



KENYA ELECTRICITY GENERATING COMPANY LIMITED

KGN-GDD-06-2018

**TENDER FOR SUPPLY OF NUMERICAL PROTECTION
RELAYS FOR OLKARIA POWER PLANTS.
(OPEN NATIONAL)**

Kenya Electricity Generating Company Limited
Stima Plaza Phase III, Kolobot Road, Parklands
P.O. BOX 47936-00100
NAIROBI.
Website: www.kengen.co.ke

January, 2018

SECTION I INVITATION TO TENDER

The Company invites sealed tenders from eligible candidates for the **Supply of Numerical protection relays for Olkaria Power Plants** whose specifications are detailed in the Tender Document.

Interested eligible candidates may obtain further information from and inspect the Tender Documents during official working hours starting at the date of advert at the office of:

Supply Chain Director
Tel: (254) (020) 3666000
Email: tenders@kengen.co.ke;

where the tender document may be collected upon payment of a non-refundable fee of **KShs.1,000.00** paid in cash or through a bankers cheque at any KenGen finance office. The document can also be viewed and downloaded from the website www.kengen.co.ke and www.suppliers.treasury.go.ke. Bidders who download the tender document from the website **are advised to forward their particulars to facilitate any subsequent tender clarifications and addenda**. Downloaded copies are free of charge.

Bidders are advised from time to time to be checking the website for any uploaded further information on this tender.

Unless otherwise stated, tenders **MUST** be accompanied by a security in the format and amount specified in the tender documents and must be submitted in a plain sealed envelope and marked “**KGN-GDD-06-2018-TENDER FOR SUPPLY OF NUMERICAL PROTECTION RELAYS FOR OLKARIA POWER PLANTS**” And addressed to:

**Company Secretary & Legal Affairs Director
Kenya Electricity Generating Company Limited
7th Floor, Stima Plaza Phase III
Kolobot Road, Parklands
P O Box 47936 - 00100
NAIROBI, KENYA**

On or before: ***(20th February 2018 at 2.00 p.m.)***

Tenders will be opened on ***(20th February 2018 at 2.30 p.m.)*** in the presence of the candidates’ representatives who choose to attend at Stima Plaza III, Executive Committee Room, 7th Floor. The company reserves the right to vary the quantities.

SUPPLY CHAIN DIRECTOR

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2.1 Eligible Tenderers

- 2.1.1 This Invitation for Tenders is open to all tenderers eligible as described in the Invitation to Tender. Successful tenderers shall complete the supply of goods by the intended completion date specified in the Schedule of Requirements (Section VI).
- 2.1.2 The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 2.1.3 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods under this Invitation for tenders.
- 2.1.4 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

2.2 Eligible Goods

- 2.2.1 All goods to be supplied under the contract shall have their origin in eligible source countries.
- 2.2.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components
- 2.2.3 The origin of goods is distinct from the nationality of the tenderer.

2.3 Cost of Tendering

- 2.3.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 2.3.2 The price to be charged for the tender document collected from the Procuring Entity shall not exceed Kshs.1,000/= . Downloaded copies are free of charge.

2.3.3 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

2.4. The Tender Document

2.4.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 2.6 of these instructions to Tenderers

- (i) Invitation to Tender
- (ii) Instructions to tenderers
- (iii) General Conditions of Contract
- (iv) Special Conditions of Contract
- (v) Schedule of requirements
- (vi) Technical Specifications
- (vii) Tender Form and Price Schedules
- (viii) Tender Security Form
- (ix) Contract Form
- (x) Performance Security Form
- (xi) Manufacturer's Authorization Form
- (xii) Confidential Business Questionnaire

2.4.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

2.5 Clarification of Documents

2.5.1 A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by post at the entity's address indicated in the Invitation to Tender. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than **seven (7) days prior to the deadline for the submission of tenders**, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers that have received the tender document.

(IN THE CASE OF OPEN INTERNATIONAL TENDER 10 DAYS)

2.5.2 The procuring entity shall reply to any clarifications sought by the tenderer **within 3 days** of receiving the request to enable the tenderer to make timely submission of its tender.

2.6 Amendment of Documents

2.6.1 **At any time prior** to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.

2.6.2 All prospective candidates that have received the tender documents will be notified of the amendment in email and will be binding on them.

2.6.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

2.7 Language of Tender

2.7.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchange by the tenderer and the Procuring entity, shall be written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

2.8 Documents Comprising of Tender

2.8.1 The tender prepared by the tenderers shall comprise the following components:

- (a) a Tender Form and a Price Schedule completed in accordance with paragraph 2.9, 2.10 and 2.11 below
- (b) documentary evidence established in accordance with paragraph 2.1 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (c) documentary evidence established in accordance with paragraph 2.2 that the goods and ancillary services to be supplied by the tenderer are eligible goods and services and conform to the tender documents; and
- (d) tender security furnished in accordance with paragraph 2.14

2.9 Tender Forms

2.9.1 The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

2.10 Tender Prices

2.10.1 The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the goods it proposes to supply under the contract

2.10.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.

2.10.3 Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22

2.10.4 The validity period of the tender shall be **90 days** after the date of opening of the tender.

2.11 Tender Currencies

2.11.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the Appendix to Instructions to Tenderers.

2.12 Tenderers Eligibility and Qualifications

2.12.1 Pursuant to paragraph 2.1. the tenderer shall furnish, as part of its Tender, documents establishing the tenderers eligibility to tender and Its qualifications to perform the contract if its tender is accepted.

2.12.2 The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 2.1

2.12.3 The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall be established to the Procuring entity's satisfaction;

- (a) that, in the case of a tenderer offering to supply goods under the contract which the tenderer did not manufacture or otherwise produce, the

tenderer has been duly authorized by the goods' Manufacturer or producer to supply the goods.

- (b) that the tenderer has the financial, technical, and production capability necessary to perform the contract;
- (c) that, in the case of a tenderer not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

2.13 Goods Eligibility and Conformity to Tender Documents

2.13.1 Pursuant to paragraph 2.2 of this section, the tenderer shall furnish, as part of its tender documents establishing the eligibility and conformity to the tender documents of all goods which the tenderer proposes to supply under the contract

2.13.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.

2.13.3 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristic of the goods;
- (b) a list giving full particulars, including available source and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two (2) years, following commencement of the use of the goods by the Procuring entity (*if applicable*); and
- (c) a clause-by-clause commentary on the Procuring entity's Technical Specifications demonstrating substantial responsiveness of the goods and service to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

2.13.4 For purposes of the documentary evidence to be furnished pursuant to paragraph 2.13.3(c) above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procurement entity in its Technical Specifications, are intended to be descriptive only and not restrictive. The

tenderer may substitute alternative standards, brand names, and/or catalogue numbers in its tender, provided that it demonstrates to the Procurement entity's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

2.14 Tender Security

2.14.1 The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Appendix to Invitation to Tenderers.

2.14.2 The tender security shall be in the amount of Specified in the Appendix.

2.14.3 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.14.7

2.14.4 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of an on-demand bank guarantee issued by a reputable bank located in Kenya or where the bank is located abroad, it must have a local correspondent bank.

