Audit Inspection Report of Uttarakhand Power Corporation Ltd., MD's Office (Company), Dehradun comprising of C & P Wing, Commercial Wing, Operation Wing, MM Wing, Finance Wing & Corporate Maintenance Wing for the period from April 2015 to March 2016 was carried in exercise of the power conferred by 19 of out section C & AG, DPC Act, 1971 read with section 143 of the Companies Act, 2013. The transaction audit was conducted by Shri Amit Kumar Mishra, AAO, Shri A.P. Singh, AAO and Shri Vikas Dhyani, AAO under the partial supervision of Shri Mukesh kumar, Audit Officer w.e.f 20-04-2016 to 18.05.2016.

The Audit Inspection Report has been prepared on the basis of records/data/information made available by the, MD's office, Uttarakhand Power Corporation Ltd, Dehradun. The office of the Accountant General (Audit) will not be held responsible for any incorrect information or information not received.

Part-I

A. Introductory:

Last audit of the Company (UPCL) for the period from April 2014 to March 2015 was conducted by Shri Amit Kumar Mishra, AAO, Shri Vikas Dhyani, AAO and Shri Sunil Verma, Auditor under the partial supervision of Shri Mukesh kumar, Audit Officer.

During present audit, the records of MD's office and contracts for the period April 2015 to March 2016 were generally examined.

Following Officers held the charges as under:-

- (1) Shri S. S. Yadav Managing Director since last audit to date.
- (2) Shri S. S. Yadav, Director (F) since 04.05.2014 to 24.07.2015
- (3) Shri M. A. Khan, Director (F) since 25.07.2015 to date
- (4) Dy. General Manager (F) Shri Mohd. Iqbal since last audit to date.

B. Outstanding Paras of previous Audit Inspection Reports:-

| Sr. No. | Period | Part-II-A | Part-II-B |
|---------|--------------------|----------------|-----------|
| 1. | 04/2003 to 12/2004 | 01 to 03 | 02 to 04 |
| 2. | 01/2005 to 12/2005 | 01,03,04,05,06 | 01 to 03 |
| 3. | 01/2006 to 12/2006 | 01 to 08 | 01 to 08 |
| 4. | 01/2007 to 12/2007 | 01 to 08 | 01 to 06 |
| 5. | 04/2011 to 03/2013 | 01 to 10 | 01 to 06 |
| 6. | 04/2013 to 03/2014 | 01 to 08 | 01 to 05 |
| 7. | 04/2014 to 03/2015 | 01 to 06 | 01 to 08 |

| C. Persistent irregularities: | | | | | | |
|-------------------------------|--|--|--|--|--|--|
| Nil | | | | | | |
| | | | | | | |
| D. Record not produced: | | | | | | |
| Nil | | | | | | |

PART II A

Para 1: Loss of ` 53.83 lakh due to non-renewal of Performance Bank Guarantee and Security Deposit

UPCL entered into an agreement (January 2011) with M/s A2Z Maintenance & Engineering Services Pvt. Ltd. to execute the work of design, supply, erection, testing, commissioning of material and equipment required for construction of 33/11 KV substations & its associated lines including civil works on turn-key basis for package-A (Sumari Bhardar, Chopta & Dhauntary) at a contract value of `4.89 crore. The completion period for each 33 KV substation and its associated lines shall be nine months from the date of handing over of land or issue of the 1st date of inspection DI of the material of that substation & its associated lines. Penalty shall be 0.1% per day subject to maximum of 20% of the cost of work of construction of particular 33/11 KV substation & its associated 33/11 KV lines and other associated work of this substation; subject to condition, that maximum penalty of all substations shall not exceed more than 10% of total contract price of the agreement. Further, as per Government of Uttarakhand G.O. dated 09.02.2009, before entering into agreement of any construction work, the complete survey of related work, land arrangement and preparation of DPR must be completed. After that the said work must be completed in scheduled time by inviting tenders as per rules for construction work.

As per clause 19.0 of the contract, the contractor shall furnish Performance Security in form of bank guarantee to the employer for an amount of 10 per cent of the contract value i.e. 48.94 lakh in favour of Executive Engineer, Electricity Secondary Works Division, Dehradun. In case of non-completion of work in time, the same are to be extended suitably as demanded by Engineer-in-charge/CEO of the project. As per clause 15.0 of the agreement, a Security at the rate of 1 per cent amounting to `4.89 lakh shall have to be deposited in the form of bank draft/FDR/CDR/bank guarantee valid for a period of 12 months from the date of completion of all scope of work with a claim period of 6 months thereafter. The Security Deposit will be released to the contractor on successful completion of the contract and on submission of 10 per cent Performance Gurantee.

