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REQUEST FOR FORMAL WRITTEN PRICE QUOTATIONS

**Procurement from R30 000.00 up to a transaction value of R 200 000.00 (including Vat)
(For publication on Mogale City Website and Notice Boards)**

Kindly furnish Mogale City Local Municipality with a written quotation on the goods listed hereunder:

RFQ: I (E) 20/2011
QUOTATIONS ARE HEREBY INVITED FROM SERVICE PROVIDERS FOR THE SUPPLY, DELIVERY, AND OFF-LOADING OF POWER LINE CARRIER (PLC) PREPAID SPLIT METERS WITH FITTED CUSTOMER INTERFACE UNIT.

Advertising date: Tuesday 1 January 2011

Closing date and time: Thursday 10 February 2011 at 11:00

The quotation must be submitted on the official quotation document (including all the required annexures) and must be delivered by hand before the official closing date and time to:

The SCM Unit of MCLM
Civic Centre
Corner Market & Commissioner Streets, Krugersdorp
Upper Level West Wing
Tender Box 1

The following conditions will apply:

- Quotation documents can be downloaded from the website www.mogalecity.gov.za or collected from the Supply Chain Management Unit, Finance Dept, Civic Centre, Krugersdorp.
 - The lowest or any quotations will not necessarily be accepted and MCLM reserves the right to accept the quotation in total or only in part.
 - To participate in MCLM's quotation procurement of goods and services, suppliers are requested to register on the MCLM supplier database. Forms available from SCM Unit or website.
 - No late quotations delivered after the official closing date and time will be accepted.
 - **Price(s) quoted must be valid for at least thirty (30) days from date of your offer.**
 - **Price(s) quoted must be firm and must be inclusive of VAT.**
 - A firm delivery period must be indicated.
 - A valid, original tax clearance certificate must be attached.
 - This quotation will be evaluated in terms of the 80/20 preference point system as prescribed in the Preferential Procurement Policy Framework Act (No 5 of 2000) and for this purpose the following forms need to be completed and submitted:
 - **MBD 4: Declaration of interest;**
 - **MBD 6.1: HDI preference points (7 points);**
 - **MBD 6.3: Promotion of SMME's (3 points)**
 - **MBD 6.11: Preference points to Mogale based companies (10 points)**
 - **MBD 8: Declaration of bidders past supply chain management practices**
 - **MBD 9: Certificate of independent bid determination.**
- If the MBD forms are not completed & submitted, your quotation will be rejected.
- No quotation will be considered from persons in service of the state (MDB 4)
 - **Electronic (e-mailed or faxed) quotations are not accepted.**

**MOGALE CITY LOCAL MUNICIPALITY
REQUEST FOR FORMAL WRITTEN PRICE QUOTATION**

Mogale City Local Municipality requests a quotation on the services listed hereunder on the Request for Quotation Forms. Please furnish all the information as requested and return the quotation on the date stipulated. Late and incomplete submissions will invalidate the quotation submitted.

RFQ NUMBER:	RFQ – I(E) 20/2011 Service provider for the supply, delivery off- loading of PLC Prepaid Split Meter with fitted customer interface unit.
ADVERTISING DATE:	Tuesday 1 January 2011
DEPARTMENT	Department of Electrical Planning – Electricity
	<p>1. <u>SCOPE OF WORK</u></p> <ul style="list-style-type: none"> • <u>QUALITY</u> <p>All materials and standards shall comply with the latest amended specifications as the case may be unless otherwiseSpecified. Meters must be provided with a calibration certificate. All specifications must comply with the NRS 057-1: 2001 (Electricity metering) guidelines.</p> <ul style="list-style-type: none"> • <u>SITE CONDITIONS:</u> <ul style="list-style-type: none"> • <u>Altitude:</u> 1 738 meters above sea level. • <u>Temperature:</u> <ul style="list-style-type: none"> Max: 35°C Min: -6°C • <u>Humidity:</u> <ul style="list-style-type: none"> During the night: 100 % relative humidity During the day: 25 % relative humidity • <u>Lightning:</u> <ul style="list-style-type: none"> Severe lightning storms prevail.

