



Delhi Electricity Regulatory Commission

ViniyamakBhavan, C-Block, Shivalik, Malviya Nagar, New Delhi – 110 017

F.17(174)/DERC/Engg./DERC/2017-18/5856

In the matter of: Notification of Laboratory for Testing of Tampered Meter under Delhi Electricity Regulatory Commission (Supply Code and Performance Standards) Regulations, 2017

Order

(Date of Order: 06.12.2021)

In exercise of the powers conferred by Regulation 32(8) of *Delhi Electricity Regulatory Commission (Supply Code and Performance Standards) Regulations, 2017*, the Commission hereby notifies various NABL accredited Meter Testing Laboratories for testing in case of suspected tampered meter and its charges thereof.

1. NABL accredited Meter Testing Laboratories

Sr. No.	Name of the Laboratories	Contact Person and Address of the Laboratories
1.	M/s Electronics Regional Test Laboratory (ERTL)	Mrs. Sunita Binji (Head CSC Test) ERTL(North) S- Block, Okhla Industrial Area, Phase - II, New Delhi – 110020 Phone: 011-26386206,26386498, 26386118 Email: ertlnorth@stqc.gov.in
2.	M/s Electronics and Quality Development Centre (EQDC)	Mr.Kirit Parmar- (Engineer) Meter Testing laboratory, 4/13, Substation Building, Sector-13, Rohini, New Delhi-110085. Phone: +91-9723531064 Email: addelhi@eqdc.in
3.	M/s Yadav Measurements Private Limited (YMPL)	Mr. Rameshwar Singh (Manager- Marketing) 397, Left Side Basement, Near PNB ATM, Hanuman Mandir Road, Chirag Delhi, New Delhi-110017. Phone: +91-9650394924 Email: rameshwar.sr@yadavmeasurements.com & Mr. Rameshwar Singh (Manager- Marketing) 4th Floor, Millennium Plaza Tower-A, SushantLok Phase-I, Sector-43, Gurugram, Haryana 122022. Phone: +91-9650394924 Email: rameshwar.sr@yadavmeasurements.com
4.	M/s QA Lab, Flash Electronics (India) Private Limited.	Mr. Rajendra Kumar (Manager- Technical) Plot No 3, 1 st Floor, Sector 27 B, Faridabad- 121003. Phone: +91-9891066921 Email: rk.em@flashgroup.in & Mr. Rajendra Kumar (Manager- Technical) 202, Western Avenue, Sainik Farms, New Delhi-110062. Phone: +91-9891066921 Email: rk.em@flashgroup.in

The Commission noted that the above mentioned laboratories are notified for Meter Testing by various other State Electricity Regulatory Commissions also like Gujarat Electricity Regulatory Commission (GERC), Haryana Electricity Regulatory Commission (HERC), Rajasthan Electricity Regulatory Commission (RERC) etc.

2. Charges for Testing

The Testing Charges in case of suspected tampered meter are mentioned below.

Sr.No	Name of Testing Laboratory	Testing Charges as per Annexure
1.	Electronics Regional Test Laboratory	Annexure-I
2.	M/s Electronics and Quality Development Centre	Annexure-II
3.	M/s Yadav Measurements Private Limited	Annexure-II
4.	M/s QA Lab, Flash Electronics (India) Private Limited.	Annexure-III

3. Protocol/ Guidelines

(1) The Distribution Licensee shall remove the meter from site/consumer’s premises and seal it in the presence of the consumer or his representative in a container affixing thereon paper seals which shall be signed by both the parties. The Distribution Licensee shall prepare a seizure memo at the time of removal of meter, duly signed by their representative and consumer, indicating following details:

- i) C.A. No.
- ii) Registered Consumer Name
- iii) Meter No.
- iv) Meter Type
- v) Container Seal No.
- vi) Container no.
- vii) Date of removal
- viii) Physical status of the meter/ meter box as applicable
- ix) Licensee’sauthorized person details including mobile no. & e-mail.
- x) Seizure memo no.
- xi) any other relevant information

(2) The Distribution Licensee shall send meter sealed in the container as above along with the seizure memo to the laboratory within 3 (three) days of removal of meter.

