

TAMILNADU GENERATION & DISTRIBUTION CORPORATION LTD

Research & Development – TANGEDCO - R&D – Establishing Three Nos. NABL accredited Labs for testing ABT meters, CT & PT, one Stationary lab at Chennai and two mobile labs one each at Tirunelveli and Udumalpet –Fixing of rates for Testing/Calibration of meters , calibration of reference meters and other meters- Administrative approval – Accorded.

(Technical Branch)

(Per) CMD TANGEDCO No.202

Dated 22, September 2022,
Subakirudhu Varudam, Purattaasi-05,
Thiruvalluvar Aandu-2053.

READ: CMD/TANGEDCO's note approval dt. 19.09.2022.

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PROCEEDINGS:

After careful consideration of the proposal submitted by Chief Engineer/ DSM, Industrial Co-ordination, R&D, Administrative approval is hereby accorded for third party testing/ calibration of meters , calibration of reference meters and other meters under chargeable basis at NABL accredited TANGEDCO labs at Chennai, Thirunelveli and Udumalpet as follows.

I.TESTING /CALIBRATION CHARGES FOR ABT METERS

1. Testing Charges for testing HT AC Static meters with ABT compliance.

Sl. No.:	Tests Included	Charges in Rs.
1.	<u>Bidirectional Meter</u> Accuracy test (4 modes) No load test Starting current test Meter Constant test Verification of ABT features	20,000
	<u>Unidirectional Meter</u> Accuracy test (2 modes) No load test Starting current test Meter Constant test Verification of ABT features	14,000

2. Calibration Charges for Periodical calibration of HT AC Static meters with ABT compliance.

Sl. No.:	Tests Included	Charges in Rs.
1.	Bidirectional Meter Accuracy test and Verification of ABT features. (4 modes)	20,000
	Unidirectional Meter Accuracy test and Verification of ABT features. (2 modes)	14,000

Under I.1 and I.2 the rates for bulk testing/calibration of ABT meters if single payment made at a time are as follows.

No. of meters	Discount in %	Charges in Rs./meter	
		Bi-Directional	Uni-Directional
1-3 Nos.	Nil	20,000	14,000
4-5 Nos.	5%	19,000	13,300
6-9 Nos.	10%	18,000	12,600
≥10 Nos	20%	16,000	11,200

II. RATES FOR TESTING OF ENERGY METERS.

A. Testing of AC static Single phase meters of Class 1 and 2 –As per IS 13779:2020 and 16444:2015

Sl. No.	Name of the Test	No. of Test points	Charges in Rs.	Remarks
1	No load test	1	1,500	Fixed
2	Meter constant test	1	1,500	Fixed
3	Starting current test	1	1,500	Fixed
4	Limits of error test	16	4,000	Minimum. For each additional point Rs.200/-
5	Interpretation of test results		500	
6	Repeatability of error test	12	2,000	1 mode
7	Test of Influence Quantities-Voltage variation	6	1,500	Minimum. For each additional point Rs.200/-
8	Test of Influence Quantities-Frequency variation	6	1,500	Minimum. For each additional point Rs.200/-
9	Test of Influence Quantities-10% of 3rd harmonics in current	3	1,500	Minimum. For each additional point Rs.200/-
10	Influence of supply voltage	3	1,500	Fixed

B. Testing of AC static Three phase meters of Class 1 and 2 –As per IS 13779:2020 and 16444:2015

Sl. No.	Name of the Test	No. of Test points	Charges in Rs.	Remarks
1	No load test	1	1,500	Fixed
2	Meter constant test	1	1,500	Fixed
3	Starting current test	1	1,500	Fixed
4	Limits of error test (Balanced load)	16	4,000	Minimum. For each additional point Rs.200/-
	Unbalanced load	9	2,000	Minimum. For each additional point Rs.200/-
5	Interpretation of test results		5,00	Fixed
6	Repeatability of error test	12	2,000	Fixed
7	Test of Influence Quantities- Voltage variation	6	1,500	Minimum. For each additional point Rs.200/-
8	Test of Influence Quantities- Frequency variation	6	1,500	Minimum. For each additional point Rs.200/-
9	Test of Influence Quantities-10% of 3rd harmonics in current	3	1,500	Minimum. For each additional point Rs.200/-
10	Test of Influence Quantities- Reversed phase sequence	2	1,500	Fixed
11	Test of Influence Quantities- Voltage Unbalance	8	1,600	Fixed
12	Influence of supply voltage	3	1,500	Fixed