The Tender Security may also be in the form of an on-demand guarantee issued by a reputable insurance company approved by the Authority and in the form provided in the tender documents or another form acceptable to the Procuring entity.

The tender security must be valid for at least thirty (30) days beyond the validity of the tender.

2.14.5 Any tender not secured in accordance with paragraph 2.14.1 and 2.14.3 will be rejected by the Procuring entity as non-responsive, pursuant to paragraph 2.22

2.14.6 Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible, but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.

2.14.7 The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.27 and furnishing the performance security, pursuant to paragraph 2.28

2.14.8 The tender security may be forfeited:

- (a) if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
- (b) in the case of a successful tenderer, if the tenderer fails:
 - (i) to sign the contract in accordance with paragraph 2.27
 - or
 - (ii) to furnish performance security in accordance with paragraph 2.28

2.15 Validity of Tenders

2.15.1 Tenders shall remain valid for **90 days after** the date of tender opening prescribed by the Procuring entity, pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non-responsive.

2.15.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 2.14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

2.16 Format and Signing of Tender

2.16.1 The Tenderer shall prepare **two copies of the tender**, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER," as appropriate. In the event of any discrepancy between them, the original shall govern.

2.16.2 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. **The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender, except for un-amended printed literature, shall be initialed by the person or persons signing the tender.**

2.16.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

2.17 Sealing and Marking of Tenders

2.17.1 The Tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.

2.17.2 The inner and outer envelopes shall:

(a) be addressed to the Procuring entity at the address given in the Invitation to Tender:

(b) bear, tender number and name in the Invitation for Tenders and the words, “DO NOT OPEN BEFORE,” **the 20th February 2018 at 2.00 p.m.)**

2.17.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared “late”.

2.17.4 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Procuring entity will assume no responsibility for the tender’s misplacement or premature opening.

2.18 Deadline for Submission of Tenders

2.18.1 Tenders must be received by the Procuring entity at the address specified under paragraph 2.17.2 no later than **(20th February 2018 at 2.00 p.m.)**.

2.18.2 The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will therefore be subject to the deadline as extended

2.19 Modification and Withdrawal of Tenders

2.19.1 The tenderer may modify or withdraw its tender after the tender’s submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring Entity prior to the deadline prescribed for submission of tenders.

2.19.2 The Tenderer’s modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.17. A withdrawal notice may also be sent by cable, telex but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

2.19.3 No tender may be modified after the deadline for submission of tenders.

2.19.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity

specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 2.14.7

2.19.5 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.

2.19.6 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

2.20 Opening of Tenders

2.20.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, at **20th February 2018 at 2.30 p.m.)** and in the location specified in the Invitation to Tender.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

2.20.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, will be announced at the opening.

2.20.3 The Procuring entity will prepare minutes of the tender opening.

2.21 Clarification of Tenders

2.21.1 To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.

2.21.2 Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

2.22 Preliminary Examination

2.22.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether

- required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.
- 2.22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantify, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures the amount in words will prevail
- 2.22.3 The Procuring entity may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any tenderer.
- 2.22.4 Prior to the detailed evaluation, pursuant to paragraph 2.23 the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
- 2.22.5 If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the non-conformity.

2.23 Conversion to Single Currency

- 2.23.1 Where other currencies are used, the procuring entity will convert these currencies to Kenya Shillings using the selling exchange rate on the date of tender closing provided by the Central Bank of Kenya.

2.24 Evaluation and Comparison of Tenders

- 2.24.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.22
- 2.24.2 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.
- 2.24.3 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of

contract award shall be considered for debarment from participating in future public procurement.

2.25 Preference

2.25.1 Preference where allowed in the evaluation of tenders shall not exceed 15%

2.26 Contacting the Procuring entity

2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Procuring entity on any matter related to its tender, from the time of the tender opening to the time the contract is awarded.

2.26.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender, evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

2.27 Award of Contract

(a) Post-qualification

2.27.1 In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.

2.27.2 The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.12.3 as well as such other information as the Procuring entity deems necessary and appropriate.

2.27.3 A positive determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

(b) Award Criteria

2.27.4 The Procuring entity will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been

determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

(c) **Procuring entity's Right to Vary quantities**

2.27.5 The Procuring entity reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the Schedule of requirements without any change in unit price or other terms and conditions

(d) **Procuring entity's Right to accept or Reject any or All Tenders**

2.27.6 The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action

2.28 Notification of Award

2.28.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.

2.28.2 The notification of award will constitute the formation of the Contract but will have to wait until the contract is finally signed by both parties

2.28.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.28, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.14

2.29 Signing of Contract

2.29.1 At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.

2.29.2 The parties to the contract shall have it signed within **fifteen (15) days** from the date of notification of contract award unless there is an administrative review request.

2.29.3 Within **fifteen (15) days** of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

2.30 Performance Security

2.30.1 Within **fifteen (15) days** of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.

2.30.2 Failure of the successful tenderer to comply with the requirements of paragraph 2.27 or paragraph 2.28 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

2.31 Corrupt or Fraudulent Practices

2.31.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts when used in the present regulations, the following terms are defined as follows;

(i) “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; and

(ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Procuring entity of the benefits of free and open competition;

2.31.2 The procuring entity will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

2.31.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

Appendix to Instructions to Tenderers

The following information regarding the particulars of the tender shall complement supplement or amend the provisions of the instructions to tenderers. Wherever there is a conflict between the provision of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers

INSTRUCTIONS TO TENDERERS REFERENCE	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
2.1.1	This Invitation for Tenders is OPEN NATIONAL to all tenderers eligible as described in the Invitation to Tender.
2.14.2	The tender security shall be in the amount of Kenya Shillings Five Hundred Thousands (KES. 500,000.00) or equivalent in a freely convertible currency.
2.15.1	Tenders shall remain valid for 120 days <u>after</u> the date of tender opening.
2.16.1	The Tenderer shall prepare two copies of the tender , clearly marking each “ ORIGINAL TENDER ” and “ COPY OF TENDER ,” as appropriate. In the event of any discrepancy between them, the original shall govern.
2.18.1	20th February 2018 at 2.00 p.m.)
2.22.2	No correction of errors. The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.
	<i>The delivery period shall be within 6 months after the date of signing the Contract.</i>