Scrutiny of records revealed that the performance of the contract was very poor as he could not complete the work of even one substation in Sumari Bhardar as on June 2014. In two substations namely Chopta and Dhauntry, the contractor could not even start the work due to non-

availability of land by Company till June 2014. Company terminated the contract (07.07.2014) with the following conditions:

- Remaining works of construction of 33/11 KV substation at Sumari Bhardar and its
 associated 33 KV lines shall be completed at firm's risk & cost and the difference of the
 cost shall be recovered from the firm. Any liability/penalty in respect of substation at
 Sumari Bhardari and Dhauntry shall also be recovered from the firm by UPCL.
- 2. The contractor is debarred from participating in the tenders invited by UPCL for a period of 2 years from the date of termination of contract or till recovery of amount as per point no. (ii) above from the firm, whichever is later.

Further, the estimate for balance works of the Sumari Bhardar substation amounting to `14.19 lakh was approved (08.12.2014) by UPCL.

In this regard, some clarifications/ information were sought from the Company. In response of these clarifications, it was observed that the contractor deposited the performance bank guarantee and security deposit amounting to `53.83 lakh (`48.94 lakh & `4.89 lakh respectively) at the time of award of work. The Company replied that the contractor defaulted/ showed poor performance to execute the work, during discussion with contractor, he again and again assured to start and complete the work. At the time of giving him a chance the company should have got these bank guarantees renewed well in time which was not done. Finally, the contractor failed to execute the work and Company has nothing to forfeit to protect its financial interest but the same was not forfeited as the contract was terminated in July 2014 till then the Bank Guarantee were time barred. Hence, the Company failed to renew the same well in time. The details of total payment made to contractor till termination of contract was not furnished by the Company. The details of extra expenditure made to complete the work were not furnished. In case of Chopta and Dhauntry, the land was provided by the Company on January 2014 & October 2012 respectively. The delayed acquisition of land resulted in not only violation of State Government's Order but also extra financial burden on the Company.

Para 2: Blockade of fund due to non utilization of prepaid meters

As per Order of retail supply tariff of UPCL for 2012-13, Uttarakhand Electricity Regulatory Commission (UERC) provided in principal approval for implementing prepaid metering w.e.f. October 2012. Further, National Electricity Policy under clause 5.4 emphasises upon the use of modern technology for reducing distribution losses and improvement in quality of service to consumers and energy conservation. Prepaid metering provides better service to the consumers, improves cash flow of the Company and also leads to reduction in consumer grievances. Further, prepaid metering shall be mandatory for new temporary LT connections upto 30 KW from October 2012 subject to availability of meters and valid operational constraints.

Company procured 5000 single phase and 1000 3phase direct connected pre payment meters and associated accessories amounting to ` 3.90 crore vide order number 999/UPCL/CE/CCP-II/23/2013-13(Secure) dated 31 July 2014. The pre paid meters thus procured are issued to Test divisions of UPCL so that same may be issued during release of new temporary connection. Audit noticed that Electricity Distribution Division (South) and Electricity Distribution Division (Central) issued 1171 and 309 temporary connection respectively and out of above only 11 and nine temporary connections were issued through temporary meters. Although the corporation has procured pre paid meters but has not ensured its utilization by field units. Due to non-installation of prepaid metering system Company was deprived of its associated benefits viz better cash flow, reduction in consumer grievances & AT&C losses and energy conservation and also violated the UERC's order as it was mandatory.

Management stated that in first phase of implementation of pre paid metering UPCL procured only 1000 three phase and 200 three phase meters. These meters were used for temporary connections as it did not have any provision for MCG solar rebate etc. Also the tariff was changed by UERC during 2015-16 and consumption based fixed charges were introduced and these changes cannot be carried out in pre paid meters. Considering these operational difficulties Commission has made provision of releasing connections through post paid meters.

The reply of the management is not satisfactory as UPCL is well aware that it operates in a dynamic environment and that its tariff changes on regular basis. It should have made such provisions in the bidding document or should have availed source code, software etc of these meters for carrying out necessary changes.

Part-II-B

Para 1: Non- pursuance of Claim of `39.60 crore for loss due to natural calamity with State Government

Audit noticed that Uttarakhand Power Corporation Limited (UPCL) raised claim for requirement of `64.16 crore from Government of Uttarakhand (GoU) for damage of its assets in the natural calamity (June 2013) as per details below:

- 36.24 crore for re-installing the damaged electric infrastructure due to natural calamity and ensuring continuous and reliable supply to the affected areas.
- 14.25 crore for waiver of electricity bills due on the disaster affected families as per instructions of the G.O.
- 13.67 crore for connecting 109 villages of districts Pithoragad and Bageshwar with the UPCL's grid which were connected with UREDA and other small Hydro Projects.

