


	<p align="center"><b>SCOPE OF WORK AND TECHNICAL EVALUATION</b></p>	<p align="center"><b>GAS AND RENEWABLES COE</b></p>
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**Title: The provision of maintenance service and technical support for 24 SMA  
Sunny Tripower Inverters (15kW) at Eskom RT&D solar PV plant, for a period  
of five (5) years on an as and when required basis.**

<b>Compiled by</b>	<b>Functional Responsibility</b>	<b>Authorized by</b>
		
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<p>Date: 2024/04/24</p>	<p>Date: 2024/04/24</p>	<p>Date: 2024/04/24</p>

## 1 Description of the service

### 1.1 Executive overview

The provision of maintenance service and technical support for 24 SMA Sunny Tripower Inverters (15kW) at Eskom RT&D solar PV plant, for a period of five (5) years on an as and when required basis.

### 1.2 Employer's requirements for the service

#### Background Information

The Photovoltaic (PV) plant at the Eskom Research and Innovation Centre (ERIC), consists of 7 areas, with different types of solar PV panels that have been installed in various configurations in order to research how panel type and installation direction affect power generation. This PV plant has 24 SMA Sunny Tripower 15kW string inverters installed and is connected to the ring feed at Rosherville. This solar plant was installed in 2014, while some sections have been decommissioned due to panel damage other section have been recommissioning and are producing power. The initial assessment of the inverters has shown that maintenance is required in order to return the full PV plant back to service, some of the faults identified are broken fans, data loggers, etc. Some inverters are not operational and need to be assessed externally to determine the cause of the fault.

## 2 Scope of work/supply

1. Repair and maintenance of SMA inverters, this is to include:
  - Technical support during fault finding.
  - Onsite evaluation and repair of inverters
  - Inverters returned to the factory for repair.
2. The service provider will be required to conduct an onsite assessment of the condition of all 24 inverters at the initiation of the contract.
3. After assessment, should the inverter need to be returned to the factory for repair, this will be the responsibility of the service provider. The service provider is to make a provision for packaging and postage/transport of the inverter to and from Rosherville.
4. The service provider will be required to provide all replacement parts and spares as and when required.
5. The service provider is to make provision for accommodation and subsistence in the event that the technician working on site is required to perform work over more than one day and the technician is not based in the Gauteng region.
6. The Rosherville PV plant was installed in 2014 and consists of **24 SMA Sunny Tripower 15000TL Inverter (15kW string inverter)**.

### 3 Proposed Quantities

The estimated quantities for this contract are provided in Table 1.

Table 1: Proposed Bill of Quantities

No	Details	Units	Estimated Quantities
1	Online support	Rate / hour	88
2	Onsite support	Rate / hour	200
3	Service/maintenance (at factory)	Per unit	24
4	Initial inverter assessment (onsite condition analysis of all inverters)	Once off	24
5	Packaging and postage / transport to and from RT&D Rosherville (courier cost per unit, both ways)	Per unit	24
6	Travel (state where you are traveling from and mode of transport)	Rate / Trip	6
7	Subsistence / Accommodation	Rate / Day	6
8	Spares and consumables (cost plus)	Lump sum	Refer to NEC Price List

### 4 Technical Evaluation Criteria

#### 4.1 Technical Evaluation Threshold

The minimum weighted final score required for a tender to be considered from a technical perspective is 70%. The Eskom technical evaluation team will evaluate all tenders, any service provider receiving a score less than 70% will be considered technically unacceptable.

#### 4.2 Technical Evaluation Team

The following member will make up the technical evaluation team.

- Sibusiso Maphumulo – UCG Site Engineering Manager
- Chantelle Moll – UCG Engineer
- Mandisi Shunqukela -Gas & Renewables Engineer

#### 4.3 Mandatory technical evaluation Criteria

There are no mandatory requirements.

#### 4.4 Qualitative Technical Evaluation Criteria

The technical evaluation team will assess each tender according to the criteria in Table 3. The criteria will be assessed on a scale of 0 – 5, as per Table 2 below.

