

Independent Communications Authority of South Africa

350 Witch-Hazel Avenue, Eco Point Office Park Eco Park, Centurion. Private Bag X10, Highveld Park 0169 Telephone number: (012) 568 3000/1

INSTALLATION & COMMISSIONING OF TWO (2) GENERATORS, MAINTENANCE AND REPAIRS FOR A PERIOD OF TWENTY-FOUR (24) MONTHS

1. INTRODUCTION

ICASA relocated to its new premises (i.e. 350 Witch Hazel Avenue, Eco Park, Centurion) on 26 October 2018. The Authority relocated with two (2) of its generators, which are:

1 x 600KVA SB generator set, H9457: PERKINS 2800 SERIES, SS7227 diesel-powered generator;

1 x SDMO 275 KVA diesel-powered generator

2. OBJECTIVE

ICASA would like to appoint a competent and experienced service provider that will install, commission and maintain these two generators, as per scope of work below. The generators must be commissioned and tested for functionality in order to ensure uninterrupted power supply in the event of a power outage.

3. SCOPE OF WORK

ICASA would like to appoint a service provider for the following services:

- 3.1. Installation and commissioning of the generators at ICASA's premises(i.e. 350 Witch-Hazel Avenue, Eco Park, Centurion);
- 3.2. Wiring, commissioning and testing at ICASA's premises, which includes but not limited to connection of the incoming cables, outgoing feeder cables, connecting of the cable and control cabling to the generator and the control terminals etc.;

- 3.3. The design of the control system to comply with the requirements for automatic starting, stopping, interlocking and isolation;
- 3.4. Circuit breakers, isolators and wiring to be correctly sized for each unit as per SANS 10142 wiring regulations or published applicable regulations;
- 3.5. The service provider must ensure that fuel is provided for testing and commissioning;
- 3.6. The service provider is responsible to provide cable routes, (power, charging & signal) cabling, civil work and re-instatement thereof from each new change over panel to each generator set;
- 3.7. Earth continuity shall be maintained throughout the complete installation;
- 3.8. Submission of detailed drawings and wiring diagrams of the generators and the switchgear, which includes but not limited to:
 - 3.8.1. Installation plan drawings where applicable;
 - 3.8.2. As-Built installation plans;
 - 3.8.3. Schematic wiring diagrams, including emergency shutdown panel, and fully detailed sequence of operations.
- 3.9. The generator must automatically start not later than one (1) minute during the power outage and must easily start, even during cold days, without the use of any special ignition devices (i.e. in summer and winter conditions). Note that in its current set-up, both existing generators currently operate in this manner.
- 3.10. The generator must have the option to be started manually. Note that in its current set-up, both existing generators currently operate in this manner.
- 3.11. A fully automatic change-over system for each generator must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains;
- 3.12. The service provider shall ensure adequate provision of cabling, subject to full measurement on site. Service providers will be granted access to do site assessment. Appointments must be made 24 hours in advance;

- 3.13. The generators must be connected to ensure full business operation, including air-conditioning, during power failures. As soon as power is restored, the generators must automatically switch back to main supply.
- 3.14. The service provider must conduct an assessment for the electricity consumption for the two (2) blocks and determine appropriate allocations for each generator per block.
- 3.15. It is recommended that the generators must be connected as follows, or as advised by the service providers having viewed electricity consumption of each building:
 - 3.15.1. 1 x 600KVA SB generator set, H9457: PERKINS 2800 SERIES, SS7227 to be connected to Block B;
 - 3.15.2. 1 x SDMO 275 KVA to be connected to Block C.
- 3.16. Installation of clear view fence and warning notices related to the generator, as required by the Occupational Health and Safety Act, in and around the generator's location, using the correct material (e.g. non-corrodible and non-deteriorating material, preferable plastic);
- 3.17. All work and equipment shall be in accordance with the approved SABS Standards and shall comply with the Occupational Health and Safety Act, No 85 of 1993 and other published regulations applicable to this work;
- 3.18. Service provider to submit Certificate of Compliance (COC) after installation, testing and commissioning, as well as installation circuit diagram;
- 3.19. The service provider shall commission the existing generators and ensure that both the generators are commissioned and fully operational;
- 3.20. The scope of work must include the appointment of a professional electrical engineering consultant to undertake the detailed assessment of the existing electrical infrastructure at ICASA's premises for purposes of connecting the generators to buildings occupied by ICASA.
- 3.21. Any design that may be required to be undertaken by the service provider shall comply with relevant statutory requirements contained in published regulations, the national and international standards, and industry best practices.

4. SITE ASSESSMENT

A compulsory site assessment, at the premises will also be arranged after the bid has been advertised as part of the tender process.

5. MANDATORY REQUIREMENTS

- 5.1. The service provider must be registered in terms of the Electrical Contractors' Association of South Africa [ECA (SA)] attach valid proof of registration;
- 5.2. Proof of valid active CIDB rating of 3EP grade and above.

