DEPARTMENT

TECHNICAL SERVICES

DIRECTORATE

ELECTRICITY AND ENERGY

DIVISION

TECHNICAL SUPPORT

PROCUREMENT DOCUMENT

GOODS/SERVICES

Documents are to be obtained, free of charge, in electronic format, from the National Treasury's eTenders website or the eThekwini Municipality's website.

Tender No: **37074-5E**

Title: **SUPPLY, DELIVERY AND OFF-LOADING OF 500 kVA MINI-SUBSTATIONS AND 11 kV RING MAIN UNITS DURING A 36 MONTH PERIOD (AS AND WHEN REQUIRED)**

CLARIFICATION MEETING AND QUERIES

Clarification Meeting & Email Queries: There will be no clarification meeting. Email queries are to be submitted by 2027-01-15. The consolidated questions and answers to the queries will be uploaded by 2027-01-21.

Queries can be addressed to:

General/Contractual: **Nyaniso Mlilo; Tel: 031 311 9422; eMail: Nyaniso.mlilo@durban.gov.za**

Technical: **Nazeer Vawda; Tel: 031 311 9635; eMail: nazeer.vawda@durban.gov.za**

DELIVERY OF TENDERS

Sealed Tenders, addressed to the City Manager and marked with the Tender Number, are to be placed in the Tender Box **located in the ground floor foyer of the Municipal Buildings, 166 KE Masinga Road (Old Fort Rd), Durban** (and not any other municipal department): Tenderers are to also make an electronic submission via the eThekwini Municipality JDE System (ESP Module)

ESP Queries: Contact: Lindo Dlamini: Tel: 031-322-7133/031-322 7153
Email: supplier.selfservice@durban.gov.za

Closing Date: **Friday, 29 January 2027**

Time: **11:00 am**

FACSIMILE, eMAIL or POSTED TENDERS WILL NOT BE ACCEPTED

Issued by:

ETHEKWINI MUNICIPALITY

Deputy Director: TECHNICAL SUPPORT

Issued: November 2026 **Document Version: 01/12/2025**

NAME OF TENDERER: .....

Tender Price: R ..... **VAT Registered: YES/NO** (circle applicable)

PROCUREMENT DOCUMENT (Goods/Services)

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SECTION 1: GENERAL INFORMATION

YOU ARE HEREBY INVITED TO TENDER FOR REQUIREMENTS OF THE ETHEKWINI MUNICIPALITY

TENDER No.: 37074-5E

DESCRIPTION: **SUPPLY, DELIVERY AND OFF-LOADING OF 500 kVA MINI-SUBSTATIONS AND 11 kV RING MAIN UNITS DURING A 36 MONTH PERIOD (AS AND WHEN REQUIRED)**

CLOSING DATE/TIME: Friday, 29 January 2027 at 11:00 am

All tenders must be submitted on official tender documentation issued (in electronic format) by the eThekwini Municipality from:

- the National Treasury's eTenders website (https://www.etenders.gov.za/), or
- the eThekwini Municipality's website (https://www.durban.gov.za/pages/business/procurement). Electronically downloaded documentation should be printed by the tenderer.
- Bidders must submit a "hard copy" submission to the Tender Box located in the ground floor foyer of the Municipal Buildings, 166 KE Masinga Road (Old Fort Rd), Durban and an electronic submission via eThekwini Supplier Portal (ESP). Notwithstanding the electronic submission, a tender offer will only be deemed valid if the "hard copy" submission has been made. The "hard copy" submission will be deemed to be the ruling version. Bidders are responsible for resolving all access rights and submission queries before the tender closing date. Tender closing date and time remain unchanged

Tenderers are required to be registered on the **National Treasury Central Supplier Database** (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.

Registration on the **eThekwini Municipality's Database** can be done via website:
https://ethekwinivendor.durban.gov.za/ and on **ESP:** supplier.selfservice@durban.gov.za

Tenderers should ensure that tenders are delivered timeously to the correct address as stated in the Conditions of Tender. If a tender is late, it will not be accepted for consideration.

The Municipality will consider a tender submitted in response to this request for tender to be an offer from your company to perform the supply on the basis of that tender. Accordingly, please review the attached General and Special Terms and Conditions which will form the basis for any supply arrangement entered into between the Municipality and your company.

The Municipality is seeking tenders from potential suppliers only and makes no representation or promise in relation to procuring work from a supplier or suppliers. The Municipality will not be responsible for any costs associated with preparing and submitting a tender.

SECTION 3: ACT 7 bears reference to the tender award. The Municipality does not bind itself to accept the lowest or any tender. It reserves the right to accept the whole or any part of a tender to place orders.

Bidders shall not bind the Municipality to any minimum quantity per order. The successful Tenderer(s) shall be bound to provide any quantities stipulated in the specification.

The successful tenderer will be required to fill in and sign a written Contract Form (MBD 7).

NB: NO TENDER WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (as defined in Regulation 44 of the Local Government: Municipal Supply Chain Management Regulations).

THE FOLLOWING PARTICULARS MUST BE FURNISHED
(Failure to do so may result in your tender being disqualified)

Name of Tenderer: …….....

Postal Address: …….....

Street Address: …….....

E-Mail Address: …….....

Telephone Number:				-				-					
Cell phone Number:				-				-					
Facsimile Number:				-				-					

	Circle Applicable
Is your entity registered on the **eThekwini Municipality's supplier database**?	YES/NO
• **If YES insert** your PR Number: .....…….....…….....…….

SECTION 2 : CONDITIONS OF TENDER – (Goods / Services : June 2019)

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SPECIAL/ADDITIONAL CONDITIONS OF TENDER

STANDARD CONDITIONS OF TENDER (Goods/Services)

1. DEFINITIONS

General:

(1) Defined words/phrases are printed in Italic font.
(2) Definitions apply to the singular as well as the plural.
(3) Any reference to the masculine gender shall be taken to include the feminine and any reference to the feminine gender shall be taken to include the masculine.
(4) The words "bid" and "tender", and "bidder" and "tenderer" can be used interchangeably.
(5) All definitions as defined in the ***General Conditions of Contract*** are applicable to these ***Standard Conditions of Tender***. These definitions include:
- "Closing time"
- "Contract"
- "Contract Price"
- "Corrupt practice"
- "Countervailing duties"
- "Country of origin"
- "Day"
- "Delivery"
- "Delivery ex stock"
- "Delivery into consignees store or to his site"
- "Dumping"
- "Force majeure"
- "Fraudulent practice"
- "GCC"
- "Goods"
- "Imported content"
- "Local content"
- "Manufacture"
- "Order"
- "Project site"
- "Purchaser"
- "Republic"
- "SCC"
- "Services"
- "Supplier"
- "Tort"
- "Turnkey"
- "Written" or "in writing"

(6) **Bid or Tender**: The offer submitted in respect of an invitation to submit such an offer.
(7) **Bidder or Tenderer**: An entity (company, close corporation, partnership, joint venture, sole proprietor) which submits a *bid/tender*.
(8) **Municipality**: The eThekwini Municipality, as represented by the duly authorised delegate, official or committee.
(9) **SCT:** Special Conditions of Tender (found in Section 3).
(10) **Week**: A period of seven (7) consecutive *days*.
(11) **Material Deviation**: A material deviation or qualification is one which, in the *Municipality's* opinion, would:
(a) Detrimentally affect the scope, quality, or performance of the services or supply identified in the Scope;
(b) Significantly change the *Municipality's* or the *Tenderer's* risks and responsibilities under the contract; or
(c) Affect the competitive position of other *Tenderers* presenting responsive *tenders*, if it were to be rectified.

2. CONDITIONS OF TENDER & CONTRACT

The specification will be governed by the ***Standard Conditions of Tender*** (Goods and Services), ***Special Conditions of Tender (SCT)***, ***General Conditions of Contract (GCC)*** (Government Procurement General Conditions (July 2010), as amended by National Treasury Circular 52 dated 30 July 2010), the ***Special Conditions of Contract (SCC)***, the ***Occupational Health and Safety Act*** (Act No. 85 of 1993), and the ***eThekwini Code of Conduct***.

Complete Acceptance of Conditions

Unless otherwise expressly stipulated in a letter covering the *tender*, every *Tenderer* shall be deemed to have waived, renounced, and abandoned any conditions printed or written upon any stationery used for the purpose of, or in connection with, the submission of their *tender*, which are in conflict with the ***General Conditions of Contract*** and ***Special Conditions of Contract***. *Tenderers* are advised that any *material divergences/qualifications* from the official Conditions or Specification will render their *tenders* liable to disqualification.

3. TENDER INFORMATION

(1) **General**
(a) *Tenders* will be liable for rejection unless made out on the official tendering documentation.
(b) Any alterations effected upon any of the tendering documents must be clearly shown by means of a hand written (black, non-erasable ink), or typed, entry and must be signed in full by the *Tenderer*. **The use of correction fluid is not permitted**.
(c) *Tenderers* may submit alternative solutions that, in the *Tenderer's* opinion, are to the *Municipality's* advantage economically and technically. Full technical details of the alternative *tender(s)* shall be submitted with the tender documents. Alternative *tender(s)* shall be submitted separately.

(2) **Obtaining Tender Documentation**

All tenders must be submitted on official tender documentation issued, in electronic format, by the eThekwini Municipality. Electronically downloaded documentation (obtainable free of charge) should be printed and suitably bound by tenderer.

(3) **Queries Relating to this Tender**

Queries can be directed to the person/Department as stated in the ***SCT***.

(4) **Briefing Session (Clarification Meeting)**

Details of the briefing session are stated in the ***SCT***.
Failure to attend a compulsory briefing session will invalidate the *tender*. *Tenderers* must sign the attendance list in the name of the tendering entity. Tenders will only be evaluated from those tendering entities appearing on the attendance list.

(5) **Closing Date and Delivery of Tender Submissions**

Sealed *tenders* made out on the enclosed Official Tender Form, which shall be signed by or on behalf of the *Tenderer* , and addressed to the City Manager, marked with the appropriate Tender number, must be placed in the **Tender Box** as stated in the ***SCT*** not later than the **date and time** as stated in the ***SCT***, where after they will be opened publicly.

All tender documents **must** be placed directly into the Tender Box and should not be delivered to any other Municipal Department. *Bidders* are advised that *tenders* submitted by post, fax or email **will not** be considered. All couriered documents must be placed directly into the Tender Box and should not be delivered to any other Municipal Department.

Any *tender* received after the closing date and time stated for the receipt thereof **shall not** be accepted for consideration and shall be returned to the *Tenderer*.

(6) **Tender Validity and Withdrawal of Tenders**

Tenders must hold good until 16:00 of the 5th week following the date on which *tenders* are opened, or during such other period as may be specified in the ***SCT***. The *Municipality* may, during the period for which *tenders* are to remain open for acceptance, authorize a *Tenderer* to withdraw their *tender* in whole or in part on condition that the *Tenderer* pays to the *Municipality* on demand, a sum of one thousand Rand (R1,000.00). The *Municipality* may, if it thinks fit, waive payment of such sum in whole or in part.

4. **RETURNABLE SCHEDULES, FORMS, CERTIFICATES**

Each *Tenderer* shall complete fully and accurately the following documents and submit these documents with the *tender*:

(1) **Authority of Signatory:** In terms of Clause 4(5)(c) of the Conditions of Tender.

(2) **Tax Compliance Status PIN/Tax Clearance Certificate:** SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

(3) **Declaration of Municipal Fees:** Only those *Bidders* whose municipal fees are fully paid, or those that have concluded acknowledgement of debt agreements with the *Municipality*, are eligible to *tender*.

All Bidders must sign the Declaration of Municipal Fees returnable form, declaring that their municipal fees are in order or that acknowledgement of debt agreements have been concluded, and include the relevant account numbers in the declaration. Failure to include account numbers or sign will invalidate the *tender*. The completion of the declaration is also applicable to *Bidders* outside of the eThekwini Municipal Area.

(4) **Declaration with respect to the Occupational Health and Safety Act:** Acceptance of undertaking in terms of the Occupational Health and Safety Act (Act 85 of 1993) and the relevant Regulations.

(5) **Municipal Bidding Documents** (which includes):

(a) **MBD 4:** Declaration of Interest: All Bidders are to sign the Declaration of Interest wherein they declare any relationship that may exist with an official of the Municipality involved in the evaluation process.

Regulation 44 of the Supply Chain Management Regulations states that a Municipality or Municipal Entity may not make any award to a person:

(i) Who is in the service of the state;
(ii) If that person is not a natural person, of which any Director, Manager, Principal, Shareholder or Stakeholder is a person in the service of the state; or
(iii) Who is an advisor or consultant contracted with the Municipality or municipal entity.

Should a contract be awarded, and it is subsequently established that Regulation 44 has been breached, the Municipality shall have the right to terminate the contract with immediate effect.

(b) **MBD 5:** Declaration for Procurement Above R10 Million (if applicable): For all procurement expected to exceed R10 million (all applicable taxes included), tenderers must complete this questionnaire.

(c) **MBD 6.1**: Preference Points Claim Form: For the awarding of Preference Points, Bidders are required to complete the attached MBD 6.1 form and return it with their tender submission. Failure on the part of a tenderer to complete and submit this form will be interpreted to mean that preference points for **Specific Goals** are not claimed.

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

(d) **MBD 8**: Declaration of Bidders Past Supply Chain Management Practices Form: This form serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

(e) **MBD 9**: Certificate of Independent Bid Determination: Section 4(1)(b)(iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms if it involves collusive tendering or tender rigging. In order to give effect to this, the Certificate of Bid Determination must be completed and submitted with the tender.

(5) **Official Tender Form** (see Section 9)

(a) Legal Status of Tenderer
It is essential for the purpose of entering into a legal contract that *Bidders* state on the Official Tender Form, under "Name and Address of Tenderer ", their full legal status:
(i) the full registered name of the company making a *tender*; or
(ii) if the *Tenderer* is a person conducting business under a recognised trading name then:
- State the name of the person(s);
- State recognised trading name; and
- State whether an owner, co-owner, proprietor, etc.

(b) **Signing of Official Tender Form**
Failure of a *Tenderer* to complete, in its entirety, and sign the Official Tender Form will invalidate the *tender*.

(c) **Authority of Signatory**
Bidders are to complete and sign the Authority of Signatory returnable document, and attach the required additional documents.

(d) **Differences or Discrepancies**
Should there be any difference or discrepancy between the prices or price contained in the Official Tender Form and those contained in any covering letter from the Tenderer, the prices or price contained in the Official Tender Form shall prevail.

(6) **Any additional Schedules, Forms, or Certificates as stated in the *SCT*.**

5. **INFORMATION TO BE SUPPLIED REGARDING SUB-CONTRACTORS**

Bidders are to state in their *tenders*, or covering letters, whether, if the contract were to be awarded to them, the whole of the work would be executed by them in their own workshop/factory. If the answer is in the negative, they are required to state which part(s) would be handed to sub-contractors and the name and address of such sub-contractors.

6. **SAMPLES**

Bidders may be required to state where samples of the full range of products can be inspected or be required to submit samples for inspection prior to the closing date of the *tender*.

7. **MANUFACTURERS**

The names of the manufacturers of the goods or equipment offered must be stated in the *tender*.

Bidders who are not manufacturers, accredited distributors, or agents must provide a valid agreement/Joint Venture Agreement, entered into with the manufacturer, accredited distributors, or agents, with their submission. This agreement must meet all the requirements as laid down in the *tender* document, and must cover the contract period.

8. **CLARIFICATION**

The Head: Supply Chain Management Unit, or an authorized representative, may request clarification or further information on any aspect of the *tender*. The *Tenderer* **must** supply the requested information within the time specified. Failure to comply will render the *tender* non-responsive.

9. **PRICING**

Bidders would be precluded from this *tender* if their pricing structure deviates from the Official Tender Form.

(1) **Nett Prices**
All prices shall be quoted in South African currency (Rand) after deduction of any brokerage or discount allowed to the Municipality.

(2) **Unit Prices**
Bidders shall quote only one price in respect of each item. Such price is to hold good for the full duration of the contract period, being subject to variation only in accordance with specified criteria, as stated in the ***Conditions of Contract***.

(3) **Firm Tenders**
Bidders may submit firm prices for each 12 month period. These prices shall be free from all fluctuations, including any statutory increases.

(4) **Value Added Tax (V.A.T)**
Prices exclusive and inclusive of VAT must be stated separately on the Official Tender Form.

10. **ESTIMATED QUANTITIES**

The estimated quantities are set out in Section 8 : Bill of Quantities/Schedule of Rates/Activities which forms part of the official tender documents. The quantities are stated purely for the information of the *Bidders* and are in order to ascertain an estimated total contract price. The *Supplier* will, however, be bound to supply whatever quantity or quantities the *Municipality* may actually require, and may exceed, or be less than, the estimated quantities stated.

11. **DELIVERY, RISK, PACKAGES, ETC**

(1) Unless otherwise provided, all goods are to be supplied only against the form of order issued by the *Municipality*.
(2) *Bidders* shall quote a unit price which shall include delivery to the specified delivery point, as stated in the ***SCT.***
(3) The risk in all goods purchased by the *Municipality* under the contract shall remain with the *Supplier* until such goods shall have been duly delivered.
(4) *Bidders* shall clearly state the period within which delivery will be made after receipt of the official order, as this may be material in the adjudication of the *tender*.

12. **RATES OF EXCHANGE**

(1) Where the goods are imported the *Supplier* shall, within seven days of date of official Purchase Order, arrange through their bankers for the foreign commitment to be covered forward down to the Rand in order to fix the rate of exchange. The *Supplier* shall notify the *Municipality* as soon as possible thereafter regarding the rate which has been fixed on such forward exchange.

Any increase or decrease between the basic rate of exchange as at a date seven days prior to the date of closing of *tenders* and that existing at the date of establishment of the forward exchange cover within the period stipulated above shall be paid or deducted by the Municipality. Upon the failure of the *Supplier* to arrange forward exchange cover, the *Supplier* shall be liable should there be any increase in the basic rate of exchange occurring after the last mentioned date.

The bank charges incurred in obtaining the forward exchange cover shall be for the *Municipality's* account.

(2) The *Supplier* shall on request:
(a) Submit documentary proof of the rate of exchange; and
(b) When an adjustment is claimed in terms of this sub-clause, whether by the *Supplier* or the *Municipality*, submit documentary proof to the satisfaction of the Deputy City Manager: Treasury in respect of such claim.

13. **IMPORT PERMITS**

(1) In order to minimise special importation, *Bidders* should, where possible, have recourse to local suppliers and/or manufacturers.
(2) *Bidders* must state whether their *tender* is dependent upon the issue of a special import permit or whether they are able to supply the goods by making use of the import facilities available to them.
(3) In the event of a tender being dependent upon the issue of a special import permit, application for such special import permit shall be made by the Tenderer , unless otherwise provided for in the ***SCT***.

14. **EVALUATION PROCESS**

The procedure for evaluation of responsive Tender Offers will be in accordance with the eThekwini Municipality's current SCM Policy and the Preferential Procurement Policy Framework Act (5 of 2000), and the Preferential Procurement Policy Framework Act Regulations (November 2022).

Details of additional evaluation criteria, if applicable, are stated in the *SCT*.

Evaluation points for price and preference will only be calculated for *Bidders* who comply with the contractual and technical specification, and if applicable, have attained the minimum Functionality Score as stated in the ***SCT***.

The evaluation process of responsive *tenders* will be as follows:

- Score each *tender* in respect of the financial offer made and preferences claimed (if any);
- Calculate the total number of evaluation points (T_{EV}) in accordance with the following formula:
  $T_{EV} = N_{FO} + N_P$ where: **N_{FO}** : is the number of evaluation points awarded for the financial offer; and **N_P** : is the number of evaluation points awarded for preferences claimed.
- Rank *tenders* from the highest number of evaluation points to the lowest.
- Recommend the *Tenderer* with the highest number of evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- Rescore and re-rank all *Bidders* should there be compelling and justifiable reasons not to recommend the *Tenderer* with the highest number of evaluation points, and recommend the *Tenderer* with the highest number of evaluation points, unless there are compelling and justifiable reasons not to do so, and the process set out in this sub-clause is repeated.

(1) **Evaluation points awarded for the financial offer:**

Reference is to be made to the Special Conditions of Tender (***SCT)***, and returnable form 5(c) in Section 4.

INCOME-GENERATING CONTRACTS

The financial offer will be scored using the formula: $N_{FO} = W\left(1 + \frac{Pt - Pmax}{Pmax}\right)$

GOODS and SERVICES

The financial offer will be scored using the formula: $N_{FO} = W\left(1 - \frac{Pt - Pmin}{Pmin}\right)$

Where the value of W is:

(a) **90** where the financial value inclusive of VAT of all responsive *tenders* received have a value in excess of R 50,000,000; OR
80 where the financial value inclusive of VAT of one or more responsive *tenders* offers have a value that equals or is less than R 50,000,000.
It is unclear (at the time of advertising) which of the two preference point systems applies. Either the 80/20 or 90/10 preference point system will apply, determined by the price offered by the lowest acceptable tender.

(b) **Pmax** is the comparative offer of the most favourable comparative offer (highest acceptable tender).

(c) **Pmin** is the comparative offer of the most favourable comparative offer (lowest acceptable tender).

(d) **Pt** is the comparative offer of the *tender* offer under consideration.

(2) **Evaluation points awarded for preference:**

The **Specific Goals** for Preference Points are specified in the ***SCT***.

15. **BRIBERY AND COMMUNICATION WITH COUNCILLORS / OFFICIALS**

(1) **Bribery**

No *Tenderer* shall offer, promise or give to any person or person connected with a *tender* or the awarding of a contract, any gratuity, bonus or discount etc, in connection with the obtaining of a contract.

