

## **CORRIGENDUM-1**

PUBLIC TENDER NO: LERC/PT-166/23-24 Supply, Installation and Commissioning of Spark Emission Spectrometer at LERC, Bangalore

The Changes made in the Tender Document is as follows:

Sl. No	Cl. No. of Tender	LERC Specification as in Tender Document	Modification/Changes
1	3.4 (Page-44)	High resolution Multi-CMOS detectors having at least 0.5 nm or better.	As per Cl. 3.4 of Technical Specifications it should be read as “ <b>High-resolution multi-CMOS detectors having at least 0.5 nm or better with Dual Optics Chamber</b> ”.
2	Warranty & AMC		Supply cost of the equipment must include warranty of 3 years and Service-AMC of next 3 years (i.e., 4 <sup>th</sup> to 6 <sup>th</sup> year) which will be done by providing 4 quarterly visits in a year including calibration & troubleshooting. No extra payment will be done during these 6 years.
3	3.1 (Page 29) & 16.1 (Page 38)	In the tender document as per Cl 3.1 (Page-29)it is mentioned that 5 days for depositing Security Deposit. But as per Cl 16.1(Page 38) it is mentioned as 21 days	Security Deposit to be deposited within 14 days from the date of LOI / PO as applicable.
4	6.4 (Page 3)	Last date and time for submission of tender documents. 17.12.2023 @ 10:00 hrs in the tender box at LERC	Last date and time for submission of tender documents. 19.12.2023 @ 10:00 hrs in the tender box at LERC
5	6.5 (Page 3)	Date and time of opening of tender (Technical/Commercial Bid Only)- 17.12.2023 @ 14:00 hrs	LERC will open the tender on 19-12-2023 @ 14:00 hours

Minutes of Meeting of Pre-Bid Meeting held on Public Tender No. LERC/PT-166/23-24

Date:07-12-2023.

Vendors Attended:

- Srimanth Rao Patil-Metal Power Analytical Pvt Ltd, Mumbai.
- Swaroop G- Ametek Instruments India Pvt Ltd

Members from LERC:

- T.D.Sabu- CEO LERC
- H.S Muralidhara, Secretary Cum Treasurer-LERC
- Subrat Kumar Panigrahi, Senior Manager-LERC

Sl.No	Cl. No. of Tender	LERC Specification	Query Raised by the Vendor	Remarks
1	2.2	Easily exchangeable spark stand plate (Spark Stand Plate of 10mm & 8mm hole size should be provided)	Metal Power Analytical Pvt Ltd, Mumbai-Will provide adaptors for testing.	LERC confirmed that Separate spark stand is required for each type of sample i.e, Low Carbon Steel , Brass , Zamak & Aluminium.(Require separate Electrode, Electrode insert glass , Spark Stand & other necessary requirements of 4 sets)
2	2.5	Supplied Instrument shall also have special adapters to analyse rods/wires/pins of Dia 0.3 mm or less than 10 mm, adapter for thin sheets up to 1mm.	Metal Power Analytical Pvt Ltd, Mumbai-Why do you require special adapters to analyse rods/wires/pins of Dia 0.3 mm or less than 10 mm, adapter for thin sheets up to 1mm.	LERC will be continuously working on new materials of different shape & size. Hence LERC requires to test the same sample of various dimensions.
3	7.4	The equipment quoted must be with three modes for argon flow.	Metal Power Analytical Pvt Ltd, Mumbai requested clarification on Three Modes.	Adjustable flow of Argon is also accepted.
4	9.1	The equipment shall have the following analytical programs 47 (sub-program) for each base as mentioned below: FE-00 FE-01 FE-02 FE-10	Metal Power Analytical Pvt Ltd, Mumbai-requested the range of elements defined in the programmes.	LERC will provide the range pertaining to programmes by E-mail.


