTY	UNIT PRICE		TOTAL	
1	Category A Brown	Person	1				
	<i>Sub total</i>						
	<i>Vat</i>						
	<i>Total</i>						

(2)Traction Linesman Phase 3

PROJECT SPECIFICATION FOR APPOINTMENT OF A SERVICE PROVIDER TO FACILITATE PRE-REQUISITE MODULES FOR CATEGORY A RED (OHTE) PHASE 3

1. SPECIFICATIONS

1.1 Scope

This project specification covers a general description of the project, the facilities available and the requirements to be met. It is about the training of the Metrorail KZN staff and to equip them with necessary tools to perform the required duties in the workplace.

1.2 Qualifications

All Service Providers must be TETA accredited.

1.3 Duration of the Training Programme

The Duration of the training for the **Phase 3 modules for Category "A" Red (OHTE)** will be 88 days.

1.4 Location of training venue:

Durban

1.5 General Description

The theoretical training will take place in Transnet School of Rail in Durban and all practical shall take place on site within Transnet/ Prasa Rail network in the vicinity of Durban.

The following modules are requested:

MODULE	TOTAL DAYS TRAINING
Engineering Electrical Safety Instruction 1 EESI 1	4
Foundation and Work Permit FWP	15
Electrical Engineering Safety Instruction 2 EESI 2	5
Alternating Current Training AC-T	10
Engineering Electrical Safety Instruction 3 EESI 3	14
Construction Work PCW	40

Training materials to be supplied by the service provider as follows:

- Training Manuals
- Certificate of competency

2. Control of Work and Quality Assurance

It is an essential element of this contract that the control of the work, the Quality Control and Quality Assurance falls under the direct control of the Service Provider. Should the Tenderer have a specialist sub-contractor, special arrangements will be required in terms of their contractual arrangement to ensure that the above control is possible. Such arrangements are to the Tenderers discretion but the Tenderer must demonstrate that the arrangement is functional and workable to the entire satisfaction of the organisation.

3. Occupational Health and Safety Act

The Service Provider shall ensure that he is fully conversant with the latest edition of the Occupational Health and Safety Act.

4. REQUIREMENTS

For the purpose of this quote the service provider must ensure that he/she submits proof of the outlined requirements below, failure to do so, will render the service providers quote unsuccessful:

- 8.1 Previous Experience; Supply detailed information of recent Traction Linesman training programs that you (service provider) conducted and successfully completed with traceable references.
- 8.2 Provide proof of accreditation as outlined in clause 1.2 above.
- 8.3 The Service Provider shall submit a detailed training programme in the point form, or other means acceptable to the Project Manager, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).

BILL OF QUANTITIES- **Traction Linesman Phase 3**

NO	ITEM DESCRIPTION	UOM	QTY	UNIT PRICE	TOTAL
1	Traction Linesman Phase 3	Person	1		
	<i>Sub total</i>				
	<i>Vat</i>				
	<i>Total</i>				

(3) ELECTRICAL POWER SYSTEMS

1 PROJECT PURPOSE

This project specification covers a general description of the project, the facilities available and the requirements to be met. It is about the training of the PRASA KZN staff to be able to undertake work to clearance from exposed "live" high-voltage electrical equipment. The Tenderer shall be responsible for all items indicated on the attached BOQ.

2. DURATION OF CONTRACT

PRASA KZN requires that the Training be completed within 6 weeks from the date of written notification of acceptance of the quote, or to such later date as may be specified in the advice of award.