(2) **Communication, Councillors and Officials**

A *Tenderer* shall not in any way communicate with a member of the *Municipality* or with any official of the *Municipality* on a question affecting any contract for the supply of goods or for any work, undertaking or services which is the subject of a *tender* during the period between the closing date for receipt of *tenders* and the dispatch of the written notification of the *Municipality's* decision on the award of the contract; provided that a *Tenderer* shall not hereby be precluded:

(a) At the request of the Head: SCM Unit, or an authorized representative, from furnishing him with additional information or with a sample or specimen for testing purposes or otherwise from giving a demonstration so as to enable the recommendation to the Bid Committee on the award of the contract to be formulated;

(b) From obtaining from the Head : SCM Unit, or an authorised representative, information as to the date upon which the award of the contract is likely to be made, or, after the decision upon the award has been made by the *Municipality* or any Committee to which the *Municipality* has delegated its powers, information as to the nature of the decision or such information as was publicly disclosed at the opening of *tenders* or from submitting to the Accounting Officer in writing any communication relating to their *tender* or the award of the contract or a request for leave to withdraw their *tender*; and

(c) Provided further that nothing contained herein shall be construed so as to prevent information being sought and obtained from an Official in regard to any decision taken at an open Municipal meeting, or any Committee to which the *Municipality* has delegated its powers.

A contravention of subsection (1) and/or (2), or an attempt to contravene such subsection, shall be reported to the Accounting Officer, who may on receipt of such report disqualify the *tender* of the *Tenderer* concerned.

16. **NEGOTIATIONS WITH PREFERRED BIDDERS**

The *Municipality* reserves the right to invoke Regulation 24 of Municipal Finance Management Act if required.

(1) The Accounting Officer may negotiate the final terms of a contract with *Bidders* identified through a competitive tendering process as preferred *Bidders*, provided that such negotiation:

- Does not allow any preferred *Tenderer* a second or unfair opportunity;
- Is not to the detriment of any other *Tenderer* ; and
- Does not lead to a higher price than the *tender* as submitted.

(2) Minutes of such negotiations must be kept for record purposes.

(3) Such negotiation may be delegated by the Accounting Officer.

17. **CANCELLATION OF TENDER PROCESS**

The municipality is entitled to cancel the tender at any time before the award of a tender and the decision to cancel the tender shall be published in the same manner in which the original tender invitation was advertised. The Municipality shall, in no way, be liable for any damages whatsoever, including, without limitation, damages for loss of profit, in any way connected with the cancellation of this bid.

18. **ACCEPTANCE OF BID**

(1) The *Municipality* does not bind itself to accept the lowest or any *tender*, and reserves the right to accept the whole or any part of a *tender* to place orders.

(2) The *Municipality* reserves the right to accept more than one technically and contractually compliant *tender* for part or the whole of the contract and to place orders on the price and availability.

(3) *Bidders* shall not bind the *Municipality* to any minimum quantity per order.

(4) The successful *Tenderer(s)* shall be bound to provide any quantities stipulated in the specification.

(5) Tenders will only be accepted on condition that:

(a) The *tender* is signed by a person authorised to sign on behalf of the *Tenderer* .

(b) A valid (at time of close of tenders), original, Tax Clearance Certificate OR Tax Compliance Status PIN is included with the *tender* submission. Both should have sufficient validity to ensure the process is adequately covered;

(c) A *Tenderer* who submitted their *tender* as a Joint Venture has included an acceptable Joint Venture Agreement and a B-BBEE Certificate pertaining to the Joint Venture with their *tender*.

(6) Financial Standing: The Head: Supply Chain Management reserves the right to require *Bidders* to submit evidence that their financial standing is adequate to meet their obligations under the contract should they be successful.

(7) Change of Ownership or Major Policy: Where it is known to a *Tenderer* that a change in ownership or major policy (of the tendering entity) will occur, or is likely to occur, during a specified contract period, the scope and effect thereof must be fully defined in a covering letter to be submitted with the *tender*.

(8) Purchase of Goods From Other Sources: Nothing contained in this contract shall be held to restrain the *Municipality* from purchasing from persons other than the *Supplier*, any of the goods described or referred to in this contract, if it shall in its discretion think fit to do so.

(9) Capability and Breach of Contract: Tenderers that do not have the capability of undertaking this enquiry in terms of the requirements of the contract or have been in breach of contract previously will not be considered.

19. **PAYMENT and FACTORING**

Payment conditions will be as per the ***Conditions of Contract***.

Payment will be made only to the *Supplier(s).* Factoring arrangements will not be accepted.

20 **APPEALS**

In terms of Regulation 49 of the Municipal Supply Chain Management Regulations persons aggrieved by decisions or actions taken by the *Municipality*, may lodge an appeal within 14 days of the decision or action, in writing to the *Municipality*. The appeal (clearly setting out the reasons for the appeal) and queries with regard to decision of award are to be directed to the office of the City Manager, attention:

Ms. S. Pillay, P.O. Box 1394, Durban, 4000;
eMail: Simone.Pillay@durban.gov.za.

SECTION 3: SPECIAL/ADDITIONAL CONDITIONS OF TENDER

3.1 SPECIAL CONDITIONS OF TENDER (SCT)

The ***Standard Conditions of Tender*** (Goods/Services) make several references to the ***Special Conditions of Tender*** *(SCT)* for details that apply specifically to this tender. The ***SCT*** shall have precedence in the interpretation of any ambiguity or inconsistency between it and the ***Standard Conditions of Tender***.

Each item below is cross-referenced to the clause in the ***Standard Conditions of Tender*** to which it mainly applies.

SCT 3(1) TENDER INFORMATION: General

The tender document comprises a cover page and 102 pages.

SCT 3(2) TENDER INFORMATION: Obtaining Tender Documentation

Documents are issued by the eThekwini Municipality in an electronic format. Electronically downloadable documentation is obtainable from:

a) the National Treasury's eTenders website (https://www.etenders.gov.za/); or
b) the eThekwini Municipality's website (https://www.durban.gov.za/pages/business/procurement).

The entire document should be printed on A4 paper (one sided), and suitably bound by the tenderer.

SCT 3(3) TENDER INFORMATION: Queries Relating to this Tender

General and Contractual Queries are to be directed to:
Nyaniso Mlilo; Tel: 031 311 9422; eMail: Nyaniso.mlilo@durban.gov.za
Technical Queries are to be directed to:
Nazeer Vawda; Tel: 031 311 9635; eMail: nazeer.vawda@durban.gov.za

SCT 3(4) TENDER INFORMATION: Briefing Session and Queries

There will be no clarification meeting. Email queries are to be submitted by 2027-01-15. The consolidated questions and answers to the queries will be uploaded by 2027-01-21.

SCT 3(5) TENDER INFORMATION: Closing Date and Delivery of Tender Submissions

a) Tenderers are hereby advised to submit the following, no later than **Friday, 29 January 2027** at 11:00 am:
   i) A signed **hard copy** of the Tender Document that is sealed, addressed to the City Manager and clearly marked with the Tender Number. This **hard copy** shall be deposited into the Tender Box **located in the ground floor foyer of the Municipal Buildings at 166 KE Masinga Road (Old Fort Rd), Durban**; and
   ii) An **electronic copy** of the Tender Document, identical to that of the signed **hard copy**, via the eThekwini Municipality JDE System (ESP Module).
b) Notwithstanding the submission of the **electronic copy** of the Tender Document via the JDE System (ESP Module):
   i) The Tender Offer shall only be deemed valid if the **hard copy** submission has been made; and
   ii) The **hard copy** submission shall take precedence and be utilised for the evaluation of Tenders.
c) In the event of any ambiguity or inconsistency within the **hard copy** submissions, eThekwini Municipality reserves the right to verify the information by comparing the **hard copy** with the corresponding **electronic copy**. Subsequently, if the **electronic copy** is found not to be identical to the **hard copy**, the Tender Offer shall be deemed invalid.
d) Tenderers shall ensure all access rights and submission queries related to the JDE system are resolved prior to the closing date.
e) Bid Viewing, Tender Document Download and Bid Submission Process
   The following link must be followed for login, to view advertised bids, and to submit a bid advertised by eThekwini Municipality.

https://rfq.durban.gov.za/jde/E1Menu.maf

All queries related to the JDE system shall be directed to:

	ESP Queries	ESP Technical Queries
Name	Lindo Dlamini	Kgopotso Maja
Contact number	031 322 7133 or 031 322 7153	031 322 3808
Email	supplier.selfservice@durban.gov.za	kgopotso.maja@durban.gov.za

SCT 3(6) **TENDER INFORMATION: Tender Validity and Withdrawal of Tenders**

a) Tenders must remain valid for a period of 120 days following the date on which the Tenders are opened. This period is referred to as the **original validity period**.
b) In addition to the original validity period, Tenders must remain valid for acceptance for a further period of twelve (12) months, unless the Municipality is advised otherwise by the bidder in writing.
c) eThekwini Municipality reserves the right to request confirmation of Tender validity at any time during the twelve (12) month period.

SCT 4(6) **RETURNABLE SCHEDULES, FORMS, CERTIFICATES**

The returnable documents, schedules and declarations required are listed in **ACT 12 of SECTION 3**.

SCT 11(2) **DELIVERY, RISK, PACKAGES, ETC**

a) The cost of packaging (where applicable), delivery and off-loading shall be amortised into the tender price of the respective item. Hence the Supplier shall not submit separate or additional charges.
b) The delivery of goods shall be by road to the Electricity and Energy Directorate, Electrical Workshops, 11 Electron Road (off Umgeni Road), Springfield, Durban.

SCT 14 **EVALUATION PROCESS**

14.1 **Eligibility, Responsiveness, Price and Preference**

The procedure for the evaluation of Tender offers will be **ELIGIBILITY**, **RESPONSIVENESS**, **PRICE** and **PREFERENCE** in accordance with the Employer's current SCM Policy, the Preferential Procurement Policy Framework Act (5 of 2000) and the Preferential Procurement Regulations, 2022.

14.1.1 ELIGIBILITY

Tender offers will be assessed for eligibility as follows:

a) Checking the "Tender offer" against the following:
   i) Conditions of Tender (Goods/Services: June 2019) detailed in **SECTION 2**;
   ii) Special/Additional Conditions of Tender detailed in **SECTION 3**;
   iii) General Conditions of Contract (July 2010) detailed in **SECTION 5**; and
   iv) Special/Additional Conditions of Contract detailed in **SECTION 6**.
b) Checking that, for the items offered, all required returnable documents detailed in **SECTION 3** and **SECTION 4** are submitted and fully completed; and
c) Checking that, for the items offered, all mandatory supporting documentation, as required in **SECTION 3** and **SECTION 4**, is submitted.

Tenders that are deemed ineligible, after undertaking the above assessments, will not be considered for the next phase of the evaluation process i.e. **RESPONSIVENESS**, **PRICE** and **PREFERENCE**.

14.1.2 RESPONSIVENESS

Checking the responsiveness of the "Bidder's Offer", for the items offered, against "Electricity and Energy Directorate Requirements" for every clause detailed in **SECTION 7** and "Ref No." detailed in the **TECHNICAL RETURNABLE DOCUMENTS** of **ACT 12**.

Tenders that are deemed non-responsive, after undertaking the above assessments, will not be considered for the next phase of the evaluation process i.e. **PRICE** and **PREFERENCE**.

14.1.3 PRICE

i) The eligible Tender offers will then be reduced to a comparative **PRICE** schedule for each item offered, except the training items 22 to 24, which are awarded in terms of **ACT 9**. The items are those detailed in **SECTION 7** and in the **TECHNICAL RETURNABLE DOCUMENTS** of **ACT 12**.
ii) The comparative **PRICE** schedule for each item offered will be arranged in "price ascending order".

14.1.4 PREFERENCE

The 90/10 preference points system will be applied. The Formula used to calculate the **Price Points (max. 90)** will be according to that specified in Regulation 5(1) of the Preferential Procurement Regulations, 2022.

14.2 Preference Point System and Specific Goals

The definitions as per the SCM Policy are applicable.

a) The Price Points (max. 90) will be calculated by applying the 90/10 preference points system to the comparative **PRICE** schedule. The Formula used to calculate the Price Points (max. 90) will be according to that specified in Regulation 5(1), as reproduced in clause 3.1 of MBD 6.1: "Preference Points Claim Form" (in **SECTION 4** of this procurement document).

b) Preference Points (max. 10) will be derived from points claimed on Returnable Document MBD 6.1: "Preference Points Claim Form" (in **SECTION 4** of this procurement document) for the Specific Goal(s) as indicated on the table(s) below, and according to the specified Goal Weightings.

OWNERSHIP GOAL

The tendering entity's **Percentage Ownership**, in terms of the **Ownership Category(s)** listed below, is to be used in the determination of the tenderer's claim for **Preference Points**.

GOAL WEIGHTING: 30 %

Ownership Categories	Criteria	90/10
Gender: Female (100 %)	0 %	0
	> 0 % and < 51 %	4
	≥ 51 % and < 100 %	7,5
	100 %	10

Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status)

- Companies and Intellectual Property Commission (CIPC) registration document
- CSD report
- B-BBEE Certificate of the tendering entity
- Consolidated B-BBEE Certificate if the tendering entity is a Consortium, Joint Venture, or Trust (Issued by verification agency accredited by the South African Accreditation System).
- Agreement for a Consortium, Joint Venture, or Trust.

Failure to provide any "proof of claim" documentation will result in zero (0) points being awarded.

The **Category Weightings** of the Ownership Categories will be:

w1 = 0 %, w2 = 100 %, w3 = 0 % (where w1 + w2 + w3 = 100 %)

RDP GOAL: THE PROMOTION OF SOUTH AFRICAN OWNED ENTERPRISES

The tendering entity's **Address** (as stated on the National Treasury Central Supplier Database (CSD) or on the eThekwini Municipality Vendor Portal) will be used in the determination of the tenderer's claim for **Preference Points** for this Specific Goal.

GOAL WEIGHTING: 30 %

Location	90/10
Not in South Africa	0
South Africa	2,5
KZN	5
ETM	10

Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status)

- CSD report

  Failure to provide any "proof of claim" documentation will result in zero (0) points being awarded.

RDP Goal: The promotion of enterprises located in a specific municipal area – Covered in the above RDP Goal.

RDP GOAL: THE PROMOTION OF EXPORT-ORIENTED PRODUCTION TO CREATE JOBS

The tendering entity's **Business Type**, in terms of the categories below, will be used in the determination of the tenderer's claim for **Preference Points** for this Specific Goal.

GOAL WEIGHTING: 40 %

	90/10
Retailer	0
Wholesaler	0
Distributor	0
Manufacturer	10

Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status)

- SABS/SANAS certification
- CSD report

  Points will only be awarded if the business type, stated on the CSD report, is related to the scope of this tender document.
- Signed declaration

  A signed declaration from the tendering entity in the form of an official letter explicitly stating the entity's business type (manufacturer) and any supporting documentation to justify the claim such as a company profile, product brochures, technical datasheets, certificates from manufacturer bodies etc.

  The Tenderer's business type may be subject to verification by eThekwini's tender evaluating officials. The declaration will take precedence over the entity's business type as stated on the CSD report.

Clarification of the "points claimed" against the "proof of claim" submitted, may be sought with the Tenderer if necessary.

Failure to provide "proof of claim" documentation as per above, will result in zero (0) points being awarded.

SCT 20 **COMPLAINTS AND OBJECTIONS**

In terms of **eThekwini Municipality's current SCM Policy**, any person aggrieved by the decisions taken in the implementation of the SCM System may lodge a written objection against the decision, within 14 days of notification, to:

The City Manager
Attention: Ms S Pillay (E-Mail: Simone.Pillay@durban.gov.za)
P O Box 1394
DURBAN
4000

Please be advised that any objection to this decision will only be processed upon receipt of a non-refundable administration fee of **R 6 131,00** including VAT **as stipulated in the Municipality's current SCM Policy**. An objection will only be considered upon receipt of proof of payment of this fee. This amount must be paid into the following bank account as a real-time payment:

eThekwini Municipality
FNB – 631 6574 6331
Reference Number: *37074(5E)*

3.2 **ADDITIONAL CONDITIONS OF TENDER (ACT)**

ACT 1 **ELIGIBILITY – CSD REGISTRATION**

Tenderers are required to be registered on the National Treasury Central Supplier Database (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture. Tenderers not so registered, at the time of closing of tenders, will not be eligible to submit tenders.
The Tenderer's CSD Supplier Number (starting with "MAAA") is to be provided on the information table in **SECTION 1**.

Tenderers who wish to register on the CSD may do so via web address https://secure.csd.gov.za.

ACT 2 Tenderers shall submit the following for items offered:
a) full technical and descriptive information as detailed in **SECTION 7**;
b) completed **TECHNICAL RETURNABLE DOCUMENTS** and **DELIVERY PERIODS SCHEDULE** as detailed in **ACT 12**; and
c) relevant technical datasheets/test reports/certificates as required in **SECTION 7** for the tendered item.

ACT 3 The preferred Tenderers shall submit samples of the tendered items within four (4) weeks of a request by eThekwini Municipality. These samples shall be delivered to eThekwini Municipality, Electricity and Energy Directorate, Electrical Workshops, 11 Electron Road (off Umgeni Road), Springfield, Durban and marked for the attention of Nazeer Vawda – Senior Electrical Engineer: Technology Services.

ACT 4 The sample submitted for each requested item shall be identical to the item offered against that item number in **SECTION 8**. The item offered in **SECTION 8** shall be the same item described in the **TECHNICAL RETURNABLE DOCUMENT** for that item number detailed in **ACT 12**, and shall comply with **SECTION 7**. Each sample shall be labelled with the following information:
a) Contract/Enquiry number;
b) Name of Tenderer;
c) Date of delivery; and
d) Item number corresponding with the respective item in **SECTION 8**.

ACT 5 Tenderers shall bear the full cost of the samples provided. eThekwini Municipality shall not be held liable for the costs incurred by the Tenderer.

ACT 6 eThekwini Municipality reserves the right to subject samples to tests as deemed reasonable and necessary. Tenderers shall collect and remove their samples within one month of being notified to do so, failing which they will be deemed to have waived all rights to the samples and such samples not collected after one month from the date of such notification will become the property of eThekwini Municipality for disposal or use at its discretion.

ACT 7 TENDER AWARD

7.1 SCOPE AND APPLICATION

This clause establishes the predetermined criteria and procedures for the evaluation and award of this Tender to multiple Tenderers, including the mechanism for manufacturer diversification in the supply chain. The provisions of this clause have been formulated in compliance with, and shall be interpreted in accordance with:

a) Section 217(1) of the Constitution of the Republic of South Africa, 1996, which requires that an organ of state contract for goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost-effective;
b) Section 111 of the Municipal Finance Management Act, 2003 (Act 56 of 2003), which requires the Municipality and its municipal entities to adopt and implement a Supply Chain Management Policy, which gives effect to the requirements of the Act;
c) The Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) (PPPFA) and the Preferential Procurement Regulations, 2022, which prescribe the preference points system for the evaluation and award of Tenders; and
d) The latest version of the eThekwini Municipality Supply Chain Management Policy.

7.2 DEFINITIONS

The terms and definitions detailed in Table A are applicable to ACT 7.

Table A – Terms and definitions applicable to ACT 7

Term	Definition
"Manufacturer"	The entity that produces or fabricates the items or group of items tendered, as declared by the Tenderer in the returnable documents. Where the Tenderer is also the manufacturer, the Tenderer shall be regarded as the manufacturer for the purposes of this clause.
"Most Responsive Tenderer"	The eligible and responsive Tenderer that has scored the highest Total Points (comprising price points and preference points) in accordance with the applicable preference points system prescribed in terms of the PPPFA and the Preferential Procurement Regulations, 2022, for a particular item or group of items.
"Next Most Responsive Tenderer"	The eligible and responsive Tenderer that has scored the next highest Total Points, in descending order, after the Most Responsive Tenderer for the same item or same group of items.
"Manufacturer Diversification"	The predetermined requirement, as set out in clause 7.3 of this ACT 7, that where the Municipality accepts more than one Tender for the same item or same group of items, successive awards shall be made to Tenderers offering products from different manufacturers, in order to mitigate supply chain concentration risk.
"Total Points"	The aggregate score obtained by a Tenderer, comprising price points and preference points, calculated in accordance with the applicable preference points system (90/10) as stated in SCT 14.

7.3 AWARD TO MULTIPLE TENDERERS WITH MANUFACTURER DIVERSIFICATION

7.3.1 To manage supply risk and ensure supply chain resilience, the Municipality reserves the right to award each item, or group of items, to more than one Tenderer, subject to the limitation in clause 7.3.6 of this ACT 7.

7.3.2 The primary award for an item, or group of items, shall be made to the Most Responsive Tenderer, regardless of the Manufacturer offered. Manufacturer Diversification shall play no part in the primary award.

7.3.3 The Municipality may make a subsequent award for the same item, or group of items, where it is satisfied, having regard to operational requirements, available budget and the need for supply chain resilience that a second source of supply is justified.

7.3.4 Where the Municipality elects to make a subsequent award, it shall consider the Next Most Responsive Tenderers in descending order of Total Points and shall select the first such Tenderer that offers the item, or group of items, from a Manufacturer different to the Manufacturer offered by the Most Responsive Tenderer. A Next Most Responsive Tenderer that offers the same Manufacturer as the Most Responsive Tenderer does not satisfy the Manufacturer Diversification requirement and shall not be selected for the subsequent award. Its Total Points ranking shall remain unaffected for all other purposes.

7.3.5 Where no Next Most Responsive Tenderer offers a Manufacturer different to that offered by the Most Responsive Tenderer, no subsequent award shall be made and the item, or group of items, shall be awarded to the Most Responsive Tenderer alone.

7.3.6 The number of awards per item, or group of items, shall not exceed two.

7.3.7 The following shall be noted for the avoidance of doubt:
a) Total Points ranking remains the primary determinant of award;
b) Manufacturer Diversification is a secondary, predetermined criterion which applies only to a subsequent award in terms of clause 7.3.4 of this ACT 7; and
c) Manufacturer Diversification does not displace, alter or qualify the primary award.

7.3.8 Where more than one award is made for an item, or group of items, orders shall be placed on the basis of price and availability.

ACT 8 Tenderers shall not bind eThekwini Municipality to any minimum quantity per order.

ACT 9 Training (items 22 to 24 of **SECTION 8**) shall not be evaluated or awarded as separate items. The training shall follow the award of the equipment, as follows:

a) Training shall be awarded only to a Tenderer awarded equipment under this contract, and only for the Manufacturer of the equipment awarded to that Tenderer;
b) Where awards for an item, or group of items, are made to two Tenderers offering different Manufacturers in terms of clause 7.3 of **ACT 7**, each awarded Tenderer shall be awarded the training for its own Manufacturer's equipment;
c) The training shall be awarded at the rates the awarded Tenderer offered in **SECTION 8**;
d) A Tenderer shall not be awarded training for equipment of a Manufacturer that has not been awarded to that Tenderer, whatever its training rates; and
e) The training rates offered shall be market-related, and eThekwini Municipality reserves the right to verify them before award.