C. Testing of Three phase meters of Class 0.2S,0.5S and 1S –As per IS14697:2021 and 16444:2017 and with ABT compliance.

Sl. No.	Name of the Test	No. of Test points	Charges in Rs.	Remarks
1	No load test	1	1,500	Fixed
2	Meter constant test	1	1,500	Fixed
3	Starting current test	1	1,500	Fixed

4	Limits of error test (Balanced load)	19	4,000	Minimum. For each additional point Rs.200/-
	Unbalanced load	9	2,000	Minimum. For each additional point Rs.200/-
5	Interpretation of test results		500	Fixed
6	Repeatability of error test	12	2,000	Fixed
7	Test of Influence Quantities- Voltage variation	18	3,600	Minimum. For each additional point Rs.200/-
8	Test of Influence Quantities- Frequency variation	18	3,600	Minimum. For each additional point Rs.200/-
9	Test of Influence Quantities-10% of 3rd harmonics in current	9	1,800	Minimum. For each additional point Rs.200/-
10	Test of Influence Quantities- Reversed phase sequence	2	1,500	Fixed
11	Test of Influence Quantities- Voltage Unbalance	8	1,600	Fixed
12	Influence of supply voltage	3	1,500	Fixed
13	Verification of Reactive Energy Reading for voltage High and Low in ABT compliance meter	1	1,000	Fixed
14	Verification of Average Frequency in ABT compliance meter	1	1,000	Fixed

Note: All the rates mentioned above under II.A, II.B & II.C are for 1 mode wherever applicable.

III.RATES FOR CALIBRATION OF ENERGY METERS AND REFERENCE METERS UNDER CALIBRATION SCOPE

For calibration of energy meters the charges are same as that for Testing-Limits of error under balanced condition.

A. Calibration of Reference meters of Class 0.2 & 0.5.

Sl. No.	Equipment	Charges in Rs.
1.	Reference meters of Class 0.2 & 0.5	Minimum Rs.16,000/- upto 4 modes (upto 100 points) and Rs.4,000/mode for additional mode or Rs.200/point for additional points.

B. Calibration of Reference meters of Class 0.05.

Sl. No.	No. of points	Charges in Rs.
1.	Total points \leq 100 points	Fixed charges Rs.5,000/-and Rs.200/point
	Total points $>$ 100	Rs.20,000/- upto 100 points and Rs.200/point for additional points

C. Calibration of Reference meters of Class 0.02

Sl. No.	No. of points	Charges in Rs.
1.	Total points \leq 50 points	Fixed charges Rs.15,000/-
	Total points $>$ 50 and \leq 100 points	Fixed charges Rs.20,000/-
	Total points $>$ 100	Rs.20,000/- upto 100 points From 101 point, Rs.200/-point for additional points.

IV. TRANSPORTATION CHARGES FOR MOBILE LABS

Sl. No.	Kilometres	Additional Charges in Rs./meter
1.	At Head Quarters (At Lab location)	Nil
2.	Up to 100 Km	Rs.2,500/-
3.	Every Additional 50 km	Rs.1,000/-
4.	In the absence of Three phase supply at testing site for testing and for testing using Alternator.	Rs.500/- Per hour

Above mentioned charges from I to IV are exclusive of GST. Prevailing 18% GST subject to revision as per GO is applicable for all the above charges.

(BY ORDER OF THE CMD/TANGEDCO)

S.E.S.Syed Ahamed

Chief Engineer,
DSM, Industrial Co-ordination, R&D.

To

- The Chief Engineer/DSM, Industrial Co-ordination, R&D/Chennai-2.
- Copy submitted to Director /Generation/TANGEDCO/Chennai-2.
- Copy submitted to Director /Distribution/TANGEDCO/Chennai-2.
- Copy submitted to Director /Finance/TANGEDCO/Chennai-2.
- Copy to the Chief Financial Controller/General/ TANGEDCO /Chennai-2.
- Copy to the Superintending Engineer/R&D/Chennai-2.
- Copy to the Executive Assistant/Director (Generation)/ TANGEDCO /Chennai-2.
- Copy to Executive Engineer/TANGEDCO Testing Laboratory, Chennai-2.
- Copy to Executive Engineer/TANGEDCO Mobile Testing Laboratory, Thirunelveli.
- Copy to the Assistant Personnel Officer/Tamil Development for Publication in Bulletin/ TANGEDCO, Chennai-2.
- Copy to B.P. Section, Administrative Branch, Chennai-2.
- Copy to SE / Computer Centre – for website update.

TRUECOPY // FORWARDED// BY ORDER

B. K. Srinivasan 23/09/22
EXECUTIVE ENGINEER/NABL
TANGEDCO Testing Laboratory,
Chennai-02

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