3. QUALIFICATIONS

All Service Providers must be TETA (Transport Education Training Authority) accredited. Please provide the accreditation certificate

4. LOCATION OF TRAINING VENUE

Transnet Training Facility Durban

5. GENERAL DESCRIPTION

(11 000 Volts and /6 600 volts Distribution Substations and / Transmission line)

	Total no. of Days
Phase 1	10 Days
Phase 2	15 Days/ 20
On the job training	90 Days/ +

PHASE 1

Module 1 (Days 10)

Content	Theory	Practical &/Site visits	Exam
	7 & ½ days /7	1 & ½ days /2	1 day
Transmission lines/ Substation work/ Test Permit	Learners have to be taken through different substations & be exposed to layout of substations and different High-voltage equipment. If there is a work permit or test permit in the nearby section, learners should be exposed to such practical Working situations		
Logbook			
Electrolysis			
Energizing Notice			
Electrical Safety Instruction			
Engineering Instruction			

PHASE 2

Module 1 – High Voltage Outdoor Yard Equipment. (3)

CONTENT	Theory	Practical &/Site Visit	Exam
	1 & ½ Days	½ Day	1 Day
HIGH VOLTAGE SURGE ARRESTORS	Exposure &/ Site Visit to view the High Voltage Surge Arrestors, Disconnecting Switches, Current Transformers & Circuit Breakers		
HIGH VOLTAGE DISCONNECTING SWITCHES			
HIGH VOLTAGE CURRENT TRANSFORMERS			
HIGH VOLTAGE CIRCUIT BREAKERS			

Module 2 – High Voltage Transformers (3)

CONTENT	Classroom Theory	Assessment	Site visit
	1 & ½ Day	½ Day	1 Day
POWER DISTRIBUTION TRANSFORMERS	Exposure and / Site Visit to view the Power distribution Transformers and Protection. If Transformer maintenance is done in the nearby section, then learners should be exposed to such practical working situations.		
TRANSFORMER PROTECTION			
TRANSFORMER MAINTANANCE			
VECTOR DIAGRAMS			

Module 3- Earthing (3)

CONTENT	Theory	Practical & / Site Visit	Exam
	1 & ½ Days	½ Day	1 day
SUBSTATION EARTHING MAINTANANCE	Exposure / site visit to Transmission line, Substations and Signals Earthing		
EARTHING REQUIREMENTS FOR SIGNAL SUPPLY			
FEED POINTS AND TRANSMISSION LINES			

Module 4- Protection (3)

CONTENT	Theory	Practical & / Site visit	Exam
	1 & ½ Day	½ Day	1 Day
HIGH VOLTAGE DISTRIBUTION NETWORK PROTECTION	Exposure / Site Visit to view the High- Voltage Fuses		
HIGH VOLTAGE FUSES			

Module 5 – High Voltage Cables (2)

CONTENT	Theory	Practical & / Site visit	Exam
		1 day	½ Day
CABLE TERMINATION AND JOINTS	Depot Visit and practical Working situations sites visit		
CABLE INSTALLATION, LAYING, TESTING AND COMMISSION			
CABLE FAULT FINDING			

Module 6 – Battery (3)

CONTENT	Theory	Practical & / Site visit	Exam
		1 day	½ Day
Lead Acid Batteries	Exposure to Substation Battery room		
Nickel – Cadmium Batteries			
Typical Substation Battery Charger			

ON THE JOB TRAINING

B-Grey certificate of Training may be issued to the learners/s who has successfully completed the Electrical Power System Course for them to gain further practical experience to become fully authorised. The B-Grey Certificate of Training may be issued by a person appointed by the Responsible Electrical Engineer. The learner must do the entire practical under the direct supervision of the Authorized person who has a Category A-Brown.

6. CONTROL OF WORK AND QUALITY ASSURANCE

It is an essential element of this contract that the control of the work, the Quality Control and Quality Assurance falls under the direct control of the Service Provider. Should the Tenderer have a specialist sub-contractor, special arrangements will be required in terms of their contractual arrangement to ensure that the above control is possible. Such arrangements are to the Tenderers discretion but the Tenderer must demonstrate that the arrangement is functional and workable to the entire satisfaction of the organisation.

7. OCCUPATIONAL HEALTH AND SAFETY ACT

The Service Provider shall ensure that he is fully conversant with the latest edition of the Occupational Health and Safety Act.