ACT 10 The Tenderer shall be fully responsible for the design and satisfactory performance of all items on this specification. Nothing in this specification shall lessen the obligations of the Tenderer. Approval by Electricity and Energy Directorate shall not relieve the supplier of responsibility for the adequacy of design.

ACT 11 ARITHMETICAL ERRORS, OMISSIONS AND DISCREPANCIES

In order to ensure transparency for all tenders received, eThekwini Municipality will verify the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with the evaluation process. The verification will include checking the following in **SECTION 8: SCHEDULE OF RATES**.

a) The gross misplacement of a decimal point in any line-item unit price; and
b) Omissions made in completing **SECTION 8**.

eThekwini Municipality will correct the arithmetical errors in the following manner:

a) Where there is an obvious gross misplacement of a decimal point in the unit price, the unit price shall be corrected; and
b) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.

eThekwini Municipality will consider the rejection of a tender offer if the Tenderer does not correct, or does not accept the correction of, the arithmetical error in the manner described above.

ACT 12 <u>RETURNABLE DOCUMENTS, SCHEDULES AND DECLARATIONS</u>

This section contains the following documents:

a) **ITEM NO., STOCK CODE AND DESCRIPTION SCHEDULE** which serves for information purposes only;
b) **DELIVERY PERIODS SCHEDULE** which details eThekwini Municipality's initial and subsequent order delivery period requirements;
c) **TECHNICAL RETURNABLE DOCUMENTS 1 to 10** which detail the technical requirements for each item or group of items; and
d) **BIDDING COMPANY CONTACT INFORMATION SCHEDULE** which details the contact details of the Tenderer's escalation process.

Failure to **<u>fully complete</u>** any of the documents under b) and c) above and to submit them with the bid documents will render the Tender ineligible for those particular items. Clarification on the returnable documents may be sought with the Tenderer if necessary.

The Tenderer shall read, understand and fully appreciate the technical requirements detailed in **SECTION 7** <u>before</u> completing the **TECHNICAL RETURNABLE DOCUMENTS** to follow.

ITEM NO., STOCK CODE AND DESCRIPTION SCHEDULE

Item No.	Description	Stock Code	Annual Estimated Quantity
1	500 kVA Mini-substation 11 000 V/420 V/242 V	1763	220
2	Indoor, three-circuit ring main unit (all isolator switch disconnectors)	1279	80
3	Indoor, four-circuit ring main unit (all isolator switch disconnectors)	1280	10
4	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure (all isolator switch disconnectors)	110080	50
5	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure (all isolator switch disconnectors)	110072	50
6	Indoor, three-circuit ring main unit (all circuit breaker functions)	1778893	10
7	Indoor, four-circuit ring main unit (all circuit breaker functions)	1778906	10
8	Indoor, five-circuit ring main unit (all circuit breaker functions)	1778914	10
9	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1778990	10
10	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1779001	10
11	Outdoor, five-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1779095	10
12	Indoor, three-circuit ring main unit with integrated remote terminal unit (all isolator switch disconnectors)	109553	5
13	Indoor, four-circuit ring main unit with integrated remote terminal unit (all isolator switch disconnectors)	109561	5
14	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all isolator switch disconnectors)	1779036	5
15	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all isolator switch disconnectors)	1779044	5
16	Indoor, three-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778922	5
17	Indoor, four-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778957	5
18	Indoor, five-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778973	5
19	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779010	5
20	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779108	5
21	Outdoor, five-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779028	5
22	Switchgear Operator Training	1779052	6 sessions
23	Switchgear Maintenance Training	1779061	6 sessions
24	SCADA and RTU Training	1779079	2 sessions

TECHNICAL RETURNABLE DOCUMENT 1

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where alternative offers are submitted for item 1, these schedules shall be copied and submitted with each offer. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	**General requirements of mini-substation**		
1.1	Name of manufacturer	[redacted]	
1.2	Place of manufacture		
1.3	Manufacturer's identification reference		
1.4	Rated output	500 kVA	kVA
1.5	Nominal secondary voltage	420 V/242 V	V
1.6	Nominal primary voltage of system	11 kV	kV
1.7	Standard to which the mini-substation complies	SANS 1029	
1.8	Corrosion protection of the base	Hot-dip galvanised and coated with black epoxy tar paint	
1.9	Are the ring main unit, enclosure and all other components protected against the environmental conditions as per clause **7.2.2**?	Yes	*Yes/No
1.10	Details of the corrosion protection applied to the ring main unit, transformer and enclosure supplied with the bid documents?	Yes	*Yes/No
1.11	Material of enclosure	3CR12	
1.12	Colour of mini-substation	C37 light stone to SANS 1091:2012	
1.13	Dimensions of mini-substation in millimetres	Height × width × depth	× ×
1.14	Mass of mini-substation	3 600 kg (maximum)	kg
1.15	Material of fasteners and door hinges	316 marine grade stainless steel	
1.16	Three-point locking mechanism fitted to doors?	Yes	*Yes/No
1.17	Doors fitted with padlock protection facility to accommodate 50 mm high security padlock with 10 mm diameter shackle as per clause **7.3.8**?	Yes	*Yes/No
1.18	Doors reinforced with diagonal steel members as per **clause 7.3.9**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1.19	Left LV door drilled with 4 × 5 mm diameter holes to accommodate label as per **clause 7.3.11**?	Yes	*Yes/No
1.20	Rigid document holder fitted to inside of one MV and one LV door?	Yes	*Yes/No
1.21	Door contacts fitted to all doors and wired to the IED?	Yes	*Yes/No
1.22	Mini-substation compatible with eThekwini concrete plinth as per Figure 1?	Yes	*Yes/No
1.23	IAC of the mini-substation (min)	AB FLR 20 kA, 0,5 s	
1.24	Warranty of the complete unit (including all associated components)	Minimum 2 years	
1.25	Warranty of complete mini-substation against corrosion	Minimum 5 years	
1.26	Type test reports on the mini-substation offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No
1.27	Enclosure degree of protection as per clause 7.3.13	IP54 (minimum)	
2	**Transformer**		
2.1	Name of manufacturer	[redacted]	
2.2	Place of manufacture		
2.3	Manufacturer's identification reference		
2.4	Dimensions of transformer in millimetres	Height × width × depth	× ×
2.5	Mass of core and windings		kg
2.6	Mass of complete transformer		kg
2.7	Oil capacity		litres
2.8	Rated power	500 kVA	kVA
2.9	Nominal primary voltage	11 kV	
2.10	Nominal secondary voltage	420 V/242 V	V
2.11	Vector group and symbol	Dyn11	
2.12	Guaranteed upper limit of no-load losses at rated voltage and frequency	850 W	W
2.13	Guaranteed upper limit of load-losses at rated voltage and frequency	5 000 W	W

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
2.14	Tap change switch	Rotary off-load, externally operated, lockable in any position	
2.15	MV tappings	0, ±2,5 %, ±5 % at 11 kV	
2.16	Guaranteed impedance voltage	4,5 % to 5,5 %	%
2.17	Method used to ensure that terminals are suitable for both copper and aluminium conductors	Tinning, silver plating or other suitable method stated by the bidder	
2.18	Bushing: a) MV b) LV	 a) Type C b) Porcelain	 a) b)
2.19	Transformer fitted with a bolted tank lid?	Yes	*Yes/No
2.20	Oil gauge and tap change switch easily visible and readily accessible?	Yes	*Yes/No
2.21	Temperature rise at rated voltage and power of: (i) Windings (ii) Top oil	 65 °C 60 °C	 °C °C
2.22	Temperature sensing system fitted as per **clause 7.4.5.14**?	Yes	*Yes/No
2.23	Does the transformer comply with SANS 780?	Yes	*Yes/No
2.24	Design detail submitted with the bid documents?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
3	**Ring main unit and ring main unit compartment of Mini-substation**		
3.1	Name of manufacturer		
3.2	Place of manufacture		
3.3	Manufacturer's identification reference		
3.4	Does the ring main unit comply with SANS 1874?	Yes	*Yes/No
3.5	Insulation medium		
3.6	Interruption medium of circuit breaker		
3.7	Rated frequency	50 Hz	Hz
3.8	Rated voltage (min)	12 kV	kV
3.9	Rated short-time withstand current (min)	20 kA for 3 s	kA s
3.10	Rated peak withstand current (min)	50 kA (peak)	kA
3.11	Rated current (min)	630 A	A
3.12	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
3.13	Rated lightning impulse withstand voltage (min)	95 kV	kV
3.14	Material of bushing		
3.15	Bushing type	Type C	
3.16	One EFI fitted and compliant with **clause 7.5.4**?	Yes	*Yes/No
3.17	Minimum earth fault current indication	50 A	A
3.18	Minimum earth fault duration for indication	50 ms	ms
3.19	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
3.20	Mechanical flag indication on ICU and flashing LED indication on RIU of EFI?	Yes	*Yes/No
3.21	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
3.22	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
3.23	HR VDS fitted as per clause 7.5.1.15?	Yes	*Yes/No
3.24	Centre leg of ring main unit connected to and labelled 'LOCAL TRANSFORMER'?	Yes	*Yes/No
3.25	Centre leg of ring main unit is a circuit breaker function?	Yes	*Yes/No
3.26	Current rating of centre-leg circuit breaker (min)	200 A	A
3.27	Ring main unit and transformer connected via single-core screened copper cables with Type 4 connectors?	Yes	*Yes/No
3.28	Ring main unit compartment fitted with socket outlet and lamp as per **clause 7.5.1.13?**	Yes	*Yes/No
3.29	Circuit earthing facility	Integral earthing through ring main unit	
3.30	Cable test facility	Details supplied with bid	
3.31	Type of switch position indication	Mechanical via a mimic indication system	
3.32	Type of pressure indication fitted (if applicable)	Pressure gauge	
3.33	Warranty of ring main unit against corrosion	Minimum 5 years	
3.34	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
3.35	Distance between bushing and cable support clamp (min)	800 mm	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
4	**Low voltage switchboard**		
4.1	Name of manufacturer	[redacted]	
4.2	Place of manufacture		
4.3	Manufacturer's identification reference		
4.4	Material busbars manufactured from	Aluminium	
4.5	Phase busbars current rating	800 A	
4.6	Neutral busbar current rating	400 A	
4.7	1 × 800 A incoming switch disconnector fitted?	Yes	*Yes/No
4.8	3 × 400 A three-phase fuse-switch disconnectors fitted?	Yes	*Yes/No
4.9	Earth busbar as per **clause 7.4.7.4.6**?	Yes	*Yes/No
4.10	Neutral earth link included?	Yes	*Yes/No
4.11	3 × spare M10 nuts and bolts fitted to earth and neutral busbars as per **clause 7.4.7.4.12**?	Yes	*Yes/No
4.12	Short-circuit rating	18 kA for 0,5 s	kA s
4.13	Creepage and clearance distances (min)	19 mm	mm
4.14	Personnel protection: IP XXB under all normal operating conditions as per **clause 7.4.7.1.2**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
4.15	Short-circuit withstand strength type test report/certificate submitted as per **clause 7.4.7.10.2**?	Yes	*Yes/No
4.16	Incoming switch disconnector test report/certificate submitted as per **clause 7.4.7.10.3**?	Yes	*Yes/No
4.17	Outgoing fuse-switch disconnector test report/certificate submitted as per **clause 7.4.7.10.4**?	Yes	*Yes/No
4.18	Resistance to abnormal heat type test report/certificate submitted as per **clause 7.4.7.10.5**?	Yes	*Yes/No
4.19	LV interconnecting cables adequately rated?	Yes	*Yes/No
4.20	Supporting documents and calculations for cable rating provided with bid document?	Yes	*Yes/No
4.21	Socket outlet, lamp and IED fitted as per **clause 7.4.7.6**?	Yes	*Yes/No
4.22	Name of IED manufacturer	[redacted]	
4.23	IED manufacturer's identification reference		
4.24	Door switches and EFI operation wired to IED?	Yes	*Yes/No
4.25	Mounting space allocated for mounting of modem?	Yes	*Yes/No
5	**Incoming switch disconnector**		
5.1	Name of manufacturer	[redacted]	
5.2	Place of manufacture		
5.3	Manufacturer's identification reference		
5.4	Complies with SANS 60947-1 and SANS 60947-3?	Yes	*Yes/No
5.5	Current rating	800 A	A

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
5.6	Three-pole assembly with each phase independently operable?	Yes	*Yes/No
5.7	Contact pressure does not rely on springs in normal service?	Yes	*Yes/No
5.8	Operating pole has interlocks to ensure correct operation?	Yes	*Yes/No
5.9	Visible break?	Yes	*Yes/No
5.10	Voltage test probe access?	Yes	*Yes/No
5.11	Current transformer incorporated in switch disconnector and resin encapsulated?	Yes	*Yes/No
5.12	Current transformers comply with SANS 61869-2?	Yes	*Yes/No
5.13	Current transformer: ratio 800/5, 5 VA, Class 5?	Yes	*Yes/No
5.14	Padlocking in the open position?	Yes	*Yes/No
5.15	Cleat provided to support and locate incoming cables?	Yes	*Yes/No
5.16	Terminals suitable for torque shear lugs?	Yes	*Yes/No
6	**Outgoing fuse-switch disconnector**		
6.1	Name of manufacturer		
6.2	Place of manufacture		
6.3	Manufacturer's identification reference		
6.4	Complies with SANS 60947-1 and SANS 60947-3?	Yes	*Yes/No
6.5	Current rating	400 A	A
6.6	Three-phase fuse-switch disconnector suitable for single-pole operation?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 1 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Item 1: Technical requirements for mini-substations

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
6.7	Double break type as per clause 7.4.7.5.2 c)?	Yes	*Yes/No
6.8	Suitable for type gG, size 2 fuse-links to SANS 60269-2?	Yes	*Yes/No
6.9	Voltage test probe access?	Yes	*Yes/No
6.10	Padlocking with fuse carriers removed?	Yes	*Yes/No
6.11	Provision for connection of 1 × 4-core 240 mm² cable?	Yes	*Yes/No
6.12	Terminals suitable for compression or torque shear lugs?	Yes	*Yes/No
6.13	Performance characteristic: AC-22B, U_e = 400 V?	Yes	*Yes/No
6.14	Short-circuit current: 50 kA, U_e = 400 V?	Yes	*Yes/No
6.15	Overload performance capability: test sequence V of SANS 60947-3?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 2

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 2 and 3 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 2 and 3: Technical requirements for indoor three and four circuit ring main units (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer	[redacted]	
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	All functions are isolator functions?	Yes	*Yes/No
6	Insulation medium	[redacted]	
7	Dimensions of RMU in millimetres	Height × width × depth	Item 2: × × Item 3: × ×
8	Mass of RMU	[redacted]	Item 2: kg Item 3: kg
9	IAC of RMU (min)	AFLR 20 kA, 0,5 s	
10	Rated frequency	50 Hz	Hz
11	Rated voltage (min)	12 kV	kV
12	Rated short-time withstand current (min)	20 kA for 3 s	kA s
13	Rated peak withstand current (min)	50 kA (peak)	kA
14	Rated current (min)	630 A	A
15	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
16	Rated lightning impulse withstand voltage (min)	95 kV	kV
17	Material of bushing	[redacted]	
18	Bushing type	Type C	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 2 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 2 and 3: Technical requirements for indoor three and four circuit ring main units (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Distance between bushing and cable support clamp (min)	800 mm	
20	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
21	Circuit earthing facility	Integral earthing through ring main unit	
22	Cable test facility	Details supplied with bid	
23	Type of switch position indication	Mechanical via a mimic indication system	
24	Type of pressure indication fitted (if applicable)	Pressure gauge	
25	EFI fitted to **all** switch functions and compliant with **clause 7.5.4**?	Yes	*Yes/No
26	Minimum earth fault current indication	50 A	A
27	Minimum earth fault duration for indication	50 ms	ms
28	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
29	Mechanical flag indication on ICU	Yes	*Yes/No
30	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
31	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
32	Is the ring main unit protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
33	Details of the corrosion protection applied to the ring main unit supplied with the bid documents?	Yes	*Yes/No
34	Warranty of the complete unit (including all associated components)	Minimum 2 years	
35	Warranty of ring main unit against corrosion	Minimum 5 years	
36	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
37	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 3

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 4 and 5 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 4 and 5: Technical requirements for outdoor three and four circuit ring main units (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer		
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	All functions are isolator functions?	Yes	*Yes/No
6	Insulation medium		
7	Dimensions of RMU in millimetres	Height × width × depth	Item 4: × × Item 5: × ×
8	Mass of RMU (including concrete plinth)		Item 4: kg Item 5: kg
9	IAC of RMU (min)	AB FLR 20 kA, 0,5 s	
10	Rated frequency	50 Hz	Hz
11	Rated voltage (min)	12 kV	kV
12	Rated short-time withstand current (min)	20 kA for 3 s	kA s
13	Rated peak withstand current (min)	50 kA (peak)	kA
14	Rated current (min)	630 A	A
15	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
16	Rated lightning impulse withstand voltage (min)	95 kV	kV
17	Material of bushing		
18	Bushing type	Type C	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 3 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 4 and 5: Technical requirements for outdoor three and four circuit ring main units (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Distance between bushing and cable support clamp (min)	800 mm	
20	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
21	Circuit earthing facility	Integral earthing through ring main unit	
22	Cable test facility	Details supplied with bid	
23	Type of switch position indication	Mechanical via a mimic indication system	
24	Type of pressure indication fitted (if applicable)	Pressure gauge	
25	EFI fitted to **all** switch functions and compliant with **clause 7.5.4**?	Yes	*Yes/No
26	Minimum earth fault current indication	50 A	A
27	Minimum earth fault duration for indication	50 ms	ms
28	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
29	Mechanical flag indication on ICU and flashing LED indication on RIU of EFI?	Yes	*Yes/No
30	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
31	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
32	Material of enclosure	3CR12	
33	Colour of enclosure	C37 light stone to SANS 1091:2012	
34	Material of fasteners and door hinges	316 marine grade stainless steel	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 3 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 4 and 5: Technical requirements for outdoor three and four circuit ring main units (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
35	Three-point locking mechanism fitted to doors?	Yes	*Yes/No
36	Doors fitted with padlock protection facility to accommodate 50 mm high security padlock with 10 mm diameter shackle as per **clause 7.3.8**?	Yes	*Yes/No
37	Left door drilled with 4 × 5 mm diameter holes to accommodate label as per **clause 7.3.11**?	Yes	*Yes/No
38	Doors reinforced with diagonal steel members as per **clause 7.3.9**?	Yes	*Yes/No
39	Concrete plinth fitted as per **clause 7.5.1.12**?	Yes	*Yes/No
40	Drawings and details of the concrete plinth supplied with the bid documents?	Yes	*Yes/No
41	Lifting lugs carry full weight as per **clause 7.5.1.10**?	Yes	*Yes/No
42	Are the ring main unit and enclosure protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
43	Details of the corrosion protection applied to the ring main unit and enclosure supplied with the bid documents?	Yes	*Yes/No
44	Warranty of the complete unit (including all associated components)	Minimum 2 years	
45	Warranty of ring main unit and enclosure against corrosion	Minimum 5 years	
46	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
47	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No
48	Enclosure degree of protection as per clause 7.3.13	IP54 (minimum)	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 4

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 6, 7 and 8 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 6, 7 and 8: Technical requirements for indoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer	[redacted]	
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	Standard to which circuit breaker complies	SANS 1874 / SANS 62271-100	
6	All functions are circuit breaker functions?	Yes	*Yes/No
7	Insulation medium of RMU	[redacted]	
8	Interruption medium of circuit breaker		
9	Dimensions of RMU in millimetres	Height × width × depth	Item 6: × × Item 7: × × Item 8: × ×
10	Mass of RMU	[redacted]	Item 6: kg Item 7: kg Item 8: kg
11	IAC of RMU (min)	AFLR 20 kA, 0,5 s	
12	Rated frequency	50 Hz	Hz
13	Rated voltage (min)	12 kV	kV
14	Rated short-time withstand current (min)	20 kA for 3 s	kA s
15	Rated peak withstand current (min)	50 kA (peak)	kA
16	Rated current (min) including circuit breaker	630 A	A
17	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
18	Rated lightning impulse withstand voltage (min)	95 kV	kV

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 4 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 6, 7 and 8: Technical requirements for indoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Material of bushing	[redacted]	
20	Bushing type	Type C	
21	Distance between bushing and cable support clamp (min)	800 mm	
22	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
23	Circuit earthing facility	Integral earthing through ring main unit	
24	Cable test facility	Details supplied with bid	
25	Type of switch/circuit breaker position indication	Mechanical via a mimic indication system	
26	Type of pressure indication fitted (if applicable)	Pressure gauge	
27	EFI fitted to **all functions** and compliant with **clause 7.5.4**?	Yes	*Yes/No
28	Minimum earth fault current indication	50 A	A
29	Minimum earth fault duration for indication	50 ms	ms
30	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
31	Mechanical flag indication on ICU	Yes	*Yes/No
32	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
33	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
34	Endurance classification of circuit breaker as per **clause 7.5.7.3** (min)	E2-M1	
35	Self-powered relay fitted as per **clause 7.5.7.2**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 4 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 6, 7 and 8: Technical requirements for indoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
36	Relay manufacturer	[redacted]	
37	Relay model		
38	Protection requirements as per **clause 7.5.7.1**?	Yes	*Yes/No
39	Standard to which CT complies	SANS 61869-2	
40	Number of CTs	3 (1 per phase)	
41	CT installation	Around the cable bushings	
42	Details of CT provided with bid as per **clause 7.5.7.4**?	Yes	*Yes/No
43	CT ratio	[redacted]	
44	CT class and accuracy limit factor	5P10 (minimum)	
45	CT rated burden	[redacted]	
46	Wiring terminated onto terminal blocks as per **clause 7.5.7.5**?	Yes	*Yes/No
47	Is the ring main unit protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
48	Details of the corrosion protection applied to the ring main unit supplied with the bid documents?	Yes	*Yes/No
49	Warranty of the complete unit (including all associated components)	Minimum 2 years	
50	Warranty of ring main unit against corrosion	Minimum 5 years	
51	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
52	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 5