Out of above requirement, `24.56 crore was approved and received (upto January 2016). During scrutiny of records, it was also observed that UPCL, being a loss making Company, had to meet the above requirements from its own sources. Although, The Company needs financial support from State Government for re-installing the damaged electric infrastructure and ensuring continuous and reliable power supply to the disaster affected areas yet it has not effectively communicated its requirement to the State Government and NDRF for early release of funds. Further, 33 months (upto March 2016) have elapsed but the funds have not been received, due to this, Company had to borrow funds from financial institution at a higher rate of interest to meet its own requirement. Had the above funds been received to the Company, borrowing to the same extent could have been avoided.

Initial reply of the management was not received.

Para 2: Poor progress of the works under the scheme R-APDRP

R-APDRP was initiated by Govt. of India with the objective of Reducing AT&C losses in State Owned Electricity Distribution Utilities in India. The Program is divided into two parts i.e. Part-A & Part-B.

Part –**A** aims at establishing base line data for accurate measurement of losses at various levels and improving customer services for the utilities. It covers Consumer Indexing, GIS Mapping etc.

Part –**B** aims at renovation, modernization and strengthening of 11 KV level Substations, transformers/Transformer Centers, Re-conductoring of lines at 11kv level and below, Load Bifurcation, Feeder Separation, Load Balancing, HVDS (11kv), Aerial Bunched Conductoring in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters, installation of capacitor banks and mobile service centers etc. In exceptional cases, where the sub-transmission system is weak, strengthening at 33 kV or 66 kV levels may also be considered. During scrutiny of records and progress of R-APDRP, Part-B as on 31.03.2016 against the total work as per approved BOQ, the following shortfalls were observed:

- For the work of replacement of defective meters, only 1061 numbers of three phase meters (7.09 percent) were replaced against the total 14959 numbers of three phase meters to be replaced.
- For the work of Shifting of Meter outside the premises, only 100 meters were shifted against the total 17625 numbers (0.57 percent) of three phase meters to be shifted.
- For the work of creation of new 11 KV line, only 152.188 km. (31.23 percent) was completed against the total 487.31 km. of new 11 KV line to be created.
- For the work of conversion of LT Line into HT Line HVDS, only 29.45 km. (11.37 percent) line was converted against the total 259.11 km. of LT line to be converted.
- For the work of construction of 10 nos. of 33/11 KV s/s, no s/s has been constructed as on date and in most of the cases, even the land was not finalized.

It is also pertinent to mention here that as per clause 5 of the guidelines of Ministry of Power (MoP) on R-APDRP scheme dated 22.12.2008, "For Special Category States (all North-Eastern States, Sikkim, Uttarakhand, Himachal Pradesh and Jammu & Kashmir), Government of India's (GOI) loan for Part B projects will be upto 90%. All other conditions / methodology applicable to

non-special category states shall also be applicable to the special category states. The projectwise requirement of Gross Budgetary Support (GBS) will be decided by the Steering Committee. If the Distribution Utilities achieve the target of 15% AT&C loss on a sustained basis for a period of 5 years in the project area and the project is completed within the time schedule fixed by the Steering Committee, which shall in no case exceed five years from the date of project approval, upto 50% (90% for Special Category States) loan against Part-B projects will be convertible into a grant in equal tranches, every year for 5 years starting one year after the year in which the base-line data system (Part A) of project area concerned is established and verified by the independent agency appointed by MoP through the Nodal Agency. If the utility fails to achieve or sustain the 15% AT&C loss target in a particular year, that year's tranche of conversion of loan to grant will be reduced in proportion to the shortfall in achieving 15% Aggregate Technical & Commercial (AT&C) loss target from the starting base-line assessed figure. The loan from GOI shall be the first converted into grant. Loans from FIs shall be converted into grant only after the conversion of full GOI loan into grant. Whenever the loan from GoI /FIs will be converted into grant, interest and other charges paid on the converted amount will also be treated as grant and reimbursed to the Utility. For the loan and interest which could not be converted into grant on account of not meeting the conditions of conversion, the utility / state will have to bear the balance burden of loan and interest repayment. "

UPCL awarded contracts under Part-B of the scheme on February 2013. The scheduled period of completion of these works were 18 months i.e. September 2014, but the progress of the scheme is very slow as on 31.03.2016 as mentioned above. This shows that UPCL will not be in a position to convert its loan against the Part-B scheme and the interest thereon into grant at the present scenario. This major default from UPCL's end may result into huge financial burden due to poor progress of the scheme.

Initial reply of the management was not received.

Para 3: Avoidable loss of energy in distribution - `93.62 Crore

The main function of the Company is to receive the energy and distribute it among the consumers in such a way that loss of energy in distribution (line losses) should not exceed the norms fixed by the UERC. The distribution loss trajectory approved by UERC is 15.00 *percent* for the year 2015-16. To achieve the norm, UERC also identified some causes due to which there is loss of energy in distribution and suggested remedial measures to achieve the norms in respect of line losses as fixed by it.

