

April 30th, 2025,

Addendum No. 1

To All Bidders,

CLARIFICATION/AMENDMENTS FOR TENDER FOR PROPOSED SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 1NO. 800KVA GENERATOR SET AND MAINTENANCE OF THREE (3) GENERATOR SETS AT CA OFFICES NAIROBI COUNTY, TENDER NO.CA/SCM/OT/50/2024-2025-

Please refer to the above-mentioned tender.

According to clause 10.1 of the tender document shared with bidders, the Authority wishes amend and respond to the clarifications sought out as follows:

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
1.	Noise Level Requirement Is the noise level of 70 dBA at 1 meter a mandatory specification, or is there some flexibility allowed? This has a major impact on the design and cost of the generator.	This is a mandatory technical specification and no flexibility allowed.
2.	Automatic Transfer Switch (ATS) Specification <ul style="list-style-type: none"> Could you please confirm the required make/type of ATS? Is a Socomec ATS specifically required, or are equivalent alternatives acceptable? Additionally, should the ATS be ACB (Air Circuit Breaker) type, or would a standard contactor-based solution suffice? 	Alternative brands are acceptable Bidders to follow technical specifications on the ATS
3.	In Mandatory Requirements, MR3 indicates NCA 4 Electrical Installation whereas MR4 indicates Valid Annual NCA 4- Electrical Engineering Service Certificate Contractor Kindly clarify which is applicable	MR3 is on NCA Registration certificate while MR4 is on NCA Annual practicing license and both are required
4.	To show Financial Capability in Technical Capacity Evaluation, are we to provide Line of Credit ONLY to satisfy Evidence of Financial Resources requirement?	Besides Line of credit , bidders can also submit 1.Overdraft facility from a reputable bank or financial institution;

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
		2. Credit facility from material suppliers or manufactures
5.	In the tender we have 3 generators for maintenance that's 800Kva, 500kva and 200kva but there's another boq of 2no 800kva are these included into the same scope of work or are they independent if so then you have 5No generators of maintenance or kindly re-amment your boq is very confusing	The scope of works comprise supply of 1No. 800KVA generator and maintenance of existing 1No. 500KVA and 1No. 200KVA generators
6.	<p>I would like to request a site visit to discuss and assess the site-specific requirements for the opportunity mentioned in the above subject.</p> <p>Kindly let me know if Tuesday next week would be convenient for you or suggest an alternative date that works best on your end.</p>	Not Considered
7.	<p>Kindly note that our technician was not able to make it in good time to attend the Site Visit scheduled for yesterday 22nd April 2025. We therefore request that you allow us to visit the site on a day and time convenient to you.</p> <p>Also in reference to Mandatory Requirement No.MR3 that states "Valid copy of NCA Registration Certificate in category NCA 4 and above; (i) Electrical installation works (ii) Building Works", please clarify whether bidders registered with NCA as Electrical Contractors are allowed to sub-contract for Building Works.</p>	<p>Not Considered</p> <p>Bidders to work on modalities of meeting this requirement including joint venture arrangement.</p>
8.	AMENDMENTS /REVISION BY CA	
9.	Introduced mandatory Requirements	<p>New Mandatory requirements</p> <p>MR16-Attach Technical Brochures (for the following items: -Diesel Generator set, Automatic Transfer switch (ATS), synchronization panel, Remote Monitoring System solution, power cables. ACBs/MCCBs and Cable Trays Being offered by the bidder) and clearly highlight the pages with items to be supplied AS PER PAGE NO. 31 ATTACHED</p>

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
		MR17 -Bid MUST be submitted in book style, perfectly bound, and should not have any loose pages. Bids with Spiral binding or files (<i>spring and box</i>) shall be disqualified AS PER PAGE NO. 31 ATTACHED
10.	<p>Additional Technical Capacity Evaluation criteria for Item 1 (Key personnel)</p> <p>old requirement stated Artisans / Site Installation Staff. Provide 2No. Artisans each with: a) Minimum certificate in Electrical and Electronic Engineering or equivalent. b) Proof of minimum 5 years' experience in installation of Generators.</p>	<p>New Technical capacity Evaluation Criteria</p> <p>Artisans / Site Installation Staff. Provide 2No. Artisans each with:</p> <p>a) Minimum certificate in Electrical and Electronic Engineering or equivalent. b) Attach Artisan, Trade Test Certificate c) Proof of minimum 5 years' experience in installation of Generators.</p> <p>AS PER PAGE 40 ATTACHED</p>
11.	<p>Additional Technical Capacity Evaluation criteria Item No. 4</p>	<p>Introduce Requirement in technical capacity evaluation item No. 4 as item No. (e) for bidders to Provide detailed Factory Acceptance Test (FAT) Plan including outline of FAT tests to be carried out and witnessed by PM and Client personnel. AS PER PAGE 41 ATTACHED</p>
12.	<p>Additional Technical Capacity Evaluation criteria Item No. 6</p>	<p>Introduced item No. 6 in Technical Capacity Evaluation stage as follows: -</p> <p>Dully fill sign and stamp Statement of Compliance as per the format provided on AS PER PAGE 41 ATTACHED</p>
13.	<p>Additional Technical Capacity Evaluation criteria Item No. 7</p>	<p>Introduce requirement in technical capacity evaluation as item no. 7 as follows:</p> <p>Duly Fill litigation History Form CON – 2: Historical contract Non-performance, pending litigation and Litigation history AS PER PAGE 41 ATTACHED</p>
14.	<p>Qualification Form</p>	<p>Form introduced as per AS PER ANNEX5-4 ATTACHED</p>
15.	<p>FAT and Training & Factory Inspection</p>	<p>Introduced the factory acceptance test and training guidelines as shown in AS PER ANNEX 4 ATTACHED</p>
16.	<p>Compliance technical specification table</p>	<p>Column with heading "Bidders to explain compliance with reference to the datasheet on Technical Compliance table in AS PER PAGE 33 REPLACED AS ATTACHED</p>