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 9, 10 and 11 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 9, 10 and 11: Technical requirements for outdoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer	[redacted]	
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	Standard to which circuit breaker complies	SANS 1874 / SANS 62271-100	
6	All functions are circuit breaker functions?	Yes	*Yes/No
7	Insulation medium of RMU	[redacted]	
8	Interruption medium of circuit breaker		
9	Dimensions of RMU in millimetres	Height × width × depth	Item 9: × × Item 10: × × Item 11: × ×
10	Mass of RMU (including concrete plinth)	[redacted]	Item 9: kg Item 10: kg Item 11: kg
11	IAC of RMU (min)	AB FLR 20 kA, 0,5 s	
12	Rated frequency	50 Hz	Hz
13	Rated voltage (min)	12 kV	kV
14	Rated short-time withstand current (min)	20 kA for 3 s	kA s
15	Rated peak withstand current (min)	50 kA (peak)	kA
16	Rated current (min) including circuit breaker	630 A	A
17	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
18	Rated lightning impulse withstand voltage (min)	95 kV	kV

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 5 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 9, 10 and 11: Technical requirements for outdoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Material of bushing	[redacted]	
20	Bushing type	Type C	
21	Distance between bushing and cable support clamp (min)	800 mm	
22	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
23	Circuit earthing facility	Integral earthing through ring main unit	
24	Cable test facility	Details supplied with bid	
25	Type of switch/circuit breaker position indication	Mechanical via a mimic indication system	
26	Type of pressure indication fitted (if applicable)	Pressure gauge	
27	EFI fitted to **all functions** and compliant with **clause 7.5.4**?	Yes	*Yes/No
28	Minimum earth fault current indication	50 A	A
29	Minimum earth fault duration for indication	50 ms	ms
30	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
31	Mechanical flag indication on ICU and flashing LED indication on RIU of EFI?	Yes	*Yes/No
32	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
33	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
34	Endurance classification of circuit breaker as per **clause 7.5.7.3** (min)	E2-M1	
35	Self-powered relay fitted as per **clause 7.5.7.2**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 5 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 9, 10 and 11: Technical requirements for outdoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
36	Relay manufacturer	[redacted]	
37	Relay model		
38	Protection requirements as per **clause 7.5.7.1**?	Yes	*Yes/No
39	Standard to which CT complies	SANS 61869-2	
40	Number of CTs	3 (1 per phase)	
41	CT installation	Around the cable bushings	
42	Details of CT provided with bid as per **clause 7.5.7.4**?	Yes	*Yes/No
43	CT ratio	[redacted]	
44	CT class and accuracy limit factor	5P10 (minimum)	
45	CT rated burden	[redacted]	
46	Wiring terminated onto terminal blocks as per **clause 7.5.7.5**?	Yes	*Yes/No
47	Material of enclosure	3CR12	
48	Colour of enclosure	C37 light stone to SANS 1091:2012	
49	Material of fasteners and door hinges	316 marine grade stainless steel	
50	Three-point locking mechanism fitted to doors?	Yes	*Yes/No
51	Doors fitted with padlock protection facility to accommodate 50 mm high security padlock with 10 mm diameter shackle as per **clause 7.3.8**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 5 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 9, 10 and 11: Technical requirements for outdoor three, four and five circuit ring main units (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
52	Left door drilled with 4 × 5 mm diameter holes to accommodate label as per **clause 7.3.11**?	Yes	*Yes/No
53	Doors reinforced with diagonal steel members as per **clause 7.3.9**?	Yes	*Yes/No
54	Concrete plinth fitted as per **clause 7.5.1.12**?	Yes	*Yes/No
55	Drawings and details of the concrete plinth supplied with the bid documents?	Yes	*Yes/No
56	Lifting lugs carry full weight as per **clause 7.5.1.10**?	Yes	*Yes/No
57	Are the ring main unit and enclosure protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
58	Details of the corrosion protection applied to the ring main unit and enclosure supplied with the bid documents?	Yes	*Yes/No
59	Warranty of the complete unit (including all associated components)	Minimum 2 years	
60	Warranty of ring main unit and enclosure against corrosion	Minimum 5 years	
61	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
62	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No
63	Enclosure degree of protection as per clause 7.3.13	IP54 (minimum)	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 6

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 12 and 13 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 12 and 13: Technical requirements for indoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer		
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	All functions are isolator functions?	Yes	*Yes/No
6	Insulation medium		
7	Dimensions of RMU in millimetres	Height × width × depth	Item 12: × × Item 13: × ×
8	Mass of RMU		Item 12: kg Item 13: kg
9	IAC of RMU (min)	AFLR 20 kA, 0,5 s	
10	Rated frequency	50 Hz	Hz
11	Rated voltage (min)	12 kV	kV
12	Rated short-time withstand current (min)	20 kA for 3 s	kA s
13	Rated peak withstand current (min)	50 kA (peak)	kA
14	Rated current (min)	630 A	A
15	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
16	Rated lightning impulse withstand voltage (min)	95 kV	kV
17	Material of bushing		
18	Bushing type	Type C	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 6 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 12 and 13: Technical requirements for indoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Distance between bushing and cable support clamp (min)	800 mm	
20	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
21	Circuit earthing facility	Integral earthing through ring main unit	
22	Cable test facility	Details supplied with bid	
23	Type of switch position indication	Mechanical via a mimic indication system	
24	Type of pressure indication fitted (if applicable)	Pressure gauge	
25	EFI fitted to **all** switch functions and compliant with **clause 7.5.4**?	Yes	*Yes/No
26	Minimum earth fault current indication	50 A	A
27	Minimum earth fault duration for indication	50 ms	ms
28	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
29	Mechanical flag indication on ICU	Yes	*Yes/No
30	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
31	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
32	Is the ring main unit protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
33	Details of the corrosion protection applied to the ring main unit supplied with the bid documents?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 6 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 12 and 13: Technical requirements for indoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
34	Is the RTU fully compliant with completed **TECHNICAL RETURNABLE DOCUMENT 10**?	Yes	*Yes/No
35	Warranty of the complete unit (including all associated components)	Minimum 2 years	
36	Warranty of ring main unit against corrosion	Minimum 5 years	
37	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
38	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 7

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 14 and 15 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 14 and 15: Technical requirements for outdoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer		
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	All functions are isolator functions?	Yes	*Yes/No
6	Insulation medium		
7	Dimensions of RMU in millimetres	Height × width × depth	Item 14: × × Item 15: × ×
8	Mass of RMU (including concrete plinth)		Item 14: kg Item 15: kg
9	IAC of RMU (min)	AB FLR 20 kA, 0,5 s	
10	Rated frequency	50 Hz	Hz
11	Rated voltage (min)	12 kV	kV
12	Rated short-time withstand current (min)	20 kA for 3 s	kA s
13	Rated peak withstand current (min)	50 kA (peak)	kA
14	Rated current (min)	630 A	A
15	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
16	Rated lightning impulse withstand voltage (min)	95 kV	kV
17	Material of bushing		
18	Bushing type	Type C	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 7 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 14 and 15: Technical requirements for outdoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Distance between bushing and cable support clamp (min)	800 mm	
20	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
21	Circuit earthing facility	Integral earthing through ring main unit	
22	Cable test facility	Details supplied with bid	
23	Type of switch position indication	Mechanical via a mimic indication system	
24	Type of pressure indication fitted (if applicable)	Pressure gauge	
25	EFI fitted to **all** switch functions and compliant with **clause 7.5.4**?	Yes	*Yes/No
26	Minimum earth fault current indication	50 A	A
27	Minimum earth fault duration for indication	50 ms	ms
28	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
29	Mechanical flag indication on ICU and flashing LED indication on RIU of EFI?	Yes	*Yes/No
30	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
31	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
32	Material of enclosure	3CR12	
33	Colour of enclosure	C37 light stone to SANS 1091:2012	
34	Material of fasteners and door hinges	316 marine grade stainless steel	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 7 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 14 and 15: Technical requirements for outdoor three and four circuit ring main units with RTUs (isolators)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
35	Three-point locking mechanism fitted to doors?	Yes	*Yes/No
36	Doors fitted with padlock protection facility to accommodate 50 mm high security padlock with 10 mm diameter shackle as per **clause 7.3.8**?	Yes	*Yes/No
37	Left door drilled with 4 × 5 mm diameter holes to accommodate label as per **clause 7.3.11**?	Yes	*Yes/No
38	Doors reinforced with diagonal steel members as per **clause 7.3.9**?	Yes	*Yes/No
39	Concrete plinth fitted as per **clause 7.5.1.12**?	Yes	*Yes/No
40	Drawings and details of the concrete plinth supplied with the bid documents?	Yes	*Yes/No
41	Lifting lugs carry full weight as per **clause 7.5.1.10**?	Yes	*Yes/No
42	Are the ring main unit and enclosure protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
43	Details of the corrosion protection applied to the ring main unit and enclosure supplied with the bid documents?	Yes	*Yes/No
44	Is the RTU fully compliant with completed **TECHNICAL RETURNABLE DOCUMENT 10**?	Yes	*Yes/No
45	Warranty of the complete unit (including all associated components)	Minimum 2 years	
46	Warranty of ring main unit and enclosure against corrosion	Minimum 5 years	
47	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
48	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No
49	Enclosure degree of protection as per clause 7.3.13	IP54 (minimum)	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 8

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 16, 17 and 18 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 16, 17 and 18: Technical requirements for indoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer	[redacted]	
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	Standard to which circuit breaker complies	SANS 1874 / SANS 62271-100	
6	All functions are circuit breaker functions?	Yes	*Yes/No
7	Insulation medium of RMU	[redacted]	
8	Interruption medium of circuit breaker		
9	Dimensions of RMU in millimetres	Height × width × depth	Item 16: × × Item 17: × × Item 18: × ×
10	Mass of RMU	[redacted]	Item 16: kg Item 17: kg Item 18: kg
11	IAC of RMU (min)	AFLR 20 kA, 0,5 s	
12	Rated frequency	50 Hz	Hz
13	Rated voltage (min)	12 kV	kV
14	Rated short-time withstand current (min)	20 kA for 3 s	kA s
15	Rated peak withstand current (min)	50 kA (peak)	kA
16	Rated current (min) including circuit breaker	630 A	A
17	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
18	Rated lightning impulse withstand voltage (min)	95 kV	kV

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 8 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 16, 17 and 18: Technical requirements for indoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
19	Material of bushing	[redacted]	
20	Bushing type	Type C	
21	Distance between bushing and cable support clamp (min)	800 mm	
22	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
23	Circuit earthing facility	Integral earthing through ring main unit	
24	Cable test facility	Details supplied with bid	
25	Type of switch/circuit breaker position indication	Mechanical via a mimic indication system	
26	Type of pressure indication fitted (if applicable)	Pressure gauge	
27	EFI fitted to **all functions** and compliant with **clause 7.5.4**?	Yes	*Yes/No
28	Minimum earth fault current indication	50 A	A
29	Minimum earth fault duration for indication	50 ms	ms
30	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
31	Mechanical flag indication on ICU	Yes	*Yes/No
32	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
33	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
34	Endurance classification of circuit breaker as per **clause 7.5.7.3** (min)	E2-M1	
35	Self-powered relay fitted as per **clause 7.5.7.2**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 8 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 16, 17 and 18: Technical requirements for indoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
36	Relay manufacturer	[redacted]	
37	Relay model		
38	Protection requirements as per **clause 7.5.7.1**?	Yes	*Yes/No
39	Standard to which CT complies	SANS 61869-2	
40	Number of CTs	3 (1 per phase)	
41	CT installation	Around the cable bushings	
42	Details of CT provided with bid as per **clause 7.5.7.4**?	Yes	*Yes/No
43	CT ratio	[redacted]	
44	CT class and accuracy limit factor	5P10 (minimum)	
45	CT rated burden	[redacted]	
46	Wiring terminated onto terminal blocks as per **clause 7.5.7.5**?	Yes	*Yes/No
47	Is the ring main unit protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
48	Details of the corrosion protection applied to the ring main unit supplied with the bid documents?	Yes	*Yes/No
49	Is the RTU fully compliant with completed **TECHNICAL RETURNABLE DOCUMENT 10**?	Yes	*Yes/No
50	Warranty of the complete unit (including all associated components)	Minimum 2 years	
51	Warranty of ring main unit against corrosion	Minimum 5 years	
52	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
53	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 9

This document shall be completed, signed and returned with bid documents of which it forms part.

Note: Where different manufacturers of items are offered and where alternative offers are submitted, these schedules shall be copied and submitted for each offer. If the offer for items 19, 20 and 21 differ, then these schedules shall be copied, and each item shall have its own schedule submitted. Failure to submit schedules for each offer shall preclude such offers from evaluation.

Items 19, 20 and 21: Technical requirements for outdoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
1	Name of manufacturer		
2	Place of manufacture		
3	Manufacturer's identification reference		
4	Standard to which ring main unit complies	SANS 1874	
5	Standard to which circuit breaker complies	SANS 1874 / SANS 62271-100	
6	All functions are circuit breaker functions?	Yes	*Yes/No
7	Insulation medium of RMU		
8	Interruption medium of circuit breaker		
9	Dimensions of RMU in millimetres	Height × width × depth	Item 19: × × Item 20: × × Item 21: × ×
10	Mass of RMU (including concrete plinth)		Item 19: kg Item 20: kg Item 21: kg
11	IAC of RMU (min)	AB FLR 20 kA, 0,5 s	
12	Rated frequency	50 Hz	Hz
13	Rated voltage (min)	12 kV	kV
14	Rated short-time withstand current (min)	20 kA for 3 s	kA s
15	Rated peak withstand current (min)	50 kA (peak)	kA
16	Rated current (min) including circuit breaker	630 A	A
17	Rated 1 min power frequency withstand voltage (min)	28 kV	kV
18	Rated lightning impulse withstand voltage (min)	95 kV	kV

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 9 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 19, 20 and 21: Technical requirements for outdoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's Offer
19	Material of bushing		
20	Bushing type	Type C	
21	Distance between bushing and cable support clamp (min)	800 mm	
22	HR VDS fitted as per **clause 7.5.1.15**?	Yes	*Yes/No
23	Circuit earthing facility	Integral earthing through ring main unit	
24	Cable test facility	Details supplied with bid	
25	Type of switch/circuit breaker position indication	Mechanical via a mimic indication system	
26	Type of pressure indication fitted (if applicable)	Pressure gauge	
27	EFI fitted to **all functions** and compliant with **clause 7.5.4**?	Yes	*Yes/No
28	Minimum earth fault current indication	50 A	A
29	Minimum earth fault duration for indication	50 ms	ms
30	Is EFI immune to current spikes and magnetising inrush current?	Yes	*Yes/No
31	Mechanical flag indication on ICU and flashing LED indication on RIU of EFI?	Yes	*Yes/No
32	Method of resetting	Reset automatically with 230 V, 50 Hz supply	
33	Test facility fitted to confirm functionality of the EFI via a 6,35 mm female jack plug?	Yes	*Yes/No
34	Endurance classification of circuit breaker as per **clause 7.5.7.3** (min)	E2-M1	
35	Self-powered relay fitted as per **clause 7.5.7.2**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 9 (continued)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 19, 20 and 21: Technical requirements for outdoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
36	Relay manufacturer	[redacted]	
37	Relay model		
38	Protection requirements as per **clause 7.5.7.1**?	Yes	*Yes/No
39	Standard to which CT complies	SANS 61869-2	
40	Number of CTs	3 (1 per phase)	
41	CT installation	Around the cable bushings	
42	Details of CT provided with bid as per **clause 7.5.7.4**?	Yes	*Yes/No
43	CT ratio	[redacted]	
44	CT class and accuracy limit factor	5P10 (minimum)	
45	CT rated burden	[redacted]	
46	Wiring terminated onto terminal blocks as per **clause 7.5.7.5**?	Yes	*Yes/No
47	Material of enclosure	3CR12	
48	Colour of enclosure	C37 light stone to SANS 1091:2012	
49	Material of fasteners and door hinges	316 marine grade stainless steel	
50	Three-point locking mechanism fitted to doors?	Yes	*Yes/No
51	Doors fitted with padlock protection facility to accommodate 50 mm high security padlock with 10 mm diameter shackle as per **clause 7.3.8**?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 9 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 19, 20 and 21: Technical requirements for outdoor three, four and five circuit ring main units with RTUs (circuit breakers)

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
52	Left door drilled with 4 × 5 mm diameter holes to accommodate label as per **clause 7.3.11**?	Yes	*Yes/No
53	Doors reinforced with diagonal steel members as per **clause 7.3.9**?	Yes	*Yes/No
54	Concrete plinth fitted as per **clause 7.5.1.12**?	Yes	*Yes/No
55	Drawings and details of the concrete plinth supplied with the bid documents?	Yes	*Yes/No
56	Lifting lugs carry full weight as per **clause 7.5.1.10**?	Yes	*Yes/No
57	Are the ring main unit and enclosure protected against the environmental conditions as per **clause 7.2.2**?	Yes	*Yes/No
58	Details of the corrosion protection applied to the ring main unit and enclosure supplied with the bid documents?	Yes	*Yes/No
59	Is the RTU fully compliant with completed **TECHNICAL RETURNABLE DOCUMENT 10**?	Yes	*Yes/No
60	Warranty of the complete unit (including all associated components)	Minimum 2 years	
61	Warranty of ring main unit and enclosure against corrosion	Minimum 5 years	
62	Warranty of ring main unit against loss of insulating gas (for gas-insulated units)	Minimum 20 years	
63	Type test reports on the ring main unit offered submitted with the bid documents as per clause 7.8.3?	Yes	*Yes/No
64	Enclosure degree of protection as per clause 7.3.13	IP54 (minimum)	

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 10

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 12 to 21: Technical requirements for remote terminal units

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's Offer
1	RTU fitted in a lockable cabinet as per **clause 7.6.1**?	Yes	*Yes/No
2	Dimensions of RTU cabinet in millimetres: a) Indoor ring main unit b) Outdoor ring main unit	a) Height × width × depth b) Height × width × depth	× × × ×
3	Are all monitoring and automation functions as per **clauses 7.6.2.1 to 7.6.2.9** supplied?	Yes	*Yes/No
4	RTU fitted with battery and charger unit?	Yes	*Yes/No
5	Is the d.c. supply for the modem supplied as per **clause 7.6.3**?	Yes	*Yes/No
6	Standby duration on battery power as per **clause 7.6.3** (min)	12 hours	
7	Switch operations on battery as per **clause 7.6.3** (min)	8 operations	
8	Battery voltage and rating		V Ah
9	Number of I/Os prewired to the RTU cards from the 32-point terminal block as per clause 7.6.13 (for indoor units only)	24 digital inputs, 8 analogue inputs	
10	Can I/Os be extended?	Yes	*Yes/No
11	Modem mounting plate provided to accommodate modem of size 300 mm × 250 mm × 100 mm within the cabinet?	Yes	*Yes/No
12	Pre-cut hole drilled and grommeted to RTU cabinet as per **clause 7.6.9**?	Yes	*Yes/No
13	RTU cabinet fitted with trunking and terminal block wired to inputs on the RTU as per **clause 7.6.13** (for indoor units only)?	Yes	*Yes/No
14	All wiring from the RTU fitted with plug connectors as per **clauses 7.5.5.5** and **7.5.6.5**?	Yes	*Yes/No
15	RTU capable of communicating via Modbus and DNP3.0 over TCP/IP?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

TECHNICAL RETURNABLE DOCUMENT 10 (concluded)

This document shall be completed, signed and returned with bid documents of which it forms part.

Items 12 to 21: Technical requirements for remote terminal units

Ref No.	Technical details	Electricity and Energy Directorate's requirement	Bidder's offer
16	RTU fitted with two 10/100 Ethernet ports?	Yes	*Yes/No
17	RTU configurable through a web browser?	Yes	*Yes/No
18	RTU configuration file workable when offline?	Yes	*Yes/No
19	Wiring marked with clip-on labels as per **clause 7.6.11**?	Yes	*Yes/No
20	Wiring diagrams supplied with bid documents?	Yes	*Yes/No
21	DNP3.0 over Ethernet TCP/IP certificate of compliance and full implementation table of the protocol submitted with the bid documents as per clause 7.6.4?	Yes	*Yes/No

*Delete whichever is not applicable.

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

DELIVERY PERIODS SCHEDULE

I/We hereby undertake to deliver the goods within the following periods from date of receipt of order. Note that delivery periods to be stated in weeks:

Items	Initial order		Subsequent orders	
	Electricity and Energy Directorate's preferred requirements	Bidder's offer	Electricity and Energy Directorate's preferred requirements	Bidder's offer
1	within 6 weeks		within 4 weeks	
2-3	within 6 weeks		within 4 weeks	
4-5	within 6 weeks		within 4 weeks	
6-8	within 6 weeks		within 4 weeks	
9-11	within 6 weeks		within 4 weeks	
12-13	within 6 weeks		within 4 weeks	
14-15	within 6 weeks		within 4 weeks	
16-18	within 6 weeks		within 4 weeks	
19-21	within 6 weeks		within 4 weeks	
22	within 6 weeks		within 4 weeks	
23	within 6 weeks		within 4 weeks	
24	within 6 weeks		within 4 weeks	

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

BIDDING COMPANY CONTACT INFORMATION SCHEDULE

To facilitate an efficient working relation with the bidding company, bidders are to complete the following information.

TECHNICAL CONTACT DETAILS	
Contact person for technical queries related to the items	
Name:	
Position:	
Tel number:	
Cell number:	
Email Address:	
Contact person for ESCALATION of technical queries related to the items (Senior to the person above)	
Name:	
Position:	
Tel number:	
Cell number:	
Email Address:	
CONTRACTUAL CONTACT DETAILS	
Contact person for contractual queries related to the items	
Name:	
Position:	
Tel number:	
Cell number:	
Email Address:	
Contact person for ESCALATION of contractual queries related to the items (Senior to the person above)	
Name:	
Position:	
Tel number:	
Cell number:	
Email Address:	

Bidding company: _____

Name: _____ Signed: _____

Capacity of signatory: _____ Date: YYYY-MM-DD

SECTION 4: RETURNABLE TENDER DOCUMENTS

The required returnable documents are as detailed in Section 2 (Clause 4): "Returnable Schedules, Forms, Certificates" of the Conditions of Tender/Special Conditions of Tender.