The causes and norms for line losses are as under:-

Causes:-

- (i) Un-authorized extraction of electricity.
- (ii) Defective metering system.
 - (iii) Wrong estimation of consumed energy.
 - (iv) Non-rectification of defective system in due course.

Measures:-

- (i) Installation of Electronic meters to control theft.
- (ii) Regular checking of unauthorized extraction of electricity.
- (iii) Rectification of defective system in due course.

During test check of relevant records of the Company, it was noticed that there was 18.681 *per cent* (during 4/2015 to 01/2016) loss of energy (line losses) in distribution against the target fixed by the UERC (15.00 *per cent*). Consequently, the Company suffered a loss of `93.62 crore (by taking the cost of energy at a minimum rate of other domestic consumers @ `2.40 per unit)

The detail in this regard has been worked out as under for 2015-16:

Energy received during the period 04/2015 to 01/2016 = 10597.617 M.U Sale of energy (4/2015 to 01/2016) = (-) 8617.907 M.U Loss of energy = 1979.710 M.U Permissible losses (15.00 %) = (-) 1589.643 M.U Avoidable loss of energy in distribution = 390.067 M.U

Cost of avoidable loss of energy = 390.067 X 10,00,000 x 2.40 = ` 93.62 crore

It is evident from the above that the Company failed to control the loss of energy in distribution during the period from 4/2015 to 01/2016 (information for the period 02/2016 to 03/2016 was not updated by the Company). Had the Company taken the measures as suggested by UERC then this loss would have been minimized.

The management stated in its reply that in order to minimize the line losses, new electronic meters are being installed in place of old mechanical meters. A target of 10 percent for Work of Installation of electronic meters was fixed which were fully achieved in February 2016. In order to check theft of electricity, the vigilance unit of UPCL is regularly conducting raids and assessment were also made on defaulting consumers and recoveries were also being done. The conventional types of conductors are being replaced with the Ariel Bunch Conductors under R-APDRP and State plan. The present rate of defective/ damaged meters is 7.50 percent and the same was targeted to bring down to 3 percent by 31.03.2016 against which only 6.29 percent damage rate were achieved. The reply of the management is not convincing as the percentage of energy loss is much higher than the norm and the efforts to bring down the loss up to the norm does not seem to be sufficient which resulted in loss of `93.62 crore.

Para 4(A): Non - recovery of electricity dues amounting to ` 366.61 crore because of violation of Commercial and Revenue manual.

Commercial and Revenue Manual of Uttar Pradesh Power Corporation (which has been adopted by the Company) *interalia* provides that in case a consumer does not deposit electricity dues within 30 days from the date of receipt of bill, his connection would liable to be disconnected. A demand notice for recovery of electricity dues will be issued under section- 3 for depositing of dues against him within 30 days. In case consumer does not deposit the dues within stipulated period a recovery certificate (R.C.) will be issued under section -5 through District authorities. All such action for recovery of electricity dues should have been completed within six month.

During the scrutiny of records, it was noticed that the Company has 202958 no. of non domestic (RTS-2) consumers with the connected load of 853239 KW and there were electricity dues outstanding against them to the tune of ` 319.87 crore prior to April 2015. During the 01/2016 503.51 crore months 4/2015 were added aggregating ` 823.38 crore, out of which the Company had realized only ` 437.60 crore during the same period and realized against arrears ` 9.93 crore and waived of arrear to the tune of ` 9.24 crore during 04/2015 to 01/2016. Dues of ` 366.61 crore were pending for realization as on January 2016. Further, due to lack of documentation, the periodicity of outstanding dues could not be verified. However, no action as provided in the above referred manual was taken against these defaulting consumers by the Company and chances of the recovery of the same have become grim with the passage of time.

Management stated in its reply that an effective operation was in progress for realization of the dues as a result of which 91.19 percent (`959.67 crore) of revenue realization against the target of `1052.41 crore including commercial consumers was achieved in the months of January 2016 and February 2016. The reply of the management is not convincing as the arrear has been increasing year after year and reached to an alarming stage.

Para 4(B): Non- realization of dues due to inappropriate monitoring of Recovery Certificates - ` 18.64 crore.

As per Indian Electricity Act 2003, the payment of electricity dues should be made within due date mentioned in the bill. In case of default, the supply was required to be disconnected after seven days and a demand notice under section 3 of Dues Recovery Act 1958 (giving 30 days notice) was to be sent. If payment was not received, a Recovery Certificate (RC) under section- 5 of the said act was to be sent to the concerned District Magistrate to recover the dues as land revenue. Proper care was required to be taken that the particulars of the consumers were correct and permanent disconnection was duly finalized so that RC's could be realized.

