Audit Inspection Report on the transaction audit of Executive Engineer Electricity Distribution Division, Roorkee (Rural), UPCL 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 143 of the Companies Act 2013. The transaction audit was conducted by Shri Vikas Dhyani, AAO and Shri Sunil Verma, Auditor under the partial supervision of Shri Mukesh Kumar, Sr. Audit Officer during the period from 06.06.2016 to 13.06.2016.

"The Audit Inspection Report has been prepared on the basis of records /data/ information made available by the Executive Engineer, Roorkee (Rural). The office of the Accountant General (Audit) Uttarakhand, Dehradun will not be responsible for any incorrect information made available"

PART-I-A

A. INTRODUCTORY

The last audit of the division was conducted by Shri Vikas Dhyani AAO and Shri Sunil Verma, Auditor under the partial supervision of Shri Mukesh Kumar, Audit Officer covering the period upto March 2015. During the present audit, accounts and records for the period from April 2015 to March 2016 were generally examined.

The following officers held the charge of the division since last audit to date.

Executive Engineer:

Shri Anil Verma, Executive Engineer since last audit to 22.012.2015

Shri A. K. Mishra, Executive Engineer since 23.05.2015 to 31.03.2016

Divisional Accountant

Shri Sanjeev Bansal, DAsince last audit to date.

(B) Outstanding Paras of old AIR

Sl. No.	Period	Part II-A	Part II-B
1.	04/2010 to 09/2011	01	3,4
2.	10/2011 to 03/2013		1 to 7
3.	04/2013 to 03/2014	1,2	1 to 5
4.	04/2014 to 03/2015		1 to 5

(C) PERSISTENT IRREGULARITIES -----Nil-----

(D) RECORDS NOT PUT UP

-----Nil-----

Part-II-A

Para 1: Non recovery of additional Security amounting to `3.48 crore

As per para 2.2.1 of UERC Regulations 2007, security of the consumers should be assessesed in end of each financial year in respect of those consumers who have been given the connection for supply of electricity, the security should be equal to average consumption of two month bill of the financial year. In case security reassessed exceeds the amount of security already deposited, the differential amount will be demanded as additional security by giving a notice to the consumers within the 45 days. In case the additional security is not deposited within the stipulated period, the electricity supply of such consumers can be disconnected.

Scrutiny of billing files and other related records of the large & heavy consumers. It revealed that in case of 50 consumers, the average two months bills of consumers exceeded the amount of security already deposited which worked out to `3.48 crore. As per circular in question, amount of this additional security was required to be recovered within 45 days. This amount should have been recovered from consumers which were not done.

Management stated in its reply that instructions to sub divisional officers and concerned employees were being issued for realization of the additional security. The updated status of the recovery of additional security would be intimated to audit. The reply is not convincing as the amount of additional security should have been recovered within 45 days i.e. upto 15th May 2016 but a huge amount was yet to be realized till date. The progress of recovery would be watched in next audit.

Part-II-B

Para 1: Inadequate operation & maintenance of IT implementation of Part A of R-APDRP scheme

Part A of R-APDRP scheme includes Metering of Distribution Transformers and Feeders, and Automatic Data Logging for all Distribution Transformers and Feeders. It will also include adoption of IT applications for meter reading, billing & collection; energy accounting and auditing. As per records of damaged/bypass DTR metering system installed in R-APDRP town areas namely Roorkee, Manglore and Landhora the following discrepencies were observed:

- In Roorkee town a total no. 221 meters/ modems were installed against which only 125 (56.56 *per cent*) meters/modems were working /communicative. Remaining 96 (43.48 *per cent*) were not working/non-communicative.
- In Manglore town a total no. 56 meters/ modems were installed against which only 12 (21.43 *per cent*) meters/modems were working /communicative. Remaining 44 (78.57 *per cent*) were not working/non-communicative.
- In Landhora town a total no. 38 meters/ modems were installed against which only 16 (42.11 *per cent*) meters/modems were working /communicative. Remaining 22 (57.89 *per cent*) were not working/non-communicative.

The instances of non-communicative meters/modems ranged between 43.48 to 78.57 *per cent* which shows that the purpose of recording and monitoring of energy inflow and outflow to reduce AT& C losses has been completely defeated.

The division stated in its reply that the failure in metering and communication system in the DTRs was due to fault in modems, sim in modems, meters and wiring connected with DTRs. In the event of fault in meters and wiring, the same was repaired time to time by the Test division, Kashipur. Whereas, in the case of faults in modem and its sim, the problem was resolved by the representative of external agency (authorized by UPCL Headquarters through the contract under R-APDRP) who visits once in a interval of two to three months. The most common reason of failure in DTR Metering is fault in modem and its sim. In order to resolve this problem, division made request to higher authorities to depute the representative of external agency at local level.