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
17.	Technical Compliance table on page 34 , item B.3 states-Provide itemized list of (2) year maintenance spares and special maintenance tools as recommended by Generator Manufacturer, on Manufacturer's document letterhead.	Criteria on technical compliance table in page 34 item, B.3 amended as follows:- Provide rates on the itemized list of spare parts AS PER PAGE 13 ATTACHED
18.	Existing generator Capacity	The capacity rating of the existing generator has been amended from 800KVA to 500 KVA. AS PER E1, F6 PAGE 88, I3 ATTACHED
19.	Compliance to Technical Specification table distorted some parameters not clear in page 34	Compliance technical specifications for generator set on page 34 replaced for ease of eligibility as shown in PAGE 34, ATTACHED
20.	Bills of Quantities and summary page number H/DG-1to H/DG-13, Main Summary Page H/DG-12	Bills of Quantities and Summary Page H/DG-1to H/DG-13 , Main Summary page H/DG-12 replaced as H/DG-1 TO 10 and H/DG11 respectively AS ATTACHED .
21.	Item 3 of Bill No.2 Schedule 2- AMF Control Panel – Design supply and install generator monitoring system with all the components as per the technical specifications. Work to include all LAN, piping, wiring and sundries deemed necessary.	<p>The description indicated in the bill of quantities item 3.00 on Bill No.2 Schedule 2- AMF Control Panel removed and transferred to the technical; specification for remote monitoring station as additional specifications detailed below . New bill of quantity for BILL NO.2 SCHEDULE 2- AMF CONTROL PANEL replaced with template in H/DG-2 ATTACHED.</p> <p>ADDITIONAL SPECIFICATIONS FOR REMOTE MONITORING SYTEM AS PER PAGE 39B ATTACHED</p> <p>Design, supply and install generator monitoring system with all the components as per the technical specifications. Works to include all LAN, piping, wiring and sundries deemed necessary. After installation the system should be able to</p> <p>1. Alert Types Critical Alerts (Immediate Action Required)</p> <ul style="list-style-type: none"> • Generator fails to start • Overload trip • High coolant temperature • Low oil pressure • Fuel leak detected • Emergency stop activated • Battery failure

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
		<ul style="list-style-type: none"> • High engine temperature <p>Warning Alerts (Prompt Attention Needed)</p> <ul style="list-style-type: none"> • Low fuel level • Battery voltage low • Maintenance due • High fuel consumption rate • High/low voltage or frequency • Engine running too long (based on schedule) <p>Informational Alerts (For Logs & Awareness)</p> <ul style="list-style-type: none"> • Generator started/stopped • Generator switched to/from grid • Scheduled maintenance completed • Fuel refilled • Remote command executed <p>2. Notification Channels</p> <ul style="list-style-type: none"> • SMS Alerts – Quick mobile notifications for urgent issues. • Email Alerts – Detailed logs and non-urgent warnings. • Mobile App Push Notifications – Real-time alerts with context, graphs, and GPS. • Web Dashboard Alerts – Visual indicators (red/yellow/green status) with pop-ups. • On-Site Audible/Visual Alarms – Sirens, beacon lights for physical locations. <p>3. Alert Configuration Features</p> <ul style="list-style-type: none"> • Customizable Thresholds – Set your own limits for fuel, voltage, temperature, etc. • User Roles & Access Control – Different alerts to different personnel (technicians, managers). • Acknowledgment System – Track who saw and acknowledged an alert. • Escalation Protocol – If no one acknowledges within X minutes, escalate to higher authority • Silencing/Delay Options – Avoid alarm fatigue from known issues being handled. <p>4. Smart Alerting Features (Optional but Powerful)</p> <ul style="list-style-type: none"> • Predictive Alerts – Based on trends, alert before

NO.	CLARIFICATION QUESTIONS	CA RESPONSE
		<p>failure (e.g., oil pressure gradually dropping).</p> <ul style="list-style-type: none"> • AI/ML Anomaly Detection – Spot patterns or behaviours that deviate from normal. • Geofencing Alerts – If the generator is mobile, notify if it moves out of a zone. • Offline Alert – Alert if the monitoring system itself goes offline. • Reports- System should generate reports on past Events <p>Item 3.1 of BILL NO.2 SCHEDULE 2-AMF CONTROL PANEL moved to bill of quantities bill 3 for remote Monitoring Station as per the new BQ template in H/DG-7</p>

The closing date for the above mention tender has been extended from 7th May2025 to 14th May 2025 at 10.30 am East African Time.

ALL other conditions of the initial tender remain unchanged.

Yours Faithfully,



Philip Kiplagat
FOR: DIRECTOR GENERAL /CEO

a) **PRELIMINARY EVALUATION**

S/No	MANDATORY REQUIREMENTS(MR)
MR1	Valid copy of certificate of incorporation/ Registration
MR2	Valid Current Tax Compliance Certificate valid as at the date of tender opening.
MR3	Valid copy of NCA Registration Certificate in category NCA 4 and above (Certified by an advocate); (i) Electrical installation works (ii) Building Works
MR4	Valid Annual NCA contractor's Practicing license for works listed in MR3 above.
MR5	Provide a Current CR12 from the Registrar of Companies (for Limited Companies). The tender is exclusively reserved for firms in which Kenyans own one hundred per cent (100%) shares.
MR6	The Tender Security (Bid Bond) of Kenya Shillings Five Hundred Thousand (Kshs. 500,000.00) only in form of Bank Guarantee from a reputable bank or insurance company approved by Public Procurement Regulatory Authority (PPRA) and that is valid for 240 days from the date of tender opening;
MR7	Duly filled, signed (by Authorized signatory) and stamped form of tender.
MR8	Dully filled signed and stamped Confidential business questionnaire
MR9	Duly filled, signed and stamped Statement of compliance
MR10	Manufacturer's Authorization Letters in the format provided, for ALL the following items: - Diesel Generator set and its components and General Tele-Networks for Remote Monitoring System Solution being offered by the bidder
MR11	Attach Duly filled Form SD1 Self declaration confirming that the person/tenderer is not debarred in the matter of the public procurement and asset disposal act 2015
MR12	Attach Duly filled Form SD2 Self Declaration confirming that the person/tenderer will not engage in any corrupt or fraudulent practice.
MR13	Attach a site visit certificate for CA Centre signed by the Authorized Authority's representative
MR14	Written confirmation of authorization of the person signing the tender on behalf of the Tenderer. Attach a duly signed and stamped power of Attorney commissioned by Commissioner for oaths or notarized by Notary Public if not a Director of the Firm.
MR15	Submit copies of Audited accounts (Signed by Auditors and directors) for the last three (3) years (2021, 2022 and 2023) . The Audited financial statements must bear the name and practicing license/certificate number of auditors
MR16	Attach Technical Brochures (for ALL the following items:- Diesel Generator set, Automatic Transfer Switch (ATS), synchronization panel, Remote Monitoring System Solution, power cables, ACBs /MCCBs and Cable Trays being offered by the bidder) and clearly highlighted the pages with items to be supplied
MR17	Bid MUST be submitted in book style, perfectly bound, and should not have any loose pages. Bids with Spiral binding or files (spring and box) shall be disqualified.