Table 2: Qualitative Evaluation Criteria

Description	% compliance	Score
Meets Eskom's requirements: no errors, risks, weaknesses, or omissions.	80 → 100	5

<b>Meets Eskom's requirements with qualifications:</b> some qualifications required from tenderer to eliminate the errors, risks, weaknesses and omissions.	60 → 79	4
<b>Does not meet Eskom's requirements:</b> some errors, risks, weaknesses or omissions which can be corrected or overcome with negotiation and cost impact.	40 → 59	3
<b>Substantially does not meet Eskom's requirements:</b> many errors, risks, weaknesses which may be difficult to be corrected or overcome and make acceptable.	20 → 39	2
<b>No achievement of Eskom's requirements:</b> existence of numerous errors, risks, weaknesses or omissions which cannot be corrected.	0 → 19	1
Totally deficient / non-responsive.	0	0

The qualitative technical evaluation criteria will be assessed by each member of the technical evaluation team. The Contractor is to provide the following documentation for the technical evaluation:

1. Company Profile detailing company structure, core business areas, product, and services offered.
2. The tenderer is required to submit proof of experience over the past 3 years in the form of: contacts from clients, reference letters or purchase orders from clients (submissions should include details of scope, duration, and value)
3. The company submits documents which demonstrates to the client how the company executes the maintenance services. The following procedure/documents are required to be submitted by the company.
  - Inverter fault identification procedures
  - Inverter repair procedures
  - Testing and Commissioning Procedures.
  - Document outlining the Online support service structure and availability.
  - CV of the Technician showing experience in the installation, servicing and repair of inverters
4. Letter confirming that the supplier is an approved service agent for SMA inverters. This must be provided on the SMA letterhead with a contactable reference in order to validate the letter.

**Minimum Threshold is 70%**

Item No.	Qualitative Technical Criteria	Description	Weight % (W)
1.	<b>Company profile:</b>	The tenderer submits the profile with details of, company structure, core business areas, product, and services offered.	10
<b>Note for Item 1</b>			
	<b>Score</b>	<b>Details</b>	
	10	Company has submitted a company profile with core business areas in line with the scope	
	8	Company profile lacks details but evidence is submitted to show that core business areas are in line with the scope.	
	6	Company has submitted a company profile with core business area's not in line with the scope	
	4	Company profile lacks details and core business areas are not in line with the	

	scope			
2	Company profile does not provide sufficient information			
0	Not submitted			
Item No.	Qualitative Criteria	Technical	Description	Weight % (W)
2.	<b>Experience of Company in the maintenance of SMA Inverters or similar inverters</b>		The tenderer submits details of 1. Contacts from clients, reference letters or purchase orders from clients (contracts indicating scope, duration, and value. Company must provide the track record of previous work projects/contracts over the past 3 years. Provide list of five (5) or more projects with the following details (1) Description of the works, (2) Value of the works, (3) Duration of the works	20
<b>Note for Item 2</b>				
<b>Score</b>		<b>Details</b>		
20		Company has submitted five (5) or more written reference letter or contracts with a similar scope performed in the past 3 years.		
16		Company has submitted four (4) written reference letter or contracts with a similar scope performed in the past 3 years.		
12		Company has submitted three (3) written reference letter or contracts with a similar scope performed in the past 3 years.		
8		Company has submitted two (2) written reference letter or contracts with a similar scope performed in the past 3 years.		
4		Company has submitted one (1) written reference letter or contracts with a similar scope performed in the past 3 years.		
0		Not submitted		
Item No.	Qualitative Criteria	Technical	Description	Weight % (W)
3.	<b>Capability of the Company to execute the scope of maintenance services of SMA inverters or similar inverters</b>		The company submits <b>documents</b> which demonstrates to the client how the company executes the maintenance services. The following procedure/documents are required to be submitted by the company. 1. Inverter fault identification procedures (10%) 2. Inverter repair procedures (10%) 3. Testing and Commissioning Procedures. (10%) 4. Document outlining the Online support service structure and availability. (10%) 5. CV of Technician showing experience in the installation, servicing and repair of inverters (10%)	50
<b>Note for Item 3</b>				
<b>Score</b>		<b>Details</b>		
50		The submitted documents and procedures meets technical requirement. No foreseen technical risks in meeting technical requirement		
40		Compliant with associated qualifications. Meet technical requirement with acceptable technical risk or Acceptable exceptions		

30	Does not meet Eskom's requirements: some errors, risks, weaknesses or omissions which can be corrected or overcome with negotiation and cost impact.		
20	non-Compliant. Substantially does not meet Eskom's requirements: many errors, risks, weaknesses which may be difficult to be corrected or overcome and make acceptable.		
10	No achievement of Eskom's requirements: existence of numerous errors, risks, weaknesses, or omissions which cannot be corrected		
0	Totally deficient / non-responsive		
<b>Item No.</b>	<b>Qualitative Criteria</b>	<b>Technical</b>	<b>Description</b>
4	<b>Proof of SMA Inverters service agent</b>		Letter confirming that the supplier is an approved service agent/partner/ distributor for SMA inverters. Or provide a letter confirming that the supplier will commit to receiving technical support from SMA.
			<b>Weight % (W)</b>
			20
<b>Note for Item 4</b>			
<b>Score</b>	<b>Details</b>		
20	Company has submitted the letter on the company letter head confirming the above requirement for Item 4.		
0	Not submitted		