During test check of records, it was noticed that the Company could not take any action against the consumers who were irregular in payment of electricity bills. Because of this, the payment of realization had accumulated. Audit also noticed that the 11413 numbers of RCs amounting to `99.95 crore were pending for realization in the beginning of April 2015. Company, further issued 2906 numbers of RCs amounting to `22.76 crore during April to January 2016 to District Authorities for recovery, out of which only 443 RCs amounting to 0.95 crore were recovered upto January 2016 and 11226 RCs amounting to `103.13 crore were returned and 2650 numbers of RCs amounting to `18.64 crore are still unrecovered with District Authorities. Had proper action for temporary/permanent disconnection been taken by the Company in time against the defaulting consumers this arrear would not have been accumulated. As a result, the Company suffered a likely loss of `18.64 crore, as the above revenue is yet to be recovered.

The management stated in its reply that instructions have been issued to the field units to contact to the concerned district magistrates for recovery of the pending Recovery Certificates. The reply of the management is not convincing as the number of Recovery Certificates and amount involved have been increasing year after year and reached to an alarming stage. The matter is brought to the notice of the management.

Para 5: Suspected recovery of electricity dues from Private Tube wells Consumers – ` 122.26 crore

As per order of UPCL, if a consumer failed to deposit the electricity dues within 30 days, his connection would be liable to be disconnected and action for recovery would be initiated i.e. finalization of Permanent Disconnection (P.D.) report, O.M. under section 3 to be issued for depositing the electricity dues. If electricity dues are not deposited within one month after issuing O.M. under section 3, R.C under section 5 would be issued through DM Office for recovery. All these actions were to be completed within six month.

During the course of audit, it was noticed that the Company has been supplying electric power to Private Tube-well consumers (under RTS-4) and ` 122.26 crore were outstanding against the consumers in question. The details up to January 2016 were as under.

| Sl. No. | Name of Department | No. of Consumers | Connected Load (KW) | Total (` in crore) |
|------------|------------------------------|------------------|---------------------|-----------------------|
| 1. | Private Tube-wells consumers | 28347 | 142591 | 122.26 |

It was further observed that 259 unmetered PTW consumers were also noticed in Commercial Diary of UPCL while in the tariff of UPCL issued by UERC for the 2015-16, there is no provision of tariff for unmetered consumers. Thus, It is clear from above that even though there was a huge amount involved in dues, no sincere effort was made to recover the same by the Company. This shows that the Company was not serious to recover the dues. Also, as the periodicities of the dues are not clear, the chances of recovery of these dues could not be commented.

The management stated in its reply that only 35.11 percent (25.32 crore) of revenue realization against the target of `72.11 crore was achieved in the months of January 2016 and February 2016. Also, instructions have been issued to the field units for recovery of the pending dues from the Private Tube Well consumers. The reply of the management is not convincing as the Company could not achieve the targets fixed by it as a result of which these dues have reached to an alarming stage.

Para 6: Award of contract without need assessment

UPCL invited (July2015) tenders for the work of Real Time Decision for day to day Effective Energy Management. The tender was invited as per the administrative and financial approval¹ accorded by competent authority of UPCL. Part I of the tender was opened on 18.08.2015 and two biders namely M/s Zeerone, Mumbai (JV with M/s Manikaran,New Delhi and M/s Asian Electronics ltd, Mumbai participated in tender.

During online opening of Part I of M/s Asian Electronics Ltd;Mumbai it was found that in the Excel sheet of PQR uploaded by bidder the name of bidder mentioned was Zeerone – Manikaran JV which was the name of the competing firm. Therefore hard copies (Part I) of both the bidders were not considered for opening and tender was scrapped as per the decision of CSPC level -I on 09.09.2015. Fresh tender for the same work was again invited vide e- tender notice No CCP II /43/2015-16 on 25.09.2015. Only two firms namely Quenext-Manikaran and GEC consultant uploaded their PQR for the same. Part- I of the above tender was opened on 11.12.2015. On the basis of technical evaluation of part –I it was decided by the committee to open part- II of both qualifying firms, which was opened on 19.12.2015. After evaluation of part –I and part -II of tender the work was awarded to JV of Quenext –Manikaran, New Delhi for `6.10 crore for load Forecasting, scenario analysis, demand supply position map, energy portfolio management system, scheduling optimization, trade/bid optimization etc.

In respect of above, audit observed the following:

- UPCL has not performed any need analysis of the work and how it is going to improve the projection of power requirement which UPCL is already doing.
- The tender document of the UPCL and PQR do not reveal the equity share of each partner of JV.