8. REQUIREMENTS

For the purpose of this quote the service provider must ensure that he/she submits proof of the outlined requirements below, failure to do so, will render the service providers quote unsuccessful:

- 8.1 Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.
- 8.2 Provide proof of accreditation (Accreditation certificate).
- 8.3 The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).
- 8.4 The Service Provider shall be responsible for travelling and accommodation of its own facilitator and the rates must be incorporated on the Bill of Quantities.

(4) ELECTRICAL TRACTION SYSTEMS(ETS)

1 PROJECT PURPOSE

This project specification covers a general description of the project, the facilities available and the requirements to be met. It is about the training of the PRASA KZN staff to be able to undertake work to clearance from exposed "live" high-voltage electrical equipment. The Tenderer shall be responsible for all items indicated on the attached BOQ.

2 DURATION OF CONTRACT

PRASA KZN requires that the Training be completed within 4 months from the date of written notification of acceptance of the quote, or to such later date as may be specified in the advice of award.

3 QUALIFICATIONS

All Service Providers must be TETA (Transport Education Training Authority) accredited. Please provide the accreditation certificate

4 LOCATION OF TRAINING VENUE

Transnet Training Facility Durban

1. GENERAL DESCRIPTION

Electrical Traction Systems Promotional Structure

ETS 1

Duration	-	7 Days
Period	-	
Theory	-	3 Days
Practical	-	3 Days
Written examination	-	1 Day

Element 1

Introduction to Electric Traction

1. The different voltage ratings used in Traction Systems.
2. The purpose of a 3kV DC Tie-Stations.
3. The operation of track switches in Tie-Stations.
4. The feeding arrangement of a 3kV DC Traction Systems.
5. The feeding arrangement of a 25kV AC Traction Systems.
6. The continuous rating factor of a 3kV DC Substation.
7. The continuous rating factor of a 25kV AC Substation.

Element 2

Traction return circuits

1. The arrangement of return conductors for Traction Systems.
2. The acceptable resistance value between 3kV DC negative return circuit and earth.
3. What effects stray DC currents have on the surrounding earth?

Element 3

Layout 3kV DC Substation

1. Lighting arrestors.
2. HV AC disconnecting switches.
3. Primary circuit breakers.
4. Main traction transformers.
5. Auxiliary transformers.
6. Rectifiers.
7. Reactor coils.
8. Wave filter equipment.
9. Auxiliary earthing switches.
10. Positive isolators.
11. High Speed circuit breakers.
12. Earth leakage relays.

Element 4

Layout 25kV AC Substation

1. The protection structure of a 25kV AC Traction network.
2. The installation of spark gaps.

ETS 12

Duration	-	7 Days
Period	-	
Theory	-	6 Days
Practical	-	
Written examination	-	1 Day

Element 1

Logbook completion

1. Describe how to complete a Substation (Tie-Station) logbook.
2. Complete the Substation (Tie-Station) logbook in the correct manner.

Element 2

Work Permit completion

1. How to complete a Work Permit.
2. All the relevant Safety Instructions: High-Voltage Electrical equipment pertaining to Work Permits.
3. How to issue and cancel Work Permits.
4. How to communicate with "Electrical Control".
5. Responsible person in charge.

Element 3

Test Permit completion

1. How to complete a Test Permit.
2. All the relevant Safety Instructions pertaining to Test Permits.
3. How to issue and cancel Test Permits.
4. How to communicate with "Electrical Control".
5. The responsibilities of the person in charge of test.

Element 4

Hi-pot tests

1. How to safely perform Hi-pot tests.
2. Know all the relevant Safety Instructions pertaining to Hi-pot tests.
3. Hi-pot testing procedures.

ETS 2

Duration	-	6 Days
Period	-	
Theory	-	2 Days
Practical	-	3 Days
Written examination	-	1 Day

Element 1

Earthing of HV outdoor equipment 3kV DC Substations

1. The earthing of a 3kV DC Traction Substation.
2. The earthing of a 25kV AC Traction Substation.
3. The installation technique of cables installed in Traction Substations.
4. Protection against electrical flashover.