(3) The Distribution Licensee shall fill the Service Request Form, as provided by the laboratories, and deposit the same to the laboratory alongwith the sealed meter.

(4) The DistributionLicensee shall indicate the specific parameters to be tested.

(5) The Meter Testing Laboratories on receipt of the meter/ meter in meter box, sealed in the container along with the seizure memo & Service Request Form shall acknowledge the receipt after verifying the following details:

- i) Intact Condition of the Container
- ii) Intact Condition of Container seal
- iii) Container Seal No.

(6) The Distribution Licensee shall schedule a date and time for testing of meter in consultation with Meter Testing Laboratories and shall give prior notice to the consumer as per the provisions of Order dated 31/08/2017 for Schedule of Charges and the procedure under Delhi Electricity Regulatory Commission (Supply Code and Performance Standards) Regulations, 2017 as amended from time to time.

(7) It shall be the responsibility of the Distribution Licensee to collect the Meter Test Report from Meter Testing Laboratories on the intimated date and provide a copy to the consumer also.

(8) In case any laboratory has meter manufacturing facility directly or through its sister concern then the laboratory shall not test the meters manufactured by it or by its sister concern.

4. Date of applicability of the Order:

This Order shall be applicable from the date of its notification and shall remain in force till revised.

Accordingly, the Order dated 5/9/2018 shall cease to have effect from the date of notification of this Order.

Sd/-
(Dr. A.K. Ambast)
Member

Sd/-
(Justice Shabihul Hasnain 'Shastri')
Chairperson

Annexure-I

Testing/calibration charges for the items mentioned below: -

क्रम संख्या/SL .No.	वस्तु/ Item	मात्रा/ Qty	उपयुक्त परीक्षण/नाम Applicable Test / Nomenclature	लागू शुल्क Applicable Charges ₹ (Rs)
1	Energy Meter (Suspected) 1 Or 3 ph , as per DERC & Discoms of Delhi requirements , NO NABL (NOTE: 1.Software used for reading/downloading data also required 2.Interface cable 3.Procedure to open the ultra-sonic welded meter with demo)	1	Physical/Visual Observation: Condition of Meter box with respect to : i) Breakage/break-open on box, ii) Scratch mark on meter box iii)Hole on meter box hinges & meter box back side iv) Adhesive on hinges v)Cut on Meter box glands vi) Breakage/open of meter box glands vii) Meter box seals conditions:burnts/tempered/re-fixed viii)Any extra hole in meter box	3000.00
			Condition of Meter w.r.to : i) Seal status (Plastic & Hologram) ii) Push button/push button seal status iii) Scratch mark on terminal block & meter body iv) Meter ultrasonic welding status v) Meter body condition: re- fixed/tampered vi) Glue marks on terminal block & on meter body vii) external damage or hole/cut marks in the meter body vii)Terminal cover & screw status ix) burnt (External or internal burnt/Terminal burnt/Totally burnt) x) Burn marks on meter display LCD	6000.00
			xi) Any foreign material added externally (Patch work), gadget/ESD devices/EHV device xii) Meter bypassed xiii) Cavity formation in input terminal xiv) Abnormal burnt condition xv) Status of meter terminal block in case of completely/partially burnt meters	
			Condition of CT unit with respect to (in case of poly phase meter) : i) Patch Marks on resin cast of CT unit ii) Different colour shades on CT unit iii) S.No. Mismatched between nameplates on CT & CT Box iv) S.no. of Sticker refixed / repasted v) Phase indication stickers refixed / repasted vi)Embossing marks not proper vii) CT ration testing viii) Status & physical condition of PINS in Resin cast CT ix) Phase association of Resin cast current & Potential PINS	3000.00