6. REGULATIONS

The commissioning, installation, and testing must be done according to the published SABS Standards, Acts and regulations, which include but not limited to:

- 6.1. The latest issue of SABS SANS10142-1: "Code of Practice for the Wiring of Premises",
- 6.2. The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended,
- 6.3. The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority,
- 6.4. The Fire Brigade services Act 1993 Act 99 of 1987 as amended,
- 6.5. The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as emended,
- 6.6. The Post Office Act 1958 (Act 44 of 1958) as amended,
- 6.7. The Electricity Act 1984 (Act 41 of 1984) as amended,
- 6.8. The Regulations of the local Gas Board where applicable and
- 6.9. Disaster Management Act 2002 (Act 57 of 2002) as amended.

7. COMPANY PROFILE

A brief company profile must be submitted to assist ICASA in assessing the company's capabilities, capacity and competitive advantages.

8. TECHNICAL APPROACH

8.1. The service provider must submit a detailed technical plan, demonstrating technical competency, clear planning, project

management, and quality controls, as well as a project rollout plan for the installation of the generators.

- 8.2. The service provider must attach a project plan, which includes but not limited to timelines, milestones and activities, showing how the project is going to be achieved. Service providers may need to allow for a portion of the implementation to be completed outside of normal business hours, to ensure readiness of the project by the agreed date.
- 8.3. The service provider may be required to provide ICASA or its representative(s) with method statements and detailed work procedures for any aspect of the work.
- 8.4. The above-mentioned methods and procedures will be scrutinized by ICASA or its representative(s) to ensure that the proposed approach is likely to achieve the required results, will be safe, that the processes involved comply with manufacturers' conditions and requirements.

9. MATERIALS AND WORKMANSHIP

- 9.1. The work throughout shall be executed to the highest standards and to ICASA's satisfaction.
- 9.2. ICASA reserves the right to reject any work and materials, which, in its judgement, is not in full accordance therewith. All condemned material and workmanship shall be replaced or rectified, as directed, by the service provider, at its own cost.
- 9.3. All work must be executed by qualified personnel, with relevant experience.
- 9.4. The service provider shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices and ready and complete for full operation.
- 9.5. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and operation shall be provided without additional cost whether or not shown or described in the tender response document.
- 9.6. All components and their respective adjustment, which do not form part of the installation work, but influence the optimum and safe operation of

the generators shall be considered to form part of and must be included in the service provider's scope of works.

- 9.7. All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- 9.8. The service provider shall make sure that all published safety regulations and measures in place are applied and enforced during the installation. In addition, the guarantee periods need to be stipulated to ensure the safety of the public and user client (ICASA).
- 9.9. The service provider is to include for all scaffolding required to complete the work required.
- 9.10. The service provider shall only incorporate in the works materials (substances that can be incorporated into the works), products (item manufactured or processed for incorporation into the works), components (products manufactured as distinct units to serve a specific function or functions) and assemblies (set of related components attached to each other) which are:
 - a) fit for their intended purpose; and
 - b) capable of fulfilling required functions under intended use conditions or when in use, with planned maintenance, under the influence of the environmental actions or a result of a self-ageing process for a period of time within industry accepted norms.
- 9.11. All materials to be used must be SABS approved or complies to the applicable SANS Standards.
- 9.12. No second-hand materials shall be utilized;
- 9.13. ICASA supplies no plant, materials and equipment in relation to this work.

10. HEALTH AND SAFETY

- 10.1. The major hazards identified by the ICASA are that the works will take place within ICASA's premises.
- 10.2. The service provider will be working in close proximity of ICASA's premises requires minimal disruption to day-to-day operations as well as noise caused by construction activities.
- 10.3. The service provider must adhere to the Occupational Health and Safety Act, Disaster Management Act, other relevant legislations including the ICASA's occupational health and safety policy.

- 10.4. The service provider shall manage health and safety in accordance with the ICASA's occupational health and safety, COVID-19 regulations and policy, procedures, including measures and protocols in place.
- 10.5. Where applicable, the service provider shall provide suitable notice boards that will be mounted outside the works area when they begin work.
- 10.6. Such signboards shall indicate the service provider's name, contact details of the responsible site agent, the name/number of the building they are working on, and a short description of the works that are being performed there.
- 10.7. In addition, warning notices and other barricade will be erected to keep the public away from the locations where there is work being performed. It is the service provider's responsibility to ensure that all persons are informed of the hazards associated with the works and to keep persons outside of the working areas from a health and safety perspective.
- 10.8. Warning notices mounted in a conspicuous position shall be provided in the plantroom which shall be clearly legible and indelible.
- 10.9. Warning notices shall be made of non-corrodible non-deteriorating material, preferably plastic.
- 10.10. Warning notices shall read as follows: "EMERGENCY STANDBY PLANT" -This engine will start without warning.
- 10.11. The service provider shall only utilize equipment that is safe and in good serviceable order. No work will be undertaken without using the appropriate and correct tools for the purpose.
- 10.12. Earth, stone, gravel and sand, and all other materials existing on, excavated from or obtained by the removal of vegetation or demolition of structures on the site, shall be at the service provider's disposal in so far as they are required for incorporation into the works.
- 10.13. Old equipment that is removed from site shall be disposed of safely, and in an environmentally safe and responsible manner.

11. ACCESS CONTROL & PERMITS

11.1. The service provider is responsible for obtaining necessary access control credentials from ICASA, for all its contracted persons working on this project.

11.2. This includes any and all permits and wayleaves which might be required to perform the works, from the relevant authorities.

