

Supply of estimated quantities of power quality monitoring meters on an "as and when required" basis for a period of five (5) years.

PART 3: SCOPE OF WORK

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C3.1: *PURCHASER’S* GOODS INFORMATION

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1 Overview and purpose of the *goods and services*

Supply of power quality monitoring meters on “as and when required” basis for a four (4) year period.

2 Specification and description of the *goods*

The contract includes the following items:

- PQ monitoring instrument (SAP no: 706339) – permanent substation, 19” rack mounted.
 - GPS Antenna (SAP no: 0000703962).
 - 19” 3U rack mounting (SAP no: 0000704512).
 - Cellular Modem compliant to 240-76625081 (SAP no: 0000703964).
 - 0-5A (range) micro clamp compatible with instrument (SAP no: 0000703963).
- PQ monitoring instrument (SAP no: 706339) – permanent non substation, surface mount.
 - GPS Antenna (SAP no: 0000703962).
 - Panel mounting (SAP no: 0000665289).
 - Cellular Modem compliant to 240-76625081 (SAP no: 0000703964).
- PQ monitoring instrument (SAP no: 706340) – investigation, surface mount with the following accessories:
 - GPS Antenna.
 - Cellular Modem compliant to 240-76625081
 - 0-5A (range) micro clamp compatible with instrument.
 - 250/500/1000:5A – Current Clamps.
 - Carry Case.
 - Current Harness.
 - Voltage Harness and Clips.
 - Power Harness.

The specifications for the goods and services are as follows:

Power Quality Monitoring Instruments

- 240-132938253: Power Quality Monitoring Instrument Standard.
- 240-76625081: Specification for Cellular Modem Standard.
- 240-82534274: Specification for Definition of the Eskom Power Quality Data Import Format (EPQDIF).
- 240-64038621: Specification for Remote Device Communication Standard For Operational And Engineering Data Retrieval And Remote Access.

An overview for the requirements for this contract is provided in the following documents:

- 240-89613391: Technical Evaluation Criteria For Power Quality Monitoring Instruments.

The Data Acquisition Software in accordance to 240-132938253: Power Quality Monitoring Standard must be supplied without any additional licensing fees.

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2.1 Purchaser's design

Not Applicable

2.2 Procedure for submission and acceptance of Supplier's design

All Meters shall be designed according to the applicable specifications stated in the specification and description of the goods section of this document.

The design of meters shall be evaluated in accordance with the required specifications as detailed in the following documents:

- Technical evaluation criteria for power quality monitoring instruments.

The Supplier must always keep track of any changes applied to all meter models and individual meter numbers. On request from Eskom, the Supplier must be able to determine exactly which changes apply to an individual meter number and also which changes have been applied to a particular model/version.

All metering equipment shall be accompanied by drawings as listed below:

- Outline and mounting details of each item.
- Electrical termination and cabling details. These diagrams shall also be mounted on the metering device.

2.3 Other requirements of the Supplier's design

The Supplier shall maintain a record of all products supplied on this contract. This shall apply to the total contract duration. The record shall include product designations, serial numbers and manufactured dates. Details shall be kept of the part/model numbers, serial numbers and firmware versions of all products. The record shall be available to the Purchaser at no charge on request.

All meters are to be supplied with the following packaging:

- The meter serial number and barcode shall be printed onto the packaging of the meter.
- Where multiple meters are supplied within one package, all the serial numbers and barcodes of the individual meters shall be printed onto the packaging.

2.4 Use of Supplier's design

Not applicable

2.5 Manufacture & fabrication

Not applicable

2.6 Factory acceptance testing (FAT)

Not applicable

2.7 Other tests and inspections and commissioning in place of use

Not applicable

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2.8 Operating manuals and maintenance schedules

The Supplier shall provide all operating manuals for meters to the Purchaser on delivery of the meters.