1) Authority of Signatory
2) Tax Compliance Status PIN/Tax Clearance Certificate
3) Declaration of Municipal Fees
4) Declaration with respect to The Occupational Health and Safety Act

5(a) MBD 4: Declaration of Interest
5(b) MBD 5: Declaration for Procurement Above R10 Million
5(c) MBD 6.1: Preference Points Claim
5(d) MBD 8: Declaration of Bidder's Past Supply Chain Management Practices
5(e) MBD 9: Certificate of Independent Bid Determination

The Tender Form can be found in Section 9: "Official Tender Form", and any additional schedules, forms, certificates can be found in SECTION 3 and SECTION 4.

1) AUTHORITY OF SIGNATORY

Reference is made to the Conditions of Tender: Clause 4(5)(c).

Indicate the status of the tenderer by ticking the appropriate box hereunder.

COMPANY		**CLOSE CORPORATION**		**PARTNERSHIP**		**JOINT VENTURE**		**SOLE PROPRIETOR**	
Refer to Notes at the bottom of the page									

I/We, the undersigned, being the Chairperson (Company), Member(s) (Close Corporation), Partners (Partnership), Sole Owner (Sole Proprietor), Lead Partner (JV), in the company/business trading as:

…….....

hereby authorise Mr/Mrs/Ms …….…….....

acting in the capacity of .....

to sign all documents in connection with the tender for Contract No. **37074-5E** and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Notes

Tenderers are to include, at the back of their tender submission document, a printout of the following documents:

If a Company : a “Resolution of the Board” in this regard.
If a Joint Venture : a “Power of Attorney” signed by the legally authorised signatories of all the partners to the Joint venture.

2) TAX COMPLIANCE STATUS PIN/TAX CLEARANCE CERTIFICATE

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

Separate Tax Clearance Certificates/TCS PINs are required for each entity in a Joint Venture.

The TCS PIN(s) are to be entered on the information table in **SECTION 1: GENERAL INFORMATION.**

Tenderers are to include, at the back of their tender submission document, a printout of their Tax Compliance Status PIN (TCS PIN) OR an original Tax Clearance Certificate.

Failure to include the required document will make the tender submission non-responsive.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, ***and that the requested documentation has been included in the tender submission****.*

NAME (Block Capitals): ..... **Date** .....

SIGNATURE: .....

3) DECLARATION OF MUNICIPAL FEES

I, the undersigned, do hereby declare that the Municipal fees of

.....

(full name of Company/Close Corporation/partnership/sole proprietary/Joint Venture)

(hereinafter referred to as the TENDERER) are, as at the date hereunder, fully paid or an Acknowledgement of Debt has been concluded with the Municipality to pay the said charges in instalments.

The following account details relate to property of the said TENDERER:

Account	Account Number: to be completed by tenderer.
Consolidated Account No.	
Electricity	
Water	
Rates	
Other	

I acknowledge that should the aforesaid Municipal charges fall into arrears, the Municipality may take such remedial action as is required, including termination of any contract, and any payments due to the Contractor by the Municipality shall be first set off against such arrears.

- Where the TENDERER'S place of business or business interests are outside the jurisdiction of eThekwini Municipality, a copy of the accounts/agreements from the relevant municipality must be attached (to the back inside cover of this document).

- Where the tenderer's Municipal Accounts are part of their lease agreement, then a copy of the agreement, or official letter to that effect is to be attached (to the back inside cover of this document).

Tenderers are to include, at the back of their tender submission document, a printout of the above accounts and/or agreements signed with the municipality.

Failure to include the required document will make the tender submission non-responsive.

NAME (Block Capitals): ---------- **Date**

SIGNATURE: _____ ----------

4) DECLARATION WITH RESPECT TO THE OCCUPATIONAL HEALTH AND SAFETY ACT

Definitions

The Act: The Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and any associated/applicable Regulations.

Declaration by Tenderer

1. I, the undersigned, hereby declare and confirm that I am fully conversant with the Act.

2. I hereby declare that my company has the competence and the necessary resources to safely carry out the work/supply/services under this contract in compliance with the Act, and the Employer's/Purchaser's/Client's Health and Safety Specifications.

3. I hereby undertake, if my tender is accepted, to provide on request a suitable and sufficiently documented Health and Safety Plan which plan shall be subject to approval by the Employer/Purchaser/Client.

4. I hereby confirm that adequate provision has been made in my tendered rates to cover the cost of all resources, actions, training and all health and safety measures envisaged in the Act, and that I will be liable for any penalties that may be applied by the Employer/Purchaser/Client for failure to comply with the provisions of the Act.

5. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer/Purchaser/Client will mean that I am unable to comply with the requirements of the Act and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer/Purchaser/Client.

NAME (Block Capitals): ---------- **Date**

SIGNATURE: _____ ----------

5(a) MBD 4: DECLARATION OF INTEREST

NOTES
MSCM Regulations: "**in the service of the state**" means to be:
(a) a member of:
  (i) any municipal council.
  (ii) any provincial legislature.
  (iii) the national Assembly or the national Council of provinces.
(b) a member of the board of directors of any municipal enterprise.
(c) an official of any municipality or municipal enterprise.
(d) an employee of any national or provincial department, national or provincial public enterprise or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999).
(e) a member of the accounting authority of any national or provincial public enterprise.
(f) an employee of Parliament or a provincial legislature.

"**Shareholder**" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

1 No bid will be accepted from persons **in the service of the state.**

2 Any person, having a kinship with persons **in the service of the state**, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to **persons in service of the state**, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.

3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Name of enterprise	
Name of enterprise's representative	
3.2 ID Number of enterprise's representative	
3.3 Position enterprise's representative occupies in the enterprise	
3.4 Company Registration number	
3.5 Tax Reference number	
3.6 VAT registration number	

3.7 The names of all directors/trustees/shareholders/members/sole proprietors/partners in partnerships, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted.

	Circle Applicable	
3.8 Are you presently in the service of the state?	YES	NO
If yes, furnish particulars:		
3.9 Have you been in the service of the state for the past twelve months?	YES	NO
If yes, furnish particulars:		
3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?	YES	NO
If yes, furnish particulars:		

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? If yes, furnish particulars: …… ……	YES	NO
3.12 Are any of the company's directors, trustees, managers, principal shareholders or stakeholders in service of the state? If yes, furnish particulars: …… ……	YES	NO
3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principal shareholders or stakeholders in service of the state? If yes, furnish particulars: …… ……	YES	NO
3.14 Do you or any of the directors, trustees, managers, principal shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract ? If yes, furnish particulars: …… ……	YES	NO

4 The names of all directors/trustees/shareholders/members/sole proprietors/partners in partnerships, their individual identity numbers and state employee numbers must be indicated below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted

Full Name	Identity No.	State Employee No.	Personal income tax No.
Use additional pages if necessary			

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.

NAME (Block Capitals): ..... **Date**

SIGNATURE: ....

5(b) MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION
(ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire.

		Circle Applicable	
1.0	Are you by law required to prepare annual financial statements for auditing?	YES	NO

1.1 **If YES, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.**

2.0	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?	YES	NO

2.1 If NO, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If YES, provide particulars.

……

……

3.0	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?	YES	NO

3.1 If YES, provide particulars.

……

……

4.0	Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality/municipal entity is expected to be transferred out of the Republic?	YES	NO

4.1 If YES, provide particulars.

……

……

If required by 1.1 above, tenderers are to include, at the back of their tender submission document, a printout of their audited annual financial statements.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, ***and, if required, that the requested documentation has been included in the tender submission****.*

NAME (Block Capitals): ..... **Date** .....

SIGNATURE: .....

5(c) MBD 6.1: PREFERENCE POINTS CLAIM
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

1.0 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).
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The applicable preference point system for this tender is the 90/10 preference point system.

1.3 Preference Points for this tender shall be awarded for:

- **Price** and **Specific Goals**: 90 (price) and 10 (specific goals), in terms of 1.2 above.
- The total Preference Points, for Price and Specific Goals, is 100.

1.4 Failure on the part of the tenderer to submit the required proof or documentation, in terms of the requirements in the (Special) Conditions of Tender for claiming **Specific Goal** preference points, will be interpreted that preference points for **Specific Goals** are not claimed.

1.5 The Municipality 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 of preferences, in any manner required by the Municipality.

2.0 DEFINITIONS

2.1 "**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.

2.2 "**price**" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts.

2.3 "**rand value**" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes.

2.4 "**tender for income-generating contracts**" means a written offer in the form determined by Municipality 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 Municipality and a third party that produces revenue for the Municipality, 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.

2.5 "**the Act**" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3.0 FORMULA FOR CALCULATION OF PREFERENCE PRICE POINTS

3.1 PROCUREMENT OF GOODS AND SERVICES

PRICE POINTS: A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 Points System **OR** **90/10 Points System**

$$Ps = 80\left(1 - \frac{Pt - Pmin}{Pmin}\right) \qquad Ps = 90\left(1 - \frac{Pt - Pmin}{Pmin}\right)$$

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

4.0 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 **points claimed** for the goal(s) stated in **Table 1** below, as supported by proof/documentation stated in the **Conditions of Tender**:

4.2 In cases where the municipality intends to use Regulation 3(2) of the Regulations, which states that if it is unclear whether the 80/20 or 90/10 preference point system applies, the municipality must, in the tender documents, stipulate in the case of:

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system, or
(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the municipality must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

TABLE 1: Specific Goals for the tender and maximum points for each goal are indicated per the table below.

Tenderers are to indicate their points claim for each of the Specific Goals in the shaded blocks.

The Specific Goals to be allocated points in terms of this tender	Maximum Number of points ALLOCATED (90/10 system)	Number of points CLAIMED (90/10 system)
Ownership Goal: Gender (Female)	3	
RDP Goal: The promotion of South African owned enterprises	3	
RDP Goal: The promotion of export-oriented production to create jobs	4	
	Total CLAIMED Points (10 Maximum)	

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, certify that the points claimed, based on the specific goals as specified in the tender, qualifies the tendering entity for the preference(s) shown.

I acknowledge that:

1) The information furnished is true and correct.

2) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.

3) 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.

4) 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.

NAME (Block Capitals): _____ **Date**

SIGNATURE: _____ _____

5(d) MBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1.0 This Municipal Bidding Document must form part of all bids invited.

2.0 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3.0 The bid of any bidder may be rejected if that bidder, or any of its directors have:

a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system.
b) been convicted for fraud or corruption during the past five years.
c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years.
d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).

4.0 In order to give effect to the above, the following questions must be completed and submitted with the bid.

	Circle Applicable	
4.1 Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the audi alteram partem rule was applied.) The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	YES	NO

4.1.1 If YES, provide particulars.

……

……

4.2 Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	YES	NO

4.2.1 If YES, provide particulars.

……

……

4.3 Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	YES	NO

4.3.1 If YES, provide particulars.

……

……

4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality/municipal entity, or to any other municipality/municipal entity, that is in arrears for more than three months?	YES	NO
	4.4.1 If YES, provide particulars.		
	…….		
	…….		
4.5	Was any contract between the bidder and the municipality/municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	YES	NO
	4.5.1 If YES, provide particulars.		
	…….		
	…….		

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

NAME (Block Capitals): ..... **Date** .....

SIGNATURE: .....

5(e) MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

NOTES

[1] Includes price quotations, advertised competitive bids, limited bids and proposals.

[2] Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and/or services for purchasers who wish to acquire goods and/or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

[3] Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

1.0 This Municipal Bidding Document (MBD) must form part of all **bids**[1] invited.

2.0 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or **bid rigging**).[2] Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.

3.0 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

a. take all reasonable steps to prevent such abuse;
b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

4.0 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of **bid rigging**.

5.0 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality/Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect.

I certify, on behalf of:

(Name of Bidder)

that:

1. I have read and I understand the contents of this Certificate.

2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect.

3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;

4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;

5. For the purposes of this Certificate and the accompanying bid, I understand that the word “competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
   (a) has been requested to submit a bid in response to this bid invitation.
   (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience.
   (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.

6. 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[3] will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   (a) prices.
   (b) geographical area where product or service will be rendered (market allocation).
   (c) methods, factors or formulas used to calculate prices.
   (d) the intention or decision to submit or not to submit, a bid.
   (e) the submission of a bid which does not meet the specifications and conditions of the bid.
   (f) bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements, or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. 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.

10. 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.

NAME (Block Capitals): _____ **Date** _____

SIGNATURE: _____ _____

SECTION 5: CONDITIONS OF CONTRACT

GOVERNMENT PROCUREMENT: CONDITIONS OF CONTRACT (July 2010)

The ***Conditions of Contract*** are the ***General Conditions of Contract*** as published by the National Treasury titled "Government Procurement: General Conditions of Contract (July 2010), as amended by National Treasury Circular 52 dated 30 July 2010, hereinafter referred to as ***GCC***.

THE NATIONAL TREASURY

Republic of South Africa

GOVERNMENT PROCUREMENT:

GENERAL CONDITIONS OF CONTRACT

July 2010

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1. Definitions

The following terms shall be interpreted as indicated:

1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.

1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.

1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.

1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

1.7 "Day" means calendar day.

1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.

1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.

1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.

1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.

1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.

1.14 "GCC" means the General Conditions of Contract.

1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.

1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the bid will be manufactured.

1.17 "Local content" means that portion of the bidding price, which is not included in the imported content provided that local manufacture does take place.

1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.

1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.

1.20 "Project site," where applicable, means the place indicated in bidding documents.

1.21 "Purchaser" means the organization purchasing the goods.

1.22 "Republic" means the Republic of South Africa.

1.23 "SCC" means the Special Conditions of Contract.

1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.

1.25 "Supplier" means the successful bidder who is awarded the contract to maintain and administer the required and specified service(s) to the State.

1.26 "Tort" means in breach of contract.

1.27 "Turnkey" means a procurement process where one service provider assumes total responsibility for all aspects of the project and delivers the full end product/service required by the contract.

1.28 "Written" or "in writing" means hand-written in ink or any form of electronic or mechanical writing.

2. Application

2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.

2.2 Where applicable, special conditions of contract are also laid down to cover specific goods, services or works.

2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.

3.2 Invitations to bid are usually published in locally distributed news media and on the municipality/municipal entity website.

4. Standards

4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information inspection

5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.

5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.

5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent Rights

6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

6.2 When a supplier developed documentation/projects for the municipality/municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality/municipal entity.

7. Performance security

7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.

7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.

7.3 The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:

(a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or

(b) a cashier's or certified cheque.

7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.

8. Inspections, tests and analyses

8.1 All pre-bidding testing will be for the account of the bidder.

8.2 If it is a bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.

8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.

8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.

8.5 Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.

8.6 Goods and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.

8.7 Any contract goods may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with goods, which do comply with the requirements of the contract. Failing such removal the rejected goods shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected goods, purchase such goods as may be necessary at the expense of the supplier.

8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.

9. Packing

9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

10.1 Delivery of the goods and arrangements for shipping and clearance obligations, shall be made by the supplier in accordance with the terms specified in the contract.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified.

13. Incidental Services

13.1 The supplier may be required to provide any or all of the following services, including additional services, if any:

(a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;

(b) furnishing of tools required for assembly and/or maintenance of the supplied goods;

(c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

(d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and

(e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

(a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and;

(b) in the event of termination of production of the spare parts:

(I) advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and

(ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified.

16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.

16.4 Payment will be made in Rand unless otherwise stipulated.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized or in the purchaser's request for bid validity extension, as the case may be.

18. Variation orders

18.1 In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the contractor may be instructed to deliver the goods or render the services as such. In cases of measurable quantities, the contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.

19. Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.

21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.

21.3 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available.

21.4 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.

21.5 Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without cancelling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

(a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;

(b) if the supplier fails to perform any other obligation(s) under the contract; or

(c) if the supplier, in the judgement of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.

23.5 Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

(i) the name and address of the supplier and/or person restricted by the purchaser;

(ii) the date of commencement of the restriction

(iii) the period of restriction; and

(iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Antidumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

25. Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.

25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.

27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.

27.4 Notwithstanding any reference to mediation and/or court proceedings herein,

(a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and

(b) the purchaser shall pay the supplier any monies due the supplier for goods delivered and/or services rendered according to the prescripts of the contract.

28. Limitation of Liability

28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;

(a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified.

31. Notices

31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.

31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.

32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid SARS must have certified that the tax matters of the preferred bidder are in order.

32.4 No contract shall be concluded with any bidder whose municipal rates and taxes and municipal services charges are in arrears.

33. Transfer of Contracts

33.1 The contractor shall not abandon, transfer, cede assign or sublet a contract or part thereof without the written permission of the purchaser.

34. Amendment of contracts

34.1 No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.

35. Prohibition of restrictive practices

35.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder(s) is/are or a contractor(s) was/were involved in collusive bidding.

35.2 If a bidder(s) or contractor(s) based on reasonable grounds or evidence obtained by the purchaser has/have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 0f 1998.

35.3 If a bidder(s) or contractor(s) has/have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and/or terminate the contract in whole or part, and/or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and/or claim damages from the bidder(s) or contractor(s) concerned.

SECTION 6: SPECIAL/ADDITIONAL CONDITIONS OF CONTRACT

The ***Conditions of Contract*** make reference to the ***Special Conditions of Contract (SCC)*** for details that apply specifically to this bid. The ***SCC*** shall have precedence in the interpretation of any ambiguity or inconsistency between it and the ***Conditions of Contract***. Each item below is cross-referenced to the clause in the ***Conditions of Contract*** to which it mainly applies.

SCC 1.2 CONTRACT

This contract commencement and termination date is based on the date of signature of the Letter of Award (LoA).
The termination date will be 36 months thereafter.

SCC 7.1 PERFORMANCE SECURITY

The liability of the Performance Security shall be Nil.

SCC 10.1 DELIVERY AND DOCUMENTS

a) The cost of delivery and off-loading shall be amortised into the bid price of items. The delivery of goods shall be by road to the Electricity and Energy Directorate, Transformer Stores, 11 Electron Road (off Umgeni Road), Springfield, Durban.
b) Electricity and Energy Directorate reserves the right to reject, at the point of delivery, any goods that are damaged, defective, incorrectly labelled, or that do not conform to the scope and specification detailed in **SECTION 7**.

SCC 12.1 TRANSPORTATION

The cost of transport shall be amortised into the bid price of each item. No additional transport costs shall be entertained.

SCC 15.2 WARRANTY

Items 1 to 21 shall be supplied with a comprehensive warranty period of 2 years (24 months) from date of delivery to the Electricity and Energy Directorate. The warranty shall cover defects to the items supplied.
In addition, the items above shall be supplied with the following warranties covering respective **manufacture defects**:
a) a minimum of 5 years against corrosion; and
b) a minimum of 20 years against loss of insulating gas, where a gas-insulated unit is offered, whether sulphur hexafluoride (SF6) or an alternative gas.

SCC 16.1 PAYMENT

The Contractor shall submit to the Department concerned a detailed account which shall reflect the identifying number of each item/service. Payment will be made on this account when checked and substantiated by the authorised official.

Payment for goods received and accepted by the Municipality shall be made no later than 30 days after submission of invoice or claim, provided however that all the terms of the contract are duly complied with.

Payment will be made only to the supplier. Factoring arrangements will not be accepted.

SCC 17 PRICES

Price(s) submitted on the **OFFICIAL TENDER FORM** shall be based on one or a combination of the following:
i) Rates of exchange, with the base rate as that published by a reputable South African bank seven-days prior to bid closing;
ii) SEIFSA indices, with indices as that published by SEIFSA two-months prior to bid closing; or
iii) CPI per province (KwaZulu-Natal) as specified on ***Table A (Consumer Price Index: Main indices) of Statistical Release P0141***, as that published by Statistics South Africa two-months prior to bid closing.

A) RATES OF EXCHANGE

The first adjustment of the price(s) declared on the **OFFICIAL TENDER FORM** shall be undertaken when the Contractor(s) receives the first “Official Purchase Order”, on condition that:
a) The Contractor(s), within seven-days of receiving the “Official Purchase Order”, arranges “forward exchange cover” i.e. fixing the rate of exchange;
b) The “forward exchange cover” is arranged via a reputable South African bank; and

c) The "forward exchange cover" shall be firm for the first month from the date of the "Official Purchase Order".

Hence, the first adjustment of price(s) declared on the **OFFICIAL TENDER FORM** shall take into account any variation in the rates of exchange between the following dates:

i) The date of the base rate as that published by a reputable South African bank seven days prior to bid closing; and
ii) The date the "forward exchange cover" is arranged after the first "Official Purchase Order".

The adjustment of price(s) shall then be undertaken for subsequent orders provided that the Contractor(s) arranges "forward exchange cover" via a reputable South African bank after each order. The price difference shall be paid or deducted by the Municipality in correlation with any increase or decrease in the basic rate of exchange.
Upon the failure of the Contractor(s) to arrange "forward exchange cover", the Contractor(s) shall be liable should there be an increase in the basic rate of exchange occurring after the last-mentioned date.

B) SEIFSA INDICES

The first adjustment of the price(s) declared on the **OFFICIAL TENDER FORM** shall be undertaken when the Contractor(s) receives the first "Official Purchase Order" and shall take into account any variation in indices between the:

i) indices published by SEIFSA two-months prior to bid closing; and
ii) indices published by SEIFSA two-months prior to the date of the first "Official Purchase Order".

The adjustment of price(s) for subsequent orders shall then be undertaken on the date of every order in accordance with the respective indices, two-months prior, as those published by SEIFSA.

C) CONSUMER PRICE INDEX (CPI)

The first adjustment of the price(s) declared on the **OFFICIAL TENDER FORM** shall be undertaken when the Contractor(s) receives the first "Official Purchase Order" and shall take into account any variation in the CPI between the:

i) CPI published by Statistics South Africa two-months prior to bid closing; and
ii) CPI published by Statistics South Africa two-months prior to the date of the first "Official Purchase Order".