N/B. Full compliance by the tenderers shall be required to proceed to the next stage of evaluation. Failure to provide any of the listed requirements shall lead to disqualification.

B) Technical Capacity Evaluation

The bidders that will qualify at the Technical Compliance Evaluation stage shall be subjected to the Technical Capacity Evaluation

Technical Capacity Evaluation

Item	Description	Compliance ✓ or X
1.	Key Personnel (Bidders shall fill in FORM PER 1 and FORM PER 2 All CVs must be signed by both the bidder and the party named in the CV and certificate.)	
	Director of the firm <input type="checkbox"/> Holder of degree/ diploma in Electrical Engineering	
	Project Engineer. Provide 1No. Project Engineer with: a) Degree Certificate in Electrical and Electronic Engineering or equivalent. b) Proof of Registration with Engineers Board of Kenya (EBK) as a Professional Engineer. c) Proof of valid practicing License as a Professional Engineer. d) Proof of minimum 5 years' experience in Electrical Installation and Commissioning Works.	
	Technician (Generator installation and Commissioning). Provide 1No. Engineer with: a) Minimum Diploma in Electrical and Electronic Engineering or equivalent b) Trained and certified by any Generator manufacturer. c) Proof of minimum 5 years' experience in assembly/installation and commissioning of Generators	
	Artisans / Site Installation Staff. Provide 2No. Artisans each with: a) Minimum certificate in Electrical and Electronic Engineering or equivalent. b) Attach Artisan, Trade Test Certificate c) Proof of minimum 5 years' experience in installation of Generators.	
2.	Contracts completed in the last Five (5) years (Min of 4No. Projects) - <u>Provide Evidence i.e. Completion Certificates and/or Reference letters</u> <input type="checkbox"/> Projects of similar nature, complexity or magnitude - Testing and commissioning of Generators, Synchronization and ATS Note: Award of contract letter is not applicable without proof for completion of works. The letter heads must clearly show the logo, the address, and contact information of the client.	

3.	Schedule of contractors equipment and transport (proof or evidence of ownership/Lease)	
	a) Relevant Transport (at least 3No.) <input type="checkbox"/> Means of transport	
	b) Relevant Equipment (at least 5No.) The Equipment includes but not limited to the following; <ol style="list-style-type: none"> 1. Motor and Phase Rotation Indicator 2. Digital Earth Loop Tester 3. Insulation Continuity Tester 4. Digital Earth Resistance Tester 5. Multimeter and Clamp Meter 6. Ladders 7. Crane truck 8. Load bank tester 9. Hydraulic crimping tool 	
4	Work Execution	
	a) Provide work methodology statement for site assembly, installation, and commissioning of Generator installation. The method statement must cover other activities related to these installation works	
	b) Submit Ghant chart showing activities from contract award to completion of installation and commissioning, clearly showing milestones and activity dependencies. Bidders are expected to provide realistic timelines required for the full delivery of the project.	
	c) Provide detailed Training Programme including outline of the training areas and topics.	
	d) Works Completion commitment - Company's signed and stamped commitment letter to execute the works within 6 months	
	e) Provide detailed Factory Acceptance Test (FAT) Plan including outline of FAT tests to be carried out and witnessed by PM and Client personnel.	
5.	Financial report	
	a) Demonstration of financial soundness with an average turnover of Kshs. 50 million and above for the last three financial years (2021, 2022 and 2023)	
	b) Evidence of Financial Resources (lines of credit, over draft facility, Credit facility from material suppliers or manufactures) commitment from the Bank of Kshs 20 Million and above	
6.	Statement of Compliance <input type="checkbox"/> Duly filled, signed and stamped	
7.	Litigation History <input type="checkbox"/> Duly Filled Form CON – 2: Historical contract Non-performance, pending litigation and Litigation history	
	COMPLIANCE STATUS	

The tenderers who do not satisfy any of the above mandatory requirements shall be considered Non- Responsive and their tenders will not be evaluated further.

1. FACTORY ACCEPTANCE TEST AND TRAINING

The generator shall undergo a Factory Acceptance Test (FAT) at the supplier's premises prior to shipment to Kenya. The testing shall be carried out to confirm to CA that the system to be supplied meets the tender requirements.

The factory acceptance tests shall be witnessed by Four (4 No) Engineers from CA and PM (SDPW) in the vendor's factory, and at the vendor's expense. The generator shall be subjected to the following routine tests at the manufacturer's works. The tests shall be carried out in accordance with the details specified in ISO 8528-5

- i Inspection of generator and basic properties (winding connections, tightness of terminals, protection, suspension elements etc)
- ii Check the degree of protection (visual examination and documentation)
- iii Measurement of windings insulation resistance.
- iv Measurement of winding resistance.
- iv Measurement of thermal sensors resistance.
- v Measurement of voltage symmetry.
- vi Phase sequence check at no load.
- vii No load characteristics at $f=50$ hertz

2. FACTORY INSPECTION

2.2 The employer shall be entitled to have the quantity and quality of the imported lifts materials inspected by two number (2No.) engineers appointed by the Project Manager and two (2No.) representative for the employer.

