This Inspection Report has been prepared on the basis of information provided by Executive Engineer, Electricity Test Division, Almora. The office of the Accountant General (Audit) Uttarakhand, Dehradun disclaims any responsibility for any misinformation, non submission or submission of incomplete records.

Audit inspection of accounting records of Executive Engineer, Electricity Test Division, Almora for the period from April 2015 to March 2016 was carried out in exercise of the power conferred by section 19 of the C&AG, DPC Act 1971 read with section 619(3) (b) of the Companies Act 1956 & section 143 of Companies Act 2013. Audit inspection was conducted by Shri Khub Chand, Assistant Audit Officer, under the supervision of Shri B.C. Suyal, Sr. Audit Officer during the period from 29.11.2016 to 03.12.2016.

<u>Part-I</u>

Introduction:- The last audit of this unit was conducted by Shri Ghanshyam Das Pal, Asst. Audit Officer, and Shri Sharad Chaudhary, Auditor under the supervision of Shri Sohrab Husain, Sr. Audit Officer, in which accounting records for the period October 2010 to March 2015 were examined.

(i) **Functions and geographical jurisdiction of the unit:**

The main function of Electricity Test Division (ETD) is to test the technical parameters and accuracy of Single Phase (upto 4kw), three Phase electronic meters (5kw to 10 kw) and above 10 kw electronic meters prior to the installation of these meters at the connection of the consumers. After testing, these meters are either issued to the distribution divisions for installation or installed at the premises of the consumers by the ETD.

(ii) Auditing methodology and scope of audit:

Electricity Test Division, Almora was covered in the audit. Inspection reports of all independent Drawing and Disbursing officers are being issued separately. This inspection report is based on findings of audit. December 2015 month having highest expenditure was selected for detailed examination.

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Year	Revenue	Expenditure	Profit
2015-16	N.A.	13189472.00	N.A.

(To the extent this information is available & applicable)

(iv) Organisation structure of the unit and reporting lines.

The Electricity Test Division, Almora is an electricity Test unit of UPCL which is officiated by the Executive Engineer.

<u>Part IIA</u>

.....Nil.....

<u>Part IIB</u>

Para 1: Recurring revenue loss due to non repair/replacement of defective meters.

The main function of Uttarakhand Power Corporation Limited (UPCL) is to receive the energy and distribute it among the different categories of the consumers in such a way that the loss of energy in distribution should not exceed 15 *percent* as fixed by UERC. One of major reasons for abnormal loss of energy in distribution as identified by the UERC, is defective meters. Because the consumers, who have defective meters, may misuse the electricity. In order to install the meters on new connections of the consumers and replace/repair the defective meters of the consumers, the Electricity Test Divisions (ETD) have been established. Thus main function of ETD is to install the meters on new connections of the consumer's immediately after sanction of the connection and to repair/replace the defective meters within 15 days from the date of testing of the meters. In this regard Uttarakhand Regulatory Electricity Commission (UERC) has also made a provision in rate schedule (RTS) issued by it from time to time. Para 4 regarding Billing in Defective Meter (ADF/IDF) and Defective Reading (RDF) of general conditions of RTS effective from 1.4.2015 and was in force till 31.3.2016 *inter-alia* provided as under:

"In case of defective meter the consumer shall be billed on the basis of average consumption of the past three billing cycles immediately preceding the date of the meter being found or being reported defective (as per Regulation 3.2 (1) of Electricity Supply Code). These charges shall be leviable for a maximum period of three months or two billing cycle in case of bimonthly billing only during which time the licensee is required to replace the defective meters. Thereafter, the licensee shall not be entitled to raise any bill without correct meters".

Scrutiny of relevant records of the division revealed that total defective meters which were 15226 in March 2015 were reduced to 6968 in March 2016, however, number of defective meter were further increased to 13278 meters in September 2016 as detailed below:

Sl. No.	Name of Division	Total no of IDF	No. Of IDF ≥ 5	No. Of IDF ≥ 10	No. Of IDF ≥ 20	No. Of IDF \geq 30	No. Of IDF ≥ 40	No. Of IDF >
110.		of IDF	$\frac{101}{\text{Cycle}} \ge 3$	Cycle	Cycle	Cycle	Dr ≥ 40 Cycle	50
			upto 10	upto 20	upto 30	upto 40	upto 50	Cycle
1	EDD Almora	3481	1812	904	417	310	8	30
2	EDD Ranikhet	3928	1201	2097	350	271	4	5
3	EDD Bagheshwar	5869	3387	711	929	810	17	15
	TOTAL	13278	6400	3712	1696	1391	29	50