2.24.2	<p><i>The following shall be the evaluation Criteria</i></p> <p>A) Mandatory Requirements Evaluation Criteria:-</p> <ul style="list-style-type: none"> ➤ Duly completed, signed and stamped Tender Form. ➤ Duly completed, signed and stamped Price Schedule. ➤ Manufacturer’s Authorization Letter if bidder is not the manufacturer. ➤ All items in the schedule must be quoted to be considered responsive. ➤ Valid Tax Compliance Certificate issued by Revenue Authority in the country of domicile. ➤ Sequential pagination/serialization of all pages in the tender documents. ➤ Audited financial statements for the past two (2) years (2014-2016). ➤ Notarized Power of Attorney for the person(s) signing the tender on behalf of the Tenderer. ➤ Evidence of incorporation in the country of domicile i.e. Certificate of Incorporation/ Registration. ➤ Duly completed, signed and stamped “Mandatory Confidential Business Questionnaire”. ➤ Tender Security in the amount of KES. 500,000.00 or equivalent in a freely convertible currency. ➤ The Tender validity period shall be 120 days from the date of tender closing. ➤ Tender Security has to be valid for thirty (30) days beyond the validity of the tender i.e 120 days from the date of tender closing. ➤ Pagination/serialization of all pages of the bid document. <p>B) Technical Evaluation Criteria:-</p> <ul style="list-style-type: none"> ➤ All items in schedule must be quoted to be considered responsive. ➤ Compliance to the technical requirements. ➤ Documentary evidence to prove that the products offered comply with the Technical Specifications. ➤ Manufacturer’s guarantee attesting to the quality of the products offered. <p>C) Financial Evaluation</p> <ul style="list-style-type: none"> ➤ Check for arithmetic Errors. ➤ <i>Award shall be based on the total lowest evaluated bid.</i>
2.27.6	<p><i>KenGen may at its own discretion conduct due diligence on the eligible bidders to establish their ability to perform the contract.</i></p>

SECTION III

GENERAL CONDITIONS OF CONTRACT

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3.1 Definitions

3.1.1 In this Contract, the following terms shall be interpreted as indicated:-

- (a) “The Contract” means the agreement entered into between the Procuring entity and the tenderer, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (b) “The Contract Price” means the price payable to the tenderer under the Contract for the full and proper performance of its contractual obligations
- (c) “The Goods” means all of the equipment, machinery, and/or other materials, which the tenderer is required to supply to the Procuring entity under the Contract.
- (d) “The Procuring entity” means the organization purchasing the Goods under this Contract.
- (e) “The Tenderer’ means the individual or firm supplying the Goods under this Contract.

3.2 Application

3.2.1 These General Conditions shall apply in all Contracts made by the Procuring entity for the procurement installation and commissioning of equipment

3.3 Country of Origin

3.3.1 For purposes of this clause, “Origin” means the place where the Goods were mined, grown or produced.

3.3.2 The origin of Goods and Services is distinct from the nationality of the tenderer.

3.4 Standards

3.4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

3.5 Use of Contract Documents and Information

- 3.5.1 The tenderer shall not, without the Procuring entity's prior written consent, disclose the Contract, or any provision therefore, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring entity in connection therewith, to any person other than a person employed by the tenderer in the performance of the Contract.
- 3.5.2 The tenderer shall not, without the Procuring entity's prior written consent, make use of any document or information enumerated in paragraph 3.5.1 above
- 3.5.3 Any document, other than the Contract itself, enumerated in paragraph 3.5.1 shall remain the property of the Procuring entity and shall be returned (all copies) to the Procuring entity on completion of the Tenderer's performance under the Contract if so required by the Procuring entity

3.6 **Patent Rights**

- 3.6.1 The tenderer shall indemnify the Procuring entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring entity's country

3.7 **Performance Security**

- 3.7.1 Within **fifteen (15) days** of receipt of the notification of Contract award, the successful tenderer shall furnish to the Procuring entity the performance security in the amount specified in Special Conditions of Contract.
- 3.7.2 The proceeds of the performance security shall be payable to the Procuring entity as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 3.7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring entity and shall be in the form of a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in Kenya or abroad, acceptable to the Procuring entity, in the form provided in the tender documents.
- 3.7.4 The performance security will be discharged by the Procuring entity and returned to the Candidate not later than thirty (30) days following the date of completion of the Tenderer's performance obligations under the Contract, including any warranty obligations, under the Contract

3.8 **Inspection and Tests**

- 3.8.1 The Procuring entity or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications. The Procuring entity shall notify the tenderer in writing in a timely manner, of the identity of any representatives retained for these purposes.
- 3.8.2 The inspections and tests may be conducted in the premises of the tenderer or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the tenderer or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring entity.
- 3.8.3 Should any inspected or tested goods fail to conform to the Specifications, the Procuring entity may reject the equipment, and the tenderer shall either replace the rejected equipment or make alterations necessary to make specification requirements free of costs to the Procuring entity.
- 3.8.4 The Procuring entity's right to inspect, test and where necessary, reject the goods after the Goods' arrival shall in no way be limited or waived by reason of the equipment having previously been inspected, tested and passed by the Procuring entity or its representative prior to the equipment delivery.
- 3.8.5 Nothing in paragraph 3.8 shall in any way release the tenderer from any warranty or other obligations under this Contract.

3.9 Packing

- 3.9.1 The tenderer 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.
- 3.9.2 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

3.10 Delivery and Documents

- 3.10.1 Delivery of the Goods shall be made by the tenderer in accordance with the terms specified by Procuring entity in its Schedule of Requirements and the Special Conditions of Contract

3.11 Insurance

3.11.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacturer or acquisition, transportation, storage, and delivery in the manner specified in the Special conditions of contract.

3.12 Payment

3.12.1 The method and conditions of payment to be made to the tenderer under this Contract shall be specified in Special Conditions of Contract

3.12.2 Payments shall be made promptly by the Procuring entity as specified in the contract

3.13 Prices

3.13.1 Prices charged by the tenderer for goods delivered and services performed under the Contract shall not, with the exception of any price adjustments authorized in Special Conditions of Contract, vary from the prices by the tenderer in its tender.

3.13.2 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)

3.13.3 Where contract price variation is allowed, the variation shall not exceed 25% of the original contract price.

3.13.4 Price variation request shall be processed by the procuring entity within 30 days of receiving the request.

3.14. Assignment

3.14.1 The tenderer shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring entity's prior written consent

3.15 Subcontracts

3.15.1 The tenderer shall notify the Procuring entity in writing of all subcontracts awarded under this Contract if not already specified in the tender. Such notification, in the original tender or later, shall not relieve the tenderer from any liability or obligation under the Contract

3.16 Termination for default

3.16.1 The Procuring entity may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part

- (a) if the tenderer 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 Procuring entity
- (b) if the tenderer fails to perform any other obligation(s) under the Contract
- (c) if the tenderer, in the judgment of the Procuring entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract

3.16.2 In the event the Procuring entity terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, equipment similar to those undelivered, and the tenderer shall be liable to the Procuring entity for any excess costs for such similar goods.

3.17 Liquidated Damages

3.17.1. If the tenderer fails to deliver any or all of the goods within the period(s) specified in the contract, the procuring entity shall, without prejudice to its other remedies under the contract, deduct from the contract prices liquidated damages sum equivalent to 0.5% of the delivered price of the delayed items up to a maximum deduction of 10% of the delayed goods. After this the tenderer may consider termination of the contract.

3.18 Resolution of Disputes

3.18.1 The procuring entity and the tenderer shall make every effort to resolve amicably by direct informal negotiation and disagreement or dispute arising between them under or in connection with the contract.

3.18.2 If, after thirty (30) days from the commencement of such informal negotiations both parties have been unable to resolve amicably a contract dispute, either party may require adjudication in an agreed national or international forum, and/or international arbitration.