12. WORKS COMPLETION

12.1. A service provider was appointed to decommission and transport the generators to ICASA's premises but was not able to complete the work assigned. Refer to Annexure A.

13. INSPECTIONS & HAND-OVER

The following tests are to be carried out:

- 13.1. After completion of the works and before the generators are handed over to ICASA, a full test, in the presence of ICASA's representatives, must be carried out for a period of sufficient duration, to determine the satisfactory working of the generator(s).
- 13.2. During this period the installation will be inspected, and the contractor shall make good, to the satisfaction of ICASA's Representative/Agent, any defects which may arise.
- 13.3. The service provider will be liable for any other damages to the building resulting from the installation and commissioning of the generators.
- 13.4. The service provider shall, at its own cost, provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installation at completion.
- 13.5. Test report(s) as specified is to be submitted to ICASA.

14. DAMAGES

- 14.1. The service provider shall examine all equipment, workmanship, finishing and completeness on delivery and should any deficiencies be found, then the service provider shall make good these at own expense, to the satisfaction of ICASA.
- 14.2. All damages to the building structure, paint work, and finishing, as a result of the actions of the service provider during the installation, commissioning and maintenance shall be made good by the service provider at own expense.
- 14.3. Before any work is carried out, the service provider shall ascertain the presence and position of all infrastructure likely to be damaged or

interfered with by their activities.

- 14.4. Where required, the service provider must obtain up-to-date plans from ICASA for this purpose, showing the position of infrastructure that when interfered with may cause service interruption in the area where he intends to work.
- 14.5. As infrastructure can often not be reliably located from such plans, the service provider shall determine the exact position of such infrastructure by means of suitable detecting equipment and afterwards by careful hand excavation where necessary in order to expose the infrastructure at the positions of possible interference by his activities.
- 14.6. The procedure to avoid damage to infrastructure and avoid service interruptions shall also be followed in respect of infrastructure not shown on the plans but believed to be present.
- 14.7. All identified critical infrastructure (which if interfered with can cause service interruption), the positions of which have been located at the critical points, shall be designated as 'known' infrastructure and their positions shall be indicated on a separate set of drawings, a copy of which shall be furnished to ICASA.
- 14.8. While at ICASA's premises and undertaking the work, the service provider shall be liable for all damage caused to known infrastructure as well as for consequential damage, whether caused directly by the service provider's operations or by the lack of proper protection.
- 14.9. The service provider is required to identify all services prior to conducting any work within a building, and to ensure that all workers are made aware of the location and nature of such services.
- 14.10. All existing services shall be treated as operational. In all circumstances, the existing services must remain operational until the scheduled cutover of the electricity supply/connectivity, where required, so as to not disrupt ICASA's operations.
- 14.11. Should the service provider cause damage to any services, they will first secure the services, and make the area safe. They will thereafter inform ICASA's representative of the damage incurred and for a resolution/way forward.
- 14.12. The service provider will remain at all times responsible for the swift and safe repair of any damage caused to services, if it is through their own

fault or not. The cost of such repairs shall be borne by the service provider and shall not be passed on to ICASA.

15. SITE ESTABLISHMENT

- 15.1. ICASA does not guarantee the provision of a site establishment/storage to accommodate the service provider's tools and equipment.
- 15.2. If such site establishment/storage is not be available, the service provider will be responsible for establishing and disestablishing its own storage facility, the location of which must be agreed with ICASA (if established within ICASA's premises).
- 15.3. The service provider may not make use of the site for residential purposes, and no workers will be permitted to set up sleeping quarters on ICASA's premises.
- 15.4. The service provider may display discrete signage to indicate the ownership of plant or equipment only and as required in order to comply with health and safety requirements.
- 15.5. The service provider shall clear up all site establishment after use, and reinstate the same to the state prior to occupation, at the service provider's cost.

16. GUARANTEE

- 16.1. Any new equipment shall be installed with a twelve (12) months manufacturer's warranty/guarantee on the work done (refer to scope of work). The service provider shall provide a 12-month guarantee on the workmanship on the work undertaken (refer to scope of work).
- 16.2. If during this period the equipment is not in good working order, or not working satisfactorily owing to faulty material, design or workmanship, the service provider will be notified, and immediate steps must be taken by the service provider to rectify the defects and/or replace the affected parts on site, at no cost to ICASA.

17. PROGRESS REPORTING

17.1. The service provider will be required to attend regular site meetings, as agreed with ICASA to discuss general progress, quality of work, problems, claims, payments, etc. and any other matters concerning the day-to-day running of the contract.

- 17.2. At the completion of all tests, a comprehensive test report including, healthy, safety, Co2, ventilation, exhaust gases and associated emissions shall be compiled, by a qualified person, and submitted to ICASA.
- 17.3. The appointed service provider shall provide three (3) comprehensively indexed Operating and Maintenance Manuals, bound in loose leaf plastic covers.