		FE-11 FE-20 FE-21 FE-30 FE-31 CU-00 CU01 CU-02 CU-20 CU-21 CU-TEST AL-00 AL-01 AL-02 ZN-THELSHA ZN-00 ZN-10 ZN-11 ZN-20 ZN-21 ZN-40 ZN-41 ZN-50 ZN-51X ZN-70 ZN-71 ZN-51 ZN51CR		
5	12.4	Related Furniture-Vendor should supply Godrej or any better make of Computer Table and Chair.	Metal Power Analytical Pvt Ltd, Mumbai- Will supply Metal Power make Computer Table.	LERC will stick to the specification quoted. But room size can be altered with respect to machine.
6	12.8	After Technical Qualification: Demonstration of the offered Equipment shall be done by the vendor only then technical qualification will be finalized.	LERC	LERC strictly need to witness the machine with testing of CRM's and LERC samples.(Transportation expenses will be born by vendor)
7	9.7	The equipment shall be precalibrated for N, Si, Fe, Cu, Mn, Mg, Cr, Ni, Zn, Ti, Ag, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Ga, Hg, In, La, Li, Na, P, Pb, Sb, Sn, Sr, V, Zr, Te, As, Al, S, Au, C, Se, Nb, Pt, Nd, Tl, Pr, W, As, Mo, Ta, Pd and Ge, AS APPLICABLE in each of the base alloys.	Metal Power Analytical Pvt Ltd, Mumbai- Suggested to provide Oxygen along with the specified element.	LERC accepted.
8			Metal Power Analytical Pvt Ltd, Mumbai- Clarification regarding CRM's	LERC will procure CRM's on their own risk.
9			Metal Power Analytical Pvt Ltd, Mumbai- Sample cutting & Preparation	LERC will have own machinery for sample preparation
10	7.5	Argon Cylinder Storage is 5meters away from testing equipment. Copper tubing should be provided at the time of installation.	Metal Power Analytical Pvt Ltd, Mumbai- Needs Clarification on Regulator is included or not.	LERC confirmed supplied equipment should be with necessary Regulator & other mechanism.

11	3.4	High resolution Multi-CMOS detectors having at least 0.5 nm or better.	Metal Power Analytical Pvt Ltd, Mumbai- suggested on adding Multi/Dual Optics.	LERC will clarify the issue by mail.
12	10.1	Spectrometer computer system shall have following specifications: • Desktop PC intel 12th generation core i7 processor • 16 GB RAM DDR4, • 1 TB Hard Disk + 512 GB SSD, • Windows 11 • Colour Monitor (TFT >= 17" recommended) 24 inches Full Highdefinition Anti-glare display. • Warranty – 3 years • Keyboard and Scrolling Mouse • USB ports (Front & Back) • HDMI Ports (Min 2 ) • 10/100 Mbit Ethernet NIC (2 Nos.) (Compulsory)	Ametek Instruments India Pvt Ltd- suggested that 8 GB RAM is enough for the machine requirement.	LERC confirmed that will stick to the specifications-No Changes.
13	5.7 (Page 23)	The small-scale industries units registered with MSME & NSIC will be allowed exemption from payment of Security Deposit up to the monetary limit as specified by the MSME & NSIC in the Registration Certificate issued on SSIUs. However, they will have to give a warranty on stamp paper of Rs. 100/-.	Ametek Instruments India Pvt Ltd-needs clarification.	LERC clarified that as per the clarification from office of Development Commissioner (MSME) dt.27.01.2022 query no.20 No exemption on security deposit.
14	22	AGREEMENT: The Vendor shall conclude a stamped Agreement with LERC. Copy of Agreement is enclosed.	Ametek Instruments India Pvt Ltd-needs confirmation on the agreement paper.	LERC confirmed that agreement paper is attached with the tender document.
15		Warranty & AMC	LERC	LERC clarified that supply cost of the