3.19 Language and Law

3.19.1 The language of the contract and the law governing the contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

3.20 Force Majeure

3.20.1 The tenderer shall not be liable for forfeiture of its performance security or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

3.21 Taxes

3.21.1 "**Taxes**" means all present and future taxes, levies, duties, charges, assessments, deductions or withholdings whatsoever, including any interest thereon, and any penalties and fines with respect thereto, wherever imposed, levied, collected, or withheld pursuant to any regulation having the force of law and "Taxation" shall be construed accordingly.

3.21.2 Local Taxation

Nothing in the Contract shall relieve the Contractor and/or his Sub-Contractors from their responsibility to pay any taxes, statutory contributions and levies that may be levied on them in Kenya in respect of the Contract. The Contract Price shall include all applicable taxes and shall not be adjusted for any of these taxes.

3.21.3 The Contractor shall be deemed to be familiar with the tax laws in the Employer's Country and satisfied themselves with the requirements for all taxes, statutory contributions and duties to which they may be subjected during the term of the Contract.

3.21.4 In instances where discussions are held between the Employer and the Contractor regarding tax matters, this shall not be deemed to constitute competent advice and hence does not absolve the Contractor of their responsibility in relation to due diligence on the tax issue as per 3.21.2 above.

Tax Deduction

3.21.5 If the Employer is required to make a tax deduction by Law, then the deduction shall be made from payments due to the Contractor and paid directly to the Kenya Revenue Authority. The Employer shall

upon remitting the tax to Kenya Revenue Authority furnish the Contractor with the relevant tax deduction certificates.

3.21.6 Where the Contractor is paid directly by the Financiers and the Employer is not able to deduct tax, then the Contractor will be required to pay the tax deduction to Kenya Revenue Authority in the name of the Employer and furnish the Employer with an original receipt thereof as evidence of such payment. In absence of the said evidence, the Employer will not process any subsequent payments to the Contractor.

Tax Indemnity

3.21.7 The Contractor shall indemnify and hold the Employer harmless from and against any and all liabilities, which the Employer may incur for any reason of failure by the Contractor to comply with any tax laws arising from the execution of the Contract whether during the term of the Contract or after its expiry.

3.21.8 The Contractor warrants to pay the Employer (within fourteen (14) days of demand by the Employer), an amount equal to the loss, liability or cost which the Employer determines has been (directly or indirectly) suffered by the Employer for or on account of the Contractor's Tax liability arising from the Contract.

3.21.9 Where the amount in 3.21.8 above remains unpaid after the end of the fourteen (14) days moratorium, the Employer shall be entitled to compensation for financing charges.

SECTION IV

SPECIAL CONDITIONS OF CONTRACT

- 4.1. Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, between the GCC and the SCC, the provisions of the SCC herein shall prevail over these in the GCC.
- 4.2. Special conditions of contract as relates to the GCC

REFERENCE OF GCC	SPECIAL CONDITIONS OF CONTRACT
3.7.1	<i>The performance security shall be in the amount of 10% of the Contract Price.</i>
3.8.5	<i>The supplier shall be required to expressly confirm that the goods supplied shall be under 12 month's warranty.</i>
3.12.1	Terms of payment Payment Terms and Conditions <ul style="list-style-type: none">• KenGen's payment terms are 30 days upon receipt of certified invoices and delivery notes confirming that the invoiced material has been delivered and are in accordance with the contract. Advance Payment Advance payment is not applicable.
3.13	Prices Prices shall be fixed during the Supplier's performance of the Contract and not subject to variation on any account
3.18.2	<i>Arbitration where necessary shall be by the Chartered Institute of Arbitrators Kenya Chapter or other International body.</i>

SECTION V

TECHNICAL SPECIFICATIONS

1. To help extend product life, and to protect the relay's from hostile and harsh environments including moisture, temperature variations, salt spray, organic attack (fungus), and aggressive chemicals (Hydrogen Sulphide) and vapors, the product manufacturer shall provide optional harsh environment conformal coating. The following specifications shall be met:
 - Military specifications MIL-I-46058-C, type AR, ER and UR
 - UL recognized according to specification UL746C/94 for indoor and outdoor applications
 - IEC68-2-60 Part 2, Method 3, 1995 Mixed Flowing Gas Testing
2. The primary protection for the AC generator shall be an integrated digital relay package and suitable for incorporation into an integrated station control system.
3. Delivery must be for a complete schedule. Partial delivery shall not be accepted.
4. The numerical relays shall be as per tender specifications.

Information on Usage

The numerical relays are to be used as spares for the existing relays. As such no modifications shall be allowed.

GENERATOR MANAGEMENT RELAY (A) SPECIFICATIONS

I. Protection functions:

1. High Speed Generator Stator Differential

- The differential element shall have a dual slope characteristic.
- A directional check and saturation detection algorithm shall be included for enhanced performance during CT saturation.

2. 100% Stator Ground

- The element shall incorporate an adaptive algorithm that compares the third harmonic voltage measured at the neutral and the generator terminals.

3. 3rd Harmonic Neutral Undervoltage

- The element shall measure the third harmonic voltage at the generator neutral.

- An adjustable power window shall supervise the element.
- 4. Accidental Energization**
- The element shall consist of a definite time, overcurrent element.
 - Arming logic shall allow supervision by voltage and/or offline indication.
- 5. Loss of Excitation**
- The element shall consist of two offset mho impedance zones.
 - Undervoltage supervision may be applied to either zone.
- 6. Sensitive Directional Power**
- Two elements shall be included each consisting of two stages.
 - The element characteristic angle shall be adjustable.
- 7. Generator Unbalance**
- The element shall respond to negative sequence current as a percentage of generator full-load current.
 - The element shall consist of an inverse time stage and a definite time stage.
 - The inverse time stage shall have an I²t characteristic with an adjustable definite minimum and maximum time.
 - The element shall have an adjustable linear reset characteristic.
- 8. Overexcitation**
- Two elements shall be provided.
 - The element shall respond to the ratio of voltage over frequency.
 - Time overcurrent curve characteristics: Inverse A, Inverse B, Inverse C, definite time, and four custom curves for precise or difficult coordination shall be available.
 - The element shall have an adjustable linear reset characteristic.
- 9. Abnormal Frequency**
- Six Underfrequency and four overfrequency elements shall be provided.
- 10. Backup Distance Protection**
- Individual measuring elements shall be provided for all phase loops.
 - Three zones of phase distance protection with memorized positive sequence voltage polarization, additional reactance, directional and overcurrent supervision shall be included.
 - Distance characteristics shall include mho, lens, and quadrilateral characteristics.

- All zones shall have independent direction, shape, reach, maximum torque angle, overcurrent supervision, blinders and timer settings.
- All phase distance zones shall work with CTs and VTs located independently from each other at any side of a three-phase wye-delta transformer. Accurate reach and targeting shall be provided regardless of zone direction and CT/VT location.
- The distance elements shall include an adaptive reach feature for application on series compensated lines. The reach shall be adjusted automatically based on the current level to provide maximum security.