- All equipment shall be supplied with instruction manuals that shall be detailed enough to enable Eskom staff to install, maintain, test, configure and use each item of equipment.
- Service manuals shall be in loose-leaf form and electronic Acrobat pdf form. Any modifications thereto shall be described in detail, as a supplement to the service manual.
- Copies of each manual shall be supplied to the Purchasers group as requested.

3 Supply Requirements

The Supply Requirements for this contract are in an Annexure to the Contract Data provided by the *Purchaser*.

4 Specification of the services to be provided

Supply of estimated quantities of Power Quality Monitoring Meters.

5 Constraints on how the *Supplier* Provides the Goods

5.1 Programming constraints

The Supplier must implement the early warning mechanism when unable to comply with contractual obligations.

5.2 Work to be done by the Delivery Date

The PQM meters will be delivered to various sites. The delivery dates will be provided by the relevant Eskom Project Manager.

5.3 Marking the goods

Marking shall be done in accordance with Eskom requirements.

5.4 Constraints at the delivery place and place of use

The constraints at the delivery place will be informed by the Project Manager. PQM meters shall be delivered at various operating units, the delivery place shall be indicated on each Purchase Order.

5.5 Cooperating with Others

The supplier of PQM meters shall be required to inform the receiving Operating Unit of the expected delivery and date.

5.6 Services & other things to be provided by the *Purchaser* or *Supplier*

The Supplier to propose process mechanisms and facilities to guarantee that Eskom receives the required technical and logistical support.

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5.7 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Supply Manager* as follows:

| Title and purpose | Approximate time & interval | Location | Attendance by: |
|--|-----------------------------------|---|--|
| Risk register and compensation events | As and when required | Alternate between Supplier and Purchaser premises | Purchaser, Supplier, Internal customers and subject matter experts |
| Overall contract progress and feedback | Monthly as agreed by both parties | Alternate between Supplier and Purchaser premises | <i>Purchaser, Supplier</i> , Internal customers and subject matter experts |
| Early Warning | As and when required | Alternate between Supplier and Purchaser premises | <i>Purchaser, Supplier</i> , Internal customers and subject matter experts |
| Performance Evaluation Meeting | Quarterly | Alternate between Supplier and Purchaser premises | <i>Purchaser, Supplier</i> , Internal customers and subject matter experts |

Meetings of a specialist nature may be convened as specified elsewhere in this Goods Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the manufacture of the *goods*. Records of these meetings shall be submitted to the *Supply Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

5.8 Documentation control

Contractual communications will be in the form of properly compiled letters or forms attached to e-mails and not as a message in the e-mail itself. Documentation shall be exchanged between the relevant parties, copied to the Supply Manager. All correspondence relating to or affecting contract pricing and the programme shall be routed through the *Supply Manager*.

5.9 Health and safety risk management

The Supplier shall comply with the health and safety requirements as stated on the Eskom's document 32-726

5.10 Environmental constraints and management

The *Supplier* shall comply with the environmental criteria and constraints.

5.11 Quality

The *Supplier* shall comply with the following Quality requirements:

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Full compliance with QM-58 (i.e., Supplier Quality Management Specification) – 240-10565800, Category 2 requirements.

The Contract Quality Plan (CQP) shall be kept current for the contract duration and any changes to be submitted to the Contract Manager. Final CQP to be submitted 30 days after contract award, thereafter, whenever there are communicated changes.

Product ITPs and QCPs shall be made available on request.

5.12 Invoicing and payment

Within one week of receiving a payment certificate from the *Supply Manager* in terms of core clause 51.1, the *Supplier* provides the *Purchaser* with a tax invoice showing the amount due for payment equal to that stated in the *Supply Manager's* certificate.

The *Supplier* shall address the tax invoice to *Purchaser* and include on each invoice the following information:

- Name and address of the *Supplier* and the *Supply Manager*;
- The contract number and title;
- *Supplier's* VAT registration number;
- The *Purchaser's* VAT registration number.
- Description of *goods* and *services* provided for each item invoiced based on the Price Schedule;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

Approved invoices shall be submitted to Finance Shared Services at the following email address: invoiceseskomlocal@eskom.co.za. Additional instructions for invoice submission and payment shall be included with each order.

