Audit Inspection Report on the transaction audit of Executive Engineer Electricity Distribution Division, Kashipur, 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, Ar. under the partial supervision of Shri Mukesh Kumar, Audit Officer during the period from 30.05.2016 to 04.06.2016.

"The Audit Inspection Report has been prepared on the basis of records /data/ information made available by the Executive Engineer, Kashipur. 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 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 S. S. Usman, Executive Engineer since last audit to 22.05.2015

Shri Vivek Kandpal, Executive Engineer since 22.05.2015 to till date

Divisional Accountant

Shri Ashok Kumar Joshi, DAW since last audit to 30.06.2015.

Shri. Prakash Ram Beri, DAW since 30.06.2015 to 31.03.2016.

Shri. Prakash Ram Beri, DAR since last audit to date.

(B) Outstanding Paras of old AIRs

Sl. No.	Period	Part II-A	Part II-B
1.	04/1991 to 03/1992	4	--
2.	04/1992 to 03/1994	2	--
3.	04/1996 to 03/1998	2	1, 2
4.	04/1998 to 02/1999	--	1,2,4
5.	03/1999 to 02/2000	1 to 4	1 to 7
6.	03/2000 to 11/2000	1, 2	1 to 4

7.	12/2000 to 12/2001	1, 2	1 to 5
8.	01/2002 to 12/2002	1, 2	1 to 7
9.	1/2003 to 12/2003	1 to 3	--
10.	01/2004 to 12/2005	1, 2	1 to 5
11.	01/2006 to 12/2006	--	1 to 6
12.	01/2007 to 12/2008	1, 2	1 to 6
13.	01/2008 to 12/20098	1, 2	1 to 4
14.	10/2009 to 03/2011	1 to 4	1 to 7
15.	04/2011 to 03/2013	1 to 2	1 to 3
16.	04/2013 to 03/2014	1 to 6	1 to 4
17.	04/2014 to 03/2015	1 to 3	1 to 4

(C) PERSISTENT IRREGULARITIES

----------Nil----------

(D) RECORDS NOT PUT UP

---------Nil---------

Part-II-A

Para 1: Non recovery of additional Security amounting to ` 6.94 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, 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 ` 6.94 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 was 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.

The matter is brought to the notice of the management.

Part-IIB

Para1: Blockade of funds due to excess damage of transformers amounting to ` 1.57 crore

As per internal norms, prescribed by UPCL, the number of transformers damaged in a year should not be more than three per cent (3%) of the installed transformers. To minimize the damages, following preventive steps were recommended by UPCL.

(i) Carrying out detailed monitoring including ascertaining reasons for damages.
(ii) Maintenance of history card for each transformer.
(iii) Use of drop out losses on 11 KVA side in case of transformers above 25 KVA ratings.
(iv) Joining of LT terminals with gripping tools and copper lugs etc.

During test check of related records for the period April 2015 to March 2016, it was observed that the division did not follow the preventive steps to minimize the damage of transformers as recommended by the Board/Corporation from time to time, due to which the percentage of damage ranged between 7.81 per cent to 18.75 per cent in respect of 25 KVA to 400 KVA capacity transformers against the prescribed norms of three percent fixed by the Board/Corporation which resulted in blockade of funds of ` 1.57 crore (Annexure-I).

The division in its reply stated that in order to protect the transformer from damage, efforts such as checking of earthing of transformers from time to time, checking of load of all transformers in peak hours, installation of ACB for LT protection and laying of LT AB cable to avoid overloading were being made. Further, ten new transformers of 25 KVA were approved for installation to avoid overloading. The reply of division is not convincing as despite the rigorous efforts made by the division, the damage rate is too high against the norms fixed by UPCL itself which shows that divisions efforts were not sufficient.

The matter is brought to the notice of the management.

Para 2: Inadequate IT implementations

An uninterruptible power supply, also uninterruptible power source (UPS) is an electrical apparatus that provides emergency power to a load when the input power source or mains power fails. A UPS differs from an auxiliary or emergency power system or standby generator in that it will provide near-instantaneous protection from input power interruptions, by supplying energy stored in batteries, super capacitors, or flywheels. The on-battery runtime of most uninterruptible power sources is relatively short (only a few minutes) but sufficient to start a standby power source or properly shut down the protected equipment.

