

CHAPTER IV : WORKS AND MILITARY ENGINEER SERVICES

4.1 Loss due to excess payment and short recovery of electricity charges

While the Garrison Engineer (GE) is responsible to enforce pre-check on the electricity bills before making payment to Electricity supply agencies, we found that due to failure on the part of the GEs in exercising the requisite checks and in adhering to the approved electricity tariff, an excess payment of ₹24.54 crore was made by the GEs selected for audit. The GEs also failed to effect recovery of electricity charges worth ₹23.66 crore from the paying consumers, including private parties, which was mainly due to short recovery of energy and fixed charges, delay in floating of bills, defective meters, etc. These lapses of excess payment and short recovery underscore the inadequacy of internal controls in MES.

4.1.1 Introduction

The Military Engineer Services (MES) is responsible for the technical management of the electric supply system on its charge. For supply to the Military areas or Cantonment areas, electric energy is obtained by the MES in bulk from the State Electricity Boards (SEBs) or a company (supply agency) for which necessary agreement or memorandum of terms is entered into by the MES with the supply agency. Before payment to the supply agency for bulk supply of electricity as per the applicable tariff, Garrison Engineer (GE) concerned is required to enforce pre-checks on the bills through the concerned Accounts Officer³⁵ (GE). For making payment to SEBs/ supply agencies, GEs receive budget allotment under tariff head. The allotment and expenditure under the tariff head for the years 2011-12 to 2013-14 in respect of 30 GEs responsible for payment is indicated in **Annexure-X**. In MES, Barrack Stores Officer (BSO) and Accounts Officer (GE)/(BSO) functioning under GEs dealing with the revenue work are responsible for correct recovery of electricity charges from the paying consumers *i.e.* service personnel, defence civilians, messes, Cantonment Board, private parties, etc., as per instructions issued by Engineer-in-Chief (E-in-Cs) Branch, IHQ of MoD (Army) from time to time. Free electric supply is made by MES to other than married (OTM) accommodation, Defence installations, street lights in Military Stations, Administrative offices of the Armed Forces and MES installations, etc.

³⁵Accounts officer Garrison Engineer (AO GE) is from Defence Accounts Department and attached to engineer office as Accountant to maintain certain accounts and as primary auditor.

4.1.2 Scope of Audit

We carried out a scrutiny during September 2014 to November 2014 of the records related to payment made to Supply Agencies and recovery of electricity charges in 44 GEs³⁶ including BSO at 30 military stations for the three years period from 2011-12 to 2013-14. Similar cases noticed during the normal audit of other GEs over and above those selected have also been included.

4.1.3 Audit Findings

We noticed that out of 44 selected GEs, 25 GEs had made excess payment amounting to ₹24.54 crore to the Electricity Supply Agencies due to wrong billing by the supply agencies, inflated Contracted Maximum Demand (CMD) and penalty/surcharges paid due to non maintenance of required Power Factor³⁷ (PF), *etc.* Further 41 of the 44 selected GEs failed to recover electricity charges amounting to ₹23.66 crore from the paying consumers on account of non/short recovery of fixed charges, electricity duty, meter rent, fuel surcharge *etc.* The cases are discussed in the succeeding paragraphs:

4.1.3.1 Excess payment to State Electricity Boards/Electric Supply Agencies due to wrong billing

As per electricity Act 2003, State Electricity Regulatory Commission (SERC) is the competent authority to determine the tariff for various categories of consumers within the State. The electricity tariff includes energy charges³⁸, fixed charges³⁹, electricity duty⁴⁰, Octroi⁴¹, meter rent⁴², fuel surcharge⁴³, power factor surcharge⁴⁴, rebate on High Tension (HT) bulk