			2 Functional Test : Following test shall be carried out on the meter on application of rated voltage & basic current: i) Display/LCD Status ii) Pulse LED Status iii) SI.No. & RTC (date & Time) status, if displayed on LCD panel	3000.00
			3 Accuracy Test: i) For Single Phase Meter : Single phase meter shall be tested at rated voltage & basic current : 1) At UPF under Normal mode (Phase CT) 2) At 0.5 Lag under Normal mode (Phase CT) 3) At UPF under Normal mode (Neutral CT) ii) For three Phase meter : Three phase meters shall be tested at rated voltage & basic current : 1) Accuracy at balanced load 2) Three phase voltage with single phase load (i.e Rph, Yph & Bph load individually)	3000.00 OR 3000.00
			Note: a) For LTCT Meter, meter will be tested with & without CT arrangement and HT meter will be tested without CT & PT arrangement. b) In case accuracy test could not be performed, reason should be mentioned.	
			4 Meter Data Download : i) The following observations during meter data download shall be reported: 1) Meter SI. No. 2) Meter RTC Status 3) KWH/KVAH reading 4) KW/KVA/MD 5) Event report recorded or downloaded ii) Downloaded data shall be checked for : 1) Daily energy history for previous 65 days 2) Status of MD history along with MD date for past six months (if MD history is not logged for any month then status of meter mains power availability to be reported) al power off etc. 3) Flags recorded in the data during last 12 months	3000.00

			5 Physical /Visual observation (internally after removing the cover of meter) : i) Meter internal condition: burnt/tampered ii) Status of PCB: burnt/tampered /scratch marks iii) Meter bypassed inside the meter iv) Cut marks v) Meter cut from back side vi) Glue marks found on the periphery of meter vii) Some foreign material(Resistor/Capacitor/Chip Resistor/Diode/PCB/Magnetic switch) found connected viii) Re-Soldering/rework found on PCB ix) Meter number plat found re-fixed x) Meter number sticker found changed xi) Path on PCB found shorted	3000.00
			Photo Print :Lab shall take photograph of internal parts of meter such that meter no. & any other abnormality as given above is captured.	500.00
			Witness:per person per day : 3rd part only	1500.00
			TERMS & Conditions agreed during GNCTD meeting held on 19.1.18:	
			1.ERTL(North) being an Independent Third party Test lab do not undertake any investigative or exploratory testing. The testing is performed only against well defined test requirements. Our NABL Accreditation is not valid for checking any tampering of Energy Meters.NO NABL Logo will be issued with Test Report.	
			2. Issued Test reports are not to be used for any legal purpose & shall not be produced in the court of law. In case of any dispute & matter being referred to court of law by any stakeholder , ERTL(N) shall not send their test engineer as witness in Hon"ble court.	
			3.Technical Officer of Public Grievance Cell may also be associated with ERTL(N) Test engineer for checking of suspected meter in lab & will jointly sign the test report	
			4.Distribution companies while sending the suspected meter for Testing in ERTL(N) will have to give specific parameters/issues to be tested/inspected of suspected energy meter.	
			5.Analysis of test Data which requires Manufacturer's support during the testing will not be undertaken.	
			6.Discom will deliver the suspected energy meter to be tested at the premises of ERTL(N) & will also collect the same after testing from the premises of ERTL(N).	
			7.Any person/organisation other than the government department will have to deposit witness charges + applicable Taxes as per STQC Test charges Policy.	
			8.All the test charges with witness charges if any will have to be deposited in advance along with the Filled in SRF (Service Request Form) in original & duly signed by the rep. of the indenting authority i.e distribution company in this case. Witnessing , if required shall be limited to consumers only.	

			<p>Covid Note:Due to Covid-19 spread, we keep the item in quarantine for 3-4 days before testing.</p> <p>PI fill attached SRF & send along with Bharatkosh receipt thru email only.</p> <p>Visit by appointment only</p>	
			Net Charges	29000.00
			GST (18%)	5220.00
			Applicable Total	34220.00