Management stated in its reply that as per Uttarakhand Procurement Rule 2008 there is no provision of equity share of each partner and UPCL considers the experience of subsidiary company. The reply of the management is not convincing as it has not explained the reason of carrying out the said work and weather it has conducted any need analysis of the same. Also, management has not clarified the mechanism that how consultant is going to increase the saving

¹ approval no 5954/MD/A-1dated 13.07.15

in respect of power purchase through open market. Besides, load forecasting, scenario analysis, demand supply position map, energy portfolio management system, scheduling optimization and trade/bid optimization etc. were not provided by consultant to UPCL till date (May 2016)

Para 7: Delay in completion of installation of capacitor banks leading to additional burden of `85.98 lakh

UPCL awarded (15.11.2014) the work of installation of 11 KV automatic capacitor bank (ACB) at 33/11 KV substation under Garhwal Zone to M/s Shreen Electric, Maharastra at the cost of `6.78 crore with a schedule completion date of 07.09.2015. The contractor failed to complete the work in schedule time despite incurring `6.29 crore till March 2016 as the cable trench and GI strip required was more than the quantity mentioned in the agreement. The revised BOQ of the work was approved by UPCL as late as May 2016. Due to delay in approval for revised BOQ, the contractor could not complete the work of installation of 11 KV ACB in scheduled time as a result of which UPCL could not avail the benefits of the same. This shows that the initial BOQ of the work was not prepared on realistic basis.

On being this pointed out, management stated that Electricity secondary works division submitted the revised BOQ on March 2015 which was approved by UPCL Hqrs. On May 2016 (after a delay of 14 months). Further, there was an extra financial burden of `85.98 lakh due to revision in BOQ. This shows that the if the original BOQ was made on realistic basis, the extra burden of `85.98 lakh could have been minimized to the extant of time overrun.

Para 8: Abnormal delay in completion of construction of 33 KV Ramnagar-Belpadav line

UPCL awarded (16.12..2005) the work contract of construction of 33 KV Ramnagar-Belpadav line to M/s Shikhar Enterprises with a schedule completion date of 30.11.2007. The estimated cost of work was 1.51 crore. The work of construction of 33 KV Ramnagar-Belpadav line could not be completed (March 2016) despite incurring the expenditure of ` 1.28 crore till March 2016. Due to inordinate delay of more than 8 years UPCL could not avail the benefits of the same. Had the line in question been completed in time, the line loss of UPCL could have been minimized.

Management stated in its reply that due to continuous public agitation till date, the work of construction of line was hampered. In this regard, regular meetings with local administration were held. The proposal for under ground cabling was also discussed with the DM but the same was not accorded by DM. The reply of management is not satisfactory as these factors should have been considered before award of work so that the blockade of fund could have been avoided. Further, UPCL was deprived of availing the benefits of this 22.5 kilometer line.

Para 9: Delay in completion of construction of 33 KV Double Circuit line

UPCL awarded (28.03.2011) the work contract of construction of 33 KV double circuit line from 220 KV substation Mahuakheraganj to Khadakpur 33 km M/s Durga Enterprises with a schedule completion date of 10.03.2012. The estimated cost of work was 1.36 crore. The work of construction of line could not be completed (March 2016) despite incurring the expenditure of `1.51 crore till March 2016 due to the protest of private land owners. Further, as per Government of Uttarakhand G.O. dated 09.02.2009, before entering into agreement of any construction work, the complete survey of related work, land arrangement and preparation of DPR must be completed. After that the said work must be completed in scheduled time by inviting tenders as per rules for construction work. Hence, the land acquisition for construction of lines must have been ensured before inviting tenders/award of work as per above G.O. which was not done in this case which resulted in inordinate delay of 4 years and UPCL could not avail the benefits of the same. Had the line in question been completed in time, the line loss of UPCL could have been minimized.

Management stated in its reply that due to continuous public agitation till date, the work of construction of line was hampered. In this regard, regular meetings with local administration were held. The under ground cabling could not be done because of existing gas pipe-line. The reply of management is not satisfactory as these factors should have been considered before award of work so that the blockade of fund could have been avoided. Further, UPCL was deprived of availing the benefits of the said line.