11. Out-of-Step Protection and Power Swing Blocking

- Integrated out-of-step tripping and power swing blocking functions shall be provided.
- The out-of-step tripping protection shall be programmable to trip either in an early (instantaneous) or delayed (when the current envelope is at the minimum) mode.
- Both out-of-step tripping and power swing blocking shall be programmable to work with 2 or 3 characteristics.
- Current supervision shall be available for both the functions

12. Overcurrent Protection

- One time overcurrent element for phase, neutral, and ground currents shall be provided. Voltage restraint shall be included.
- Time overcurrent curve characteristics: IEEE, IEC, IAC, I₂t, definite time, and four custom curves for precise or difficult coordination shall be available.
- Six instantaneous overcurrent elements for phase currents shall be available.
- One instantaneous overcurrent element for neutral and ground currents shall be available.
- One phase directional overcurrent element shall be available.
- Two neutral directional overcurrent elements shall be available.

13. Voltage Protection

- Two phase under- and one over-voltage elements shall be provided
- Auxiliary under- and over-voltage elements shall be provided
- A neutral overvoltage (3V₀) element shall be provided.
- The voltage element operating time shall be user adjustable.

II. Control Functions:

Two Synchrocheck Elements

- The Synchrocheck elements shall be configurable to respond to any combination of single-phase voltages.
- Dead source logic shall be included.

Programmable logic including non-volatile latches

Sixteen Flex Elements™ for user-definable protection functions

- Flexible control of all input and output contacts shall be provided.
- All elements shall have a blocking input that allows supervision of the element from other elements, contact inputs, etc.
- The relay shall allow for peer-to-peer communications direct fiber or G.703 or RS422 interfaces.

Switchable Setting Groups

- The relay shall have switchable setting groups for dynamic reconfiguration of the protection elements due to changed conditions such as system configuration changes, or seasonal requirements.

III. Monitoring and Metering

Monitoring

- User programmable Oscillography
- User programmable Data logger

Metering

- Voltage (phasor, true RMS values, Symmetrical components)
- Current (Phasor, Symmetrical components, true RMS values)
- Real, Reactive and Apparent power
- Power factor,
- Energy
- Frequency

IV. Trip circuit monitoring

- The relay shall be provided in one integrated package suitable for incorporation in an integrated substation control system. The relay shall be housed in a horizontal, 4 RU, 19-inch rack chassis configuration. It shall be a modular design to easily facilitate upgrading or repair by replacement of modules. The faceplate interface shall include an alphanumeric vacuum fluorescent display, keypad, and LED target indicators.

- The logic that determines the interaction of inputs features, and outputs shall be re-configurable through the use of FlexLogic™ equations. The use of remote inputs and outputs in addition to hardware shall be available on the communications ports using the UCA2 GOOSE (Generic Object Oriented Substation Event) mechanism to minimize the requirement for auxiliary components and wiring. The contact inputs shall accept wet or dry contacts. Contact outputs shall be trip rated Form-A with current and voltage circuit monitors, Form-C, or Fast Form-C for signaling. Hardware input/output capability shall be expandable.
- The relay shall have three communications ports that operate independently and simultaneously. The RS232 port shall be accessible from the faceplate of the relay. The second port shall be RS485 supporting Modbus® RTU and DNP 3.0 protocols capable of baud rates up to 115 kbps. The third communications port shall be either a similar RS485 port or a 10 Mbps Ethernet port supporting MMS/UCA2, Modbus®/TCP, and DNP 3.0 or IEC 60870 protocols. The physical port shall be 10BaseF, or redundant 10BaseF.
- The relay shall be supplied with supporting application software for use on a PC with Windows® 95/98/NT operating systems. The program shall be capable of retrieving Comtrade Oscillography files from the relay to display, save, or print when troubleshooting. The software shall provide the capability of editing and managing settings files to store to the relay or disk backup, while on-line or off-line. The software shall also permit the updating of new relay firmware and viewing of all trip and alarm target messages, and the 1024 time stamped events recorded by the relay.
- The relay clock shall be capable of being synchronized with an IRIG-B signal to allow synchronism with other connected devices. The relay shall allow for SNTP network-based time synchronization.

Additional information on the relay is as follows

1.	Mount	Horizontal (19" rack)
2.	CPU	RS 485 and Multimode ST 100Base-FX
3.	Faceplate/Display	Enhanced front panel with English display
4.	Power supply	125/250V AC/DC power supply
5.	CT/VT module	Standard 4CT/4VT with enhanced diagnostics
6.	Digital Inputs	16 Digital inputs

7.	CT module	Standard 8CT with enhanced diagnostics
8.	Digital outputs	8 Fast form C-outputs
9.	Digital Inputs/Outputs	6 Form A (no-monitoring) outputs, 4 digital inputs
10.	Digital outputs	14 Form-A (no monitoring) latching outputs
11.	CT rated Secondary	1A and 5A

GENERATOR MANAGEMENT RELAY (B) SPECIFICATIONS

Generator management shall be provided using a relay with complete protection, metering, and monitoring functions. The relay may be applied on synchronous or induction generators of 25, 50, or 60 Hz.

The protection functions shall include:

1. Instantaneous overcurrent when offline (50)
2. High-set overcurrent (50)
3. Distance (21)
4. Ground directional (67)
5. Instantaneous and definite time overcurrent for ground (50/51GN)
6. Stator thermal modeling and RTD (49)
7. Negative sequence overcurrent (46)
8. Bearing over temperature (38)
9. Phase differential (87G)
10. Over and Undervoltage (59/27)
11. Reverse power for anti-motoring (32)
12. Inadvertent generator energization (50/27)
13. Overspeed (12)
14. Voltage restrained phase overcurrent (51V)
15. 100% stator ground protection (59GN/27TN)
16. Bearing vibration (39)
17. Voltage phase reversal (47)
18. VT fuse failure detection (60FL)
19. Breaker failure detection (50BF)
20. Trip coil supervision
21. Sequential tripping logic

Synchronous generator protection shall include:

- over excitation (24)
- loss of field (40 & 40Q)
- over and under frequency (81)

Monitoring and metering functions shall include:

- RMS current, negative sequence current, voltage, three phase power, temperature (via the 12 RTDs), and four analog inputs
- four analog output channels which can be configured to any measured parameter
- an event record which shall maintain a record of the last 40 events

The current and voltage inputs shall be sampled 12 times a cycle. The relay shall store these waveforms into a user definable buffer (up to 64 cycles long) in the event of a trip.

The protective relay shall include the **following user interfaces:**

- a 40 character LCD display, control keys and full numeric keypad located on the front panel
- LED indicators located on the front panel which shall indicate the status of the protection relay, generator, and output relays
- An RS232 port located on the front panel with a baud rate of 9600 bps
- Two RS485 ports located on the rear of the unit with baud rates from 300 to 19,200 bps
- the communications ports shall allow simultaneous independent access using Modbus® RTU and DNP 3.0 protocol
- Windows® based PC software which enables set point programming, file storage, on-line help, and real time display of status and measured data
- The protective relay shall be provided with draw out construction to facilitate testing, maintenance, and interchange flexibility.

Additional information on the relay is as follows:

1.	Phase current Inputs (secondary)	1A
2.	Ground current input rating (secondary)	1A
3.	Control Power	110Vdc/110Ac
4.	Analog Outputs	4 to 20 mA analog outputs
5.	Environment	Harsh environment with H2S gas.