Annexure-II

Testing Charges in case of Suspected Tampered Meter		
S.No.	Applicable Test / Nomenclature	
1	Physical/Visual Observation:	
	Condition of Meter box with respect to :	
	(i) Breakage/break-open on box.	
	(ii) Scratch mark on meter box	
	(iii) Hole on meter box hinges & meter box back side	
	(iv) Adhesive on hinges	
	(v) Cut on meter box glands	
	(vi) Breakage/open of meter box glands	
	(vii) Meter box seals conditions: burnt/tempered / re-fixed	
	(viii) Any extra hole in meter box	
	Conditions of Meter w.r.t. :	
	i) Seal status (Plastic & Hologram)	
	ii) Push button/push button seal status	
	iii) Scratch mark on terminal block & meter body	
	iv) Meter ultrasonic welding status	
	v) Meter body condition: re-fixed/tampered	
	vi) Glue marks on terminal block & on meter body	
	vii) External damage or hole/cut marks in the meter body	
	viii) Terminal cover & screw status	
	ix) Burnt (external or internal burnt/terminal burnt/totally burnt)	
	x) Burn marks on meter display LCD	
	xi) Any foreign material added externally (Patch work), gadget/ESD devices/EHV device	
	xii) Meter bypassed	
	xiii) Cavity formation in input terminal	
	xiv) Abnormal burnt condition	
	xv) Status of meter terminal block in case of completely / partially burnt meters	
	Condition of CT unit with respect to (in case of poly phase meter) :	
	i) Patch Marks on resin cast of CT unit	
	ii) Different colour shades on CT unit	
	iii) S.No. mismatched between nameplates on CT & CT Box	
	iv) S.No. of sticker refixed/repasted	
	v) Phase indication stickers refixed/repasted	
	vi) Embossing marks not proper	
	vii) CT ratio testing	
	viii) Status & physical condition of PINS in Resin cast CT	
	ix) Phase association of Resin cast current & potential PINS	
2	Functional Test : Following test shall be carried out on the meter on application of rated voltage & basic current:	
	i) Display/LCD status	
	ii) Pulse LED status	
	iii) Sl.No. & RTC (date & time) status, if displayed on LCD panel	
3	Accuracy Test:	
	i) For Single Phase Meter:	
	Single phase meter shall be tested at rated voltage & basic current:	
	1) At UPF under Normal mode (Phase CT)	
	2) At 0.5 Lag under Normal mode (Phase CT)	
	3) At UPF under Normal mode (Neutral CT)	
	ii) For Three Phase meter:	
	Three phase meters shall be tested at rated voltage & basic current:	
	1) Accuracy at balanced load	

	2) Three phase voltage with single phase load (i.e. Rph, Yph & Bph load individually)	3000
	Note: a) For LTCT Meter, meter will be tested with & without CT arrangement and HT meter will be tested without CT & PT arrangement.	
	b) In case accuracy test could not be performed, reason should be mentioned.	
4	Meter Data Download:	
	i) The following observations during meter data download shall be reported:	
	1) Meter Sl. No.	
	2) Meter RTC status	
	3) KWH/KVAH reading	
	4) KW/KVA/MD	
	5) Event report recorded or downloaded	700
	ii) Download data shall be checked for :	
	1) Daily energy history for previous 65 days	
	2) Status of MD history along with MD data for past six months (if MD history is not logged for any month then status of meter mains power availability to be reported) at power off etc.	
	3) Flags recorded in the data during last 12 months	
5	Physical / Visual observation (internally after removing the cover of meter):	
	i) Meter internal condition: burnt/tampered	
	ii) Status of PCB: burnt/tampered/scratch marks	
	iii) Meter bypassed inside the meter	
	iv) Cut marks	
	v) Meter cut from back side	
	vi) Glue marks found on the periphery of meter	
	vii) Some foreign material (Resistor/capacitor/ Chip Resistor/Diode/PCB/Magnetic switch) found connected	1200
	viii) Re-Soldering/rework found on PCB	
	ix) Meter number plate found re-fixed	
	x) Meter number sticker found changed	
	xi) Path on PCB found shorted	
	Photo Print: Lab shall take photograph of internal parts of meter such that meter no. & any other abnormality as given above is captured.	300
	Witness: per person per day: 3rd part only	500
	GST Extra	