Above revealed that:

- i. The work of replacement of defective meters which was comparatively fast during 2015-16 slowed down thereafter.
- ii. Further scrutiny revealed that these meters were defective for a period between 5 cycle (10 months) to 50 cycles (100 months) whereas as per direction of the UERC the defective meters should have been replaced in maximum two billing cycles (4 months). The non-repair/replacement of defective meters within 3 months is also a violation of UERC's order.
- iii. It was also seen in the audit that loss of energy in distribution Divisions which were under the jurisdiction of the Test Division, Almora as on 31.3.2016 ranged between 17.531 *percent* to 28.92 *percent*. Thus in order to reduce the line loss there is urgent need to repair/replace all the defective meters in question.

Management in reply stated that due to shortages of the staff, replacement of meters could not be carried out fast and now tender has been called for the same and awarding of work is in progress.

Reply is not acceptable as there was inordinate delay in replacement of defective meters.

Para 2: Accuracy of the electronic meter has not been tested due to non availability of Test Bench.

The main function of electricity test division (ETD) is to test the technical parameters and accuracy of Single Phase (upto 4kw), three Phase electronic meters (5kw to 10 kw) and above 10 kw electronic meters prior to the installation of these meters at the connection of the consumers. After testing, these meters are either issued to the distribution divisions for installation or installed at the premises of the consumers by the ETD. ETD also test the meter which are installed at Hydro power projects. Besides, the ETD also replaces/repairs the defective meters installed at the connections of the consumers.

In order to test the above meters there are two Test Laboratories of the division which are situated at Almora and Ranikhet. To check the technical parameters and accuracy of the electronic meters Test Bench is required for each Lab. However, there is no Test Bench in the Test Laboratories. While justifying the need for installation of test bench, the then A.E.(Meter) in his letter dated January 2010 stated that as per UERC rules consumers having load more than 15 KW is not read manually. Its filling and reading is only by MRI (KCC Billing) in which not only KWH, various parameters such as KVARH,KVAH, temper, fraud detection & logging, scroll & time synchronization, Annunciation, direction indicator, phase status etc. were calibrated: in different time slot with load survey. These parameters are highly sensitive, precise and delicate. For testing of new Electronic Meters on these standard calibrations is possible by only having modern Highly Technical Facilities Test Bench. Further as per letter sent (March 2011) to the DGM, Electricity Distribution Circle by the Division, in the absence of test bench, compliance of UERC instructions of testing of consumer's meters in every 2 and 5 years was also not possible.

Thus in the absence of Test Bench, the only basic tests of meter are being carried out by these laboratories to assess that meter is in working condition or not. Audit noticed that the division is continuously pursuing the matter for installation of test beds in the ETD for last 6 year, however, the test beds are yet to be installed.

Facts may please be confirmed along with difficulties/ problems being faced by the division due to non-installation of the test beds.

Para 3 : Higher time taken by suppliers in replacement of defective meters.

Scrutiny of records relating to defective electronic meters received during the warranty period, handing over of defective meters to the supply contractor for free replacement and replacement received back revealed that comparatively higher time was being taken by the supplier in replacement of meters as detailed below-

Lab	Date of	Issued		Date of	Received				
Name	Make	Issue	5-30	10-60	11 kv Tvm	Receipt	5-30	10-60	11 kv Tvm
	L&T	27.03.2015	50	1	2	23.06.2016	36	-	-
ETL Almora	Lai	28.06.2016	116	1	0	-	-	-	-
Annora	Genus	18.06.2016	66	19	0	23.06.2016	7	19	-
ETL	L&T	28.06.2016	38	12	0	-	-	-	-
Ranikhet	Genus	-	-	-	-	-	-	-	-

There are two suppliers of electronic meters viz. M/s L&T and M/s Genus.

Against the 53 (50+01+02) defective meters handed over (at Almora) to the supplier (M/s L&T) on 27 March 2015 replacement of only 36 meters was received on 23 June 2016 after lapse of 15 months and replacement of balance 17 defective meters is yet to be received despite lapse of 20 months. Similarly, replacement of another 154 (116 ETL Almora and 38 ETL Ranikhet) of defective meters (handed over on 28 June 2016) is yet to be received from M/s L&T. despite lapse of 5 months (October 2016).

Similarly, against the 85 defective meters (66+19) handed over to M/s Genus on 18 June 2016, replacement of only 26 meters was received and replacement of balance 59 meters was yet to be received despite lapse of more than 5 months (October 2016).

