

## Eskom Holdings SOC Limited

**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)

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

Yours faithfully,

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

#### **T1.1 ACKNOWLEDGEMENT FORM**

SCAN AND EMAIL BACK:

Signed on behalf of the tenderer

Email:

Address:

Tel: Fax:

Quotation must be returned within (5) days

TO:	ESKOM HOLDINGS SOC LIMITED's Representative	FROM	
	Kusile Power Station Project		
	R545 Ogies/Balmoral/Kendal Road		
	Witbank		
	1035		
Attention	Jeffrey M. Bosman	Sender	
Email	kusile@eskomservice.co.za	Fax No.	
ΙΝΥΙΤΑΤΙΟΙ	N TO TENDER NO. MPPSC/00/007		
ACKNOWL	EDGEMENT: DELIVERY AND SUPPLY	OF ELECT	RIC METERS
We are in re	eceipt of the Invitation to Tender from E	skom Hold	dings Limited dated 09 February 2017
Please sele	ect either statement 1 or 2 by ticking the	e appropria	te box below:
	ve noted the <i>deadline for tender subm</i> re the stipulated time.	<i>nission</i> sta	ted in above and will be submitting our $\Box$
	not intend to submit a tender for the r a tender is as follows:	equired sc	ope / specifications. The reasons for not
Regards		Es	kom Holdings SOC Ltd Representative

*Jeffery M. Bosman Email:* kusile@eskomservice.co.za *Tel:* +27 (0) 130 042 338 *Fax:* +27 (0)130 042 339

ESKOM ACCEPTS NO LIABILITY WHATSOEVER FOR ANY LOSS OR DAMAGES WHATSOEVER AND HOWSOEVER INCURRED, OR SUFFERED, RESULTING, OR ARISING, FROM THE USE OF THIS PACK. ESKOM HOLDINGS SOC LTD REG: 2002/015527/30 VAT: 4740101508

# **Commercial and Industrial Meters**

#### 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	
Liquid Flow Controller Series L13I + C2I (IP65 control valve)	<b>Ranges</b> min. 0,25 5 g/h max. 5 100 g/h	

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

Mass Flow Meter (MFM);	Ranges
PN100 (Pressure rating 100 bar)	
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 ln/min max. 0,6 100 ln/min
Series F-112AC	min. 0,8 40 ln/min max. 1,4 250 ln/min
Series F-113AC	min. 4 200 ln/min max. 8 1670 ln/min
Mass Flow Controller (MFC); PN64 / PN100	Ranges
Series F-200CV / F-210CV <sup>1)</sup>	min. 0,014 0,7 mln/min max. 0,06 9 mln/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 ln/min max. 0,6 100 ln/min
Series F-202AV / F-212AV <sup>2)</sup>	min. 0,8 40 ln/min max. 1,4 250 ln/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 ± 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