2.3 The said inspection shall be carried out at the factory of manufacture of the lifts materials during normal working hours and the successful tenderer shall give written notice to the Project Manager at the latest thirty (30) calendar days in advance of the date that the lifts materials are ready for inspection.

2.4 Travel (including ground, air travel and airport passage taxes) and full board accommodation expenses in at least a three (3) star hotel incurred by the engineers appointed by the Project Manager, and the employer's representative shall to be borne by the Client (separately outside the contract).

2.5 The inspection period shall be five (5) working days excluding travelling time.

2.6 If as a result of the inspection any of the generator materials are found to be defective, the successful tenderer shall replace the defective materials and determine a new date as when a new inspection shall be performed at the expense of the contractor.

2.7 The successful tenderer shall only ship the generator after the said factory inspection.

The Contractor will also train onsite 5 No. CA staff comprising Engineers, Technician and maintenance staff.

QUALIFICATION FORM*

Item No.	Qualification Subject	Qualification Requirement	Documents To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
A. PRELIMINARY EVALUATION				
1.	Nationality	Nationality in accordance with ITT 4.5	Duly filled Forms ELI - 1.1 and 1.2	
2.	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by Kenya Revenue Authority in accordance with ITT 3.14.	Valid Tax Compliance Certificate or Tax Exemption Certificate	
3.	Company Registration	Has produced Valid Copy of certificate of incorporation/Registration from the registrar of companies	Certified copy of Certificate of Incorporation or Registration as the case may be	
5.	Directors	Has produced a valid Copy of CR12 from the department of the registrar or National Identity Card(s) for Sole Proprietorship/Partnership.	Certified copy of CR12 or National Identity Card as the case may be	
6.	NCA Registered	Has produced Valid NCA registration certificate and annual practicing licenses as for NCA 4 and above category.	Copy of current NCA registration and practicing certificates	
7.	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Duly filled disclosure of interest Form in the Confidential Business Questionnaire	
8.	Public Procurement Regulatory Authority (PPRA) Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.7	Duly filled and signed self declaration Form SD 1	
9.	State-Owned Enterprise	Meets conditions of ITT 3.8	Attach copies of certified documents stated in Forms ELI - 1.1 and 1.2	
11.	History of Non- Performing Contracts, Pending Litigation and Litigation History	Meets Post qualification and Contract ward (ITT 39) conditions set out in the Evaluation and Qualification Criteria 7 (iv) (a-c) Non-performance of a contract did not occur as a result of contractor default since 1st January 2019 . No consistent history of court/arbitral award decisions against the Tenderer since 1st January 2019	Duly filled and signed self declaration Form CON-2	

Item No.	Qualification Subject	Qualification Requirement	Documents To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
1.	Financial Capabilities	<p>(i) The Tenderer shall demonstrate that it has access to, or has available either, cash at hand, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Kenya Shillings 5,000,000.00 per month equivalent for the subject contract(s) net of the Tenderer's other commitments.</p> <p>(ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>(iii) The tenderer shall provide certified copies of Audited2. accounts (Signed by Auditors and directors for the last three (3) years (2021, 2022 & 2023). (Certified by an advocate).</p>	<p>1. Dully filled Form FIN – 3.1 with proof of sources of finances which shall be in any of the following forms:</p> <p>a. Credit line letter from reputable bank or financial institution;</p> <p>b. Overdraft facility from a reputable bank or financial institution;</p> <p>c. Credit facility from material suppliers or manufactures</p> <p>2. Duly signed and certified Audited Accounts for the last three year (Either 1a, 1b, 1c or 2 to be considered where necessary)</p>	
2.	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings 50,000,000.00 equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 5 years, divided by 5 years	Duly filled and signed Form FIN – 3.2	
3.	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last 5 years, starting 1st January 2019	Duly filled and signed Form EXP – 4.1	
4.	Specific Construction & Contract Management Experience	A minimum number of <i>Four</i> similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January 2019 and tender submission deadline i.e., Three (3) contracts, each of minimum value of Kenya shillings 50,000,000.00 equivalent.	Duly filled and signed Form EXP 4.2(a) complete with award letters and completion certificates.	

Item No.	Qualification Subject	Qualification Requirement	Documents To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		The similarity of the contracts shall be based on the following (Generators Installation works)		
5.	Directors' qualifications	At least one of the directors to have a Degree certificate in Electrical Engineering or equivalent from a recognized institution of learning.	Academic certificates and curriculum vitae	
6.	Contractor's Representative and Key Personnel	Curriculum Vitae (CVs) of the Proposed Key Staff must be presented in the provided format and duly signed by the proposed individual together with their Academic Certificates.	Duly filled and signed Forms PER. 1 and PER. 2	
		The site staff shall possess minimum levels set below;		
		Project Engineer	Qualification: At least a degree in Electrical Engineering or equivalent from a recognized institution. Registered as Professional Engineer by Engineers Board of Kenya (EBK) with a valid practicing License with general experience of atleast 5 years in Electrical Installation and Commissioning Works	
		Technician	Qualification: At least a Diploma in Electrical engineering from a recognized institution with atleast 5 years' experience. Trained and certified by any Generator manufacturer	
		Artisans	Qualification: At least a certificate in Electrical engineering with 5 years' experience installation of Generators. Artisan, Trade Test Certificate	

Item No.	Qualification Subject	Qualification Requirement	Documents To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
7.	Contractors key tools and equipment	i. Bidders shall declare possession/Ownership of various equipment as proposed to be used in the Project by providing Logbooks that demonstrate proof of ownership	Equipment/Transport:	
		ii. For Bidders planning to hire, they shall provide an Active Lease Agreement in Place that can be used	Tools:	
Note: Only tenderers who fully meet the technical evaluation stage requirements shall proceed to financial evaluation. The rest shall stand disqualified.				