Element 2

Negative return circuit 3kV DC Substations

1. The effect that DC currents have on Traction equipment.
2. The reason for isolating the negative return circuit from earth.
3. The installation procedure of Traction cable.
4. Eskom's earth conductor conveyed on distribution masts.
5. Safe working conditions in an outdoor yard.
6. The installation procedure of earth wires on transmission lines.
7. The safe working procedure in the outdoor yard.
8. Traction equipment in the outdoor yard connected to the negative bus bar.

Element 3

DC earth leakage protection

1. The purpose of DC Earth leakage protection.
2. The acceptable resistance value between DC earth leakage bus bar and the deep trench earth on earth spike.
3. The feeding arrangement of the DC earth leakage.
4. The calibration value of the DC earth leakage.
5. The fault current path to the auxiliary transformer.
6. All the equipment connected to the DC earth leakage.

Element 4

Earthing 3kV Tie-Station

1. The arrangement of conductors between the 3kV DC earth leakage bus bar of a Tie Station and the track.
2. Protective equipment relating to a Tie-Station.
3. The installation of isolation transformers.
4. The necessity of DC earth leakage in "GK" series Tie-Stations.
5. The earthing network of a Tie-Station.

Element 5

Earthing 25kV AC Traction Substation

1. The arrangement of connections of the neutral circuit.
2. The arrangement of equipment of the neutral circuit.
3. The arrangement of connections of the earth circuit.
4. The feeding arrangements of the Substation earth circuit.
5. The installation technique of cables feeding a 25kV AC Substation.
6. Procedure when work has to be carried out on a 25kV AC Substation.
7. Equipment associated with the Substation ring earth.

Element 6

Earthing 3kV DC switches

1. The earthing procedure of 3kV DC switching equipment
2. The installation of capacitors
3. The installation of lightning arrestors
4. The installation of spark gaps

Element 7

Earthing 25kV AC switches

1. The earthing procedure of 25kV AC switching equipment
2. The installation techniques of grading rings

Element 8

Substation earthing maintenance

The test procedure to determine the soundness of interconnecting earth conductors.

Element 9

Earthing requirements for Signal supply feed points and transmission lines.

1. The installation of earthing methods employed on transmission lines
2. The installation of earthing methods employed on 3kV DC structures
3. The installation of cables used on 3kV Traction Systems
4. The installation of cables used on transmission lines
5. The installation of spark gaps
6. Electrical symbols pertaining to the traction network.

ETS 3 & 10

Duration	-	8 Days
Period	-	
Theory	-	4 Days
Practical	-	3 Days
Written examination	-	1 Day

Element 1

Main traction transformer technical details

1. Main traction transformer technical details
2. Operating and maintenance procedure on main traction transformers.
3. The schematic illustration of a main traction transformer.

Element 2

Auxiliary traction transformer technical details

1. Auxiliary traction transformer technical details.
2. 25kV AC traction Substation auxiliary power supplies.

Element 3

Main and auxiliary transformer protection

1. Protection devices of the main and auxiliary transformers for 3kV DC Traction Substations.
2. Protection devices of the main and auxiliary transformers for 25kV AC Traction Substations.
3. Tripping mechanisms on the Buchholz relay.

Element 4

Main and auxiliary traction transformers maintenance

1. The safe working procedure when doing maintenance on traction transformers.
2. The maintenance requirements of traction transformers insulating oil.

Element 5

Vector Diagrams, Vector Symbols and Parallel Operations of Transformers.

1. The displacement of the three phases in an AC system in Vector form.
2. The parallel connections and operation of three phase transformers.
3. The phasing out of transformers with the use of phasing sticks.
4. The paralleling of transformers with different clock-hour numbers but belonging to the same parallel operating group.
5. The schematic illustration of Vector diagrams and symbols.

ETS 4

Duration	-	7 Days
Period	-	
Theory	-	2 Days
Practical	-	4 Days
Written examination	-	1 Day

Element 1

High-Voltage surge arrestors

1. The function and operation of High-Voltage surge arrestors.
2. The installation technique pertaining to surge arrestors.
3. The construction technique pertaining to surge arrestors.