Annexure-III		
Testing Charges in case of Suspected Tampered Meter		
S.No.	Applicable Test / Nomenclature	
1	Physical/Visual Observation:	
	Condition of Meter box with respect to :	
	(i) Breakage/break-open on box.	200
	(ii) Scratch mark on meter box	
	(iii) Hole on meter box hinges & meter box back side	
	(iv) Adhesive on hinges	
	(v) Cut on meter box glands	
	(vi) Breakage/open of meter box glands	
	(vii) Meter box seals conditions: burnt/tempered / re-fixed	
	(viii) Any extra hole in meter box	
	Conditions of Meter w.r.t. :	
	i) Seal status (Plastic & Hologram)	250
	ii) Push button/push button seal status	
	iii) Scratch mark on terminal block & meter body	
	iv) Meter ultrasonic welding status	
	v) Meter body condition: re-fixed/tampered	
	vi) Glue marks on terminal block & on meter body	
	vii) External damage or hole/cut marks in the meter body	
	viii) Terminal cover & screw status	
	ix) Burnt (external or internal burnt/terminal burnt/totally burnt)	
	x) Burn marks on meter display LCD	
	xi) Any foreign material added externally (Patch work), gadget/ESD devices/EHV device	
	xii) Meter bypassed	
	xiii) Cavity formation in input terminal	
	xiv) Abnormal burnt condition	
	xv) Status of meter terminal block in case of completely / partially burnt meters	
	Condition of CT unit with respect to (in case of poly phase meter)	
	i) Patch Marks on resin cast of CT unit	400
	ii) Different colour shades on CT unit	
	iii) S.No. mismatched between nameplates on CT & CT Box	
	iv) S.No. of sticker refixed/repasted	
	v) Phase indication stickers refixed/repasted	
	vi) Embossing marks not proper	
	vii) CT ratio testing	
	viii) Status & physical condition of PINS in Resin cast CT	
	ix) Phase association of Resin cast current & potential PINS	
2	Functional Test : Following test shall be carried out on the meter on application of rated	500
	i) Display/LCD status	
	ii) Pulse LED status	
	iii) SI.No. & RTC (date & time) status, if displayed on LCD	
3	Accuracy Test:	
	i) For Single Phase Meter:	1650
	Single phase meter shall be tested at rated voltage & basic	
	1) At UPF under Normal mode (Phase CT)	
	2) At 0.5 Lag under Normal mode (Phase CT)	
	3) At UPF under Normal mode (Neutral CT)	

	ii) For Three Phase meter:	
	Three phase meters shall be tested at rated voltage & basic	
	1) Accuracy at balanced load	
	2) Three phase voltage with single phase load (i.e. Rph, Yph & Bph load individually)	
	Note: a) For LTCT Meter, meter will be tested with & without CT arrangement and HT meter will be tested without CT & PT arrangement.	3500
	b) In case accuracy test could not be performed, reason should be mentioned.	
	4 Meter Data Download:	
	i) The following observations during meter data download shall be reported:	
	1) Meter Sl. No.	
	2) Meter RTC status	
	3) KWH/KVAH reading	
	4) KW/KVA/MD	
	5) Event report recorded or downloaded	
		850
	ii) Download data shall be checked for :	
	1) Daily energy history for previous 65 days	
	2) Status of MD history along with MD data for past six months (if MD history is not logged for any month then status of meter mains power availability to be reported) at power off etc.	
	3) Flags recorded in the data during last 12 months	
	5 Physical / Visual observation (internally after removing the cover of meter):	
	i) Meter internal condition: burnt/tampered	
	ii) Status of PCB: burnt/tampered/scratch marks	
	iii) Meter bypassed inside the meter	
	iv) Cut marks	
	v) Meter cut from back side	
	vi) Glue marks found on the periphery of meter	
	vii) Some foreign material (Resistor/capacitor/ Chip Resistor/Diode/PCB/Magnetic switch) found connected	
	viii) Re-Soldering/rework found on PCB	
	ix) Meter number plate found re-fixed	
	x) Meter number sticker found changed	
	xi) Path on PCB found shorted	1400
	Photo Print: Lab shall take photograph of internal parts of meter such that meter no. & any other abnormality as given above is captured.	500
	Witness: per person per day: 3rd part only	700
	GST Extra	