18. PROJECT MANAGEMENT

- 18.1. The appointed service provider will be expected to complete the project and hand-over a fully functional generators on the agreed date .
- 18.2. The following minimum project management deliverables are required as part of this project:
 - 18.2.1. Activities and tasks;
 - 18.2.2. Timeframes;
 - 18.2.3. Deliverables
 - 18.2.4. Project Initiation Document;
 - 18.2.5. Project Kick-off Meeting;
 - 18.2.6. Project Reports;
 - 18.2.7. Risk & Issue Register;
 - 18.2.8. Project Close-out Report

19. COMPLETION STRATEGY

- 19.1. The service provider shall develop a completion strategy to minimize the correction of defects after completion and to achieve completion on or before the agreed completion date.
- 19.2. Such a strategy shall include a systematic approach to ensuring that the appointed service provider search for defects as the work progresses, programme their work in such a manner that defects are corrected ahead of completion and sufficient time is allowed for commissioning.
- 19.3. The completion strategy should be framed around the systematic acceptance and/or testing of materials, plant, workmanship and any other items/subsystems as the works proceed in order to address issues ahead of completion and the allocation of tasks to ensure satisfactory completion.

20. MAINTENANCE

- 20.1. After handover and acceptance of the generators' installation and commissioning, the generators must be fully warranted, maintained and serviced both electrically and mechanically by the successful tenderer for a period of 24 months.
- 20.2. The generators will be serviced as per the below intervals for the duration of the contract but not limited:
 - 6 Minor services every three (3) months;
 - Major services every 12 months, yearly; and
 - The servicing of the generators may be required in an event of emergency afterhours or as and when a need arises.

Below are the **minor/routine servicing** activities per quarter that need to be rendered which include but not limited to:

- 20.2.1. Keep maintenance records, record date of visit, tests carried out, adjustments performed and references for visits;
- 20.2.2. Clean the machinery and its components;
- 20.2.3. Grease and oil all moving parts, where necessary;
- 20.2.4. Check air filter and, when necessary, clean the filter or replace filter;
- 20.2.5. Check lubricating oil, and top up when necessary;
- 20.2.6. Top up water of the engine primary cooling system if required and replace water condition filters when required;
- 20.2.7. Check fuel system for leaks and replace filters when necessary;
- 20.2.8. After the plan has run on one oil change, 12 months or 250 hours or as stipulated by the makers, whichever is soonest, drain the sump and refill with fresh lubrication oil.
- 20.2.9. Clean the lubricating oil filter, and/or replace the filter elements at intervals recommended by the engine maker.The cost of a new filter element to be charged as an extra.
- 20.2.10. Check the battery S.G and top up the electrolyte when necessary. Clean and tighten terminal connections.
 - Test run the plan for one hour;

- Report any parts that become unserviceable through fair wear and tear or damaged beyond our control. Also report and submit any quotation for repair work or replacement of parts to ICASA;
- 20.2.11. Advise when it has become necessary to de-carbonise the engine, and submit a quotation for service;
- 20.2.12. **Any extra work or parts** (battery replacement and etc.) to be undertaken and fitted must be approved by ICASA.

Below are the **major servicing** activities that need to be rendered annually which include but not limited to:

- 20.2.13. Change Oil Filter;
- 20.2.14. Change Fuel Filter;
- 20.2.15. Change Air Filter;
- 20.2.16. Change Nalcool;
- 20.2.17. Engine cleaner and rags;
- 20.2.18. Charge for hours of labour;
- 20.2.19. Charge for Km travelled;
- 20.3. The generators must be serviced and tested once every month during this period and all costs for this service/maintenance must be included in the tender price.
- 20.4. Timeously attend to all the repairs and replacements to avoid any failure of the system within the time period as indicated under agreed-upon "response times"
- 20.5. Where the service provider does not attend to ICASA's repair and/or maintenance requirements, ICASA reserves the right to rectify the fault through requesting the services from a third party and the costs of which will be billed to the third party.
- 20.6. Any repairs and/or part replacement to be undertaken, must be reported to ICASA before any work is undertaken. ICASA will require a quotation for such repairs/parts replacement, if outside the contract scope, and reserves the right to request for additional quotations should the quoted price be deemed to not be market related.

21. PENALTIES

In the event that the service provider's actions through negligence result in an unplanned loss of electricity to ICASA's premises where the work is taking place, the service provider will be liable for the damages at own cost.

22. PROJECT TEAM

NAME	POSITION	PROJECT ROLE	RELEVANT PROJECT EXPERIENCE

Note: you can attach as supporting documents if space provided above is not sufficient.

23. PROJECT EXCLUSIONS

The service provider must clearly specify any exclusions, as part of the bid response.

24. REFERENCES

- 24.1. The bidder must provide proof of project completion of at least three (3) to five (5) contracts or subcontracts or joint ventures, with each contract having a value of R1 000 000 or more (VAT incl.), which were successfully completed or have reached practical completion in the last five (5) years.
- 24.2. Proof of completion of all contracts must be submitted, as well as contactable references, who may be contacted if additional clarification on performance is required.
- 24.3. Acceptable proof of completion is valid, signed completion certificate issued in terms of the contract or valid and signed letter of completion from the client.
- 24.4. Attach reference letters, not older than 5 years, must be on a letterhead of the client/company, must be addressed to the service provider who was awarded the contract and must include the tender/order number and the contract amount.
- 24.5. It is the responsibility of the service provider to ensure that its references

provided are available in instances where ICASA plans to engage with them as part of reference checks.

24.6. If ICASA finds that the cited references are un-cooperative, such conduct on the part of the service provider's references may influence the scoring negatively.