Element 2

High-Voltage disconnecting switches

1. The function of disconnecting switches.
2. The assembly characteristic of disconnecting switches.
3. The maintenance of disconnecting switches.

Element 3

High-Voltage current transformers

1. The function of High-Voltage current transformers at Traction Substations.
2. The installation technique of High-Voltage current transformers.

Element 4

High-Voltage AC circuit breakers

1. The function of the High-Voltage primary circuit breaker.
2. The operation of the High-Voltage primary circuit breaker.
3. The operation procedure of the High-Voltage primary circuit breaker.
4. The methods of connecting shunt capacitors on vacuum circuit breakers.
5. The voltage rating of vacuum circuit breakers.
6. Drive mechanisms for High-Voltage circuit breakers.
7. Various types of lubricants used on spring mechanisms.
8. Various designs of current interrupting equipment.
9. The construction of contact geometry's of vacuum interrupters.

ETS 11

Duration	-	5 Days
Period	-	
Theory	-	3 Days
Practical	-	1 Day
Written examination	-	1 Day

Element 1

The Oscilloscope

1. The electrostatic deflection characteristics of the cathode ray tube.
2. The triggering characteristics of the horizontal swept trace.
3. The precautions to be taken when using an oscilloscope.
4. The purpose of an oscilloscope.

Element 2

Ohm's Law and resistance colour codes

Resolve calculations that express the relationship between voltage, resistance and current flow in a circuit.
Identify the values of carbon film resistors.

Element 3

Meters and measurement

1. The method of installing meters in a circuit to obtain a correct reading.
2. The reason for connecting current and potential transformers in a circuit.
3. The correct application of multi-meters.

Element 4

The Diode

1. The characteristics of diodes when connected in forward or reversed biased mode.
2. Current flow in a full wave rectification circuit.

Element 5

Capacitance and inductance

1. The function of inductors and capacitors in a DC circuit.
2. The characteristics of electrolytic capacitors.
3. The function of components found in a filter circuit.

Element 6

Transistors

1. The purpose of transistors in an electronic circuit.
2. How current is controlled through a transistor.
3. The switching characteristic of transistors.
4. Components relating to a junction transistor.

Element 7

Thyristor

1. Explain the characteristics and properties of the thyristor
2. Describe the function and operation of the silicon-controlled rectifier in a circuit.

ETS 5

Duration	-	7 Days
Period	-	
Theory	-	2 Days
Practical	-	4 Days
Written examination	-	1 Day

Element 1

Silicon Diode

1. The characteristics pertaining to silicon diodes.
2. The fault characteristics pertaining to silicon diodes.
3. The correct method of diode installation.

Element 2

Basic rectifier designs

1. Various pulse outputs from single and multi-phase supply voltages.
2. The advantages of multiple phase rectification.
3. The installation techniques of diodes for traction purpose.

Element 3

Diodes in series and parallel

1. The correct installation procedure of traction diodes.
2. The precautions taken when replacing diodes.
3. The design characteristics of rectifiers.
4. The correct installation procedure of capacitors used in Traction Substations.
5. The design characteristics of avalanche diodes.
6. The function of the attenuation circuit.

Element 4

Testing and servicing of silicon diode rectifiers

1. The test procedure for a bank of traction diodes.
2. How to identify faulty components.
3. How to replace traction diodes.
4. Tasks to be performed from a maintenance schedule.
5. Types of grease used on heat sinks.

ETS 6

Duration	-	12 Days
Period	-	
Theory	-	4 Days
Practical	-	7 Days
Written examination	-	1 Day

Element 1

3kV High-speed circuit breakers: General

1. The function of a high-speed circuit breaker.
2. The construction and principle of operation of a high speed circuit breaker.
3. Breaker fault current characteristics and auxiliary circuits of a high speed circuit breaker.
4. The butt and finger contact assembly.
5. How the HSCB is connected to the DC earth leakage protection circuit.
6. How the HSCB is protected against vermin.