**24 MONTHS ROUTINE MAINTENANCE OF 1No. 800KVA, 1No. 500KVA AND
1No. 200KVA GENERATOR SETS AT CA OFFICES - NAIROBI COUNTY.**

SCHEDULE OF UNIT RATES FOR ANTICIPATED SPARES NOT COVERED BY THE SCOPE OF WORKS UNDER THIS CONTRACT (ALL SPARE PARTS ARE COMPREHENSIVE EXCEPT FOR MAJOR PARTS BELOW WHERE THE CONTRACTOR IS REQUIRED TO FILL)

NO	ITEM DESCRIPTION	QUANTITY	PRICE FOR 200KVA
1	500A Changeover switch (complete with all accessories required)	1	
2	alternator	1	
3	Oil pump	1	
4	Fuel pump	1	
5	Intelligent generator controller module	1	

NO	ITEM DESCRIPTION	QUANTITY	PRICE FOR 500KVA
1	800A Changeover switch (complete with all accessories required)	1	
2	alternator	1	
3	Oil pump	1	
4	Fuel pump	1	
5	Intelligent generator controller module	1	

NO	ITEM DESCRIPTION	QUANTITY	PRICE FOR 800KVA
1	1250A Changeover switch (complete with all accessories required)	1	
2	alternator	1	
3	Oil pump	1	
4	Fuel pump	1	
5	Intelligent generator controller module	1	

The spare parts above are only replaced after being certified by technical personnel from the project manager confirms they are faulty and irreparable, the contractor upon issue of a purchase order by the client proceeds to carry out replacement under the supervision of the project manager.

B. PARTICULAR SPECIFICATIONS FOR SERVICING OF GENERATOR

1. SITE LOCATION

The site of the proposed contract works is located at CA Center, Waiyaki way and CA Station Kahawa.

2. EXISTING INSTALLATION

- (i) The existing control panels for generators are in good working condition.
- (ii) The automatic change over switches for the generators are healthy.

3. SCOPE OF WORKS

The works shall comprise of the following:-

- (i) Servicing of 3No. Generators (1No. 800KV, 1No. 500KVA and 1No. 200KVA)
- (ii) Replacing relevant parts with new during servicing.
- (iii) Faulty defective parts to be replaced with new when required.

4. GENERAL CONDITIONS OF THE SERVICE WORKS ON THE GENERATOR

- a) All works carried out under this contract shall be to the highest standards of workmanship and safety and shall be carried out by competent engineers or technicians with proper supervision.
- b) All materials and component parts supplied or used hereunder shall be of the highest quality in conformity with the current specifications of the Generator manufacturer and obtained from merchants or manufacturers of the highest repute.
- c) Except where otherwise specified the contractor shall carry out all examinations and work required

where specified. It shall also be possible to start, operate and stop the set manually, independent of any automatic features

Within the operating conditions specified in part 3 above the set shall be capable of starting and accepting full load within the shortest possible time, and in any case, in not more than 10 seconds. Any special features included to achieve this shall be stated in Section F.

5. Scope of the Contract Works

The work covered by this Specification include but not limited to the following: -

- 1) supply, delivery, installation, commissioning and testing of **1No. 800KVA** diesel generating set complete with all necessary ancillary equipment
 - 2) Maintenance Works of **1No. 800KVA (new) and 1No. 500KVA (existing) and 1No. 200KVA (existing)** generators.
- to the satisfaction of the Engineer

The equipment to comprise **1No. 800 KVA**, 415 volts/3 phase /50Hz prime rated diesel generator set with all integral accessories, and all necessary equipment for the safe and efficient working of the set. The diesel generator set will be site rated at level of 1660 metres, Kenya Datum.

Diesel generator set to include:

- a) Push button starting, starting battery and mains power supply trickle charger to be included.
- b) 72 hour operational running capacity auxiliary fuel oil storage tank, loose transfer pump and duplex oil strainer.
- c) An integral belly/ base fuel tank for daily service with an operational running capacity of 8 hours
- d) All interconnecting pipe work, valves and fittings between the storage tank, base tank and the diesel engine.
- e) An automatic generator control unit
- f) A diesel generator control cubicle
- g) Acoustic enclosure/ sound attenuated canopy
- h) All local wiring
- i) Maintenance tools and spare parts as specified.

6 Performance Objective

The output rating of the set in KVA, the voltage, the number of phases and the frequency shall be as specified in Bill No.2 Schedule 1 of the Bills of Quantities.

Within the operating conditions specified, the set equipped with its standard air intake filters, shall be capable of delivering its rated output continuously at rated voltage and 0.8 lagging power factor and of delivering 10% in excess of the continuous maximum rating for a period of one hour in any 12 hour period.

Item	Criteria	Complied/ Not Complied
A	COMPLIANCE TO TECHNICAL SPECIFICATIONS AND REQUIREMENTS	
A.1	<p>Provide Manufacturer's specification data sheets and catalogues for the following Generator parts and components: The bidder shall also fill in and submit the Technical Schedule provided in this tender document.</p> <p><i>(Note: See Compliance to Technical Specifications section on the next page)</i></p> <ul style="list-style-type: none"> (i) Alternator (ii) Engine (iii) ATS (iv) Enclosure (v) Starting System (vi) Fuel System (vii) Fuel tank (viii) Cooling System (ix) Air intake system (x) Exhaust system (xi) Lube system (xii) Mounting system (xiii) Synchronization panel, (xiv) Remote Monitoring System Solution 	
A.2	Provide General Arrangements Drawing of the type test/typical Generator, ATS, synchronization panel and accessories to be supplied. The General Arrangements Drawing must clearly show dimensions of the Generator and locations of the accessories, e.t.c	
A.3	Provided Control schematic diagram of the type test/typical Generator, ATS, synchronization panel and accessories to be supplied.	
A.4	Provide Type-Test reports for Generator, ATS, synchronization panel and all accessories to be supplied	
A.7	Declaration of conformity to IEC 88528- 11, IEC 60034-1, IEC 61439 Standards by the manufacturer	