24.7. References must be completed on the table below:

Email address

Services rendered

Contactable reference 1	Contract value	Project start & completion	
Name of company	(VAT INCL)	uale	
	R Tick whichever is applicable	to	
Contact person		Tick whichever is applicable	
Telephone	Main contract	Completion certificate	
Email address	Joint venture	Letter from company	
Services rendered	Subcontract		
Contactable reference 2	Contract value	Project start & completion	
	(VAT incl.)	date	
Name of company	R	to	
Contact person	Tick whichever is applicable		
		Tick whichever is applicable	
Telephone	Main contract	Completion certificate	
Email address	Joint venture	Letter from company	
Services rendered	Subcontract		
Contactable	Contract value	Project start & completion	
reference 3	(VAT incl.)	date	
Name of company	R	to	
Contact person	Tick whichever is applicable		
Telephone	Main contract	Tick whichever is applicable	
Email address		Letter from company	
Services rendered	Subcontract		
Contactable reference 4		Project start & completion	
	(VAT Incl.)	date	
Name of company	R	to	
Contact person		Tick whichever is applicable	
Telephone	Main contract	Completion certificate	
Email address	Joint venture	Letter from company	
Services rendered	Subcontract		
	Bubbonnade		
Contactable reference 5	Contract value	Project start & completion	
	(VAT incl.)	date	
Name of company	R	to	
Contact person	Tick whichever is applicable	10	
		Tick whichever is applicable	
Telephone	Main contract	Completion certificate	

Joint venture

Subcontract

Letter from company

25. EVALUATION CRITERIA

FU	NCTIONALITY EVALUATION		WEIGHTS
1. T	rack record and previous experience		10
	1. REFERENCES Provided references in company letterhead, where service provider rendered projects of similar nature, letters should not be older than 5 years (attach proof).	_	
1.	Five (5) references provided:	= 5	
2.	Four (4) references provided;	= 4	
3.	Three (3) references provided;	= 3	
4.	Two (2) references provided;	= 2	
5.	One (1) reference provided/ Irrelevant reference provided	= 1	
	2. EXPERIENCE		30
	Relevant company's experience in delivering projects of a similar nature with at least 3 (three) personnel with electrical/mechanical qualifications and professional registration with electrical affiliation bodies e.g. ECASA,ECSA, Trade Test certificate etc.	= 5	
1.	Company and personnel with five (5) years' experience in the electrical and mechanical industry;	= 4	
2.	electrical and mechanical industry;		
3.	Company and personnel with three (3) years' experience in the in the electrical and mechanical industry;	= 3	
4.	Company and personnel with two (2) years' experience in the in the	= 2	
5.	Company and personnel with one (1) year experience /irrelevant experience in the in the electrical and mechanical industry.	= 1	
	3. Technical Approach		20
	The service provider must submit a detailed methodology outlying the below requirements, for the installation & commissioning of the generators.		
	 a. Integration plan i.e. Submission of detailed drawings and wiring diagrams of the generators and the switchgear, which includes but not limited to: Schematic wiring diagrams, including emergency shutdown panel, and fully detailed sequence of operations; b. Safety plan as part of the quality controls measures; e.g. OHS; c. Risk mitigation plan (e.g. state how to prevent power surges when switching over to generators, how to handle disruption to normal office operations during tests, prevention of fire, etc.; d. Site acceptance sample report (e.g. User Acceptance Test Cases for commissioning). 		

1.	Service provider meets all the above-mentioned requirements;	= 5	
2.	Service provider doesn't meet all of the above-mentioned requirements	= 1	
			40
	4. Project plan implementation		
	The service provider must provide its implementation plan on this project. The plan must be detailed and must include, but not be limited to, the following:		
-	 a. Activities and task b. Timeframes c. Deliverables d. Project Initiation Document; e. Project Kick-off Meeting; f. Monthly Project Report; g. Risk & Issue Register; h. Project Close-out Report Provided realistic implementation plan for completion. The plan includes	F	
1.	kick-off, monthly project reports, risks issues register & project close-out.	= 5	
2.	Provided realistic implementation plan for completion. The plan includes details on activities/tasks, timeframes, deliverables, project initiation, project kick-off, monthly project reports & risks issues register.	= 4	
3.	Provided realistic implementation plan for completion. The plan includes details on activities/tasks, timeframes, deliverables, project initiation & risks issues register	= 3	
4.	Provided insufficient information on the proposed solution/methodology	= 2	
5.	Provided irrelevant information/no response on the proposed methodology	= 1	
Tot	al: Minimum 70% qualification on functionality		100
IND	. minimum 70% quanneación on funccionality		

26. LOCAL PRODUCTION & CONTENT

- a. ICASA promotes Local Production and Content. In the case of designated sectors, only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- b. ICASA reserves the right at its sole discretion to set minimum thresholds for sectors which may not have been declared as designated sectors by the Department of Trade & Industry (the DTI), in an effort to stimulate local production and content where relevant.
- c. Bidders are required to assess their product and /or service offering against the designated sector lists as published by the Department of Trade and Industry (the DTI) and to ensure full compliance to the minimum local content

threshold, if relevant, before submitting its response to this tender. The DTI's latest list designated of sectors can be accessed on: http://www.dti.gov.za/industrial development/ip.jsp.