Element 2

3kV High-speed circuit breakers: Closing and tripping cycles

1. The closing operation of a high-speed circuit breaker.
2. The trip free, pumping, magnetic damping and inductive shunt characteristics of a high speed circuit breaker.
3. The method of ensuring that the high-speed circuit breaker holding-in coils is connected correctly.
4. The tripping cycle of a BBT-secheron high speed circuit breaker on over current.

Element 3

Closing/Reclosing of high-speed circuit breakers provided with Electro/Mechanical/Electronic relays

1. Interpret high-speed circuit breaker schematics.
2. Explain the high speed circuit breaker auxiliary circuit functions pertaining to:-
 - (a) Electronic closing relays
 - (b) Over-excitation
 - (c) Variable inputs
3. Explain the "ECR" operation and settings.

Element 4

3kV High-speed circuit breakers: Maintenance and calibration

1. Maintenance procedures of 3kV DC high-speed circuit breakers pertaining to:-
 - (a) Main contacts
 - (b) Mercury tilt switches
 - (c) Tripping springs
 - (d) Tripping range of Ansaldo types HSCB
2. Safety high voltage testing of high-speed circuit breakers.
3. The calibration of a 3kV DC high-speed circuit breaker.

Element 5

3kV DC High-speed circuit breakers: Arc chute

1. The construction of various 3kV DC HSCB arc chutes.
2. The dissipation characteristics of various arc chutes on a breaker fault trip.
3. The maintenance procedures of various arc chutes and use of safety equipment.

ETS 7

Duration	-	4 Days
Period	-	
Theory	-	1 Day
Practical	-	2 Days
Written examination	-	1 Day

Element 1

Lead acid batteries

1. The functions of batteries in Substations
2. All the technical data relating to the maintenance of substation batteries.
3. The commissioning of new batteries.
4. The safety aspects when working in a Substation with batteries.
5. The float charge, stratification, equalising and boost charge procedure.
6. The reading of specific gravity readings correctly of hydrometer.
7. Temperature correction on nickel cadmium and lead acid batteries.
8. The advantages and disadvantages of the sealed lead acid battery.

Element 2

Nickel-cadmium batteries

1. The properties pertaining to nickel-cadmium batteries.
2. The maintenance procedure on nickel-cadmium batteries.
3. The characteristics of the electrolyte and composition thereof.
4. Temperature correction of nickel-cadmium batteries.
5. Boost and float charge procedures.

Element 3

Typical Substation battery charger

1. The continuous output current rating characteristics.
2. The function of components in the charger.
3. The sequence of adjustments.
4. The events leading to a battery under-voltage.
5. The events leading to and precautions taken when placing a substation on load after a battery under-voltage.

ETS 8

Duration	-	5 Days
Period	-	
Theory	-	1 Day
Practical	-	3 Days
Written examination	-	1 Day

Element 1

High-Voltage protection and control equipment

1. The purpose of Substation protection devices in Traction Substations.
2. The correct settings and operation of various protection devices.
3. How to place a Substation back on load after DC earth leakage or under-voltage operation.
4. The limitations within which the traction rectifier can operate.
5. By means of a sketch earth fault current flow in the Substation and outdoor yard.

Element 2

High-Voltage fuses

1. Calculate the rated inrush and short circuit current of single and three phase transformers.
2. Select the correct rated fuse for primary and secondary protection of the transformer.

ETS 9

Duration	-	3 Days
Period		
Theory	-	2 Days
Practical	-	
Written examination	-	1 Day

1. Regeneration.
2. The advantages of regenerative braking.
3. The faults that cause regenerative braking to fail.
4. The conditions that must prevail before regenerative braking can exist.
5. The different response values for calibration purpose.
6. Substation regenerative controller.
 - (a) The power supply card
 - (b) The voltage to frequency card
 - (c) The optic fibre card
 - (d) The micro processor card
7. Which equipment in the Substation is connected to the regents DC earth leakage circuit?