³⁶1. GE (Utility) Meerut, 2. GE (North) Meerut, 3. GE (South) Meerut, 4. GE Roorkee, 5. GE (Clement Town) Dehradun, 6. GE (Military Collage of Telecommunication Engineer) Mhow, 7. GE (East) Bareilly, 8. GE (Army) Suratgarh, 9. GE Chandigarh, 10. GE (South) Jaipur, 11. GE (East) Jalandhar, 12. GE (CME) Dapodi, Pune, 13. GE (I) R&D Pashan, Pune, 14. GE (North) MEG Centre, Bangalore, 15. GE (R&D) (East), Bangalore, 16. GE (I) R&D, RCI, Hyderabad, 17. GE (Army) Ahmedabad, 18. GE (East) Lucknow, 19. GE (I) R&D Kanpur, 20. GE Kanpur, 21. GE (West) Jabalpur, 22. GE (East) Jabalpur, 23. GE (East) Allahabad, 24. GE Jhansi 25. GE Babina, 26. GE Guwahati, 27. GE Shillong, 28. GE Dipatoli, 29. GE (Central) Kolkatta, 30. GE Alipore, 31. GE Binnaguri, 32. GE Missamari, 33. GE (South) Udhampur, 34. GE (North) Udhampur, 35. GE (U) Udhampur, 36. GE (North) Mamun, 37. GE Yol Cantt., 38. GE Satwari, 39. GE (Utility) Delhi Cantt, 40. GE (West) Delhi Cantt, 41. GE (South) Delhi Cantt, 42. GE (Central) Delhi Cantt, 43. GE New Delhi, 44. GE (Base Hospital) Delhi Cantt

³⁷**Power Factor**- is defined as the ratio expressed in percentage of total kilowatt hours to the total kilowatt ampere hours recorded during the billing month.

³⁸**Energy charges** – It is the cost of energy consumed by the consumer as per tariff rate.

³⁹**Fixed charges** –It is levied to recover the cost of infrastructure created for distribution of electric supply. It is cost recovered per month in addition to energy charges as per load sanctioned on a connection to consumer. Fixed charges are payable in each month irrespective of whether any energy is consumed or not.

⁴⁰**Electricity duty** – Charges levied by the State on production/supply of electricity in the State in accordance with a law in force.

⁴¹**Octroi** - It is a charge levied by the State on the consumption of electricity in a particular area in accordance with the law in force.

⁴²**Meter rent** – In case electric meter is provided by the Electric supply agency, rent is recovered on the basis of type of meter installed.

⁴³**Fuel surcharge** – To adjust the variation in cost of fuel used in production of electricity, additional charges are levied on energy charges by the electric supply agency.

⁴⁴**Power factor surcharge** – Charges recovered on account of adjustment of distribution loss of energy. If the average power factor of the consumer falls below a specified percentage, the consumer shall, in

supply,⁴⁵ etc. Payment of monthly electricity bills, calls for special attention of the GE to ensure correctness of the bills. Cases of excess/avoidable payment made by the GE due to wrong billing by the electricity supply agencies are given below:

(A) *Excess payment due to incorrect application of tariff schedule*

Every State Electricity Board notifies from time to time its tariff. The bulk supply Tariff is applicable to MES, CPWD, Institutions, Hospitals, Private Colonies, Group Housing Societies and other similar establishments for further distribution to various residential and non residential buildings.

We observed that out of 30 military stations, at 12 stations⁴⁶, State Electricity Boards/Electricity supply agencies had floated bills at tariff rates higher than those applicable to MES under the approved tariff schedule. The bills were paid by the concerned GEs, without checking the correctness of the tariff, which resulted in an excess payment of ₹11.85 crore during past three years as shown in **Annexure-XI**.

In their replies (April 2013 to August 2015) all the GEs had stated that matter had been taken up with the supply agencies for application of correct tariff schedule and refund of excess charges, which was awaited as of August 2015.

(B) *Overpayment due to incorrect levy of fixed charges*

- As per the tariff of Uttar Pradesh Power Corporation Limited (UPPCL), for all consumers, billable demand during the month shall be the actual maximum demand or 75 per cent of the contracted load (CMD) whichever is higher. In GE Jhansi, the actual demand was less than 75 per cent of the CMD in respect of three service connections but the electric supply agency had charged fixed charges on CMD instead of 75 per cent of CMD, which resulted in overpayment of ₹29.66 lakh during April 2011 to March 2014. On being pointed out by Audit (October 2014), GE Jhansi in October 2014 stated that liaison was being made with Dakshinanchal Vidyut Vitran Nigam Limited (DVVNL) Jhansi for revision of agreement so that CMD might be revised which was still awaited (August 2015).
- As per the tariff of Himachal Pradesh State Electricity Board Limited, (HPSEB) Schedule of Electricity Tariff, in case of Bulk Supply, demand charges would be levied on the actual maximum recorded demand in a month in any 30 minute interval or 90 per cent of the

addition to energy charges, pay additional charges, known as power factor surcharge, on the total amount of bill under the head 'energy charges'.