27. SERVICE LEVELS & PERFORMANCE

- 27.1. In instances of transgression of a more serious nature, should ICASA during the contract period for any reason regard the service provider's service levels and performance against this contract as being inadequate or not to ICASA's satisfaction, the details will be reduced to writing and sent to the service provider.
- In the event that the service provider is unable to remedy the complaints 27.2. to ICASA's satisfaction within agreed days of such notice of inadequate performance, ICASA reserves the right to terminate the services of the appointed service provider.
- 27.3. Notice of such termination shall either be in writing, hand-delivered or sent by email.
- 27.4. ICASA reserves the right to
 - 27.4.1. decrease quantities and/or items due to budget constraints,
 - 27.4.2. invite service provider to present or otherwise demonstrate their proposed solution to clarify aspects that are required as part of the evaluation process, at the service provider's own cost,
 - 27.4.3. not to award the bid to the lowest RFP quote, but to the one representing the best value for money.

Item	Description	Unit	Qty	Rate	Amount
1	Building and/or civil works				
	 Excavation & levelling works, if any; Cables trenching and trench closure, if any; Clear-view fence installation around generators 				
2	Engineering services				
	 Assessment of infrastructure, connection of generators, load balancing and related services 				
3	Installation, Commissioning &				
	Testing				
	SDMO 275KVA)				
	New Changeover panel B (ICASA				

2

	PERKINS 2800 SERIES)				
4	<u>Compliance</u>				
	Issuing of electrical certificate of				
	compliance and related services				
5	Documentation				
	• Development and submission of				
	drawings, manuals, any other relevant				
6	documents and related services				
0	Materials, parts, cability/writing (specify)				
7	Labour (specify)				
8	Maintenance (electrical &				
	mechanical)				
	 Monthly service (testing) 				
	Quarterly service				
	Annual service (if any)				_
Item	Description	Unit	Qty	Rate	Amount
9	Others (specify if any)				
			Sub-	total (A):	

For comparison purpose, service providers must specify number of hours to be worked

Activity/Deliverable	Rate/Hour per resource	Number of hours	Total cost (excl. VAT)
Working Hours (08:00 - 17:00)			
After-hours, Weekends and Public Holidays			
	Sub-Total (B)		
Т	Total Price (A+B) (e	excl. VAT)	
		VAT	
Т	Total Price (A+B) (i	incl. VAT)	

ANNEXURE A

Accomplished work and achievements

The following has been completed successfully and invoiced:

- Construction of plinths at new ICASA offices (x2 plinths);
- Decommission and /or de-install two (2) x diesel generators at ICASA's old premises at 164 Katherine Street, Sandton , Pinmill Farm;
- Insulate and secure disconnections (x2 generators);
- Transportation and installation at ICASA's new premises at 350 Witch-Hazel Avenue, Eco Park ,Centurion (x2 generators)

Work not completed involves the following:

- Writing, commissioning, and testing at ICASA's new premises, which includes but not limited connection of the incoming cable, outgoing feeder cables, connecting of the cable and control cabling to the generator and control terminals etc.
- The design of the control system to comply with the requirements for automatic starting, stopping, interlocking and isolation:
- Circuit breakers, isolators, or latest regulations:
- Provide fuel for testing and commissioning:
- Provide cable routes and cabling from each new changes over panel to generator set.
- Earth continuity throughout the complete installation:
- Submission of detailed drawings and wiring diagrams of the generators and the switchgear:
- The generator must automatically start no later than one (1) minute during the power outage and must easily start, even during cold days, without the use of any special ignition device (i.e., in summer and winter conditions).
- The generator must have the option to be started manually. Note that in its current set-up, both existing generators currently operate in this manner.
- A fully automatic change over system must be provided to isolate the mains supply and connect the standby to the outgoing feeder in case of a main failure and reverse this procedure on return of the mains:
- Ensure adequate provision of cabling, subject to full measurement on site. Service providers will be granted access to do site assessment. Appointment must be made 24 hours in advance:
- The generator must be connected to ensure full business operation, including air-conditioning, during power failure. As soon as power is restored, the generators must automatically switch back to main supply.
- Installation of warning notices related to the generator, as required by the Occupational Health and Safety Act, in and around the generator's location, using the correct material (e.g., non-corrodible and non-deteriorating material, preferable plastic):
- All work and equipment shall be in accordance with the approved SABS Standards and shall comply with the Occupational Health and Safety Act, No 85 of 1993 and current regulations of all other codes applicable to this work:
- To submit Certificate of Compliance (COC) after installation, testing and commission, as well as installation circuit diagram:

New item: Civil work & re-installation thereof to cater for the cabling.

From the budget and financial viewpoint, it must be emphasized that suspending the work left the following residual bill of quantities to be taken into consideration on takeover.

Miscellaneous & General

Description	Qty
Earthing and bonding	2
Safety file	1
Signage Statutory basic	2
Labelling	2
Commissioning & Testing	
COC	2
Site handover	2
Client training	2

275kVA Generator: - Cables:

Tenderer should check existing installation on site. No adjustment of cable route, lengths, civil work and re-instatement thereof after tender.