The reply is not convincing as failure in DTR metering in these three towns ranged between 25.35 to 47.00 *per cent* which shows that one of the basic objective of implementation of Part A of R-APDRP scheme, to record accurate inflow/outflow of energy, to reduce AT& C losses was defeated. Further, the most common reason for this failure is fault in modem and its sim which can only be repaired/resolved by the representative of the external agency which visits after a long time lag. This shows that UPCL itself is not competent enough and has not setup adequate system to resolve these faults which is too much time taking and results in increasing number of failures in DTR metering.

Para 2: Deficiencies in IT implementations regarding Revenue collection

- In order to release new connection to consumers, Junior Engineer prepares packages and submits the same to the concerned Sub-divisional Officer (SDO). After making necessary amendments, the SDO submits the same to the concerned division. In the division, firstly the draftsman checks the estimate and thereafter the cost of package was calculated and sent to the Executive Engineer for approval. It was noticed that after the implementation of IT application, now the SDO directly sends the estimate to the ID of Executive Engineer and after due approval, the same was sent to the draftsman for preparation of package only. Now, draftsman cannot do any correction in the estimate as it was not editable and already approved by the executive engineer. Hence, the checking and correction of the estimate by draftsman at division level is missing.
- The R-APDRP system shows the pendency of IDF connections at real time. The responsibility for replacing these meters rests with both Electricity Test division and Distribution division concerned. Scrutiny of the records revealed that in Bhagwanpur town area, total number of 2882 IDF meters were pending for replacement. However, out of which 511 meters were already replaced by Test division. It was further observed that pendency of an IDF meter would not be modified in the system until the bill revision of particular connection was made by Distribution division concerned. Hence, the system does not clearly identify that from whose end (whether test division or distribution division concerned) the work of replacing IDF meters is pending.

Division accepted the audit observation and stated in its reply that it is a system related error which can be rectified at headquarters level. However, the fact remains that due to this error fictitious IDF consumers reflect in the system and consumer is billed on assessment basis instead of actual consumption.

Para 3: Deficiencies in IT implementations regarding Revenue collection

- It was noticed that there is no arrangement in master data of R-APDRP software to
 highlight the updating of Know your consumer (KYC) & details of consumer status.

 UPCL releases power connection to BPL consumers at minimum tariff (subsidized
 rate per unit). However, once the connection was released to a BPL consumer
 initially, after a specified period, the system never alerts about the requirement of
 updating of status of consumer whether the consumer has been upgraded to APL or
 not.
- As per rate tariff of UPCL approved by UERC, If consumers installs and uses solar water heating system, rebate of ` 100 per month for each 100 litre capacity of the system or actual bill for that month whichever is lower shall be given subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system, which the licensee shall be free to verify from time to time. If any such claim found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover the total rebate allowed to the consumer with 100 % penalty and debars him from availing such rebate for next 12 months. It was noticed that the system never gives alerts to the licensee (UPCL) for verification of the water heating system and updation of its status periodically system.

Division accepted the audit observation and stated in its reply that there is no provision for such type of alerts in the IT system. In order to resolve these issues, the matter were being discussed with the higher authorities and request to Hqrs. for the necessary amendments in the system, if possible, would be made. This shows that IT system was not adequate for verification of consumers.

Para 4: Deficiencies in IT implementations

- IT implementations includes IT applications for meter reading, billing & collection, energy accounting and auditing. Scrutiny of Consumer meter reading status ledger as on 06.06.2016, it was found that out of total 826 commercial consumers Automatic Meter Reading of only 315 consumers (38.14 *per cent*) were being done and meter reading of remaining 511 consumers (61.86 *per cent*) were done manually. This shows the poor implementation of IT applications in meter reading.
- It was also observed that the network connectivity in the division was very
 poor. The poor speed was not only hampering the regular work of division
 but also affecting the billing collection efficiency and other routine work of
 the division. The instances of frequent breakdown in the network
 connectivity were also noticed.

Division accepted the audit observation in respect of AMR Reading and network connectivity and stated in its reply that there were frequent interruptions in network connectivity which were resolved by the IT section Dehradun as and when informed telephonically and through E-mail. This shows the poor implementation of IT as proper connectivity is essential to make a system IT enabled. Hence, management should take appropriate action to resolve these issues.

PART III

-----NIL-----

Sr. Audit Officer/ES-I