TECHNICAL SPECIFICATIONS PLC PREPAID SPLIT METER

• **GENERAL INFORMATION**

- Meter Format
Single-Phase, 2-wire, direct connected prepayment meter
- Compatible network(s)
Single-Phase, 2-wire, earthed neutral

• **OPERATION**

- General
Prepayment and Credit modes
- Credit entry mechanism
Keypad; encrypted numbers
- Encryption algorithms
STS Compliant
- Applicable specifications
NRS009-1; NRS009-6-6; NRS009-6-7;

• **ELECTRICAL RATINGS**

- Nominal Voltage (Un) - Rated Voltage
230 Volts AC rms (other voltages available on request)
- Nominal frequency
50 Hz (60Hz option available)
- Operating voltage range
80% to 120% of Un (184V – 276V)
- Maximum continuous current (Imax)
80 Amps (factory and field programmable to lower power limits)
- Burden
Voltage circuit <1.4W / <9VA @ 230V
Current circuit <2.5 VA @ Base Reference Current (Ib)
- Protective class (according to IEC 62052-11)
Class II (double insulated)

• **METROLOGICAL PERFORMANCE**

- Measurement direction
Forward and reverse power detection and metering (Credit is decremented in both directions)
- Meter constant (LED flash rate)
1000 impulses / kWh
- Basic reference current (Ib)
10A
- Accurate metering range
0.05 Ib to 1.2 Imax

- Starting current
≤ 0.005 Ib (For Class 2)
- Power threshold
6.5W (approx 28mA @ 230V and $\cos(\phi) = 1$)
- Accuracy class index
Class 1 and Class 2 meters available
- Maximum error
- Class 1
< ± 1% over range 0.1 Ib to I_{max}; 0.5 ≤ $\cos(\phi)$ ≤ 1.0 (lead or lag)
- Class 2
< ± 2% over range 0.1 Ib to I_{max}; 0.5 ≤ $\cos(\phi)$ ≤ 1.0 (lead or lag)

- **DISCONNECTION DEVICE**

- Type
Single Pole latching contactor 100A

- **INSULATION, OVERVOLTAGE & PROTECTION**

- Insulation System Classification
Protective Class II (according to IEC 62052-11)
- Insulation Level
4kV rms for 1 minute
- Overvoltage withstand
440VAC for 48 hours
600VDC for 1 minute
- Surge Immunity – Voltage impulse withstand
- Differential
In excess of 6kV, 1.2/50μs, with 2Ω source impedance
- Surge Immunity – Current impulse withstand
Service rating
5 kA 8/20μs
Withstand rating
30 kA, 4/10μs
Specification compliance
SABS 1524-1, IEC 62052-11
- Electromagnetic compatibility (EMC)
Electrostatic discharge 15 kV air discharge
Immunity to HF fields
80 Hz to 2 GHz @ 10V/m with load, 80MHz to 2GHz @ 30V/m no load
Immunity to fast transient bursts..... 4 kV
Radio interference
Complies with requirements for CISPR 22
Specification compliance
IEC 61000-4-2; IEC 61000-4-3;
IEC 61000-4-4; IEC 61000-4-6 CISPR 22

- **COMMUNICATION CIRCUITRY**

- Type
Power Line Carrier
- Carrier frequency
66 kHz (FSK)
- Protocol
Device Language Message Specification (DLMS). High-level data link control (HDLC)
- Specification compliance
IEC61334-4-41, ISO/IEC13239 and EN 50065
- Communication range
Typically > 200m (network dependant)

- **MAIN ENCLOSURE**

- Type
Layout according to BS5685
- Mounting
- Two mounting screws bottom (spacing according to BS5685). Top mounting bracket available as an option
- Rating
IP54 (IEC60529)
- Material
UV Stable Polycarbonate/ABS blend with flame-retardant
Resistance to heat and fire
Complies with 960°C glow-wire (IEC 60695-2-1)
Resistance to spread of fire
UL94-V0 rated @1.5mm. No toxic gases emitted: 'Green Material'
- Dimensions
127,6mm(H) x 122mm(W) x 68mm(D) with short terminal cover
- Mass
510g

- **TERMINALS**

- Layout
According to BS5685
- Mains Terminals
Type Double screw (M6), moving-cage terminal
Material-Mild steel, yellow passivated
Maximum Cable Size 25mm