Qty	Unit	Description
110	metre	Cable PVC SWA 120 x 4C
55	metre	Wire Bare copper earth 120mm
55	metre	Cable SWA 2,5 x 12 core
55	metre	Cable PVC SWA 2,5 x4C

275kVA Generators: - Termination 120mm x 4C Armored Cable (x4):

Qty	Unit	Description
4	each	Glad No 5 BW (CCG 050305)
4	each	Shroud no 5
16	each	Lug 120 x 10 (N/I)
0.4	metre	Heat shrink 38mm (19.1mm) Black
0.4	metre	Heat shrink 38mm (19.1mm) Blue
0.4	metre	Heat shrink 38mm (19.1mm) Red
0.4	metre	Heat shrink 38mm (19.1mm) White
0.8	metre	Heat shrinks 12.7mm (6.4mm) Clean
8	Pack of 100	Cable Tie T50I
32	each	Flat Washer M10

275kVA Generator: - Termination Insulated Earth wire 120mm (x2):

Qty	Unit	Description
2	Each	Lugs Non-Insulated 120 x 12mm
<u>2</u>	<u>Each</u>	Heat shrink 38mm (19.1mm) Green/ yellow
<u>2</u>	<u>Each</u>	Bush brass Female 32mm
<u>2</u>	<u>Each</u>	Bush brass Male 32mm
<u>2</u>	<u>Each</u>	Locknut 32mm
<u>2</u>	<u>Each</u>	Flat Washer M12
<u>2</u>	<u>Each</u>	Spring Washer M12

275 kVA Generator: - Termination 2.5mm x 12C Armored Cable (x2):

<u>Qty</u>	<u>Unit</u>	Description
2	Each	Gland No2 BW (CCG 050302)
0.24	Pack of 100	Bootlace Ferrule 2.5 ins
4	Pack of 100	Cable Tie T50I

275 kVA Generator: - Termination 2.5mm x 4C Armored Cable (x2):

Qty	Unit	Description
2	Each	Gland no1
8	Each	Lugs Non-Insulated 2.5 x8 mm
2	Each	Shroud no1
0.2	Metre	Heat shrink 4.8mm (2.4mm) Black
0.2	Metre	Heat shrink 4.8mm (2.4mm) White
0.2	Metre	Heat shrink 4.8mm (2.4mm) Blue
0.4	Metre	Heat shrink 12.7mm (6.4mm) Clean
4	Pack of	Cable Tie T30R
16	Each	Washer Flat M12

275kVA Generator: - Panel Upgrade 24V AMF without Changes Over:

Qty	Unit	Description
1	Each	Enclosure Red (W600xH800xD320)
1	Each	Controller DSE7320
1	Each	Circuit B 400A 50kA 3P
1	Each	Battery charger 24VA Intelligent: 9470-01
4	Each	DIN rail slotted Aluminum 2m long
9	Each	Relay base 11 pin screw terminal
9	Each	Relay 11 pin 24 VDC: c43 12VDC [ea.] (12)
1	Each	Siren
1	Each	Alarm-4-way Voltage Free
5	Each	Term Block 11-way grey
13	Each	Circuit B 10A 6KA 1P DIN
3	Each	Circuit B16A 6kA 1ph DIN
5	Each	Circuit B 20A 6KA 1P DIN
1	Each	Earth Leakage 25A 1P& Neutral
1	Each	Industrial single socket 16Amp
1	Each	Emergency Button Red Twist
1	Each	Contact Block and fixing collar Red/Green 1N/C & NC
1	Each	E-stop Label Yellow

120	Each	Panel Wire Numbers
1	Each	Meter-Amp: 50x50
3	Each	Current Transformer 400/5A
80	Each	Terminal Block: Rail mount
14	Each	Terminal End Stop for Rail mounted
16	Each	Terminal End Plates for 4mm Rail
1.1	100m roll	Panel Flex Wire 1.5mm Black
1.1	100m roll	Panel Flex Wire 1.5mm Grey
1.1	100m roll	Panel Flex Wire 1.5mm Brown
1.1	100m roll	Panel Flex Wire 1.5mm Red
1.1	100m roll	Panel Flex Wire 1.5mm Blue
1.1	100m roll	Panel Flex Wire 1.5mm White
1.1	100m roll	Panel Flex Wire 1.5mm Green/Yellow
1.1	100m roll	Panel Flex Wire 2.5mm Black
1	100m roll	Panel Flex Wire 2.5mm Brown
1	100m roll	Panel Flex Wire 2.5mm Red
1	100m roll	Panel Flex Wire 2.5mm White
1	100m roll	Panel Flex Wire 2.5mm Blue
1	100m roll	Panel Flex Wire 2.5mm Black
1	100m roll	Panel Flex Wire 4mm Grey
1	100m roll	Panel Flex Wire 2.5 Green/Yellow
1	Each	trucking Narrow slot 40x40 Gray
4	Each	Ferrules Bootlace Black 1.5mm
1	Each	Ferrules Bootlace Grey 2,5mm
1	Each	Ferrules Bootlace Double black 1,5mm
1	Each	Ferrules Bootlace Double 2,5mm
1	Each	Ferrules Bootlace Orange 4mm
1	Each	Ferrules Bootlace Double Orange 4mm
1	Each	Switch-Oil Pressure
1	Each	Sender Oil Pressure
1	Each	Sender Temperature
1	Each	Switch Temperature
1	Each	Sender-Float Arm Adjustable
1	Each	Misc.: Sundries
1	Each	Water Level Sensor (Radiator)
1	Each	Body Solenoid 12VDC
2	Each	NSH body fuse holder
2	Each	NSH Fuse 32amp
30	Each	Self-lock Conduit Black 20mm
20	Each	Self-lock couplers Black 20mm
25	Metre	Self-lock conduit Black 25mm
12	Each	Self-lock couplers Black 25 mm
1	Each	Service technical key switch head
1	Each	Service technical key contact block
1	Each	Pilot light red 220V AC
2	Each	Pilot light white 220V AC
2	Each	Pilot light blue 220V AC
1	Each	Busbar copper 40x10 300mm 800amp 15xM10
2	Each	Busbar Insulator 10mm Black