Revision

Duration	-	6 Days
Period		
Final written exam	-	

2. CONTROL OF WORK AND QUALITY ASSURANCE

It is an essential element of this contract that the control of the work, the Quality Control and Quality Assurance falls under the direct control of the Service Provider. Should the Tenderer have a specialist sub-contractor, special arrangements will be required in terms of their contractual arrangement to ensure that the above control is possible. Such arrangements are to the Tenderers discretion but the Tenderer must demonstrate that the arrangement is functional and workable to the entire satisfaction of the organisation.

3. OCCUPATIONAL HEALTH AND SAFETY ACT

The Service Provider shall ensure that he is fully conversant with the latest edition of the Occupational Health and Safety Act.

4. REQUIREMENTS

For the purpose of this quote the service provider must ensure that he/she submits proof of the outlined requirements below, failure to do so, will render the service providers quote unsuccessful:

- 8.1 Previous Experience; Supply detailed information of recent Category 'A' Brown training programs that you (service provider) conducted and successfully completed with traceable references.
- 8.2 Provide proof of accreditation (Accreditation certificate).
- 8.3 The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).
- 8.4 The Service Provider shall be responsible for travelling and accommodation of its own facilitator and the rates must be incorporated on the Bill of Quantities.

5. PENALTIES

The service provider will be charged a penalty of 0.3% of the contract price per day delayed after the contractual

BILL OF QUANTITIES- ELECTRICAL TRACTION SYSTEMS(ETS)

NO	ITEM DESCRIPTION	UOM	QTY	UNIT PRICE	TOTAL
1	ETS	Person	1		
	<i>Sub total</i>				
	<i>Vat</i>				
	<i>Total</i>				

(5) EXAMINATION OFFICER TRAINING

1 PROJECT PURPOSE

This project specification covers a general description of the project and the requirements to be met. It is about the training of the PRASA KZN staff to be able to undertake the duties of an examining officer in the electrical environment. The Tenderer shall be responsible for all items indicated on the attached BOQ.

2 DURATION OF CONTRACT

PRASA KZN requires that the Training be completed within 3 days from the date of written notification of acceptance of the quote, or to such later date as may be specified in the advice of award.

3. QUALIFICATIONS

All Service Providers must be TETA (Transport Education Training Authority) accredited. Please provide the accreditation certificate

4. LOCATION OF TRAINING VENUE

Transnet Training Facility Durban

5 GENERAL DESCRIPTION

The training will cover the following items:

- Definitions
- Working on the Restricted Access Way
- Working on HV Electrical Equipment
- Apply, Issue and Cancel Permits
- Authorization of personnel
- Training and Examining Requirements for various Categories of Licenses
- Advice of issue and renewal of certificate/letter of authority
- Supplementary Authority to perform work and/or switching in additional Area
- General guidelines for electrical personnel from other depots to assist during a shutdown

6 OCCUPATIONAL HEALTH AND SAFETY ACT

The Service Provider shall ensure that he is fully conversant with the latest edition of the Occupational Health and Safety Act.

7 REQUIREMENTS

For the purpose of this quote the service provider must ensure that he/she submits proof of the outlined requirements below, failure to do so, will render the service providers quote unsuccessful:

- 7.1 Previous Experience: Supply detailed information of recent Examining Officer training programs that you (service provider) conducted and successfully completed with traceable references.
- 7.2 Provide proof of accreditation (Accreditation certificate).
- 7.3 The Service Provider shall submit a detailed training programme in the form of Gantt chart, showing the section to be covered in the training and duration of the course (expected starting and completion dates of the course).
- 7.4 The Service Provider shall be responsible for travelling and accommodation of its own facilitator and the rates must be incorporated on the Bill of Quantities.

8. PENALTIES

The service provider will be charged a penalty of 0.3% of the contract price per day delayed after the contractual

BILL OF QUANTITIES-EXAMINING OFFICE TRAINING

NO	ITEM DESCRIPTION	UOM	QTY	UNIT PRICE	TOTAL
1	Examining Officer	Person	1		
	<i>Sub total</i>				
	<i>Vat</i>				
	<i>Total</i>				