A UPS is typically used to protect hardware such as computers, data centers, telecommunication equipment or other electrical equipment where an unexpected power disruption could cause injuries, fatalities, serious business disruption or data loss. However, most UPS units are also capable in varying degrees of correcting common utility power problems.

It was noticed that at the time of installation of IT application for billing/ collection of revenue/ KCC/ accounts section etc. in the Kashipur division, an UPS was provided to protect from serious business interruptions or data loss. However, it was found that the UPS remained idle in the division. On being pointed out it was confirmed that it had become out of order within six months of its installation and still remained idle till date.

The division accepted the audit observation and stated that UPS was installed in the month of June-July, 2013 under R-APDRP scheme to provide emergency power back up system during shutdown, but this power back up including UPS got out of order within 4- 6 months since its installation. As these equipments were installed by the office of R-APDRP section, Dehradun, the details regarding its guarantee period and total cost were not available with the division. The division further stated that many complaints were lodged in the Help Desk numbers provided by the R-APDRP section regarding this power backup system. In this regard, the office of M/s infinite, dehradun was also asked for, but the problem was not resolved till date. In the absence of power back up the connectivity of the Lease lines and computers in Revenue collection counters was stopped during shutdowns which creates difficulty in revenue collection and leads to consumer grievance.

This shows non-utilisation of infrastructure created and equipments installed under Part-A, R-APDRP scheme which resulted in non-achievement of uninterrupted IT services in Revenue collection and consumer satisfaction.

The matter is brought to the notice of the management.

Para 3: 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 Kashipur, Jaspur & Bazpur, the following discrepencies were observed:

- In kashipur town a total no. 210 meters/ modems were installed against which only 146 (69.52 percent) meters/modems were working /communicative. Remaining 64 (30.48 percent) were not working/non-communicative.
- In Jaspur town a total no. 71 meters/ modems were installed against which only 53 (74.65 percent) meters/modems were working /communicative. Remaining 18 (25.35 percent) were not working/non-communicative.
- In Bazpur town a total no. 57 meters/ modems were installed against which only 30 (53.00 percent) meters/modems were working /communicative. Remaining 27 (47.00 percent) were not working/non-communicative.

The instances of non-communicative meters/modems ranged between 25.35 to 47.00 percent which is beyond control. This will adversely affect accuracy of energy inflow/ outflow and measurements of AT&C losses.

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 percent 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 rarely. This shows that UPCL itself is not competent enough to resolve these faults at their own level and it have to rely on external sources which is too much time taking and results in increasing number of failures in DTR metering.

The matter is brought to the notice of the management.

Para 4: 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.
- 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.

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.

The matter is brought to the notice of the management.

Para 5: 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 26.05.2016, it was found that out of total 749 commercial consumers Automatic Meter Reading of only 148 consumers (19.76 percent) were being done and meter reading of remaining 601 consumers (80.24 percent) 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.
- An interrupted power supply is mandatory for sustaining IT application in an organisation. In the absence of which the whole purpose of implementation of IT application will be defeated resulting in instances of non backing up of files and non-protection from data loss. It was observed that there was no alternative power source available in the division. The regular instances of frequent breakdown in the network connectivity were also noticed.Which resulted that there were huge crowd gathered in billing and collection counters.

Division accepted the audit observation in respect of AMR Reading, network connectivity and power back up system 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. In order to provide power backup centralized UPS system was provided under Part-A of R-APDRP scheme but that was not presently functioning as their batteries were out of order. Also, these batteries were beyond guarantee period. Request to higher authorities was being made to replace the defective batteries. The reply shows the poor implementation of IT and wastage of infrastructure created and equipments installed under Part-A, R-APDRP scheme which resulted in non-achievement of one of the basic objective of IT implementation in Revenue collection.

The matter is brought to the notice of the management.

PART III

---------NIL-------

Sr. Audit Officer/ES-I