Information relating to the time period within which the suppliers are supposed to replace the defective meters as per contractual terms was not available in the ETD. Since as per UERC's directions defective meters are to be replaced maximum in two billing cycle (4 months), replacement time of more than 4 months being taken by the suppliers is comparatively higher side.

Facts may please be confirmed along with Management's reply.

Para 4 : Delay in handing over of defective meters to the supplier for replacement.

Year wise details of defective meters received and defective meters handed over to the supplier for replacement revealed that instead of handing over the defective meters in every four or six months, defective meters are being handed over only once in year as detailed below:

Lab Name	Year	Received during the year	Handed over to the Supplier	Balance
	2014-15	52	50 (Dt. 27.03.15)	2
ETL	2015-16	97	0	99
ALMORA	Jun-16	40	116 (Dt. 28.06.16)	23
	Spet -16	35	0	58
	2014-15	11	0	11
ETL	2015-16	26	0	37
RANIKHET	Jun-16	1	38 (Dt. 28.06.16)	0
	Sep-16	10	0	10

Defective L & T Meters Details

Defective	Genus Meters	Detail
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Lab Name	Year	Received during the year	Handed over to the Supplier	Balance
	2014-15	26	0	26
ETL	2015-16	32	0	58
ALMORA	Jun-16	11	66 (Dt. 18.06.16)	3
	Spet -16	12	0	15
ETL	2014-15	31	0	31
RANIKHET	2015-16	7	0	38
KANIKIEI	Sep-16	5	0	43

Above revealed that in ETL Almora, after handing over defective meters in March 2015 next lot of defective meters was handed over to M/s L&T in June 2016 *i.e.* after a gap of 15 months. Whereas in Ranikhet, ETL 11 defective meters were received in 2014-15 and 26 defective meters in 2015-16 but the defective meters (38 Meters) were handed over in June 2016.

Similarly, 26 defective meters of Genus make were received during 2014-15 and 32 defective were received in 2015-16 in Almora ETL, however, defective meters were handed over in June 2016 only. Whereas in Ranikhet, ETL 31 defective meters of Genus make of 2014-15, 7 defective meters of 2015-16 are yet to be handed over to the supplier for replacement.

Above indicates that normally higher time is being taken for handing over of defective meters for replacement of meters by the ETD, Almora.

Facts and figures may please be confirmed along with contractual terms within which the suppliers are supposed to collect the defective meters for replacement.

<u>Part III</u>

(In this part, detail of unsettled paras of previous inspection reports to be reported in below given format.)

Detail of unsettled paras of previous inspection reports:-

Sl. No.	AIR for the Period	Part-II A	Part-II B	Total
1.	04/2003 to 03/2006		01	01
2.	10/2010 to 03/2016	01	01 to 03	04

Compliance report of unsettled paras of previous inspection report-

Inspection report period and number	Para No. Audit observation	Compliance report	Comments of Audit Party	Remarks

<u>Part IV</u>

Best practices of the unit

-----NIL-----

<u>Part V</u>

Acknowledgement

- 1. Office of The Accountant General (Audit) Uttarakhand, Dehradun expresses gratitude towards Executive Engineer, Electricity Test Division, Almora and their officers and employees for promptly providing desired documents and information including infrastructure related co-operation during the course of audit.
- 2. Though following documents were not produced during audit:

NIL

3. Persistent irregularities.

NIL

4. The following officers held the charge of head of the office during the audit period:

Sl No	Name	Designation	Period
1	Shri. Sanjay Kumar	Executive Engineer	07.03.2015 to
1	Siiri. Sailjay Kuillai	Executive Engineer	19.06.2015
2	Shri Kanhaiya Ji Mishra	Executive Engineer	19-06-2015 to Till
2	Sini Kamaiya Ji Wiisina	Executive Engineer	Date of audit
3	Shri. Kamlesh Tiwari	Assistant Assounts	26-08-2014 to 31-
5	Siiri. Kannesii Tiwari	Assistant Accountant	08-2016
4	Shri Pramod Bisht	Assistant Accountant	01-09-2016 to Till
4		Assistant Accountant	Date of audit

Minor and operational irregularities which could not be resolved at the time of audit and have been included in Temporary Audit Note with the request that the compliance report on the same may be sent to Sr. DAG/DAG within one month of receipt of the letter.

> Sr. AO- B. C. Suyal Audit Party No- III Camp- ETD (UPCL) Almora