The adjustment of price(s) for subsequent orders shall then be undertaken on the date of every order in accordance with the CPI per province (KwaZulu-Natal) as specified on ***Table A (Consumer Price Index: Main indices) of Statistical Release P0141***, two-months prior, as those published by Statistics South Africa.

SCC 21.1 **DELAYS IN THE SUPPLIER'S PERFORMANCE**

The time schedule for the delivery of goods and performance of services is detailed in the **DELIVERY PERIODS SCHEDULE** of **ACT 12.**

SCC 22.1 **PENALTIES**

If the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the **DELIVERY PERIODS SCHEDULE** of **ACT 12**, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price a penalty of 0,5 % of the order for each stock item that has not been supplied (capped at 5 %). The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

ADDITIONAL CONDITIONS OF CONTRACT

ACC 1 **PERFORMANCE MONITORING & ASSESSMENT OF SERVICE PROVIDERS**

For contract awards that are greater than R 10M, the Contractor shall be subjected to "Performance Monitoring" assessments in terms of the applicable Section of the Council's current Supply Chain Management Policy.

ACC 2 **QUALITY OF PRODUCTS**

No inferior products will be accepted under this enquiry.

Should there be any cause for complaint against the standard of service or quality of products offered which is not resolved within a period of 10 working days, the Municipality reserves the right to cancel the contract after serving one month's notice, in writing, to the supplier involved. Should such notice be given, the supplier shall nevertheless be obliged to perform the duties covered by the contract up to the date of expiration of the period of notice.

ACC 3 **COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES (COID) ACT NO. 130 of 1993**

This act replaces the Workmen's Compensation Act.

The supplier shall, before commencement of work, produce documentary proof to the Director: Electricity and Energy, that he/she has complied in all respects with the provisions of the COID Act. The supplier undertakes that he/she will perform and comply with all provisions of the COID Act and more particularly that he/she will render all returns and pay all assessments for which he/she is liable in terms of such Act.

ACC 4 **DAMAGE TO PERSONS AND PROPERTY**

a) The supplier **shall** indemnify and keep indemnified the Council against any claim for death, injury, damage or loss to any person or property whatsoever in respect thereof or in relation thereto.
b) The supplier enters into this contract as an independent contractor and shall be solely liable in respect of any claim for death, injury, damage or loss to any person or property whatsoever in respect thereof or in relation thereto.

ACC 5 **ESTIMATED QUANTITIES**

The quantities stated in the **ITEM NO., STOCK CODE AND DESCRIPTION SCHEDULE** in **ACT 12** of **SECTION 3** are estimates for information purposes only. The final quantity of goods and services required shall vary, depending on the total number of actual instances a service/goods will be required over the Contract Period. The rates tendered shall be applicable, irrespective of the total quantity of goods and services procured over the contract duration.

SECTION 7: SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS

7.1 SCOPE OF SUPPLY

This specification details the manufacture, testing, supply and delivery of 500 kVA mini-substations and ring main units.

For the purposes of this section, the terms “Bidder” and “Tenderer” are used interchangeably and shall have the same meaning as “Tenderer” in SECTION 2: CONDITIONS OF TENDER.

7.2 NORMATIVE REFERENCES AND ENVIRONMENTAL AND OPERATING CONDITIONS

7.2.1 The following normative references contain provisions which, through reference in this text, constitute requirements of this specification:

Table 1 – Normative references

IEC 60376:2018	Specification of technical grade sulphur hexafluoride (SF6) and complementary gases to be used in its mixtures for use in electrical equipment
IEC 60664-1:2020	Insulation coordination for equipment within low-voltage supply systems: Principles, requirements and tests
IEC 62271-4:2022	High-voltage switchgear and controlgear: Handling procedures for gases for insulation and/or switching
IEC 63360:2025	Fluids for electrotechnical application – Specification of gases alternative to SF6 to be used in electrical power equipment
ISO 8501-1:2007	Preparation of steel substrates before application of paints and related products
NRS 068:2021	Cable earth fault indicator
SANS 121:2024	Hot dip galvanised coatings on fabricated iron and steel articles
SANS 164-1:2025	Plug and socket-outlet systems for household and similar purposes for use in South Africa: Two-pole and earth, 16 A 250 V a.c. system
SANS 780:2021	Distribution transformers
SANS 876:2026	Cable terminations and live conductors within air-filled enclosures (insulation co-ordination) for rated a.c. voltages from 7,2 kV up to and including 36 kV
SANS 1029:2023	Miniature substations for rated a.c. voltages up to and including 24 kV
SANS 1091:2012	National colour standards for paint
SANS 1339:2020	Electric cables - Cross-linked polyethylene (XLPE) insulated electric cables (3,8 kV/6,6 kV to 19 kV/33 kV)
SANS 1874:2022	Switchgear - Metal enclosed ring main units for rated a.c. voltages above 1 kV and up to and including 36 kV
SANS 10142-1:2026	The wiring of premises: Low voltage installations
SANS 12944-2:1998	Paints and varnishes – Corrosion protection of steel structures by protective paint system: Classification of environments
SANS 60269-2:2025	Low voltage fuses: Supplementary requirements for fuses for use by authorised persons
SANS 60529:2013	Degrees of protection provided by enclosures (IP code)
SANS 60695-11-10:2025	Fire hazard testing: Test flames - 50 W horizontal and vertical test methods
SANS 60947-1:2020	Low-voltage switchgear and controlgear: General rules
SANS 60947-3:2020	Low voltage switchgear and control gear: Switches, disconnectors, switch disconnectors and fuse-combination units
SANS 61439-1:2020	Low-voltage switchgear and controlgear assemblies: General rules
SANS 61439-2:2021	Low-voltage switchgear and controlgear assemblies: Power switchgear and controlgear assemblies
SANS 61869-2:2013	Instrument transformers: Additional requirements for current transformers
SANS 62271-100:2025	High-voltage switchgear and controlgear: Alternating-current circuit-breakers
SANS 62271-200:2025	High-voltage switchgear and controlgear: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV
SANS 62271-202:2023	High-voltage switchgear and controlgear: AC prefabricated substations for rated voltages above 1 kV and up to and including 52 kV
SANS 62271-213:2022	High-voltage switchgear and controlgear: Voltage detecting and indicating system

Bidders shall note that, as all normative references are subject to revision, they are encouraged to investigate the possibility of applying the most recent edition of the above references.

7.2.2 The environmental and operating conditions detailed in Table 2 shall be taken into account when designing all items detailed in this specification, to ensure these items will operate satisfactorily for the duration of their design life.

Table 2 – Environmental and operating conditions

Altitude	sea-level to 1 000 m
Ambient temperature – Minimum Ambient temperature – Maximum Ambient temperature – Average	0 °C 50 °C 35 °C measured over a period of 24 h
Atmospheric-corrosivity category	C5 in accordance with SANS 12944-2:1998
Climate	Humid, heavily salt laden and sub-tropical
Highest system phase-to-phase voltage	12 kV
Maximum relative humidity	98 %
Pollution type	Very heavy marine, dust and industrial pollution
Rainfall – Average annual	1 000 mm
Solar radiation (mean annual value)	1,0 kW/m^2
System frequency	50 Hz
System neutral earthing	Solidly

Bidders shall acknowledge that the equipment offered is able to perform in the environmental and operating conditions detailed in **Table 2** without having any adverse effects on the integrity and operation of such equipment. As such, the equipment offered shall be protected against corrosion for the environmental conditions detailed in **Table 2**.

It shall also be noted that these conditions may be prevalent during storage and during the “operational life” of the equipment i.e. when installed inside the substation building. Electricity and Energy Directorate has a large installed base of the equipment listed in this specification and may use current experience when determining performance measurements to the above environmental conditions for the same type of equipment offered.

7.3 COMMON REQUIREMENTS FOR MINI-SUBSTATIONS AND RING MAIN UNITS

7.3.1 The Bidder shall be fully responsible for the design and satisfactory performance of the respective items offered on this enquiry. No clause(s) in this section of the enquiry shall lessen the obligations of the Bidder.
Note: Approval by Electricity and Energy Directorate shall not relieve the Bidder of the responsibility for the adequacy of design.

7.3.2 Mini-substations shall be manufactured in accordance with SANS 1029 and ring main units shall be manufactured in accordance with SANS 1874. Where there are conflicting requirements with the relevant SANS standards, this specification shall take precedence.

7.3.3 The ring main units shall be manufactured from either Aluzinc, stainless steel or 3CR12 steel. Alternative materials may be accepted at the discretion of the Senior Manager: Technology Services. The ring main units shall be inherently designed to be protected from corrosion for the conditions specified in **Table 2**. All items shall be supplied with a minimum 5-year warranty against corrosion and a 20-year warranty against loss of insulating gas, where a gas-insulated unit is offered. Where sulphur hexafluoride (SF_6) is offered the insulating gas shall comply with IEC 60376. Where a gas alternative to SF_6 is offered the insulating gas shall comply with IEC 63360. Handling of the insulating and/or switching gas during installation, commissioning, repair, overhaul, operation and disposal shall comply with IEC 62271-4.

7.3.4 **Outdoor ring main units** shall be housed within an enclosure and fitted onto a concrete plinth and delivered as a single integrated unit. **Mini-substations** shall not be supplied on a concrete plinth.
All enclosures shall be manufactured of a minimum gauge of 2 mm 3CR12 steel. All nuts, bolts, washers and hinges used in the assembly of the housing and for mounting onto the concrete plinth shall be manufactured with marine grade stainless steel (316). Refer to **clause 7.3.10** of this specification.

7.3.5 All enclosures shall be protected from corrosion taking into consideration the environmental conditions detailed in **Table 2**, and as defined in SANS 12944-2 for C5 environmental conditions. Details of the coating system used shall be submitted with the bid document, together with proof of compliance to satisfactory performance in C5 environments. All items shall be supplied with a minimum 5-year warranty against corrosion.

7.3.6 The colour of the mini-substation and ring main unit enclosures shall be an acceptable match to colour C37 (light stone) of SANS 1091:2012.

7.3.7 Door contacts shall be provided for all doors on mini-substations and outdoor ring main units with RTUs and wired to terminal blocks. These contacts shall be integrated into the Intelligent Electronic Device (IED) or Remote Terminal Unit (RTU) for the items fitted with these devices to allow signals to be transmitted to Electricity and Energy Directorate's Control Centre.

7.3.8 All enclosure access doors shall be secured with three-point locking mechanisms. No Allen (hexagon socket) cap screws shall be fitted. The doors shall be capable of being padlocked to prevent unauthorised access. A padlock protection facility in accordance with SANS 1029 shall be provided, however, the door handle and padlock protection facility shall accommodate a 50 mm high security padlock with a shackle diameter of 10 mm. The lock used by Electricity and Energy Directorate is the ***Union SH50SO*** high security padlock.

7.3.9 All doors shall be reinforced using additional steel strength members diagonally welded from corner to corner on the inside surface of the door.

7.3.10 The Municipality reserves the right to manufacture the concrete plinths for the outdoor ring main units, and accordingly the necessary drawings to enable this to be undertaken shall be supplied with the tender documents. The drawings shall include details of all reinforcing steelwork (position, diameter, grade, etc.) and details of concrete.
It shall be noted, however, that outdoor ring main units are to be supplied fitted onto concrete plinths.

7.3.11 The left door of the LV compartment on the mini-substation enclosure, and the left door of the ring main unit enclosure (for outdoor ring main units) shall be drilled with 4 × 5 mm holes prior to coating of the doors. The holes shall be used by Electricity and Energy Directorate to pop-rivet an A4 sized label to the door. A template of this label and confirmation of the mounting position shall be supplied to the successful bidders at time of award. These holes shall be sealed with plastic weatherproof studs/grommets.

7.3.12 A rigid document holder suitable for A4 sized documentation shall be provided and fitted to the inside of one of the MV compartment doors and one of the LV compartment doors as specified in clause 4.13.8 of SANS 1874:2022.

7.3.13 The enclosure shall have a degree of protection of at least IP54, in accordance with SANS 60529, which is applicable when the mini-substation and outdoor ring main unit are completely assembled and the doors are closed.

7.3.14 All mini-substations and ring main units shall be supplied with a minimum two-year warranty on the complete unit, inclusive of all associated components, calculated from the date of delivery. This warranty shall be in addition to the corrosion warranty and the insulating-gas warranty detailed in **clauses 7.3.3** and **7.3.5**.

7.4 SPECIFIC REQUIREMENTS OF MINI-SUBSTATIONS

The mini-substations shall comply fully with SANS 1029, except where amended by this specification.

7.4.1 Bases

Steel bases shall be hot-dip galvanised in accordance with the relevant requirements of SANS 121, be coated with black epoxy tar paint and shall extend the full length of the mini-substation.

7.4.2 Enclosure

The enclosure of the mini-substation shall be manufactured of a minimum gauge of 2 mm 3CR12 steel. The colour of the mini-substation shall be an acceptable match to colour C37 (light stone) of SANS 1091:2012. The roof shall be of the removable type with all fasteners accessible from inside the enclosure. It shall **only** be possible to lift the complete mini-substation with the roof installed.

7.4.3 Type and dimensions

The mini-substation shall be of a unitary design and comply with Type B mini-substations in accordance with SANS 1029. To this effect, the Type B mini-substation base and plinth dimensions shall be considered when designing the mini-substation. The plinth utilised for the mini-substation by Electricity and Energy Directorate is shown in Figure 1. The mini-substation design shall be compatible with this plinth.

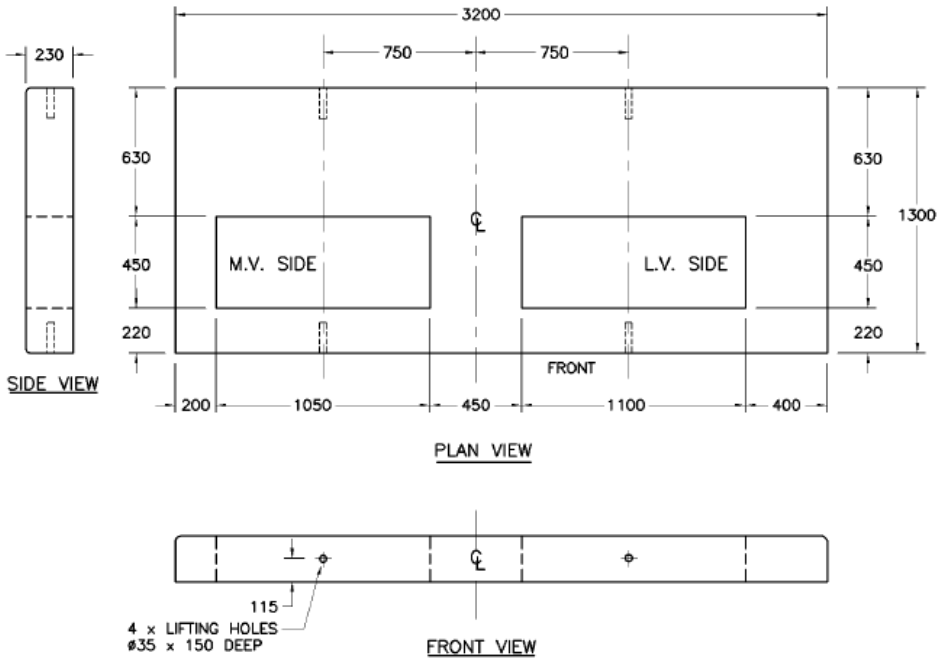


Figure 1 – Mini-substation plinth

7.4.4 Internal arc classification (IAC)

The internal arc classification of the mini-substation shall be IAC AB FLR 20 kA, 0,5 s in accordance with SANS 1029. The internal arc classification shall be verified by test in accordance with SANS 62271-202.

7.4.5 Transformer

7.4.5.1 All transformers shall be manufactured in accordance with SANS 780.

7.4.5.2 Transformers shall be protected from corrosion in accordance with SANS 780 for transformers used in corrosive environments.

7.4.5.3 All transformers shall be provided with Type C bushings on the medium voltage (MV) side and single phase porcelain bushings on the low voltage (LV) side which are clamped at the base as called for in SANS 780.

7.4.5.4 Transformer terminals shall be suited for the acceptance of both aluminium and copper conductors. To this effect, bushing terminals shall be tinned or silver plated, etc. Details of the method in which this is achieved shall be stated in the bid document.

7.4.5.5 Connections between the transformer MV bushings and the cable terminal in the MV compartment shall be made by means of single-core screened cross-linked polyethylene copper cables in accordance with SANS 1339 for the rated voltage of the connected equipment and having a conductor of minimum cross-sectional area rated for the transformer. The connectors shall comply with SANS 876:2026 for Type 4 connectors. These connectors shall be fitted on both the transformer as well as the switchgear side of the cable.

7.4.5.6 Linear tap switches shall not be accepted. The tap switch shall have two O-ring seals.

7.4.5.7 Transformers shall have a tapping range of -5 %, -2,5 %, 0 %, +2,5 %, +5 %, achieved by means of an off-circuit tapping switch.

7.4.5.8 The operation of the off-circuit tapping switch shall be such that by turning the handle clockwise, the tap position number is increased.

7.4.5.9 If corrugated cooling radiators are utilised in the design of the transformer, the design shall ensure that the cooling radiators are adequately protected against mechanical damage as well as corrosion.

7.4.5.10 The transformer shall be fitted with a **bolted main tank lid.**

7.4.5.11 The transformer shall be fitted with a prismatic oil gauge mounted onto the tank. Alternative oil gauges shall be subject to the approval of the Senior Manager: Technology Services.

7.4.5.12 The oil gauge and tap switch depicting the respective tap positions shall be **easily visible** and **readily accessible** with the transformer door of the mini-substation open.

7.4.5.13 A suitable barrier in accordance with SANS 1029 shall be fitted over the LV terminations of the transformer.

7.4.5.14 The transformer shall be fitted with a thermoelectric temperature sensing system that continuously measures and displays the transformer top-oil temperature in °C. This system shall also be able to trip the MV circuit breaker of the ring main unit through a shunt-trip facility when the transformer top-oil temperature exceeds 90 °C. The top-oil temperature gauge shall indicate the top-oil temperature in °C and include a separate resettable indicator for maximum temperature in °C. Two separate LEDs, one on the MV circuit breaker function, and one on the LV switchboard shall illuminate when the MV circuit breaker is tripped via the shunt trip facility. These LEDs shall be clearly labelled with the words: 'MV BREAKER TRIP. TRANSFORMER TEMPERATURE EXCEEDED'. These LEDs shall revert to the non-illuminate state when the breaker is reset.

7.4.6 Ring main units and ring main unit compartment for mini-substation

7.4.6.1 The ring main unit and ring main unit compartment of the mini-substation shall comply with the requirements of **clause 7.5** of this specification.

7.4.6.2 The centre leg of the ring main unit (only for mini-substations) shall be used for connection onto the transformer. This shall be clearly labelled (black writing on a white background) with the words 'LOCAL TRANSFORMER'.

7.4.6.3 The centre leg of the ring main unit (only for mini-substations) shall be a circuit breaker function of appropriate rating for the mini-substation, having a minimum rated current of 200 A. This shall trip from the shunt trip facility of **clause 7.4.5.14** when the transformer top-oil temperature exceeds 90 °C.

7.4.6.4 No overcurrent or earth fault protection is required on the mini-substation. If a protection relay is supplied, the protection settings shall be disabled.

7.4.6.5 Ring main units fitted into mini-substations shall be fitted with one earth fault indicator (EFI) in accordance with **clause 7.5.1.14** of this specification. The earth fault current sensor shall comply with clause 6.2.5 of SANS 1029:2023 and **clause 7.5.4** of this specification.

7.4.7 Low voltage (LV) switchboard assembly

7.4.7.1 General

7.4.7.1.1 The LV distribution assembly shall be:

a) compliant fully with the requirements detailed in SANS 61439-1 and SANS 61439-2;
b) floor mounted and comprising the components detailed in Table 3;
c) designed with materials that are capable of withstanding the operating conditions detailed in Table 2; and
d) designed with clearance and creepage distances that are based on the principles detailed in IEC 60664-1 that are intended to provide insulation coordination. The minimum creepage and clearance distance shall be 19 mm.

Table 3 – Components of LV distribution assembly

Qty.	LV distribution assembly
1	Floor mounted frame
1	800 A, incoming switch disconnector
1	800 A, three-phase busbar system **(Aluminium)**
1	Half-size neutral busbar **(Aluminium)**
1	Earth bus bar extending the full length of the frame **(Aluminium)**
3	400 A, outgoing fuse-switch disconnectors
3	Blanking-off plates for outgoing circuits
1	Instrument panel

7.4.7.1.2 The LV distribution assembly shall provide operator protection in accordance with IP XXB of SANS 60529 under all normal operating conditions. These conditions include the following:

a) operation of the incoming switch disconnector in the 'Open', 'Closed' and transitional states;
b) operation of the outgoing fuse-switch disconnectors in the 'Open', 'Closed' and transitional states;
c) operation of the fuse-carriers in the 'ON', 'OFF' and removed state; and
d) cabling of an outgoing fuse-switch disconnector while the other circuits are live and in service.

The conditions listed above shall assume that a back-feed or alternative supply may be present.

7.4.7.1.3 The LV distribution assembly parts shall, as far as reasonably practicable, be readily accessible and replaceable without excessive dismantling. The assembly parts of equal size and rating shall be inter-changeable.

7.4.7.1.4 The LV distribution assembly shall be provided with storage facilities on the floor mounted frame for all loose devices such as operating handles, padlocking devices, etc.

7.4.7.1.5 The incoming switch disconnector shall be positioned as near as practicable to the right of the LV assembly. Additional outgoing distributor units will be mounted by Electricity and Energy Directorate side-by-side. The spacing between the centres of outgoing distributor units shall be 120 mm ± 5 mm.

7.4.7.1.6 LV assemblies shall be so designed to ensure that thermal interaction does not unduly affect the performance of any of the components.

7.4.7.1.7 Insulating materials shall be of high quality, flame retardant and as non-hygroscopic and resistant to tracking as good manufacturing techniques permit. The main current carrying components shall be electro-tin or electro-silver plated. All fasteners, nuts, bolts etc. shall be hot-dip galvanised and shall have corrosion-proof locking features.