600kVA Generator: - Cables:

Qty	Unit	Description
180	Metre	Cable PVC SWA 150x4C
90	Metre	Wire Bare copper earth 150mm
45	Metre	Cable SWA 2.5x 12 core
45	Metre	Cable PVC SWA 205x 4C

600kVA Generator: - Termination 150mmx 4C Armored Cable (x8)

Qty	Unit	Description
8	Each	Gland No BW (CCG050306)
8	Each	Shroud no 6
32	Each	Lugs Non- Insulated 150x12mm
0.8	Metre	Heat shrink 38mm (19.1mm) Black
0.8	Metre	Heat shrink 38mm (19.1mm) Blue
0.8	Metre	Heat shrink 38mm (19.1mm) Red
0.8	Metre	Heat shrink 38mm (19.1mm) White
1.6	Metre	Heat shrink 12.7mm (6.4mm) Clean
16	Pack of 100	Cable Tie T50I
64	Each	Flat Washer M10

600kVA Generator: - Termination Insulated Erath wire 150mm (x4)

Qty	Unit	Description
4	Each	Lugs Non-Insulated 150x12mm
0.4	Metre	Heat shrink 38mm (19.1mm) Green/Yellow
4	Each	Bush brass Female 32mm
4	Each	Bush brass Male 32mm
4	Each	Locknut 32mm
8	Each	Flat Washer M12
4	Each	Spring Washer 12
500kVA Generator: - Termination 2 5mmx 12C Armored Cable (x2):		

600kVA Generator: - Termination 2.5mmx 12C Armored Cable (x2):

Qty	<u>Unit</u>	Description
2	Each	Gland No2 BW (CCG 050302
0.24	Pack of 100	Bootlace Ferrule 2.5 ins
4	Pack of 100	Cable Tie T50I

600kVA Generator: - Termination 2.5mmx 12C Armored Cable (x2):

Qty	Unit	Description
2	Each	Gland no1
8	Each	Lugs Non-Insulated 2.5x8mm
2	Each	Shroud no1
0.2	Metre	Heat shrink 4.8mm (2.4mm) Black
0.2	Metre	Heat shrink 4.8mm (2.4mm) White
0.2	Metre	Heat shrink 4.8mm(2.4mm) Blue
0.4	Metre	Heat shrink 12.7mm (6.4mm) Clean
4	Pack of	Cable Tie T30R
16	Each	Washer Flat M12

<u>Wire- ways</u>

Qty	Unit	Description
3	6m	Cable Ladder HD Tray 600mmx130mm
1	Each	Cable Ladder HD Int Bend 600mmx 130mm
2	Each	Cable Ladder HD Ext Bend 600mmx130mm
1	Each	Cable Ladder HD Tee 600mmx130mm
3	Each	Spice Sets for Straight Ladder
2	Each	Tee fastener Sets
3	Each	Bend & Riser/ Dropper Fastener Set
3	Metre	Unistrut 41mmx41mmx1.6mm
6	Each	Rod Threaded M10 M/Steel
28	Each	M10Drop in Anchor
28	Each	Strut nuts

ANNEXURE B – NEW CHANGE OVER PANELS SPECIFICATION & LANDLORD REQUIREMENTS

- Each new generator change-over panel mentioned in item 20 and Annex A should be like the existing panels in the Landlord generator rooms including correctly sized Schneider U/A controller interlocked change over, generator controller and all required to complete the installation.
- 2. Note that the existing change-over panels remain the Landlord's (M&T Development) property and may not be re-used.
- The existing cables between alternators and change-over panels as well as the changeover panels themselves should remain as is. The proposed work has been diagrammatically presented below to give more clarity.
- 4. The 600kVA genset's hot radiator air will be blowing into the fresh air intake of the SDMO genset. This will probably cause the SDMO genset to overheat under full load conditions, for extended periods. We recommend the 600kVA genset's orientation be turned around.
- 5. The copper bus bar and batteries on the 600kVA genset are missing. The cable should be connected directly to the panel, therefore nullifying the need for termination bus bar. The batteries will have to be replaced.
- 6. All required civil work, installation of sleeves, trenching and re-instatement of the landscaping, kerbs, paving and ramp into basement to be re-instated to the Landlord's satisfaction. All the preceding items should form part of the price schedule and confirmed on site before tendering. No deviation to appointed tendered amount shall be accepted.
- 7. The general condition of the gensets needs to be checked. Confirm if they run and have no underlying issues.