MOTOR MANAGEMENT RELAY SPECIFICATIONS

The motor management relay shall provide primary protection and management to low to medium voltage, small to medium size motors. The relay shall be equipped with the following protection functions.

I. Protection Function

1. Motor Thermal Overload Model (49), including 15 standard overload curves, and thermal lockout to prevent trip reset after an overload trip. An immediate Overload Alarm feature shall be provided as an early alert during overload conditions.
2. The relay shall detect ground faults or earth leakage currents as low as 0.25 A using a 50:0.025 Ground CT.
3. Use phase current heating to calculate motor thermal capacity during starting and running states. Motor protection during acceleration shall be independent of the running protection.
4. Phase and residual overcurrent elements (50P/50G)
5. Unbalance/ single phase (46)
6. Load-loss (undercurrent) (37)
7. Rapid trip / Mechanical jam
8. Motor locked / stall protection (48)
- 9. The motor protection relay shall provide a standard input for 3 RTD.**
- 10.**Over-temperature protection functions associated to the RTD inputs shall be provided, including alarm and trip settings, and associated TRIP or ALARM outputs. The following additional functionality shall be provided, associated to Thermistor or RTDs:
 - ❖ Able to configure each RTD as “Off” or as “Stator” or “Bearing” type.
 - ❖ RTD type shall be selectable between four different RTD types: “100 Ohm Platinum”, “120 Ohm Nickel”, “100 Ohm Nickel”, or “10 Ohm Copper”
 - ❖ The motor relay shall incorporate the RTD inputs to support the following:
 - Temperature alarms and trips (49/38)
 - RTD sensor fail alarm

II. Monitoring and Metering

The relay shall provide **complete monitoring and metering functions**. These shall include:

1. Current: RMS Values of per Phase, Percent of Motor Load, Current Unbalance, Ground
2. Temperature of each RTD inputs
3. The relay shall be able to provide data in the form of trending or data logger, sampling and recording up to eight actual values at an interval defined by the user. Several parameters shall be trended and graphed at sampling periods ranging from 1 second up to 1 hour. The parameters which can be trended by the Setup software shall be: Phase Currents A, B, and C, Motor Load, Current Unbalance, Ground Current, and Thermal Capacity Used
4. The relay shall include one transducer output with a settable DC output range of **4 to 20 mA**, which may be assigned to motor load, average phase current, thermal capacity, and any of the three optional RTDs.
5. Latest trip report containing cause, phase, ground, current unbalance, and RTD temperatures.
6. The relays shall retain in non-volatile memory, a trip record of the last 5 causes of trip.
7. The relay shall monitor total motor running time (including start conditions) and the maximum average current present during the last successful start.
8. The relay shall have starter failure detection feature which shall produce an alarm in the event that the motor relay does not detect a starter/breaker open condition after a trip is initiated.
9. The relay shall have the capability to display up to 5 user programmable messages to scan sequentially when the motor relay is left unattended. The user shall be able to select from any set point or actual value message to be added to the default message queue. Under normal conditions, if no front panel activity is detected within a settable time, the screen shall sequentially display messages.

User interfaces shall include:

1. A large 40 character LCD display and navigation keys.
2. Indicator LEDs on the front panel which shall provide a quick visual indication of status
3. Serial communication over 2 wire RS485 link operating at 1200 – 19200 bps will be provided. Open protocol, Modbus® RTU will include commands for read/write and such protocol shall be included in the relay instruction manual.

4. Five switch inputs shall be provided for set point access, emergency restart, external reset, and two users programmable option switches.
5. The relay will accept AC/DC control power.
6. The relay shall be capable of being set by Windows-based, Easy to use, setup graphical terminal interface
7. To make the data acquisition more efficient, the motor relay shall provide a User Definable Memory Map, which shall allow a remote computer to read up to 120 nonconsecutive data registers by using one Modbus packet. The User Definable Memory Map shall be programmed to join any memory map address to one in the block of consecutive User Map locations, so that they can be accessed by means of these consecutive locations. The User Definable area shall have two sections:
 8. A Register Index area containing 120 Actual Values or Set points registers
 9. A Register area containing the data located at the addresses in the Register Index

A simulation feature shall be included to allow testing without the need for external current inputs.

TRANSFORMER MANAGEMENT RELAY (2 WINDING)

The transformer manager relay shall provide complete protection and management for small, medium, and large power transformers. The relay shall provide **two restraint windings**. It shall be equipped with the following protection functions:

I. Protection Functions

1. Three phase differential current functions (87) with dual slope percentage differential restraint and harmonic restraint
2. Unrestrained differential overcurrent (87/50)
3. Optional Restricted Ground fault protection (87R)
4. Two instantaneous overcurrent elements per winding for phase (50P), calculated neutral (50N), and ground current (50G)
5. One time overcurrent element per winding for phase (51P), calculated neutral (51N), and ground current (51G)
6. One instantaneous negative sequence overcurrent element per winding (50_2)
7. One time delay negative sequence overcurrent element per winding (51_2)
8. Two under frequency elements (81U), and four rate-of-change of frequency elements (81R) for load shedding
9. One overfrequency element (81O)
10. When connected to a single phase VT, one over excitation (24) to protect against overvoltage and over fluxing

The following shall provide **enhanced flexibility** of the protection system:

1. Auto-configuration of transformer CTs that eliminates the need for any special CT connections by having all CTs connected in wye.
2. Programmable Logic, which allows PLC style equations, based on logic inputs and protection elements, to be assigned to any of the transformer relay outputs.
3. Multiple Set point Groups which allow the user to enter and dynamically select from up to four groups of relay settings to address the protection requirements of different power system configurations
4. Dynamic CT Ratio Mismatch Correction which monitors the on-load tap position and automatically corrects for CT ratio mismatch
5. The relay shall provide a variety of adaptive relaying features:
 - Adaptive Harmonic Restraint which addresses the problem of false tripping during inrush

- Adaptive Time Overcurrent elements which will adjust their pickup settings based on the calculated transformer capability when supplying load currents with high harmonic content
6. The relay shall consist of a draw out unit and a companion case to facilitate testing, maintenance and interchange flexibility. The case shall have a front door with a large window.