⁴⁵**Rebate on High Tension (HT) bulk supply** - The electric loss in distribution is reduced in case of high supply voltage. The HT supply is made on different supply voltage viz. 33 KV, 66 KV, 132KV and 220 KV. In case a consumer at his request availing supply at a voltage higher than the standard supply voltage as specified under relevant category, a rebate in the rate / amount of energy charges is allowed by the electric supply agency, if mentioned in tariff order.

⁴⁶Mhow (MP), Saharanpur (UP), Purkazi (UP), Babugarh (UP), Dabathuwa (UP), Dehradun (UK), Tawi(Sangroor) Udhampur, Dapodi(Pune), Pashan (Pune), Kanpur, Pachmari (MP) and Dwarka (Delhi).

contracted demand, whichever is higher. We observed that during the period April 2011 to March 2014 no record of the actual maximum recorded demand was maintained, but GE Yol Cantt had made payment of demand charges on contracted demand to the HPSEB instead of, 90 per cent of the contract demand. This had resulted in overpayment of ₹19.68 lakh by the GE to HPSEB towards demand charges during the above period.

(C) *Irregular payment of Electricity Duty (ED)/Electricity Tax (ET)*

As per Article 287 of the Constitution of India, no law of a State shall impose or authorize the imposition of a tax on the consumption or sale of electricity which is consumed by the Government of India. As such, ED was not leviable on energy consumed by the Government. However, two GEs had paid ED/ET to the tune of ₹70.58 lakh to the electric supply agencies on energy consumed by the government as shown in **Table-23** below:

Table-23: Showing GE wise amount of ED/ET paid

Sl.	Name of GE	Period	Amount (₹ in lakh)
1	GE Chandigarh	04/2011 to 03/2014	58.76
2	GE, New Delhi	04/2011 to 03/2014	11.82
	Total		70.58

On being pointed out in audit (June 2014) the GE Chandigarh in June 2014 stated that case for refund/adjustment of the amount of ED paid would be taken up with the electricity supply agencies, which however, was not taken up till July 2015. GE New Delhi took up the case with New Delhi Municipal Council (NDMC) in November 2014 but NDMC refused to refund the electricity tax amount on the plea that NDMC levied tax under NDMC act 1994 and it was not State legislation. The reply furnished by GE was not acceptable as imposition of ED/ET was in contravention of Article 287 of Constitution of India. The amount of ED/ET paid was yet to be recovered as of August 2015.

(D) *Irregular payments of Octroi Charges*

As per Article 287 of the Constitution of India, Defence establishments are exempted from paying of taxes on the electricity supplied. We, however, observed that Punjab State Power Corporation Limited (PSPCL) had irregularly levied Octroi charges in the monthly bills for electricity supply made to Jalandhar Cantt., The GE (East) Jalandhar Cantt had paid a sum of ₹2.70 crore to the PSPCL on this account from January 2000 to July 2012. Payment of octroi charges was however not made after July 2012. Similarly, GE Chandigarh had made irregular payment of Octroi charges of ₹3.18 lakh from April 2011 to July 2012 to the PSPCL for electricity supply to 'K' Area.

GE (East) Jalandhar intimated in July 2014 that the matter was being pursued with PSPCL for refund and GE Chandigarh in June 2014 intimated that the

matter for adjustment of the amount would be taken up with the PSPCL. The fact remained that a sum of ₹2.73 crore was irregularly paid by the GEs on account of Octroi and the same was still to be refunded.

(E) *Non- availing of rebate on HT supply*

To compensate the transmission/transformation losses, State electricity boards/supply agencies provide rebate on bulk electric supply at 11 KV/33KV/66KV/132 KV as prescribed in their tariff.