Para 10: Deficiencies in IT implementation in UPCL

- **(A)** A distribution utility is required to implement IT infrastructure and offer valuable insights for the following functional areas:
- Consumer Indexing, Asset Mapping
- GIS Mapping of the entire distribution network
- Automatic Meter Reading (AMR) on Distribution Transformers & Feeders
- Automatic Data Logging for all Distribution Transformers and Feeders
- SCADA Implementation
- Establishment of IT enabled customer service centres
- Establishment of the Base Line data System
- Billing and collection
- Electrical System Augmentation
- Store & Inventory
- Meter Management
- Energy Audit
- Consumer Grievance
- Establishment of data center & Disaster Recovery center at identified location
- Establishment of customer care centers at identified location
- Set up the Local Area Network and Wide Area Network
- Procurement & Installation of PCs, Servers, and associated hardware
- Creation of necessary IT infrastructure including LAN for identified Subdivision, division, Circle, Headquarter offices, Data centers, DR Centre and Customer care centers
- Integration of the entire IT infrastructure under the scope of this document as well as legacy systems, if any

Implementation of IT is not completely a technical job, a lot of planning and proper communication is very much essential to implement IT across the organization. During scrutiny of the system, following were observed:

It is very important, that implementation is done in stages as trying to implement
everything at once will lead to lot of confusion and chaos. Audit noticed that UPCL
implemented works of R-APDRP- Part A (IT Implementation) in all 30 identified towns
simultaneously without measuring accurate AT&C losses resultantly the accurate figures
of AT&C losses could not be worked out in the beginning of the scheme. Further,

instead of implementing IT stage wise, UPCL started all the work like data acquision, data filtering, DTR metering, Feeder metering etc. simultaneously in all the towns. As a result of which similar problem occurred in all the towns e.g. bypass/ meter off/ non-communication of meters and modems in almost all the project area.

- Lack of proper analysis of requirements will lead to non-availability of certain essential functionalities. This might affect the operations in the long run and reduce the productivity and profitability. In this regard, it was noticed that UPCL has not made any 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 (rate per unit). However, once the connection was released to a BPL consumer initially, after a specified period, the system never prompts periodically about the requirement of updating status of consumer whether the consumer has moved to APL or not.
- It was also noticed that UPCL is incurring extra cost on operation of its IT activities in the form of outsourcing of IT activities for its operation as UPCL lacks of trained staff.
- Alerts regarding Pendency of IDF/ADF/RDF consumers, their disposal was not available in the system.
- Financial Accounting Software (FAS) does not show the status of Bank Reconciliation Statement (BRS) of a particular division. Pendency of BRS of a particular division cannot be ascertained from BRS. Although, R-APDRP billing software is used for collection of revenue, it does not show any uncashed/ dishonored cheque leaving reconciliation a complicated manual procedure.
- **(B)** Uttarakhand Power Corporation Ltd (UPCL) was incorporated under the Companies Act, 1956 on February 12, 2001 consequent upon the formation of the State of Uttarakhand. UPCL the Frontline State Power Distribution Utility & service provider of quality & reliable power to over 1.89 million consumers of the State. These consumers are categorized depending on their domestic, commercial, agricultural and industrial loads.

UPCL procures energy from different sources and sells it to the consumers at the tariff fixed by UERC. During 2010-11 to 2015-16, UPCL carried out various activities for the improvement and computerisation of its billing and revenue collection system, stock management and information sharing among various divisions/sub-divisions of the UPCL. The following activities of UPCL have use of IT in its implementation:

- Stock management module of UPCL (developed by M/s Furgueson India)
- Automatic Meter Reading on Distribution Transformers (DTs) and Feeders

- Supervisory Control and Data Acquisition System (SCADA) for Dehradun city
- Adoption of IT for meter reading, billing & collection,
- Financial accounting

During scrutiny of the IT Infrastructure of the UPCL following were noticed:

- ➤ A whole gamut of activities of UPCL ranging from bill collection to financial accounting is IT based but it does not have an IT structure approved by State Government.
- ➤ UPCL uses two different platforms *viz*. Key Consumer Cell (KCC) and R-APDRP for the billing of its consumers. Both of the platforms are not synchronised and the data sharing among platforms is not easy.
- Automatic Meter Reading is not extended to maximum consumer. Thus, real time consumption of maximum consumers and feeders is not available.
- ➤ UPCL also provides online payment facilities to its consumers, which is being managed through outsourcing. Presently, UPCL does not have the program and in house expertise to manage and operate the system as a result of which it is dependent on out sourced agency for online payment.
- ➤ UPCL data centres and data recovery centres both are located in the same seismic zone; therefore, there are chances of loss of data in case of earth quake in the area.
- ➤ UPCL has ensured connectivity of its envisaged sub stations but still the speed and frequent break down of system need to be addressed.
- ➤ UPCL has no documented IT Policy.
- ➤ The R-APDRP System and KCC System of the UPCL are developed by outsourced agencies although UPCL has source codes of said programmes but lacks specialization to carry out amendments in the system.
- ➤ Compatibility Issues with IT Modules lead to issues in integration of modules. UPCL associates different vendors to implement different IT modules, based on their competency. It is very essential that there is a way to handle compatibility issues. Once, the contract with IT agency is over.
- ➤ For Stock management and Financial accounting UPCL uses modules developed by M/s Deloitte but UPCL is dependent on out sourced agency to carry out any amendment in the programme and this is because UPCL has not ensured imparting quality and regular

- training to the staff deployed in IT wing .Further, lack of IT structure makes it difficult for UPCL to recruit specialist for the above work.
- ➤ UPCL has ensured availability of test environment for software and applications developed under RAPDRP-A but the same is not available for legacy application i.e Financial Accounting System and Material Management and KCC software.