5.13 Insurance provided by the *Purchaser*

Refer to contract data provided by the *Purchaser* – (Clause 84.2)

5.14 Contract change management

As per Communication in CQP Plan

5.15 Provision of bonds and guarantees (if applicable)

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Supplier* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Purchaser* may withhold payment of amounts due to the *Supplier* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Supplier* by the *Supply Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Supplier* does not affect the *Purchaser's* right to termination stated in this contract.

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5.16 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Supplier*

Supplier required to keep all records of defined cost for the duration of the contract and to provide the *Supply Manager* access to the records in hard copy or electronically.

6 Procurement

6.1 Subcontracting

6.1.1 Preferred subcontractors

Not Applicable.

6.1.2 Limitations on subcontracting

Not Applicable.

6.1.3 Spares and consumables

The Supplier shall provide a 5 year warranty on all IEDs/electronic devices. The warranty shall include the repair of all failures due to latent defects (i.e. excluding failure due to mishandling or misuse of the equipment by the Purchaser or the Purchaser’s representatives, and excluding normal wear and tear). Any charges associated with the repair/replacements and shipping of the defective equipment from the Supplier’s local office to and from the works of the overseas principal shall be for the Supplier’s expense.

6.1.4 Other requirements related to procurement

Not Applicable

6.1.5 Cataloguing requirements by the *Supplier*

Not Applicable

6.2 Plant and Materials

6.2.1 Quality

The Supplier shall provide a 5-year warranty on all IEDs/electronic devices. The warranty shall include the repair of all failures due to latent defects (i.e. excluding failure due to mishandling or misuse of the equipment by the Purchaser or the Purchaser’s representatives, and excluding normal wear and tear). Any charges associated with the repair/replacements and shipping of the defective equipment from the Supplier’s local office to and from the works of the overseas principal shall be for the Supplier’s expense.

6.2.2 Spares and consumables

The Supplier shall supply spares for all the meters and/or parts thereof locally for a minimum period of ten (10) years, subsequent to the expiry of the supply contract. The Supplier shall supply a comprehensive schedule of spares to be held, relating to all the meters and or part thereof. Spares shall be carried at the Supplier’s local works.

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The Supplier shall, at the earliest opportunity, notify the Purchaser of the planned discontinuation of any device used in this contract.

6.3 Tests and inspections before delivery

- All meters/transducers shall be tested at a South African National Accreditation System (SANAS) accredited test facility (refer to SANS 474/ NRS057) before delivery.
- Calibration certificates for meters and transducers shall also be provided, which will provide test results at the test points indicated in the respective specifications.
- A “TESTED” sticker shall be applied to each meter/transducer after calibration. The sticker shall indicate the date of accuracy testing and the facility that has tested the meter/transducer.
- The Supplier shall store the calibration certificate for every meter/transducer manufactured in an electronic format as an import file compatible with Microsoft Windows software and it must be made available upon request.

6.4 Completion, testing, commissioning, and correction of Defects

6.4.1 Work to be done by the Completion Date

On or before the Completion Date the Supplier shall have done everything required to provide the Goods. The goods shall be free of defects.

6.4.2 Take over procedures

The Purchaser shall grant the Supplier access to goods which has been delivered to the Purchaser's site for the purposes of defect correction within the period of reply or as otherwise agreed between the parties.

6.4.3 Training and technology transfer

The Supplier shall provide training on the request of the Purchaser. Training shall cover the installation, maintenance, and operation of the system and the configuration software. Training shall include formal assessments of attendees.

7 List of drawings

7.1 Drawings issued by the *Purchaser*

This is the list of drawings issued by the *Purchaser* at or before the Contract Date and which apply to this contract.

| Drawing number | Revision | Title |
|----------------|----------|------------------------------------|
| D-DT-5804 | 5 | Standard Substation Metering Panel |
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| | | |
| | | |

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C3.2 *SUPPLIER'S* GOODS INFORMATION

Not Applicable