We observed that two GEs had not availed admissible rebate in monthly bills and paid excess amount of ₹ 1.24 crore to the SEB/supply agencies. The cases are discussed below:

- As per Jaipur Vidyut Vitran Nigam Limited (JVVNL) tariff 2011, for contract Demand above 1500 KVA and upto 5000 KVA standard prescribed Voltage Supply is 33 KV for which three *per cent* rebate is allowed. GE (South) Jaipur was drawing supply at 33 KV with contracted demand of 5000 KVA but no rebate was availed. Thus, excess payment of ₹99.63 lakh was made to JVVNL during 04/2011 to 03/2014. GE stated (August 2014) that case had already been taken up with JVVNL for refund/adjustment which was yet to be made (August 2015).
- Similarly GE Yol, received electric energy on 33 KVA from HPSEB against the Standard Supply, voltage of 11 KVA from April 2011 to March 2014, but failed to avail three *per cent* rebate resulting in excess payment of ₹24.40 lakh to HPSEB.

We also observed that GE Gurdaspur could not avail the rebate of ₹52.08 lakh due to non-reduction of CMD realistically. The case is discussed as follows;

- In Punjab State, the PSPCL provides HT rebate at the rates of three *per cent* to all the existing consumers (prior to 01April 2010) getting supply at a higher voltage than the specified in conditions of supply *i.e.* against contracted demand upto 4000 KVA supply to be taken at 11 KV. It was observed(October 2014) that GE Gurdaspur was drawing supply at 66 KV with contracted demand of 7095 KW but the actual maximum demand during the period April 2011 to March 2014 remained between 1597 KW to 2929 KW *i.e.* 3661 KVA (2929/0.8) for which admissible supply voltage was 11 KV. Had the contracted demand been realistically reduced by GE for 4000 KVA, rebate of three *per cent* amounting to ₹52.08 lakh for the period from January 2010 to March 2013 could have been obtained towards supply at higher voltage.

(F) *Non adjustment of interest on security deposit*

As per provisions of the Uttar Pradesh Electricity Regulatory Commission's Electricity Supply Code-2005 (3rd Amendment made in August/September 2006), the licensee shall pay interest on Security Deposit to the consumers at

bank rate as on 1 April of applicable financial year by way of credit in the bill of the consumer in the months of April, or May or June as per the applicable billing cycle. We observed that two Garrison Engineers viz. GE Babina and GE Jhansi paid an avoidable amount of ₹56.90 lakh to UPPCL during the period 2011-12 to 2013-14 due to non adjustment of interest on security deposits in the bills by electric supply agency. On this being pointed out in audit GE Babina (September 2014) and GE Jhansi (October 2014) stated that the interest would be recovered in the forthcoming bills, which was still (August 2015) awaited.

4.1.3.2 Avoidable payment of demand/ fixed charges due to inflated Contracted Maximum Demand in agreements

E-in-C's Branch, AHQ in July 2005 issued instructions that, the contracted maximum demand (CMD)⁴⁷ reflected in the agreement should be based on realistic assessments and should be commensurate with the actual maximum demand of the station. Inflated CMD results in infructuous payments of fixed charges on minimum billable demand, which is generally 75 per cent of CMD. Similarly, under-estimated CMD may result in payment of penal charges for drawl of excess demand. In case of variation in both, the GE should timely get the revised agreement executed.

Out of 30 stations, we noticed cases at 13 stations wherein the contracted demand was in excess of the present requirement which resulted in avoidable payment of minimum demand/fixed charges of ₹3.98 crore to the supply agencies by 13 GEs, details of which are given in **Annexure –XII**.

By way of illustration, three important cases regarding avoidable payment of fixed charges are discussed below:

- The existing CMD for Dabathuwa Military Station (Meerut) was 378 KVA. In September 2009, requirement for creation of infrastructure for the Defence Communication Node (DCN) at the station was felt for which upgradation of electric load from 378 KVA to 1600 KVA was required. The project for provision of infrastructure for DCN was sanctioned by the Ministry in March 2010 and execution thereof was started in December 2011, which was to be completed by January 2014. Even prior to execution of the infrastructure for DCN, the GE in January 2011 requested the electric supply agency for upgradation of the load at Dabathuwa upto 1600 KVA and deposited ₹44.46 lakh in January 2012 for enhancement of the load. The electric supply agency levied demand charges for 1200 KVA load (75 per cent of 1600 KVA) in the monthly electricity bills from October 2012 to December 2013 instead of 283.5 KVA (75 per cent of 378 KVA), which were paid by the GE without any agreement of enhanced load. However, the actual billable demand of the station was below the contracted load of 378 KVA due to non-completion of infrastructure for DCN project. Thus, an unwarranted

⁴⁷ **Contracted maximum demand (CMD)/Contracted load:** It is the maximum demand of supply for which a contract is concluded between the consumer and the electric supply agency for delivery at the point of supply at a specific rate.

payment of demand charges of ₹40.44 lakh had been made to the electric supply agency from October 2012 to December 2013.