- Terminal Block Material
UV Stable Polycarbonate with flame-retardant
Resistance to heat and fire
Complies with 960°C glow-wire (IEC 60695-2-1)
Resistance to spread of fire
UL94-V0 rated @1.5mm.
No toxic gases emitted: 'Green Material'

- **SEALING**

- Type
Meter enclosure
Factory sealed with screw-sealing plugs
Terminal cover
Utility sealed with wire and crimped ferrule

- **OPERATING ENVIROMENT**

- Area of application
Indoor meter (according to IEC62052-11)
- Operating temperature range
-10°C (+14°F) to +55°C (+131°F)
- Storage temperature range
-25°C (-13°F) to +70°C (158°F)
- Relative humidity
Maximum ≤95%; Annual mean 75%

- **MAN MACHINE INTERFACE (BASIC OPTION)**

- Rate of consumption indicator
Visible LED, 1000 pulses/kWh
- Status Indication
Visible LED

- **MAN MACHINE INTERFACE (LCD OPTION)**

- Rate of consumption indicator
Visible LED, 1000 pulses/kWh
- Liquid Crystal Display (LCD)
Size 9cm² (45mm (W) x 20mm (H)), 8 digits + 11 icons
Icon information
Happy face, Sad face, Alert, Breaker status, Info, kWh, 4-segment credit wedge
- Numeric information
Optional default display of either Total kWh
Consumed or Remaining Credit

- **EXTERNAL INTERFACES**

- Standard Interrogation Port
8-pin interface according to ESKOM DISSCAAA9
- Optical Communications Port
According to IEC 62056-21
- Proprietary Interrogation Port
Data interface for Cashpower Powerscope

- **SPECIFICATIONS COMPLIANCE & APPROVALS**

- IEC
IEC 62052-11 ; IEC62053-21
IEC 62056-21 First Edition: 2002
- SABS
SABS 1524-1 Edition 3
- ESKOM – Prepayment meters
ESKOM DISSCAAA9
- BS
BS 5685: 1979

PLC CUSTOMER INTERFACE UNIT

- **ELECTRICAL RATINGS**

- Nominal Supply Voltage
230V AC (other voltages available on request)
- Operating Voltage Range
184V – 276V
- Nominal Supply Frequency
50Hz (60Hz option available on request)
- Burden
<1.2W / <5VA @ 230V
- Protective Class
Double insulated – SELV
- Supply Connection
Detachable socket inlet

- Batteries
2 × 1.5 Volt AA batteries (typical operating life – 2 years)

- **COMMUNICATION CIRCUITRY**

- Type
Power Line Carrier
- Carrier frequency
66kHz (FSK)

- Protocol
Device Language Message Specification (DLMS). High-level data link control (HDLC)
- Specification compliance
IEC61334-4-41, ISO/IEC13239 and EN 5006

- **OPERATING ENVIRONMENT**

- Operating Temperature Range
-10°C (+14°F) to +55°C (+131°F)
- Storage Temperature Range
-25°C (+12°F) to +70°C (+158°F)
- Relative Humidity (IEC 6 1036)
Maximum ≤95%; Annual mean 75%

- **ENCLOSURE**

- Type
Wall mounted with plug-in AC power cord socket inlet and hinged battery compartment
- Rating
IP 51
- Material
UV Stable Polycarbonate/ABS blend with flame-retardant
Resistance to heat and fire
Complies with 960°C glow-wire (IEC 60695-2-1)
Resistance to spread of fire
UL94-V0 rated @1.5mm.
No toxic gases emitted: 'Green Material'
- Dimensions
147mm(H) x 123mm(W) x 65mm(D)
- Weight
500g

- **SEALING**

- Battery Compartment
Hinged door for battery replacement
Electronics Enclosure
Factory sealed – no user serviceable parts

- **MAN-MACHINE INTERFACE**

- Type
Language-independent
- Components
Pictographic/Numeric LCD display, keypad, LED rate of consumption indicator, audio feedback
- Liquid Crystal Display (LCD)
Size
9cm² (45mm (W) x 20mm (H)), 8 digits + 11 icons