II. Inputs and Outputs

The following inputs and outputs shall be provided:

- a) Access Switch to allow changing of any set point values from the face plate
- b) 16 logical inputs
- c) 1 analog input
- d) 1 high speed electronic output
- e) 8 electro-mechanical relay outputs
- f) 7 analog output channels
- g) An IRIG-B input for time synchronization

III. Monitoring and metering functions

The relay shall provide complete **monitoring and metering functions**. These shall include:

- a) Current: Per winding Phasor of Phase, Neutral, and Ground, Winding Loading, Winding Average, Positive Sequence, Negative Sequence, Zero Sequence, Phase Differential, Restraint, Ground Differential
- b) Harmonic content to the 21st harmonic, Total Harmonic Distortion, Harmonic Derating Factor
- c) System Frequency and Frequency Decay Rate
- d) Tap Changer Position
- e) Voltage: RMS of Phase-Phase and Phase-Neutral Voltages, Volts / Hz
- f) Ambient Temperature from RTD Input
- g) Optional Loss of Life monitoring including hottest spot winding temperature, insulation aging factor, and total accumulated loss of life in hours.
- h) Power: Per Winding Power Factor, Real (kw), Reactive (kvar), Apparent (kva) Power

- i) Energy: Per Winding Watt-hours, Var-hours Positive and Negative
- j) Current Demand including pick values, per winding and per phase, Thermal, Block Interval, Rolling Demand methods, time interval, programmed to 5 to 60 min. The relay shall include maximum demand, date and time stamped
- k) An event recorder with a record of the last 256 events, time tagged with a resolution of 1 ms.
- l) The current and voltage inputs shall be sampled 64 times a cycle. The waveform capture feature is similar to a transient/fault recorder. The relay shall storage capacity of up to a maximum of 128 cycles of data, captured for Phase A, B, and C currents (Ia, Ib, and Ic), Differential A, B, and C currents (Idiffa, Idiffb, and Idiffc), Ground currents (Ig), Phase A-N, B-N, and C-N voltages (Va, Vb, and Vc), Digital data for output relays and contact input states
- m) The relay shall be able to provide data in the form of trending or data logger, sampling and recording up to eight actual values at an interval defined by the user. Several parameters shall be trended and graphed at sampling periods ranging from 1 second up to 1 hour. The parameters which can be trended by the Setup software shall be: **Currents:** Ia, Ib, Ic, In, and Ig currents for Windings 1, 2, and 3, Positive-, negative-, and zero-sequence currents for Windings 1, 2, and 3, Ia, Ib, and Ic differential and restraint currents, **Voltage, System frequency, Frequency decay rate, Harmonics:** Total harmonic distortion (THD), Harmonic derating factor, **Temperature:** Ambient Temperature, Hottest-Spot Winding Temperature, RTD Input, **Demand:** Current demand for Windings 1, 2, and 3, **Others:** Analog Inputs 1, 2, 3, and 4, Accumulated loss-of-life, Aging factor, Tap changer position.
- n) The relay shall provide 7 analog output channels whose full scale range shall be set to one of the following ranges: 0 to 1 mA; 0 to 5 mA; 0 to 10 mA; 0 to 20 mA; and 4 to 20 mA. Each analog output channel shall be programmable to represent one of the parameters measured by the relay.
- o) The relay shall be provided with an input of a DC current signal, from one of the following: 0 to 1 mA, 0 to 5 mA, 0 to 20 mA, or 4 to 20 mA transducer types. This current signal can represent any external quantity, such as temperature, current or voltage.
- p) The relay shall have the capability to display up to 5 user programmable text messages

- q) Under normal conditions, if no front panel activity is detected within a settable time, the screen shall sequentially display up to 30 default messages. Any actual value or set point message shall be selectable for default display.
- r) The relay shall be provided with security audit trail capability to trace down any changes to the system configuration

User interfaces shall include:

- a) A large 40 character LCD display, navigation keys, full numeric keypad located on the front panel
- b) Twenty-four indicator LEDs located on the front panel, which shall indicate relay status, system status, and trip or alarm conditions.
- c) A front panel RS232 serial port that shall provide easy computer access. The communications protocol shall be Modbus RTU.
- d) Remote communications shall be provided via two RS485 ports, one of which shall be configured as a RS422 port. Modbus® RTU/DNP 3.0 Level 2 protocol shall be used and data transmission rates of up to 19,200 bps shall be supported. A front panel RS232 communications port shall be provided for local PC access. Setup Software shall be provided with the relay.
- e) A RJ45 Ethernet port shall be provided to allow 10BaseT Ethernet connectivity to Local or Wide Area Networks. The communications protocol shall be Modbus TCP.
- f) The relay shall be capable of being set by Windows-based, easy to use setup graphical terminal interface
- g) To make the data acquisition more efficient, the generator relay shall provide a User Definable Memory Map, which shall allow a remote computer to read up to 120 non-consecutive data registers by using one Modbus packet. The User Definable Memory Map shall be programmed to join any memory map address to one in the block of consecutive User Map locations, so that they can be accessed by means of these consecutive locations. The User Definable area shall have two sections:
 - A Register Index area containing 120 Actual Values or Set points registers
 - A Register area containing the data located at the addresses in the Register Index

The transformer relay shall include a testing and simulation feature to test the relay operation based on captured or computer generated waveform data, which

can be converted to a digitized format and downloaded into the relay's simulation buffer for "playback".

Additional information on the relay is as follows:

1.	Restraint Winding	2
2.	Phase current Inputs (secondary)	1A
3	Ground current input rating (secondary)	1A
4	Control Power	110Vdc/110Ac
5	Options	Analog inputs/Outputs
6.	Environment	Harsh environment with H2S gas.

SECTION VI

PRICE AND SCHEDULE OF REQUIREMENTS

ITEM	DESCRIPTION	UNIT	QTY	UNIT COST	VAT 16%	TOTAL COST
1	Generator Management Relay (A)	Pc	3			
2	Generator Management relay (B)	Pc	1			
2	Motor Management Relay	Pc	4			
3	Transformer Management Relay	Pc	1			
4	Training on setting, testing and configuration of the relays (exclude air tickets and accommodation)	Pc	3			

Tenderer's Name

Signature of tenderer _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

**SECTION VIII
STANDARD FORMS**

8.1 FORM OF TENDER

Date _____
Tender No. _____

To: _____

[name and address of procuring entity]

Gentlemen and/or Ladies:

1. Having examined the tender documents including Addenda Nos. *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply deliver, install and commission (..... *(insert equipment description)* in conformity with the said tender documents for the sum of *(total tender amount in words and figures)* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to deliver install and commission the equipment in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to _____ percent of the Contract Price for the due performance of the Contract , in the form prescribed by
.....(*Procuring entity*).

4. We agree to abide by this Tender for a period of *[number]* days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us, subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20 _____

[signature]

[in the capacity of]

Duly authorized to sign tender for an on behalf of _____

Note: In accordance with **Clause 82** of the **Public Procurement and Asset Disposal Act 2015**.

“The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.

8.2 MANDATORY CONFIDENTIAL BUSINESS QUESTIONNAIRE

(Must be filled by all applicants or Tenderers' who choose to participate in this tender)

Name of Applicant(s).....

You are requested to give the particulars in Part 1 and either Part 2 (a), 2 (b) or 2 (c), whichever applies to your type of business. Part 2 (d) to part 2 (i / j) must be filled. You are advised that giving wrong or false information on this Form will lead to automatic disqualification/termination of your business proposal at your cost.

Part 1 – General

Business Name:.....Certificate of Incorporation / Registration No.Location of business premises:

CountryPhysical address
.....
TownBuilding.....

...
Floor.....Plot No.

Street / RoadPostal Address
.....

Postal / Country Code.....Telephone No's.....

Fax No's.E-mail address
.....

Website
.....

Contact Person (*Full Names*) Direct / Mobile No's.....

Title Power of Attorney (**Yes / No**)

If **yes**, attach written document.
Nature of Business (*Indicate whether manufacturer, distributor, etc*)
.....

(Applicable to Local suppliers only)

Local Authority Trading License No. Expiry Date
.....