- GE Suratgarh had made avoidable payment of fixed charges to the tune of ₹93.25 lakh for the period from April 2009 to March 2013 due to incorrect contract demand shown in the electric bills by Jodhpur Vidyut Vitran Nigam Ltd (JVVNL). We observed that though the CMD was for 2600 KVA, yet JVVNL had been charging fixed charges for 4600 KVA. Chief Engineer, Bathinda Zone admitted (November 2014) the erroneous payment of ₹93.25 lakh, out of which ₹29.46 lakh were adjusted in the electricity bill of May 2014. It was further stated that the case for adjustment of balance amount would be taken up with the electric supplying agency. The adjustment of balance overpaid amount of ₹63.79 lakh was still awaited.
- Similarly, GE(East) Jabalpur made an agreement (July 2011) with Madhya Pradesh Purva Kshetra Vidhyut Vitran Company for supply of electricity with CMD as 1700 KVA in anticipation of the additional requirement for modernization of Central Ordnance Depot (COD) Jabalpur. Audit noticed that since the modernization work of the COD could not be completed, the actual recorded demand during April 2013 to March 2014 except for July 2013 remained less than 50 per cent of the CMD. Thus, due to unrealistic CMD an avoidable payment of fixed charges of ₹37.53 lakh was made by the GE during the year 2013-14. GE intimated (August 2015) that case for reduction of demand to 750 KVA had been taken up.

4.1.3.3 Avoidable payment of penalty/surcharge

Consumers are required to maintain the minimum average PF prescribed (0.85 to 0.90) by the respective State Electricity Regulatory Commission to avoid payment of surcharge/penalty. E-in-C Branch, Army Headquarters, New Delhi in June 2004 had fixed the target for bulk supply consumers to maintain PF at 0.95 and above to avail the incentives for higher PF besides avoidance of penal charges for low PF.

We observed in eight GEs, including one selected GE and other seven GEs located in Punjab State had not maintained the PF 0.90 as prescribed by PSPSCL at takeover points of bulk electric supply. Consequently, surcharge amounting to ₹92.69 lakh had to be paid by them during the period April 2010 to March 2014.

4.1.3.4 Avoidable payment of surcharge due to delay in enhancement of contracted load

GE (I) R&D, RCI, Hyderabad in March 2011 paid an amount of ₹92.72 lakh to Andhra Pradesh Central Power Distribution Company Ltd (APTRANSCO) to enhance the existing CMD of 10 Mega Volt Ampere (MVA) to 14 MVA. However, the GE applied (February 2013) for revising the CMD from 10 MVA to 12 MVA keeping in view the previous year's energy consumption, which was implemented in June 2013. However during the intervening

period, avoidable penal charges amounting to ₹90.46 lakh was paid by the GE due to delay of two years in enhancement of the contracted load. On being pointed out by Audit (August 2014), GE (I) R&D stated (October 2014) that an amount of ₹92.72 lakh was deposited to APTRANSCO for releasing of additional four MVA expecting that electric power demand would increase shortly but requirement of RCI had not been increased as expected.

4.1.3.5 Loss of rebate due to delay in opening of letter of credit (LC)

As per Delhi Electricity Regularity Commission (DERC) order of March 2007 to establish payment security mechanism the electric generation company, M/s Pragati Power Corporation Limited, (PPCL) and electric transmission company Delhi Transco Limited (DTL) provide two *per cent* rebate on the monthly bills on opening of LC by the distribution licensee as per terms and condition of their agreements.