B	WARRANTIES AND GUARANTIES	
B.1	Provide minimum 24 months Manufacturer's Warranty commitment for the Generator and Accessories. The warranty commitment must be addressed to Communications Authority of Kenya by the Manufacturer, referencing this tender. To be in manufacturer's letterhead signed and stamped including a valid official email address and contact person. The Warranty shall be valid for 24 months from the date of commissioning.	
B.2	Attach a fully filled statement from the authorized local distributor to provide support during the implementation, warranty and maintenance period of the equipment(s). Authorization from the OEM to the local distributor shall be required	
B.3	Provide rates on the itemized list of spare parts.	
	COMPLIANCE STATUS	

COMPLIANCE TO TECHNICAL SPECIFICATION – Parameters to be analyzed

No	Item Description	Complied/Not Complied
A	GENERATOR SET	
1.	<u>Ratings</u> Prime – 800KVA /640 kW Stand by – 880KVA /660 kW	
2.	<u>Fuel Type</u> Diesel	
3.	<u>Fuel Type</u> Diesel	
4.	<u>Engine Manufacturer</u> Cummins, Perkins CAT (<i>Note: The existing 500KVA generator is CAT engine</i>)	
5.	<u>Engine Configuration</u> Cast Iron, in-line 4 cylinder	
6.	<u>Aspiration</u> Turbocharged and after-cooled	
7.	<u>Gross Engine Power Output</u> Standby > 760 kWm Prime > 700 kWm	
8.	<u>BMEP at set rated load</u> Standby > 2,400 kPa Prime > 2,200 kPa	
9.	<u>Bore</u> >159mm	
10.	<u>Stroke</u> > 159mm	
11.	<u>Rated Speed</u> > 1500 rpm	
12.	<u>Lube Oil Capacity</u> > 100 L	

No	Item Description	Complied/Not Complied
A	<p>ADDITIONAL SPECIFICATIONS FOR REMOTE MONITORING SYTEM</p> <p>After installation the system should be able to support</p> <p>1. Alert Types</p> <p>Critical Alerts (Immediate Action Required)</p> <ul style="list-style-type: none"> • Generator fails to start • Overload trip • High coolant temperature • Low oil pressure • Fuel leak detected • Emergency stop activated • Battery failure • High engine temperature <p>Warning Alerts (Prompt Attention Needed)</p> <ul style="list-style-type: none"> • Low fuel level • Battery voltage low • Maintenance due • High fuel consumption rate • High/low voltage or frequency • Engine running too long (based on schedule) <p>Informational Alerts (For Logs & Awareness)</p> <ul style="list-style-type: none"> • Generator started/stopped • Generator switched to/from grid • Scheduled maintenance completed • Fuel refilled • Remote command executed <p>2. Notification Channels</p> <ul style="list-style-type: none"> • SMS Alerts – Quick mobile notifications for urgent issues. • Email Alerts – Detailed logs and non-urgent warnings. • Mobile App Push Notifications – Real-time alerts with context, graphs, and GPS. • Web Dashboard Alerts – Visual indicators (red/yellow/green status) with pop-ups. • On-Site Audible/Visual Alarms – Sirens, beacon lights for physical locations. <p>3. Alert Configuration Features</p> <ul style="list-style-type: none"> • Customizable Thresholds – Set your own limits for fuel, voltage, temperature, etc. • User Roles & Access Control – Different alerts to different personnel (technicians, managers). • Acknowledgment System – Track who saw and acknowledged an alert. • Escalation Protocol – If no one acknowledges within X minutes, escalate to higher authority • Silencing/Delay Options – Avoid alarm fatigue from known issues being handled. <p>4. Smart Alerting Features (Optional but Powerful)</p> <ul style="list-style-type: none"> • Predictive Alerts – Based on trends, alert before failure (e.g., oil pressure gradually dropping). • AI/ML Anomaly Detection – Spot patterns or behaviors that deviate from normal. • Geofencing Alerts – If the generator is mobile, notify if it moves out of a zone. • Offline Alert – Alert if the monitoring system itself goes offline. • Reports- System should generate reports on past Events 	

GENERATOR INSTALLATION WORKS**BILL NO.2 SCHEDULE 1 - GENERATOR SET**

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
1.1	Supply, deliver to site, install, test and commission a prime rated 800KVA 3 phase, 415V, 50Hz diesel generating set with a continuous power factor of 0.8 lagging and as fully described in the particular specifications. The generator set is to be complete with a sound attenuated canopy and an integral base/belly daily service fuel tank with and operational running capacity of 8 hours.	1	No		
1.5	Supply, deliver to site and install a steel exhaust pipe of not less than 14 SWG and of adequate diameter running from the generating set to the outside of the generator house	1	Item		
1.6	Connect the exhaust pipe above in item 1.2 using steel pipes of adequate diameter, and flexible piping off engine exhaust manifold complete with heavy duty silencer	1	Item		
1.7	Complete earthing of generating set to electrical engineer's approval (inclusive of manhole with watertight cover)	1	Item		
1.8	Allow for testing and commissioning the generating system installation using load bank capable of delivering full load (provide test certificate)	1	Item		
SUB-TOTAL C/F TO PRICE SUMMARY PAGE					

BILL NO.2 SCHEDULE 2- AMF CONTROL PANEL

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	Supply, deliver to site, install, test and commission the following:				
2.1	An electrical control panel complete with suitable rated incoming MCCBs and contactors for automatic change over operation and complete with all other control accessories as fully described in clauses 9.3 to 9.10 of the particular specifications	1	No		
2.2	Suitably rated manual by-pass switch with clearly labeled NORMAL-OFF-BYPASS positions, and shall such be wired that when the switch is on either OFF or BYPASS position, the generator shall receive no signal to start	1	No.		
2.3	12 Volts sealed free maintenance battery as specified	2	No.		
2.4	Armoured cables complete with glands and pvc sleeves:				
	(a) 300 mm sq. 4 core XLPE/SWA/PVC copper cable	120	M		
	(b) 4.0mm ² , 4 core, XLPE/SWA/PVC copper cable	75	M		
	(c) 95mm ² , 4 core, XLPE/SWA/PVC copper cable	1	M		
2.7	Interwire the control panel with the Mains L.V board (existing on site)	1	Item		
2.80	Appropriately rated synchronization panel (800kVA 3Phase) for 1No. 800KVA and 1No. 500KVA Generator sets	1	No		
3.00	Any other items necessary to complete the Generator installation, testing and commissioning works satisfactorily. (List and give quantities of the items)	1	No		
	a).....				
	b).....				
	c).....				
	d).....				
SUB-TOTAL C/F TO PRICE SUMMARY PAGE					