				equipment should include warranty of 3 years and AMC of next 3 years (i.e 4 <sup>th</sup> to 6 <sup>th</sup> year) which will be done by providing 4 visits in a year including calibration quarterly & troubleshooting. No extra payment will be done during this 6 years.
17	3.1 (Page 29) & 16.1 (Page 38)	In the tender document as per CI 3.1 (Page-29)it is mentioned that 5 days for depositing SD. But as per CI 16.1(Page 38) it is mentioned as 21 days	Ametek Instruments India Pvt Ltd-needs clarification.	SD deposited should be deposited with in 14 days from the date of LOI.
18	6.5 (Page 3)	Date and time of opening of tender (Technical/Commercial Bid Only)- 17.12.2023 @ 14:00 hrs	Ametek Instruments India Pvt Ltd- 17.12.2023 is Sunday.	LERC will open the tender on 18-12-2023 @ 14:00 hours
19	6.4	Last date and time for submission of tender documents. 17.12.2023 @ 10:00 hrs in the tender box at LERC	Ametek Instruments India Pvt Ltd- 17.12.2023 is Sunday.	Last date and time for submission of tender documents. 18.12.2023 @ 10:00 hrs in the tender box at LERC

  
Metal Power Analytical Pvt Ltd

  
Ametek Inst. India Pvt Ltd

**LERC:**  
  
S.K. Panigrahi

  
H.S. Muralidhara

  
T.D. Sabu

## Subrat Kumar

**From:** Subrat Kumar  
**Sent:** 08 December 2023 11:57  
**To:** swaroop.govindarajan@ametek.com; srimanthrao.patil@metalpower.net  
**Cc:** T D Sabu; ReportsMechanical; H S Muralidhara  
**Subject:** Requirement against Point No 4 & 11 of MOM held on 07.12.2023 on the Tender No. LERC/PT-166/23-24.

Ref: Public Tender No. LERC/PT-166/23-24.

Please find the requirement by LERC for Point No 4 & 11 of MOM of Prebid meeting Dated 07.12.2023 .

Sl.No	CI No. of Tender	LERC Specification	Query Raised by the Vendor	Remarks
4	9.1	The equipment shall have the following analytical programs(sub-program) for each base as mentioned below: FE-00 FE-01 FE-02 FE-10 FE-11 FE-20 FE-21 FE-30 FE-31 CU-00 CU01 CU-02 CU-20 CU-21 CU-TEST AL-00 AL-01 AL-02 ZN-THELSHA ZN-00 ZN-10 ZN-11 ZN-20 ZN-21 ZN-40 ZN-41 ZN-50 ZN-51X ZN-70 ZN-71 ZN-51 ZN51CR	Metal Power Analytical Pvt Ltd, Mumbai-requested the range of elements defined in the programme	LERC will provide the range pertaining to programmes by E-Mail.

### **Requirement by LERC:**

As LERC is a R&D centre we require Maximum & Minimum Detection Range. However, we are giving our alloy specifications for your reference.

### **Specification for Zamak Sample:**

Elements	Specific Requirements
Aluminum	3.8 to 4.2
Copper	0.7 to 1.1
IRON	0.10 Max
Lead	0.005 Max
Cadmium	0.005 Max
Magnesium	0.035 to 0.06
Nickel	0.006 Max
Tin	0.002 Max
Zinc(Zn)	Remainder

### **Specification for Copper Sample:**

Standard Requirement	
Elements	Specific Requirements
Copper(Cu)	56.5 to 60

Lead(Pb)	1 to 2
Manganese(Mn)	0.5 Min
Iron(Fe)	0.3 Max
Zinc(Zn)	Remainder

**Specification for Low Carbon Steel Sample:**

Specified Requirement		Permissible variation over max & under min. specified limit
Carbon (C)	0.16 max	0.02%
Silicon(Si)	0.25 max	0.03%
Manganese(Mn)	0.30 Min	0.03%
Phosphorous	0.025 max	0.005%
Sulphur	0.025 max	0.005%
Aluminium	0.020 min	-
Nitrogen(N)	0.009 max	-

The specified range of elements will also be a major criterion for qualification in Tender. Hence vendor should offer best possible range machine.

11	3.4	High resolution Multi-CMOS detectors having at least 0.5 nm or better.	Metal Power Analytical Pvt Ltd, Mumbai-suggested on adding Multi/Dual Optics	LERC will clarify issue by E-Mail.
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**Requirement of LERC:**

As per Cl. 3.4 of Technical Specifications it should be read as **High resolution multi-CMOS detectors having at least 0.5 nm or better with Dual Optics Chamber.**