7.4.7.1.8 The minimum rated operational/insulation voltage (U_e/U_i) of the assembly shall be 400 V/420 V respectively. The rated impulse withstand voltage shall be 8 kV.

7.4.7.2 Floor mounted frame

7.4.7.2.1 The floor mounted frame of the LV distribution assembly shall be:

a) suitable for mounting into the mini-substation;
b) provided with four holes to accommodate M12 foundation bolts. Two holes shall be in front of the frame and two holes at the rear;
c) manufactured with a metal or with a metal coating system that will be able to endure the environmental conditions as specified in **clause 7.2.2**;
d) robustly constructed to provide adequate support for the incoming switch disconnector, busbars and outgoing fuse-switch disconnectors; and
e) provided with a channel (Unistrut or equivalent) to support outgoing cables. The channel shall be positioned approximately 50 mm above ground, towards the rear and extend the full length of the frame. There shall be a minimum distance of 450 mm between the centre of the channel and cable terminals of outgoing distributor units.

7.4.7.2.2 The floor mounted frame shall incorporate a suitable hardwood cleat for the support of top entry cables into the incoming switch disconnector.

7.4.7.2.3 The floor mounted frame shall be designed to accommodate the termination of bottom (front) entry cables into the outgoing fuse-switch disconnector.
Note: Rear access to the frame shall not be required to terminate cables.

7.4.7.3 800 A, incoming switch disconnector

7.4.7.3.1 The incoming switch disconnector shall be:

a) compliant fully with the requirements detailed in SANS 60947-1 and SANS 60947-3;
b) designed to comply with the utilisation category AC-21B;
c) designed to have a continuous current rating of 800 A at an ambient temperature of 35 °C;
d) rated with a short-circuit performance capability of 18 kA for 0,5 s;
e) arranged vertically in a three-pole assembly with each phase independently operable;
f) labelled in sequence: "red", "yellow", "blue" from top to bottom;
g) designed such that contact pressure during service conditions is not reliant on the natural spring of the contacts; and

h) designed to include a means of contact tightening that would obviate slackening due to vibration. Good contact shall not depend on the natural spring of the contacts.

Note: The contact-tightening shall be undertaken by the switch disconnector operating handle.

7.4.7.3.2 The incoming switch disconnector shall be designed with interlocks to ensure the operating handle cannot be removed unless the switch disconnector is fully closed, contact pressure applied and locked-closed, or, fully open, isolated and locked-open. In addition to this, the operating handle shall not become live during normal operation.

7.4.7.3.3 The interlocks associated with the incoming switch disconnector shall be such that it is possible to be padlocked in the open position and there shall be labels clearly identifying the 'Open' and 'Closed' positions of the switch disconnector.

7.4.7.3.4 The incoming switch disconnector shall be designed to incorporate current transformers (CTs) for the measurement of current on the main incoming circuit. The CTs shall be resin encapsulated and be located within the incoming switch disconnector. The CTs shall have a ratio of 800/5 (class 5) and a burden of 5 VA. The CTs shall fully comply with the requirements detailed in SANS 61869-2.

7.4.7.3.5 Switch disconnectors shall include a 'visible break' facility.

7.4.7.3.6 The incoming neutral cables shall connect directly to the neutral busbar. Incoming cable terminals located behind the busbars or behind outgoing distributor cables are not acceptable. Incoming circuit cable terminal bolts shall be M12 stainless steel. A flat washer and lock washer shall be provided for each cable terminal fixing.

7.4.7.3.7 All interconnecting cables between the LV busbar of the switchboard and LV bushings of the transformer shall be of flexible aluminium conductor. The conductor ratings shall match the rating of the transformer, temperature rise of the enclosure, etc. Calculations shall be submitted with the bid document to confirm this match.

7.4.7.4 800 A, three-phase, half-size neutral and earth busbar system

7.4.7.4.1 There shall be a busbar for each phase, neutral and earth.

7.4.7.4.2 The busbars shall be manufactured from aluminium and tinned for heavy duty applications.

7.4.7.4.3 The phase busbars shall have continuous current rating of 800 A at an ambient temperature of 35 °C.

7.4.7.4.4 The neutral busbar shall be rated not less than half that of the phase busbar.

7.4.7.4.5 The phase and neutral busbars shall be situated at the rear of the equipment and positioned vertically above each other and in a sequence, red, yellow, blue and neutral from top to bottom. The earth busbar shall be unmarked.

7.4.7.4.6 The earth busbar shall be capable of carrying the rated short-time withstand current corresponding to that specified in **clause 7.4.7.3.1 d)** of this specification.

7.4.7.4.7 The earth busbar shall be mounted in the lower part of the assembly behind the outgoing cables and immediately above the channel supporting the outgoing cables.

7.4.7.4.8 The earth busbar shall be bolted to the frame and include an earth M12 terminal projecting through the frame. The earth terminal shall be suitable for connecting to an external earth bonding conductor and be complete with a corrosion proof flat washer and locknut.

7.4.7.4.9 The spacing between busbar centres from "red" to "yellow" and "yellow" to "blue" shall be 185 mm.

7.4.7.4.10 The neutral busbar shall be insulated from the floor mounted frame and include one terminal for each of the incoming and outgoing circuits.

7.4.7.4.11 There shall be a removable bolted link connecting the neutral busbar to the earth busbar. The rating of the bolted link shall be equivalent to the earth busbar.

7.4.7.4.12 The earth and neutral busbars shall be fitted with three additional M10 nuts and bolts each to cater for the outgoing cable circuit connections.

7.4.7.5 400 A, outgoing fuse-switch disconnector

7.4.7.5.1 The outgoing fuse-switch disconnector shall be:

a) compliant fully with the requirements detailed in SANS 60947-1 and SANS 60947-3;
b) designed to comply with the utilisation category AC-22B;
c) designed to have a continuous current rating of 400 A at an ambient temperature of 35 °C;
d) rated with a short-circuit performance capability of 50 kA;
e) arranged vertically in a three-pole assembly with each phase independently operable (each pole shall have its own fuse-carrier);
f) manually operable;
g) labelled in sequence and dual marked: “red”, “yellow”, “blue” from top to bottom; and
h) designed with a fuse-base and fuse-carrier. The fuse-carrier shall be a separate component and be able to house the NH blade-type fuse-link. The fuse-switch disconnector shall be suitable for type gG, size 2 fuse-links complying with SANS 60269-2.

7.4.7.5.2 The fuse-carrier shall:

a) have its own handle that is able to be independently hinged onto the fuse-base;
b) be able to be switched from a definite “ON” position to a definite “OFF” position; and
c) be of the double break type with switching effected by movement of the fuse-carrier.

7.4.7.5.3 The outgoing fuse-switch disconnector shall be designed with the phase cable terminals located at the bottom of each outgoing fuse-switch disconnector unit.

7.4.7.5.4 The outgoing fuse-switch disconnector shall be suitable for the connection of 1 × 4-core 240 mm², stranded copper or aluminium conductor cable.

7.4.7.5.5 The outgoing fuse-switch disconnector terminals shall be designed to accommodate compression or torque shear lugs.

7.4.7.5.6 One set of three fuse carriers shall be provided with each outgoing fuse-switch disconnector supplied.

7.4.7.5.7 Cable terminals shall be dual marked L1, L2 and L3 respectively. Phase cable terminals of each outgoing fuse-switch disconnector shall be shrouded using a removable transparent terminal cover. Cable terminal fixings shall be M10.

7.4.7.6 Instrument panel

7.4.7.6.1 The LV distribution assembly shall incorporate an instrument panel equipped with the following components:

a) 3 × thermal maximum demand indicators. These maximum demand indicators shall monitor the incoming current to the LV assembly and be suitable for use with current transformers of ratio 800/5, scaled 0 A - 800 A and have a 15 minute time delay;
b) 1 × 16 A, three pin, (single phase, neutral and earth) auxiliary socket outlet;
c) 1 × fuse for protection of the auxiliary socket outlet; and
d) 1 × ES14 brass fitting, with 11 W CFL lamp.

7.4.7.6.2 The maximum demand indicators shall be insulated and shall monitor the incoming current to the LV assembly. The indicators shall be suitable for use with CTs detailed in **clause 7.4.7.3.4**, scaled from 0 A to 800 A and have a 15 minute time delay.

7.4.7.6.3 The auxiliary socket outlet shall be in accordance with SANS 164-1.

7.4.7.6.4 The fuse for the auxiliary socket outlet shall be fitted with a 16 A size A1 fuse-link that complies with SANS 60269-2.

7.4.7.6.5 The wiring on the instrument panel shall be in accordance with SANS 10142-1.

7.4.7.6.6 One ES14 brass fitting, with an 11 W CFL lamp, shall be wired to a single-pole switch in accordance with SANS 10142-1. All terminal connections shall be equivalent to IP2X and it shall not be possible to come into contact with any exposed wiring.

7.4.7.6.7 One Intelligent Electronic Device (IED) which shall measure the LV current and voltage and shall be capable of being integrated into Electricity and Energy Directorate's SCADA network via a cellular IP modem. The communication protocol between the IED and the modem shall be TCP/IP through a RJ45 port. The SCADA master station supports DNP3.0 over TCP/IP and therefore the IED shall be capable of producing data in this format. The modem shall not be supplied, however adequate space shall be allocated for the mounting of the modem of dimensions 300 mm (width) × 250 mm (height) × 100 mm (depth).

The device shall have at least four inputs and four outputs. These shall be wired to integrate the following:
a) door open/close switches (all doors per unit to be paralleled into one input);
b) EFI operation; and
c) the remaining inputs and outputs, which shall be left as spares.

The mounting of the device shall be such that it is easily accessible from the front of the LV compartment. All wiring shall be connected via spring loaded terminals to the IED. All wiring shall be clearly marked for easy identification.

7.4.7.7 Padlocking facilities

7.4.7.7.1 Padlocking facilities shall be provided, on the following components of the LV distribution assembly:
a) 800 A incoming switch disconnector – in the open position; and
b) all 400 A outgoing fuse-switch disconnectors – with the fuse-carriers removed.

7.4.7.7.2 In the event of a supplementary padlocking device being required to lock the incoming switch disconnector in the open position, then one device shall be supplied with each disconnector.

7.4.7.7.3 In the event of a supplementary padlocking device being required to lock the outgoing fuse-switch disconnector, then one device shall be supplied with each disconnector.

7.4.7.7.4 Safety padlocks shall have a body size of up to 40 mm × 40 mm and an 8 mm diameter shackle having a clear inside width of 20 mm, with an inside length of between 16 mm and 30 mm. The hole provided for the shackle shall not be less than 8 mm diameter.

7.4.7.8 Circuit labels

7.4.7.8.1 The outgoing fuse-switch disconnector shall be provided with a circuit label.

7.4.7.8.2 The circuit label shall be 75 mm × 50 mm and made of an insulating material. This label shall be mounted at the top of each circuit and securely held without the use of screws. It shall be possible to slot the label into position and remove it from the front of the assembly. The labels shall be suitable for engraving to show black letters on a white background.

7.4.7.9 Name plate

A name plate shall be affixed to each LV distribution assembly detailing the following information:
a) manufacturer name;
b) serial number;
c) type/designation;
d) year of manufacture;
e) standard to which assembly complies;
f) current rating of the incoming circuit; and
g) current rating of the busbar.

7.4.7.10 Type tests

7.4.7.10.1 Type tests shall be undertaken in an accredited test facility affiliated with the International Laboratory Accreditation Cooperation (ILAC) and certificates shall be issued in the facility's name. All type test reports as listed in **clauses 7.4.7.10.2** to **7.4.7.10.6** shall be submitted with bid documents.

7.4.7.10.2 The LV distribution assembly i.e. frame, instrument panel, busbars, incoming switch disconnector and controlgear, shall be tested in accordance with SANS 61439-1 to verify the short-circuit withstand rating of 18 kA for 0,5 s.

7.4.7.10.3 The incoming switch disconnector shall be tested in accordance with test sequences I, II, III or IV of SANS 60947-3 to have a utilisation category AC-21B.

7.4.7.10.4 The outgoing fuse-switch disconnector shall be tested in accordance with test sequences I, II, III and IV of SANS 60947-3 to have a utilisation category AC-22B.

7.4.7.10.5 The complete LV distribution assembly shall comply with resistance of insulating materials to abnormal heat and fire as detailed in SANS 61439-1.

7.4.7.10.6 The outgoing fuse-switch disconnector shall be tested in accordance with test sequence V of SANS 60947-3 to verify its overload performance capability.

7.5 SPECIFIC REQUIREMENTS OF RING MAIN UNITS

7.5.1 General

7.5.1.1 The ring main units shall comply fully with the requirements of SANS 1874 and the requirements of this specification.

7.5.1.2 The ring main units shall be of the maintenance-free type.

7.5.1.3 The stand-alone ring main units shall have all isolator functions or all circuit breaker functions (as indicated) and ring main units fitted into mini-substations shall have two isolator functions on the outer sides, with a circuit breaker function in the centre for connection to the transformer.

7.5.1.4 All functions of the ring main unit shall be operable from the front of the ring main unit.

7.5.1.5 All functions of the ring main unit shall be fitted with an integral earthing switch and cable test facility. Access to the cable test facility and cable box shall only be possible when the associated earth switch is in the earth position. The main switch and earth switch of each function shall be capable of being locked in the OFF and EARTH positions.

7.5.1.6 All functions shall be provided with cable boxes in accordance with SANS 876:2026, suitable for air terminations. The distance between the centre line of the bushings and the cable support clamp shall be at least 800 mm. This may be achieved by installing a raising base to the ring main unit.

7.5.1.7 The type of cables used by Electricity and Energy Directorate are PILC belted and XLPE cables. Due to the use of PILC belted cable, where required, **no ring type current transformers will be accepted in the cable compartment for installation around cables** (this does not apply to the EFI).

7.5.1.8 A clamping device shall be provided to support the cables, noting that the cables being used are 3-core PILC belted or XLPE cables. The clamping device shall be approved by the Senior Manager: Technology Services.

7.5.1.9 All bushings shall comply with clause 4.8.4 of SANS 1874:2022.

7.5.1.10 The ring main units offered for outdoor use shall be fitted in a 3CR12 enclosure and firmly mounted onto a concrete plinth. Lifting lugs shall be designed such that they carry the full weight (enclosure, ring main unit and concrete plinth).

7.5.1.11 The enclosure shall comply fully with clause 4.13 of SANS 1874:2022 except where amended by this specification.

7.5.1.12 The concrete plinth for the outdoor ring main units shall have a minimum strength of 25 MPa (7 days). It shall be designed to allow for bottom entry of the medium voltage power cables into each power cable compartment of the ring main unit. It shall also allow for one 50 mm hole for entry of a low voltage cable which shall align with the LV supply connector block detailed in **clause 7.5.1.13**. Bidders shall supply all layout and engineering specification drawings with the bid documents. The drawings shall be to the approval of the Senior Manager: Technology Services.

7.5.1.13 The following shall be installed to the inside right top of the ring main unit compartment:

a) One switched 16 A, three pin, (single-phase, neutral and earth) auxiliary socket outlet in accordance with SANS 164-1;
b) One fuse for protection of the auxiliary socket outlet. This shall be fitted with a 16 A Size A1 fuse link in accordance with SANS 60269-2; and
c) One ES14 brass fitting (with 11 W CFL lamp) wired to a single pole switch in accordance with SANS 10142-1. All terminal connections shall be equivalent to IP2X and it shall not be possible to come into contact with any exposed wiring.

The equipment above shall be wired to the top end of an LV supply connector block with spring loaded terminals. These terminals shall be clearly marked live, neutral and earth. The connector block shall accept 16 mm² cables.

Further provision shall be made to gland off a cable below these terminals. The gland hole size shall be a diameter of 25 mm. This shall align with the 50 mm entry hole in the concrete plinth. Note that the provision to gland off a cable is not applicable for mini-substations as the LV supply on the mini-substation is obtained from the LV switchboard.

7.5.1.14 Earth fault indicators (EFIs) shall be fitted to **all** functions on stand-alone indoor and outdoor ring main units. Ring main units fitted into mini-substations (item 1) shall be fitted with **one** EFI. The earth fault current sensor shall comply with clause 6.2.5 of SANS 1029:2023. The EFI indication and control unit (ICU) shall be fitted in the right side of the MV kiosk.
Each earth fault indicator shall comply with **clause 7.5.4** of this specification.

7.5.1.15 A voltage detection system (VDS) in accordance with SANS 62271-213 shall be fitted to each function. The VDS system shall be of the high resistance (HR) type. Bidders are to note that a VDS comprises a test point as well as cable live indication. Any alternative in compliance to SANS 1874 offered shall be to the approval of the Senior Manager: Technology Services.

7.5.1.16 All functions shall be padlockable to prevent inadvertent operation of the unit after isolating and earthing. The locking point shall be durable, robust and of a strong material such as steel or aluminium, and shall be to the approval of the Senior Manager: Technology Services.

7.5.1.17 Ring main units installed in brick building substations shall have dimensions compatible to the existing substations. As such, the ring main unit shall comfortably fit through a door opening of 1 000 mm × 2 400 mm. The minimum distance between the back wall and the front of the cable trench is 700 mm with a cable trench width of 600 mm. The footprint of the ring main unit shall cater for these dimensions for indoor installations.

7.5.1.18 Where motors are fitted to the ring main unit, the manual operation of the ring main unit shall be independent of the motor and charging devices. No external motors shall be fitted to the ring main units.

7.5.2 Internal arc classification (IAC)

The switchgear shall be tested in accordance with SANS 62271-200, with the following additional requirements:

7.5.2.1 All panels shall be tested with the correct size current transformers, if applicable.

7.5.2.2 Where power cables impede the venting of the compartment, they shall be installed for testing purposes.

7.5.2.3 The testing conditions shall be represented as close as possible to those of normal service. They shall be represented by a floor, the ceiling above the top of the power compartments, lateral and rear walls. The clearance of the room simulation shall be in accordance with clause A.2.2 of SANS 62271-200:2025.

7.5.2.4 The internal arc classification of the ring main units shall be in accordance with clause 4.1.14 of SANS 1874:2022 i.e.:

i) Indoor units shall be IAC AFLR 20 kA, 0,5 s (restricted accessibility to authorised personnel only for the front, lateral and rear sides of the ring main unit); and

ii) Outdoor units shall be IAC AB FLR 20 kA, 0,5 s (restricted accessibility to authorised personnel only for the front, lateral and rear sides of the ring main unit within the enclosure, and unrestricted accessibility for the front, lateral and rear sides of the complete outdoor assembly).

7.5.3 Cable test facility requirements

7.5.3.1 Integral cable test facilities shall be provided for each function **on the front** of the ring main unit and independent of the cable termination enclosure.

7.5.3.2 The cable test facilities provided shall be able to connect cable test equipment (e.g. voltage testing or fault locating equipment) to the cable through the cable test facility without compromising the IAC of the ring main unit.

7.5.3.3 Each cable test facility shall be interlocked with its associated earth switch to ensure that the test terminals of the cable test facility are not accessible when the cable is energised. Access to the test terminals of the cable test facility shall only be possible when the associated earth switch is in the EARTH position.

7.5.3.4 Where removable short-circuiting connections are provided for cable earthing (e.g. a removable star point connection), the re-instatement of these connections following cable testing shall not require the use of tools and/or the application of specific torque settings. This implies that no bolted connections are accepted. It shall not be possible to close the cable test facility if the short-circuit connections have not been re-instated. Alternatively, automatic re-instatement of the short-circuit connections shall be achieved in the process of closing the cable test facility. It shall not be possible to physically remove the short-circuiting connections from the switchgear.

7.5.3.5 Where test probes are required in order to carry out cable testing, a complete set of three test probes shall be supplied with each function and securely mounted at a readily accessible location on the inside of the access cover. If this is not possible then other means may be implemented so that access to the test probes is only possible when the cable test facility is accessed. This shall be to the approval of the Senior Manager: Technology Services.

7.5.3.6 The cable test facility shall be padlockable in the closed position.

7.5.4 Earth fault indicators (EFIs)

7.5.4.1 General

7.5.4.1.1 EFIs offered shall comply with the technical requirements detailed in NRS 068, except where such requirements are modified in this specification.

7.5.4.1.2 The EFI shall comprise the following:
a) an earth fault current sensor;
b) an indicating and control unit (ICU);
c) a remote indication unit (RIU) for outdoor units and mini-substations;
d) leads to electrically connect the earth fault current sensor and RIU to the ICU; and
e) a lead to connect the ICU to a 230 V, 50 Hz auxiliary supply.

7.5.4.1.3 The individual components of the EFI shall be supplied fully wired as a complete unit.

7.5.4.1.4 The installation of the EFI shall not require for the ICU to be opened. This is to eliminate the risk of access to the components of the ICU. It is preferred that access to the connection terminals for the RIU and potential free contact be within a separate compartment within the ICU.

7.5.4.1.5 The EFI shall operate and provide permanent indication for an earth fault current having a minimum value of 50 A and a minimum duration of 50 ms (2,5 cycles), and shall be capable of withstanding high earth fault currents for at least 1,5 s. The EFI shall not operate for current spikes or magnetising inrush currents.

7.5.4.1.6 The EFI shall automatically reset from a 230 V, 50 Hz, auxiliary supply. Manually resetting EFIs shall not be accepted. The EFI shall reset within 10 seconds of restoration of supply.

7.5.4.1.7 The ICU of the EFI shall be housed in a weatherproof case and shall be subjected to the appropriate tests in SANS 60529 for a minimum degree of protection of IP 64.

7.5.4.1.8 All bolts, nuts and washers of size M8 and smaller and all exposed metal parts shall be manufactured of stainless steel of grade 304, 316 or 317.

7.5.4.1.9 Where different metals and alloys are used in the design, the design shall be such that there shall be no contact between dissimilar metals and alloys unless these metals and alloys are galvanically compatible or unless suitable steps have been taken to prevent galvanic corrosion.

7.5.4.1.10 The EFI shall provide a clear indication of an earth fault by means of a **mechanical flag** indication on the **ICU**, and by means of a **flashing light-emitting diode (LED)** on the **RIU**.

7.5.4.2 Earth fault current sensor

7.5.4.2.1 The earth fault current sensor shall be a split core type core-balance current transformer (CT) and shall be fully encapsulated and corrosion resistant.