BILL NO. 2 SCHEDULE 3- RECOMMENDED SPARE PARTS AND LUBRICATORS

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	For the supply to the site of the following spare parts and lubricators:				
3.1	Oil Filters	4	No.		
3.2	Air Filters	4	No.		
3.3	Fuel Filters	4	No.		
3.4	Fuel injector nozzle to suit the set	4	No.		
3.5	Set of Fan belts to suit the set	1	No.		
3.6	10 litres container of sump oil of grade.....*	1	No.		
3.7	2 kilogram grease in a tin of grade*	1	No.		
3.8	10 litre plastic container of distilled water	1	No.		
3.9	20 litre of engine oil in a tin of grade.....*	3	No.		
3.10	Generator fuel.*	10	Ltr		
3.11	Any other spare parts recommended by Tenderer **				
	*The tenderer to fill in the Grade quality to be supplied				
	**The tenderer to fill in the details and price of items but the price not to be included in total carried forward to summary page				
	SUB-TOTAL C/F TO PRICE SUMMARY PAGE				

BILL NO.2 SCHEDULE 4 -TOOLS TO BE SUPPLIED WITH THE SET

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
	For the supply to site of the following tools:				
4.1	Metal tool box with lock and two keys	No.	1		
4.2	Set of 8 No. Chrome vanadium ring spanners in sizes to suit the set	No.	1		
4.3	ditto but open ended spanners	No.	1		
4.4	Set of 3 screwdrivers, 75mm, 200mm and 300mm plus one	No.	1		
4.5	200mm Philips type	No.	1		
4.6	Set of feeler gauges	No.	1		
4.7	Grease gun to suit greasing points	No.	1		
4.8	Oil can, trigger type	No.	1		
	Any other special tools which the tenderer recommends should be purchased as an optional:*				
	NOTE* Tenderer should give detail and prices of item 9 but the price not to be included in total carried forward.				
	SUB-TOTAL C/F TO PRICE SUMMARY PAGE				

BILL NO.2 SCHEDULE 5 – AUXILIARY FUEL TANK

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
5.1	Supply, deliver to site and install, to the approval of the project manager, and connect to the daily service base/belly fuel tank, an auxiliary fuel tank with level indicator and with an operational running capacity of 72 hours. The tank is to be of mild steel plates of minimum thickness of 3mm complete with stand and all interconnecting G.I pipe work. (Provisional item)	1	No		
5.2	Supply, install, test and commission a 240 V ac fuel booster pump complete with a suitable rated motor DOL starter and all interconnecting accessories and G. I piping (Note - The proposed location for the new generator set is at higher ground level than the underground fuel storage tank. The existing fuel pump on site is Wayne fusion brand)	1	Item		
5.3	Supply and deliver to site generator diesel fuel for test running the generator for at least 12 hours	1000	Ltr		
SUB-TOTAL C/F TO PRICE SUMMARY PAGE					

SUMMARY PAGE

Item	Description	Amount
1.0	Sub-Total for Bill No.2: Schedule 1 - Generator Set B/F page H/DG -1	
2.0	Sub-Total for Bill No.2: Schedule 2 - AMF Panel B/F page H/DG -2	
3.0	Sub-Total for Bill No.2: Schedule 3 - Recommended Spare Parts and Lubricators B/F page H/DG -3	
4.0	Sub-Total for Bill No.2: Schedule 4 - Tools to be Supplied with the Set B/F page H/DG -4	
5.0	Sub-Total for Bill No.2: Schedule 5 - Auxiliary Fuel Tank B/F page H/DG -5	
	<i>SUB-TOTAL FOR GENERATOR C/F TO PRICE SUMMARY PAGE</i>	

Bill No. 3 - Remote Monitoring System					
Item	Description	Qty	Unit	Unit Rate	Amount
	Supply, Install, Test, integration and Commission the following as described in the specifications:				
1	Remote Monitoring System Hardware				
	Industrial Router with 4G LTE, Dual SIM, GPS, Wi-Fi, and I/O				
1.1	Interfaces. Router to be complete with Mounting Kit and all necessary accessories	1	No.		
1.2	Antenna Kit (4G LTE, GPS, Wi-Fi). Antenna kit to be complete with Mounting Kit and all necessary accessories	1	Set		
1.3	SIM Cards (2 Nos.) with Preloaded Data Plans	2	No.		
1.4	Power Supply Unit (24V DC)	1	No.		
2	Networking and Communication Components				
2.1	Ethernet Cables (Cat6, 10m)	10	LM		
2.2	RS232/RS485 Communication Cables	2	No.		
2.3	DB9 Connectors for RS232/RS485	2	No.		
2.4	Surge Protector for Communication Lines	1	No.		
4	Software and Licensing				
4.1	Remote Monitoring Software License (Annual Subscription)	1	No.		
4.2	Firmware and Software Updates (Annual Maintenance)	1	No.		
6	Warranty and Support				
6.1	Comprehensive 3 Years Warranty	1	No.		
7	Allow for selector panel works ,AVR integration. Works to include setting the two generators (new and the existing) to operate in planned phases. One to switch off after every 8 hours of continuous operation and the other one to pick on.	1	Item		
8	Allow for connection to the underground fuel tank including the existing electronic fuel system	1	Item		
9	Training for End-Users on System Operation	1	Item		
10	Supply and install complete desktop computer for integration with system for monitoring with minimum specs Corei7, 13GB dedicated graphics card Invidia/AMD, 24GB RAM, 2TB SSD storage, 4k Display	2	Item		
3.00	Any other items necessary to complete the Generator installation, testing and commissioning works satisfactorily. (List and give quantities of the items)	1	No		
	a).....				
	b).....				
	c).....				
	d).....				
Total for Remote Monitoring System c/f to Bills summary Page					