Initial reply of the management was not received.

Para 11: Loss of `1.30 Lakh

Uttarakhand Power Corporation Ltd. invited e tender 09.08.2015 for supply of 7000 Nos Long Steel Tubular Pole SP – 23 within 6 months from the date of Letter of Intent. Part I of the tender was opened on 09.09.2015 and six bidders qualified for opening of Part II of Bid. The same was opened on 12.10.2015. M/s Roll Tubes Ltd. Kanpur came out as L 1 and M/s Kay Kay Fabricators, Dehradun as L 2. The contract was awarded to L 1 (outside Uttarakhand Co.) for 6300 poles at the rate of `6426.18 per pole (including Sales tax/VAT i.e. 2 percent) and counter offer was given to L 2 (Uttarakhand based Co.) for 700 poles at the rate of `6611.81 (including Sales tax/VAT i.e. 5 percent).

During scrutiny of records it was observed that UPCL considers ex-works cost, excise duty and freight for evaluating L 1 and sales tax/ VAT is excluded from it. M/s Roll Tubes Ltd. offered full quantity as demanded in tender with delivery schedule stating the supply will commence after 45 days from date of LOI and shall be completed at the rate of 1400 poles per month thereafter. However early delivery will be made subject to availability of raw material. As per delivery schedule, total delivery of 7000 poles will be completed in 6.5 months instead of 6 months. UPCL could have asked the L1 bidder to complete delivery of 7000 poles with in six months from date of LOI instead of offering counter offer to L 2 at higher rates which resulted in loss of ` 1.30 lakh (700 X 6611.81 - 6426.18).

Management in its reply stated that L 1 was able to supply only 6300 poles within the delivery schedule of 6 months, hence in compliance to Uttarakhand Procurement rules 2008 the balance quantity of 700 poles were awarded to L 2 bidder FOR destination rates. The reply of management is not convincing as L 1 bidder in its bidding documents stated that early supply would be made subject to availability of raw material. As per delivery schedule, total delivery of 7000 poles will be completed in 6.5 months instead of 6 months. The loss could have been avoided if UPCL had requested the L 1 bidder to supply 7000 poles within scheduled delivery period of six months.

Para 12: Over payment to contractors `5.32 lakh

Uttarakhand Power Corporation Ltd. invited e tenders for supply 3500 Nos, 11 meter long steel tubular pole on 22.02.2014 and 3500 Nos, 25 KVA, 4 star rating Distribution Transformers on 29.08.14. Technical bid and Price bid were opened. Letter of Intents for supply of poles was given to M/s Endura Engineers Pvt Ltd., M/s Roll tubes Ltd. for supply of poles 2400 and 900 respectively and trial order was given to M/s Kay Kay Fabricators 200 poles at L 1 rates i.e. ` 11777 per pole. Letter of Intents for supply of Distribution Transformers was given to M/s Bansal Transformer (P) Ltd., M/s United Electricals & Transformer for supply of 1225 and 450 respectively distribution transformer and trial order was given to M/s Sri Ram Transformers and Allied Industries for 75 distribution transformers at L 1 rates i.e. ` 41570 per transformer.

During scrutiny of records it was observed that UPCL considers ex-works cost, excise duty and freight for evaluating L 1. Trial orders in both the cases on L 1 rates were given to contractors without opening their price bids and both the contractors were exempted for payment of Excise duty and cess thereto. Contracts for trial orders were given by adding the value of excise duty and cess thereto to ex works which resulted into over payment of ` 1271.09 per pole and ` 3709.30 per transformer. This has resulted in over payment of ` 5.32 Lakh (1271.09X 200 = 254218 and 3709.30 X 75 = 278197).

Management in its reply stated that as per approval BoD, UPCL part II of bid of Uttarakhand based SSI/ khadi and kutir units registered with DIC Uttarakhand for equal to or less than 5 years reckoned from the date of opening of tender shall not be opened and units shall be considered for trial order at not higher than L 1 rates. Further if the rates for trial order are evaluated by excluding excise duty then L 1 rates would have changed and there were more than one L 1 rates against the tender. The reply of management is not convincing as both the contractors were exempted for payment of Excise duty and cess thereto payable to Government. The value of excise duty was included in cost of ex-works to arrive at L 1 rates and trial orders were awarded to contractors which resulted into overpayment of `5.32 lakh.

Part III

-----NIL-----

Sr. Audit Officer/ES-I