7.5.4.2.2 The earth fault current sensor shall accommodate:
a) one 11 kV, three-phase cable having an outside diameter ranging from 50 mm (95 mm²) to 90 mm (300 mm²);
b) one 35 mm² PVC insulated earth conductor; and
c) five 2,5 mm² PVC insulated conductors (used for injecting test current).

7.5.4.2.3 The earth fault current sensor shall be provided with a suitable non-conductive, adjustable fixing device (such as a suitably sized cable tie) to attach the sensor to the cable in a suitable position. The fixing device shall be adjustable between 40 mm and 100 mm diameter.

7.5.4.2.4 The earth fault current sensor shall be supplied with five turns of 2,5 mm² PVC insulated conductor closely wrapped around and fixed into place with insulation tape. The conductor shall be continuous and have a lead length of two metres and then neatly terminated into the female end of a two pole, 6,35 mm jack plug. Current shall be injected via this jack plug to positively test the entire circuit including CT and wiring.

7.5.4.2.5 The female jack plug shall be mounted onto a 3 mm thick aluminium bracket. The bracket shall be similar to **Figure 2** below.

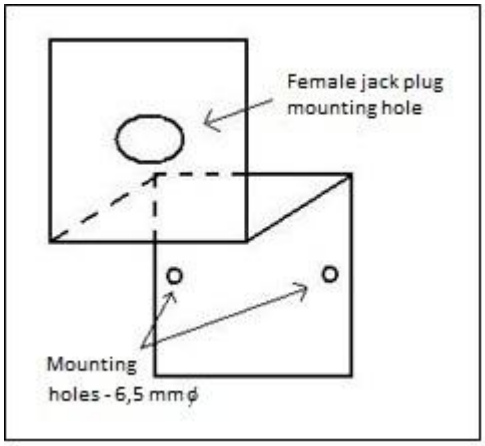


Figure 2 – Mounting bracket for EFI jack plug

7.5.4.2.6 The bracket shall be neatly mounted to each function of ring main unit, or to the right-hand side of the ring main unit or kiosk (for stand-alone ring main units), and to the inside right hand side of the MV compartment (for mini-substations). These shall be appropriately labelled to clearly identify with the respective function of the ring main unit.

7.5.4.3 Indicating and control unit (ICU)

7.5.4.3.1 The indication on the ICU shall be by means of a **mechanical flag** and shall easily be visible from at least five metres in daylight.

7.5.4.3.2 The ICU shall be designed for panel mounting and shall have one 20 mm long stainless-steel stud for mounting purposes. The stud shall be fitted with one stainless steel nut and washer. Alternative fixing systems may also be considered. The mounting of the ICU shall not require the unit to be opened.

7.5.4.3.3 The ICU shall have one potential free contact that closes when the unit senses a fault and operates. This contact shall be wired to a terminal block for all ring main units.
For mini-substations, the output shall be wired via the terminal block to the IED as specified in **clause 7.4.7.6.7** for mini-substations.

7.5.4.4 Remote indication unit (RIU) for outdoor units and mini-substations

7.5.4.4.1 The EFIs fitted to outdoor units and mini-substations shall be provided with an RIU with indication achieved via a **flashing LED**. The unit shall be designed such that a minimum of 8 hours of LED indication is achieved.

7.5.4.4.2 The RIU shall be such that it is mountable on a flat steel plate of up to 5 mm thick and shall be vandal-proof and weatherproof for outdoor mounting with an IP 65 degree of protection in accordance with SANS 60529.

7.5.4.4.3 The RIU mounting thread shall be M12 and the housing shall be corrosion resistant. All nuts and washers supplied for mounting purposes shall also be corrosion resistant.

7.5.4.4.4 The RIU shall be mounted on the outside of the enclosure in such a manner that it can be clearly viewed from the front of the enclosure without having to open the enclosure. The unit shall be visible from at least 15 m during daylight and be vandal-proof.

7.5.4.5 Leads

7.5.4.5.1 The leads shall be double insulated with an over-sheath to prevent mechanical damage.

7.5.4.5.2 The lead that electrically connects the earth fault sensor to the ICU, and the lead that electrically connects the ICU to the 230 V, 50 Hz, auxiliary supply shall each have a minimum length of two metres.

7.5.5 Additional requirements for outdoor ring main units fitted with remote terminal units

7.5.5.1 A remote terminal unit enclosure shall be securely fitted onto the left side of the ring main unit enclosure, shall be side facing and elevated off the ground level. The corrosion protection requirements of clauses **7.3.4** and **7.3.5** shall apply. The enclosure shall have suitable space and mounting arrangements to accommodate the remote terminal unit with associated wiring and equipment, as well as have an additional 350 mm height across the length of the RTU enclosure to accommodate for the modem and communication equipment. A pre-cut hole of 20 mm diameter for the antenna cabling shall be supplied and sealed with a weatherproof grommet on the top of the remote terminal unit enclosure.

7.5.5.2 The remote terminal unit used shall be in accordance with **clause 7.6** of this specification.

7.5.5.3 The LV supply to the remote terminal unit shall be via the ring main unit enclosure. Refer to **clauses 7.5.1.12 and 7.5.1.13.** The LV supply shall be wired to a terminal block within the RTU enclosure.

7.5.5.4 All wiring schematics used shall be supplied with the bid documents.

7.5.5.5 All wiring between the ring main unit and the remote terminal unit shall terminate into plug connectors, such that the remote terminal unit can be connected to, and disconnected from, the ring main unit without any re-wiring or modification. Full functionality of the ring main unit and remote terminal unit shall be achieved through these plug connectors.

7.5.5.6 Manual operation of ring main units with remote terminal units shall not require the winding/charging of the opening/closing mechanism via the handle for operation.

7.5.6 Additional requirements for indoor ring main units fitted with remote terminal units

7.5.6.1 The remote terminal unit used shall be in accordance with clause 7.6 of this specification.

7.5.6.2 The remote terminal unit shall be fitted to the left side of the ring main unit and shall be front facing.

7.5.6.3 The LV supply to the remote terminal unit shall be wired from the top end of an LV supply connector block with spring-loaded terminals mounted to the left side of the ring main unit below the remote terminal unit. These terminals shall be clearly marked live, neutral and earth.
Further provision shall be made to clamp the substation LV supply cable below these terminals.

7.5.6.4 All wiring schematics used shall be supplied with the bid documents.

7.5.6.5 All wiring between the ring main unit and the remote terminal unit shall terminate into plug connectors, such that the remote terminal unit can be connected to, and disconnected from, the ring main unit without any re-wiring or modification. Full functionality of the ring main unit and remote terminal unit shall be achieved through these plug connectors.

7.5.6.6 **Manual operation** of ring main units with remote terminal units shall not require the winding/charging of the opening/closing mechanism via the handle for operation.

7.5.7 Protection requirements for ring main units with circuit breaker functions (except the mini-substation RMU)

7.5.7.1 The protection requirements of ring main units having circuit breaker functions shall comply with clause 4.6.2 of SANS 1874:2022.

7.5.7.2 A self-powered protection relay shall be fitted to all circuit breaker functions. The make and model of the relay offered shall be stated in the bid documents.

7.5.7.3 Circuit breakers shall have a minimum electrical and mechanical endurance classification of E2-M1 in accordance with SANS 62271-100.

7.5.7.4 Three current transformers (one per phase) shall be installed around the cable bushings of each circuit breaker function. The current transformers shall have an accuracy class and accuracy limit factor of at least 5P10 and shall comply with SANS 61869-2. Full details of the current transformers offered shall be submitted with the bid documents.

7.5.7.5 All protection wiring shall be terminated onto terminal blocks in accordance with clause 4.6.2.14 of SANS 1874:2022.

7.6 REQUIREMENTS OF REMOTE TERMINAL UNITS (RTUs)

7.6.1 Ring main units fitted with RTUs (as specified) shall be integrated into an automation system. This shall be achieved via the RTU. The RTU and associated components shall be housed within a lockable cabinet. Operation functions via the RTU shall be possible without unlocking the cabinet. Access to the components of the RTU shall only be possible with the RTU cabinet unlocked.

7.6.2 The automation and monitoring functions shall achieve the following:
7.6.2.1 short circuit/earth fault indication for remote and local reading;
7.6.2.2 remote switch position indication;
7.6.2.3 remote opening/closing of switches;
7.6.2.4 remote measurement of current;
7.6.2.5 local/remote switch;
7.6.2.6 a.c. fail alarm;
7.6.2.7 battery charger faulty alarm;
7.6.2.8 RTU door open alarm; and
7.6.2.9 ring main unit door open alarm (outdoor units).

7.6.3 The RTU shall be fitted with a battery and charger unit compatible for its operation/duty. A separate a.c. circuit breaker shall be provided to isolate a.c. supply to the RTU and modem. A d.c. supply of 12-32 V, 1,5 A shall be provided to power the modem and shall be clearly labelled. The battery used shall be of a standard voltage and rating and shall be readily available. The battery and charger unit shall provide a minimum standby duration of 12 h for the RTU and modem, and shall permit a minimum of eight switch operations on battery power alone.

7.6.4 The RTU shall support communication protocols via Modbus and DNP3.0 over TCP/IP. The bidder shall provide a DNP3.0 over Ethernet TCP/IP certificate of compliance issued by an independent authority listed on the DNP3 website (www.dnp.org) and the full implementation table of the protocol.

7.6.5 The RTU shall have two 10/100 Ethernet ports. The Ethernet ports shall be configurable to enable and/or disable the port for security purposes. The ethernet ports shall also be utilised for remote configuration. The Ethernet port shall allow for DNP3.0 communication to the master station and shall also allow for remote configuration. The RTU shall have the capability of being configured through the web browser. The status of the equipment shall be represented through the web browser. The RTU shall have the ability to import a configuration file for the SCADA point mapping. A template configuration file shall be loaded on each RTU delivered to Electricity and Energy Directorate. This template shall be developed by Electricity and Energy Directorate together with the successful Bidder. The configuration file shall be exportable and in a readable format and shall be workable when the RTU is disconnected i.e. when offline.

7.6.6 The RTU shall have comprehensive self-test and diagnostic facilities. Alarms from self-test shall be able to be configured as internal indication bits within the DNP3.0 protocol.

7.6.7 The RTU shall have the ability to force remote points and shall support wireless updates.

7.6.8 A modem mounting plate shall be supplied to accommodate a modem of size 300 mm (width) × 250 mm (height) × 100 mm (depth) within the RTU cabinet.

7.6.9 A pre-cut hole of 20 mm diameter for the antenna cabling shall be supplied and sealed with a weatherproof grommet on the top of the RTU cabinet (for both indoor and outdoor RTU units).

7.6.10 All LV wiring shall be wired to spring-loaded terminals within the MV compartment.

7.6.11 All wiring shall be marked with clip-on labels. The wiring labelling standard for SCADA which shall be used is as follows:

i) Tele-Control Labelling
W – Control
X – Status Digital IP
XC – Current analogue
XE – Voltage analogue

ii) Other Field Wiring

A – Main protection Differential
AL – Alarms (General)
B – Bus Zone
C – Backup Protection
D – Metering
E – VTs
J12 – Unfused d.c.
K – Fused d.c.
T – Pilots

7.6.12 Full wiring diagrams shall be supplied with the bid documents.

7.6.13 For indoor RTU units, a pre-cut 32 mm diameter hole shall be provided on the bottom left side of the RTU cabinet to align with perforated trunking within the cabinet. This hole shall be sealed with a weatherproof grommet.

Above the perforated trunking, a DIN-rail-mounted terminal block shall be provided to cater for 32 points. From these 32 points, 24 digital inputs and 8 analogue inputs shall be prewired to the RTU cards. Refer to the **Figure 3** below.

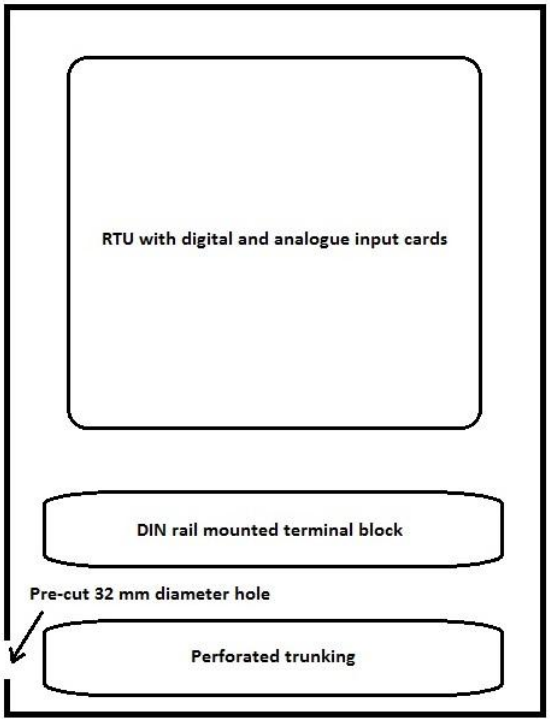


Figure 3 – RTU cabinet layout for indoor RTU units

7.7 MARKINGS

7.7.1 Each mini-substation and ring main unit shall comply fully with SANS 1029 and SANS 1874 for all markings and labelling.

7.7.2 A brass registration number plate of size at least 15 mm × 60 mm shall be securely fitted to each ring main unit and transformer. The number to be inscribed on the registration number plate shall be given at time of ordering.

7.8 TESTS AND DOCUMENTATION

7.8.1 The mini-substation shall be type tested in accordance with SANS 1029.

7.8.2 The ring main unit shall meet or exceed the requirements of the type tests of SANS 1874.

7.8.3 Type test reports detailing the test procedures and test results on the mini-substations and ring main units offered, shall be submitted with tender documents. The test reports shall be from a recognised test authority as specified in clause 5.1.4 of SANS 1874:2022. Failure to provide details of tests called for may result in the rejection of the bid.

7.8.4 Type tests shall be undertaken in an accredited test facility affiliated with the International Laboratory Accreditation Cooperation (ILAC) and certificates shall be issued in the facility's name.

7.8.5 Full technical and descriptive details, relating to all the items offered in this enquiry, shall be submitted so that the offer can be fully evaluated. This shall include:

7.8.5.1 materials used;
7.8.5.2 method of manufacture;
7.8.5.3 details of quality assurance procedures;
7.8.5.4 drawings.

7.8.6 An electronic copy in Microsoft Excel format of the rating plate data and information of the mini-substations and ring main units shall be provided with each delivery. Electricity and Energy Directorate will provide the template in which the data shall be entered and submitted as required.

7.8.7 Each item shall be delivered together with an inspection checklist for the item. The checklist shall be provided by Electricity and Energy Directorate to the successful bidder and may be subject to revision.

7.9 SAMPLES

7.9.1 The preferred Tenderers shall submit samples of the tendered items within four (4) weeks of a request by Electricity and Energy Directorate. These samples shall be delivered to Electricity and Energy Directorate, Electrical Workshops, 11 Electron Road (off Umgeni Road), Springfield, Durban, marked for the attention of Nazeer Vawda – Senior Electrical Engineer: Technology Services.

7.9.2 The samples submitted by Tenderers for each item shall be identical to the items offered on the respective **Technical Returnable Documents** detailed in **ACT 12** and shall be labelled with the following information:
a) Contract/Enquiry number;
b) Name of Tenderer;
c) Date of delivery; and
d) Item number corresponding with the respective items in **Section 8**.

7.9.3 Tenderers shall bear the full cost of the samples provided. eThekwini Municipality shall not be held liable for the costs incurred by the Tenderer.

7.9.4 Electricity and Energy Directorate reserves the right to subject samples to tests as deemed reasonable and necessary. Tenderers shall collect and remove their samples within one month of being notified to do so, failing which they will be deemed to have waived all rights to the samples and such samples not collected after one month from the date of such notification will become the property of the eThekwini Municipality for disposal or use at its discretion.

7.10 TRAINING

7.10.1 Awarded Bidders shall be required to provide initial free-of-charge demonstrations on their items to Electricity and Energy Directorate staff. This shall be arranged via the Electricity and Energy Directorate Training Centre.

7.10.2 Further formal and detailed training shall be provided as follows:
a) Switchgear Operator training priced per session comprising of 15 candidates.
b) Switchgear Maintenance training priced per session comprising of 15 candidates.
c) SCADA and RTU training priced per session comprising of 10 candidates.

7.10.3 The venue shall be provided by Electricity and Energy Directorate.

7.10.4 All hardware and firmware shall be provided by the successful Bidder.

7.10.5 All training material shall be provided by the successful Bidder.

7.10.6 The content of the training for clause 7.10.2 a) and b) shall be in accordance with the manufacturer's requirements.

7.10.7 The content for clause 7.10.2 c) shall include installation and commissioning of the RTU as well as all aspects relating to settings and engineering of configurations.

7.11 DELIVERY REQUIREMENTS

7.11.1 Delivery of goods shall be to Electricity and Energy Directorate, Electrical Workshops, 11 Electron Road (off Umgeni Road), Springfield, Durban.

7.11.2 The successful Tenderer shall give 24 hours' notice of arrival of each batch of mini-substations and ring main units by road transport to avoid delays in off-loading. Deliveries shall not be accepted on Saturdays, Sundays, public holidays and after hours.

SECTION 8: SCHEDULE OF RATES

Item	Description	Stock Code	Unit of Measure	Unit Price Excluding VAT	
				R	c
1	500 kVA Mini-substation 11 000 V/420 V/242 V	1763	each		
2	Indoor, three-circuit ring main unit (all isolator switch disconnectors)	1279	each		
3	Indoor, four-circuit ring main unit (all isolator switch disconnectors)	1280	each		
4	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure (all isolator switch disconnectors)	110080	each		
5	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure (all isolator switch disconnectors)	110072	each		
6	Indoor, three-circuit ring main unit (all circuit breaker functions)	1778893	each		
7	Indoor, four-circuit ring main unit (all circuit breaker functions)	1778906	each		
8	Indoor, five-circuit ring main unit (all circuit breaker functions)	1778914	each		
9	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1778990	each		
10	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1779001	each		
11	Outdoor, five-circuit ring main unit fitted in a 3CR12 steel enclosure (all circuit breaker functions)	1779095	each		

BIDDING COMPANY: _____

NAME: _____ SIGNED: _____

CAPACITY OF SIGNATORY: _____ DATE: YYYY - MM – DD

SECTION 8: SCHEDULE OF RATES (continued)

Item	Description	Stock Code	Unit of Measure	Unit Price Excluding VAT	
				R	c
12	Indoor, three-circuit ring main unit with integrated remote terminal unit (all isolator switch disconnectors)	109553	each		
13	Indoor, four-circuit ring main unit with integrated remote terminal unit (all isolator switch disconnectors)	109561	each		
14	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all isolator switch disconnectors)	1779036	each		
15	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all isolator switch disconnectors)	1779044	each		
16	Indoor, three-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778922	each		
17	Indoor, four-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778957	each		
18	Indoor, five-circuit ring main unit with integrated remote terminal unit (all circuit breaker functions)	1778973	each		
19	Outdoor, three-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779010	each		
20	Outdoor, four-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779108	each		
21	Outdoor, five-circuit ring main unit fitted in a 3CR12 steel enclosure with integrated remote terminal unit (all circuit breaker functions)	1779028	each		

BIDDING COMPANY: _____

NAME: _____ SIGNED: _____

CAPACITY OF SIGNATORY: _____ DATE: YYYY - MM – DD

SECTION 8: SCHEDULE OF RATES (concluded)

Item	Description	Stock Code	Unit of Measure	Unit Price Excluding VAT	
				R	c
22	Switchgear Operator Training	1779052	Per session		
23	Switchgear Maintenance Training	1779061	Per session		
24	SCADA and RTU Training	1779079	Per session		

BIDDING COMPANY: _____

NAME: _____ SIGNED: _____

CAPACITY OF SIGNATORY: _____ DATE: YYYY - MM – DD

SECTION 9: OFFICIAL TENDER FORM

Part A: OFFER BY TENDERER - In response to **Tender Number : 37074-5E** I/we hereby offer to supply the goods/services detailed hereunder in accordance with the Technical Specification, and subject to the Standard and Special Conditions of Tender (Goods/Services), and General and Special Conditions of Contract, which accompanied your Tender (with which I/we acknowledge myself/ourselves to be fully acquainted) at the price stated below, or in the case of individual rates are indicated in Section 8 : Schedule of Rates.

I/We hereby agree that this tender will hold good and remain open for acceptance as specified in the Conditions of Tender or during such other period as may be specified in the Special Conditions of Tender.

eThekwini Vendor Portal Registration Number: **PR**

C.S.D Registration Number: **MAAA**

S.A.R.S Pin Number:

Completion of the following is compulsory. Failure to declare the following will invalidate your offer.

Declaration of Interest

Are any of the entity's directors, managers, principal shareholder or stakeholders currently in the service of the state or have been in the service of the state in the past twelve (12) months? ☐ Yes ☐ No				
Is any spouse, child or parent of the entity's directors, managers, principal shareholder or stakeholder currently in the service of the state or have been in the service of the state in the past twelve (12) months? ☐ Yes ☐ No				
Name of entity's member	**Position in Entity**	**Name of Relative (if applicable)**	**Name of State Institution**	**Nature of Relationship**
Do you or any other directors, managers, principal shareholder or stakeholder of your entity have any relationship (spouse, family, friend, associate) with persons in the service of the state and/or who may be involved with the evaluation of this quotation? If yes please furnish particulars below ☐ Yes ☐ No				
Name of entity's member	**Position in Entity**	**Name of Relative (if applicable)**	**Name of State Institution**	**Nature of Relationship**

Refer to MBD 4 in SECTION 4 for the definition of "in service of the State"

*** Signature :** _____ *** Name** *(capitals)*: _____

Date: _____ **Capacity:** _____

*** Name of Business:** _____ **Tel:** _____

Address: _____ **Fax:** _____

_____

*** Denotes Mandatory Information**

Failure to complete the Mandatory Information and sign this Tender Form will invalidate the tender

Part B: ACCEPTANCE BY PURCHASER - The Purchaser, as represented by the following Official, hereby accepts the Tenderer's offer in terms of the Conditions of Tender, Specifications, and Conditions of Contract.

Signature: **Name** *(capitals)*:

Date: **Capacity:**