Bill No. 4:- EXTERNAL POWER RETICULATION & ELECTRICAL INSTALLATIONS

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
1.00	DUCTING Supply and lay the following uPVC ducts c/w necessary accessories at 600mm below ground level across drive ways and concrete areas, to Engineer's approval				
1.20	100mm uPVC duct	10	M		
1.20	150mm uPVC duct	10	M		
1.30	100mm uPVC duct with concrete surround	40	M		
1.40	150mm uPVC duct with concrete surround	20	M		
2.00	TRENCHING				
2.20	Trenching at an average depth of 750 mm laying, back filling of trenches, and laying of "DANGER-HATARI " cable tiling (for cable running along non-concrete areas), reinstatement and making of good of ground as directed by the Engineer on site	70	M		
2.20	Interlocking concrete tiles marked DANGER-HATARI	20	No		
2.20	Cable route markers marked DANGER-HATARI to approval	5	No		
3.00	MANHOLES				
3.10	PMH A-1200 x 900 x 600 mm deep manhole with concrete metal cover to engineer's approval	1	No		
3.20	PMH B-750 x 750 x 600 mm deep manhole with concrete metal cover to engineer's approval	1	No		
3.20	PMH B-600 x 600 x 600 mm deep manhole with concrete metal cover to engineer's approval	2	No		
3.30	PMH C-450 x 450 x 450 mm deep manhole with concrete metal cover to engineer's approval	2	No		
1.5	100A, 6-Way, SPN CB as Crabtree or approved equivalent	1	No.		
1.6	SP Miniature circuit breakers for the distribution boards above				
	i) 10A	1	No.		
	ii) 20A	1	No.		
	iii) 30A	1	No.		
	iv) 45A	1	No.		
	v) blanking plates	2	No.		
Sub-total carried forward to page 2					

Item	Description	Qty	Unit	Rate Kshs	Cost Kshs
	Sub-total carried forward from page 1				
1.01c	Lighting points wired in 3 x 1.5mm ² PVC/SC CU cables drawn in 20mmØ concealed HG/PVC conduits complete with all necessary accessories but excluding switches	6	No.		
1.02a	10A, moulded plastic ivory white switch plates as MK or approved equivalent as follows:- i) One gang two way ii) Two gang two way	1 1	No. No.		
1.03	Lighting fittings complete with lamps of appropriate wattage and colour rendering and fixing materials as follows:- (a) Type E2 - IP 66 1200mm, 2x18 watts LED lamps complete with polycarbonate diffuser, drivers, plastic housing and fixing accessories (g) Type H - Cast aluminium bulkhead with moulded glass cover and metallic grille (black) with 2x8W LED lamps. IP65 protection As Thorn OLG/OLV or approved equivalent	3 4	No No		
1.05	Power socket outlet power points comprising wiring in 3 x 2.5mm ² PVC/SC CU cables drawn in 25mmØ concealed HG PVC conduits/trunking including all conduit accessories but excluding plates	3	No.		
1.06	13A moulded switched socket outlet plates as MK or approved equivalent as follows: i) Single switched ii) Twin switched	1 2	No. No.		
1.53b	10 mm ² 2-C PVC/SWA/PVC Cu. cable to CU above c/w appropriate cable lugs i) Cable glands for above cable	30 2	Lm No.		
1.54	300 x 50mm 16 SWG metal cable tray complete with anchor bolts, tees, bends and all fixing accessories	15	LM		
1.54b	As above but 100 x 50mm	1	LM		
1.56	300x300x75mm recessed galvanised sheet steel draw boxes compete with powder coated cover and all other necessary accessories	2	No.		
1.57	Allow for labelling the CU under this section including all the incoming and outgoing circuits as per the specifications to Engineer's approval.	1	Item		
1.59	Complete Earthing and bonding to the installations to IEE regulations	1	Item		
	Total for electrical services c/f to Bills summary Page				

BILL NO. 6 – PROVISIONAL SUMS

Item	Description	Qty	Unit	Rate	KSHS
4.1	Provisional sum for price fluctuations	1	Item	100,000	100,000
4.2	Sub-total				
4.3	Provisional sum for Generator shed	1	Item	900,000	900,000
4.4	Contingency sum to be used at the discretion of the Project Manager.	1	Item	750,000	750,000
SUB-TOTAL FOR PROVISIONAL SUMS (Sum of items 4.2 and 4.4) CARRIED FORWARD TO PRICE SUMMARY PAGE					

MAIN SUMMARY PAGE

ITEM	DESCRIPTION	COST (KSHS)
1.00	Sub-Total for Bill No.1 - Contract preliminaries B/F page H/DG –Prel/9	
2.00	Sub-Total for Bill No.2: Generating Set installation B/F page H/DG -6	
3.00	Sub-Total for Bill No.3 - Remote Monitoring System B/F page H/DG -7	
4.00	Sub-Total for Bill No.4 - Electrical services B/F page H/DG -9	
5.00	Sub-Total for Bill No.6 - Provisional Sums B/F page H/DG -10	
6.00	Sub-Total for Bill No. 7- Maintenance of three generators for 24months B/F page G/28	
7.00	Allow for training of the Client's maintenance personnel in all aspect of operation and maintainance of the diesel engine generator sets (4 personnel for one (1) week)	
8.00	Allow for preparation of 3 sets of operation and maintenance manual	
9.00	Allow for preparation of working drawings for installations and "As Built" drawings after complete installation of the standby diesel engine generator sets	
A	TOTAL(Item 1.00-9.00)	
B	Add Levy Order 0.03% (equivalent to 0.0003) of A	
C	Add VAT 16% of A	
GRAND TOTAL COST (A+B+C) C/F TO FORM OF TENDER		

TOTAL AMOUNT IN WORDS

.....

TENDERER'S NAME & STAMP

.....

SIGNATURE **DATE.....**

P.I.N No.,..... **V.A.T CERTIFICATE No.....**

WITNESS..... **ADDRESS.....**

SIGNATURE OF WITNESS..... **DATE.....**