

**Group Technology and Commercial**

Kusile Power Station Project  
R545 Ogies/Balmoral/Kendal Road  
Emalahleni  
1035

**Ref No:**  
**MPPSC/00/007**

**Issued Date:**  
**14 February 2017**  
**Closing Date:**  
**5th March 2017**

**T1.1 Invitation to Tender**

Eskom Holdings SOC Limited (**hereinafter "Eskom"**) invites you to submit a tender for the Delivery and supply of the following items:

**Commercial and Industrial Meters:**

Model No: MG87/MR489

Model No: RS23-243

Model No: LHV10I/LHV30I Model No: E85-0509MM Model No: E650472 S45x

Items	Description	Model No:	Qty
001	Commercial/Industrial.	➤ E650472 S45x	10
002	Commercial/Industrial Meters.	➤ MG87/MR489	11
003	Commercial/Industrial Meters.	➤ RS23-243	13
004	Commercial/Industrial Meters.	➤ LHV10I/LHV30I	10
005	Commercial/Industrial Meters.	➤ E85-0509MM	13

The required scope for this tender is fully set out in the specifications contained in the attached pdf file, all items must be supplied according the Eskom specification to avoid rejection.

Eskom has delegated the responsibility for this tender to the Eskom *Representative* whose name and contact details are set out below. A submission of a tender by you in response to this Invitation will be deemed your acceptance of the Eskom Standard Conditions of this Tender invitation.

You are required to acknowledge and submit your quotation via email within 7 (seven) days of receipt of this tender Invitation. If you do not intend submitting a quotation for the above mentioned items, kindly provide your reasons for not wishing to participate. Quotation must be submitted to: [kusile@eskomservice.co.za](mailto:kusile@eskomservice.co.za)

Queries relating to the issue of these documents may be addressed to the Eskom *Representative*.

Yours faithfully,

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**Theresa O. Phillips**  
**Site Procurement Manager (Acting)**  
**Kusile Power Station Project**

**T1.1 ACKNOWLEDGEMENT FORM**

**SCAN AND EMAIL BACK:**

**Quotation must be returned within (5) days**

**TO: ESKOM HOLDINGS SOC**  
**LIMITED's Representative**  
**Kusile Power Station Project**  
**R545 Ogies/Balmoral/Kendal**  
**Road**  
**Witbank**  
**1035**

**FROM**

**Sender**

**Fax No.**

**Attention Jeffrey M. Bosman**

**Email kusile@eskomservice.co.za**

**INVITATION TO TENDER NO. MPPSC/00/007**

**ACKNOWLEDGEMENT: DELIVERY AND SUPPLY OF ELECTRIC METERS**

We are in receipt of the Invitation to Tender from Eskom Holdings Limited dated 09 February 2017

*Please select either statement 1 or 2 by ticking the appropriate box below:*

1. We have noted the *deadline for tender submission* stated in above and will be submitting our tender before the stipulated time.

2. We do not intend to submit a tender for the required scope / specifications. The reasons for not submitting a tender is as follows:

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Regards

Eskom Holdings SOC Ltd Representative

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Signed on behalf of the *tenderer*

*Email:*

*Tel:*

*Fax:*

*Address:*

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*Jeffery M. Bosman*

*Email: kusile@eskomservice.co.za*

*Tel: +27 (0) 130 042 338*

*Fax: +27 (0) 130 042 339*

# Commercial and Industrial Meters

1. Flow capacities (based on H<sub>2</sub>O equivalent)  
LIQUI-FLOW Mass Meters / Controllers  
Model No. LHV10I/LHV30I

Liquid Flow Meter	Ranges
Series L13I	min. 0,25 ... 5 g/h max. 5 ... 100 g/h
Series L23I	min. 2 ... 100 g/h max. 20 ... 1000 g/h

  

Liquid Flow Controller	Ranges
Series L13I + C2I (IP65 control valve)	min. 0,25 ... 5 g/h max. 5 ... 100 g/h
Series L23I + C2I (IP65 control valve)	min. 2 ... 100 g/h max. 20 ... 1000 g/h