Value Added Tax No.....

Value of the largest single assignment you have undertaken to date (**US D/KShs**)
.....

Was this successfully undertaken? **Yes / No**.(If **Yes**, attach reference)

Name (s) of your banker (s)

.....
.....

Branches Tel. No's.

.....

Part 2 (a) – Sole Proprietor (if applicable)

Full names

.....

....

Nationality..... Country of

Origin.....

.....

Company Profile (Attach brochures or annual reports in case of public company)

Part 2 (b) – Partnerships (if applicable)

Give details of partners as follows:

Full Names Nationality Citizenship Details Shares

1.

.....

.....

2.

.....

.....

Company Profile (Attach brochures)

Part 2 (c) – Registered Company (if applicable - as per the CR12 form)

Private or public

Company Profile (Attach brochures or annual reports in case of public companies)

State the nominal and issued capital of the Company

Nominal KShs

Issued KShs

List of top ten (10) shareholders and distribution of shareholding in the company. Give details of all directors as follows:-

Full Names Nationality Citizenship Details Shares

1.....

2.....

Part 2 (d) – Debarment

I/We declare that I/We have not been debarred from any procurement process and shall not engage in any fraudulent, corrupt, coercive and obstructive acts with regard to this or any other tender by the KENGEN and any other public or private institutions.

Full Names

.....

Signature

.....

Dated this day of
.....2018.

In the capacity of

.....

Duly authorized to sign Tender for and on behalf of

.....

Part 2 (e) – Bankruptcy / Insolvency / receivership.

I/We declare that I/We have not been declared bankrupt or insolvent by the competent Authorities in Kenya and neither are we under receivership:

Full Names

.....

Signature

.....

Dated this day of
.....2018.

In the capacity of

.....

Duly authorized to sign Tender for and on behalf of

.....

Part 2 (f) – Criminal Offence

I/We, (Name (s) of Director (s)):-

a)

b)

Have not been convicted of any criminal offence relating to professional conduct or the making of false statements or misrepresentations as to its qualifications to enter into a procurement contract within a period of three (3) years preceding the commencement of procurement proceedings.

Signed

.....

For and on behalf of M/s

.....

In the capacity of

.....

Dated thisday of

.....2018.

Suppliers' / Company's Official Rubber Stamp

Part 2 (g) – Conflict of Interest

I/We, the undersigned state that I / We have no conflict of interest in relation to this procurement:

a)

b)

For and on behalf of M/s

.....
In the capacity of

.....
Dated thisday of

.....2018

Suppliers' / Company's Official Rubber Stamp

Part 2 (h) – Interest in the Firm:

Is there any person/persons in KENGEN or any other public institution who has interest in the Firm? Yes/No (Delete as necessary) Institution

.....
(Title) (Signature) (Date)

Part 2(j or k) – Declaration

I / We, the undersigned state and declare that the above information is correct and that I / We give KENGEN authority to seek any other references concerning my / our company from whatever sources deemed relevant, e.g. Office of the Registrar of Companies, Bankers, etc.
Full names

.....
Signature.....

.....
For and on behalf of M/s

.....
In the capacity of

.....
Dated thisday of

.....2018.

Suppliers' / Company's Official Rubber Stamp

8.3 TENDER SECURITY FORM (To be on the Banks Letterhead)

WHEREAS [name of the tenderer]
(hereinafter called “the tenderer”) has submitted its tender dated [date of
submission of tender] for [name and/or
description of the equipment] (hereinafter called “the Tender”)

KNOW ALL PEOPLE by these presents that **WE** of
..... having our registered office at
(hereinafter called “the Bank”), are bound unto the **Kenya Electricity Generating Company
Limited** (hereinafter called “the Procuring entity”) in the sum of for
which payment well and truly to be made to you, the Bank binds itself, its successors,
and assigns by these presents.

Sealed with the Common Seal of the said Bank this _day of _____20

THE CONDITIONS of this obligation are:-

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender Form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the Procuring entity during the period of tender validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security in accordance with the Instructions to tenderers;

We undertake to pay the Procuring entity up to the above amount upon receipt of its first written demand, without the Procuring entity having to substantiate its demand, provided that in its demand the Procuring entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This tender guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

[Signature of the bank] _____

(Amend accordingly if provided by Insurance Company)

8.4 CONTRACT FORM

THIS AGREEMENT made the _____ day of _____ 20 ____ between
..... [name of **the Employer**] of [country of **the Employer**] (hereinafter
called "**the Employer**") of the one part and [name of **the Supplier**] of
..... [city and country of **the Supplier**] (hereinafter called "**the Supplier**") of the other
part;

WHEREAS the Employer invited tenders for] and has accepted a tender by the
tenderer for the supply of in the sum of [contract
price in words and figures] (hereinafter called "the Contract Price).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are
respectively assigned to them in the Conditions of Contract referred to:
2. The following documents shall be deemed to form and be read and construed as part of
this Agreement viz:
 - (a) the Tender Form and the Price Schedule submitted by the tenderer
 - (b) the Schedule of Requirements
 - (c) the Technical Specifications
 - (d) the General Conditions of Contract
 - (e) the Special Conditions of contract; and
 - (f) the Procuring entity's Notification of Award and Tenderer's Acceptance
 - (g) Applicable addenda and clarifications
3. In consideration of the payments to be made by the Procuring entity to the tenderer as
hereinafter mentioned, the tenderer hereby covenants with the Procuring entity to
provide the goods and to remedy defects therein in conformity in all respects with the
provisions of the Contract.
4. The Procuring entity hereby covenants to pay the tenderer in consideration of the
provisions of the goods and the remedying of defects therein, the Contract Price or such
other sum as may become payable under the provisions of the Contract at the times and
in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in
accordance with their respective laws the day and year first above written.

Signed by _____ the _____ (for the Procuring entity

Signed by _____ the _____ (for the tenderer in the presence of _____

(Amend accordingly if provided by Insurance Company)

**8.5 PERFORMANCE SECURITY FORM
(To be on the Banks Letterhead)**

To
[*name of Procuring entity*]

WHEREAS [*name of tenderer*] (hereinafter called “the tenderer”) has undertaken , in pursuance of Contract No. _____ [*reference number of the contract*] for dated _____ 20 _____ to supply [*description of goods*] (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the tenderer shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Tenderer’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the tenderer a guarantee:

NOW THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the tenderer, up to a total of [*amount of the guarantee in words and figure*] and we undertake to pay you, upon your first written demand declaring the tenderer to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [*amount of guarantee*] as aforesaid, without you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____ 20 ____

Signed and seal of the Guarantors

[*name of bank or financial institution*]

[*address*]

[*date*]

8.6 MANUFACTURER'S AUTHORIZATION FORM

To *[name of the Procuring entity]*

WHEREAS*[name of the manufacturer]* who are established and reputable manufacturers of
[name and/or description of the goods] having factories at
..... *[address of factory]* do hereby authorize
..... *[name and address of Agent]* to submit a tender, and subsequently negotiate and sign the Contract with you against tender No.
..... *[reference of the Tender]* for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Tenders.

[signature for and on behalf of manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person authorized.