	<ul style="list-style-type: none"> • Icon information Happy face, Sad face, Alert, Breaker status, Info, kWh, 4-segment credit wedge • Numeric information Display of various meter information such as credit levels, number entry, etc. • Keypad 12-key, international standard layout including "Information" and "Backspace" keys • Buzzer Audio feedback on key press, encrypted number, Accept and Reject melodies, Low-credit alarms as a factory-programmable option • Rate of Consumption Indicator (Rate LED) Rate of consumption indicator (Pulse rate proportional to current rate of consumption) • Alarm indicator Visible warning of critically low credit status • LCD Backlighting Settable – On or Off • Diagnostic Information Meter parameters accessible via the "Information" key <ul style="list-style-type: none"> • <u>SCOPE OF OFFER:</u> <p>Quotation is to include for complete construction and assembly of the units, testing, crating, delivery and off-loading to the Municipality stores.</p>
<p>EVALUATION CRITERIA</p>	<p>FUNCTIONALITY SCORING</p> <p>All quotations received will be evaluated on the 80/20 point scoring basis. The 80 points will be for Price and 20 points are for specific goals and / or for achieving the prescribed reconstruction and Development Programme (RDP) goals.</p> <p>The below mentioned criteria regarding functionality are required for responsiveness and therefore eligibility for the next stage of evaluation. If the minimum of 12 points is not scored for functionality the quotation will be rejected and not considered for further evaluation. These criteria shall only determine whether a quotation will further be evaluated and will not influence the points scored on Price.</p> <ul style="list-style-type: none"> ○ The service provider must provide proof of previous experience with the off - loading of PLC Prepaid Split Meter with fitted customer interface unit, and related safety surfacing as well as references. (10 points) ○ Related infrastructure, plant and equipment available to execute this project (10 points)

	<p>The RFQ will be evaluated on the basis of the 80/20 point system as stipulated in the Preferential Procurement Policy Framework Act.</p> <ul style="list-style-type: none"> • 80 points for Price • 20 Preference points: <ul style="list-style-type: none"> ○ HDI (Historically Disadvantaged) (MBD 6.1) 4 points ○ Female Equity (MBD 6.1) 2 points ○ Disabled ownership (MBD 6.1) 1 point ○ Promotion of SMME's (MBD 6.3) 3 points ○ Mogale Based companies (MBD 6.11) 10 points
OTHER DOCUMENTS REQUIRED:	<ul style="list-style-type: none"> • Original, valid tax clearance certificate • Company registration documents • Copies of ID's of shareholders • Completed MBD 4, MBD 6.1, MBD 6.3, MBD 6.11 ,MBD 8 and MBD 9 • Copy of latest municipal account • Price schedule (fixed prices including Vat)
PRICE	<p>The price shall include supply, delivery and off-loading and must include VAT. The total contract value of this quotation will not exceed R200 000 (including VAT)</p>
DELIVERY PERIOD	<p>Delivery period after receipt of official orderdays</p>
SPECIAL CONDITION	<p>The tenderers taken into consideration will be requested to submit a sample of a power line Carrier (PLC) prepaid spit meters.</p>
CLOSING DATE AND TIME	<p>Thursday 10 February 2011 at 11h00</p>
SUBMISSION OF QUOTES	<p>Tender box 1 Reception Desk of SCM Unit Upper Level West Wing Civic Centre Krugersdorp</p>
ENQUIRIES	<p>Petrus Makgamatha at (011) 951-2535 / 071 860 7914</p>

PRICING SCHEDULE

Name of Bidder:	Closing Date: 10 February 2011
Quotation No.: I(E) 20/2011	Closing Time: 11:00

OFFER TO BE VALID FOR **30 DAYS** FROM THE CLOSING DATE OF THE QUOTATION

	DESCRIPTION	QUANTITY	Total Price per item (Including VAT)
1.	PLC Pre-paid meter with fitted customer interface unit.	1	R

Conditions:

- All prices quoted must be **inclusive of VAT**.
- All prices submitted must be fixed prices for the period of the quotation.
- If the price schedule is not signed the quotation will not be considered.
- No tipp-ex or correction fluid to be used on the quotation documentation- will lead to instant disqualification.
- Quotations completed in pencil will be regarded as invalid.
- All prices quoted must be valid for thirty (30) days.

NAME OF THE BIDDER: CONTACT PERSON:

TEL/ CELL NO: FAX NO:

SIGNATURE OF BIDDER

CAPACITY OF BIDDER