2. Flow capacities (based on air) Model No. MG87/MR489  
Model. RS23-243

Mass Flow Meter (MFM); PN100 (Pressure rating 100 bar)	Ranges
Series F-110C	min. 0,014 ... 0,7 ml <sub>n</sub> /min max. 0,06 ... 9 ml <sub>n</sub> /min
Series F-111B	min. 0,16 ... 8 ml <sub>n</sub> /min max. 0,16 ... 25 l <sub>n</sub> /min

Series F-111AC	min. 0,4 ... 20 l <sub>n</sub> /min max. 0,6 ... 100 l <sub>n</sub> /min
Series F-112AC	min. 0,8 ... 40 l <sub>n</sub> /min max. 1,4 ... 250 l <sub>n</sub> /min
Series F-113AC	min. 4 ... 200 l <sub>n</sub> /min max. 8 ... 1670 l <sub>n</sub> /min
<b>Mass Flow Controller (MFC); PN64 / PN100</b>	<b>Ranges</b>
Series F-200CV / F-210CV <sup>1)</sup>	min. 0,014 ... 0,7 ml <sub>n</sub> /min max. 0,06 ... 9 ml <sub>n</sub> /min
Series F-201CV / F-211CV <sup>1)</sup>	min. 0,16 ... 8 ml <sub>n</sub> /min max. 0,16 ... 25 l <sub>n</sub> /min
Series F-201AV / F-211AV <sup>1)</sup>	min. 0,4 ... 20 l <sub>n</sub> /min max. 0,6 ... 100 l <sub>n</sub> /min
Series F-202AV / F-212AV <sup>2)</sup>	min. 0,8 ... 40 l <sub>n</sub> /min max. 1,4 ... 250 l <sub>n</sub> /min
Series F-203AV / F-213AV <sup>2)</sup>	min. 4 ... 200 l <sub>n</sub> /min max. 8 ... 1670 l <sub>n</sub> /min

<sup>1)</sup> With small type of valve for normal applications

<sup>2)</sup> with pilot-operated valve for high flow applications; MG/MR option not yet available for these models.

# Commercial and Industrial Meters

## **Product Specifications: Commercial E650472 S45x**

- .Operating Temperature -40C to +85C under cover
- .ANSI C12.19 standard protocol
- .Unsurpassed 10KV surge protection for safety
- .Magnetic Tamper Detection via Hall Effect sensor
- .Cover removal switch
- .Tilt and vibration sensor
- .Operating Temperature -40C to +85C under cover
- .Nominal Voltage Standard Power Supply 120–480V (2 and 3 wire 120, 208, 240, 277, 347, 480.
  - .4 wire 120/208, 240/416, 277/480, 347/600)
- .3 Phase Power Supply Option 120–277V (2 and 3 wire 120, 208, 240, 277.
  - .4 wire 120/208, 277/480)
- .Operating Voltage Standard Power Supply 98 to 552 VAC (line to neutral) Auto Ranging Power Supply
- .3 Phase Power Supply Option 98 to 318 VAC (line to neutral) Auto Ranging Power Supply
- .Frequency 50 or 60Hz  $\pm$  5%

## **Product Specifications: Elite Advanced Metering E85-0509MM**

### System Performance:

- .Sensor-to-meter interface 1 Arms nominal; 2.5 VA burden at power factor 0.9
- .System dynamic range from <0.1% to 150% of user-selectable rated current
- .Selectable rated current range 100 A to 4000 A, selectable in software
- .System (meter + CT) uncertainty <0.3%
- .Input power requirements 70 to 150 Vdc ; Typical power 66W
- .System alarms Data invalid; Maintenance required
- .NXCT Electrical Performance
- .Thermal current 4000 A
- .Overload factor 2.0
- .Short-time thermal current 63 kArms for 1 s
- .Voltage class Up to 500 kV