MES had been given a status of deemed licensee in Delhi. GE (Utility) Electric Supply, Delhi Cantt., is the nodal agency for maintenance and distribution of external electric supply to entire Delhi Cantt., including the units and establishments of Air Force and DRDO. Due to the delay in execution of agreements/LC with the electric generation/transmission companies, GE (Utility) Electric Supply Delhi Cantt., could not obtain two *per cent* rebate (₹61.74 lakh) in the monthly bills for the period from April 2011 to March 2014, as discussed below:

- MES was receiving 25 MW electricity from PPCL, Bawana, Delhi since December 2011. However, Power Purchase Agreement (PPA) was signed only on 10 September 2012 although the Ministry had approved it in December 2011. LC required for getting two *per cent* rebate was opened in August 2013, which was valid upto December 2013. Due to the delay in signing of the PPA and opening of LC, rebate of ₹22.53 lakh could not be obtained by MES resulting in loss to that extent.
- DTL was responsible for transmission of electricity in Delhi and all the distributors including MES were required to sign Bulk Power Transmission Agreement (BPTA) with them. The DTL also offered a rebate of two *per cent* on its monthly bills, provided the payment was made through an LC. The GE (Utility) Electric Supply Delhi Cantt., without signing the BPTA paid ₹19.60 crore to the DTL on account of transmission charges from April 2011 to March 2014 on which rebate of two *per cent* amounting to ₹39.21 lakh could not be obtained because of non opening of LC resulting in loss to the Government. On being pointed out by Audit in August 2014, GE (Utility) Delhi Cantt., intimated in November 2014 that the case for signing of BPTA between MES and DTL was already under progress with Ministry and hence opening of LC could be possible only after signing of BPTA between both the parties. Thus non-signing of BPTA and consequently non opening of LC had resulted in loss of ₹39.21 lakh to the State. The BPTA was still to be signed (August 2015).

4.1.4 Non/short recovery of electricity charges

The Ministry in October 2005 fixed free electricity for Officers, Junior Commissioned Officers (JCOs) and Other Ranks (ORs) at 100 units per month with effect from 1 November 2005. E-in-C Branch Army HQ had instructed in November 2005 and October 2006 that in addition to electricity charges over and above the free ceiling, fixed charges, meter rent and electricity taxes were also recoverable from all domestic paying consumers at the same rates at which general public living in adjoining colonies were being charged by the civil authorities. The procedure laid down for recovery of electricity charges from the paying consumers includes recording of meter reading by meter readers of MES, submission of return of recoveries⁴⁸ (R/R) by MES revenue staff to AO (GE) and floating of bills by AO (GE) to the concerned Pay and Accounts Officers (PAOs) of units for recovery from the Individual Running Ledger Account (IRLA) and to watch the acknowledgements for receipt of bills by the PAOs.

We noticed cases of non/short recovery of fixed charges, energy charges, meter rent, electricity duty, regulatory surcharge and other taxes causing revenue loss of ₹23.66 crore to the State as discussed below:

4.1.4.1 Non/short-recovery of fixed charges (FC)

The State Electricity Board/Electric Supply Agencies are charging fixed charges based on electric load (bulk supply) in the bills at the rates notified in the applicable tariff schedule. Fixed charges are to be recovered from all the domestic paying consumers at the same rates at which general public living in adjoining colonies being charged by the civil authorities. At 10 Military Stations, fixed charges amounting to ₹2.45 crore was not recovered/short recovered from the domestic consumers from their monthly bills by 12GEs as shown in **Annexure-XIII**.

GE (East)Bareilly, and GE (I) R&D Kanpur accepted the fact and stated that recovery of fixed charges would be made at correct rate in future. Other 10 GEs did not furnish any reply (August 2015).

- Apart from the above mentioned cases, GE (North) and GE (South) Meerut Cantt. had also not recovered the fixed charges from the paying consumers upto June 2011. It was only at the instance of audit that GEs had started to effect recovery from July 2011 onwards. We worked out the unrecovered amount from December 2004 to June 2011 which summed up to ₹5.27 crore and ₹3.93 crore respectively.

4.1.4.2 Delay in floating of bills of paying consumers

The GE is responsible for prompt realization of revenue. The return of recoveries (electric) showing the electricity charges to be recovered from each

⁴⁸**Return of Recoveries (Electric)**- This record shows electricity charges due from various individuals which are to be billed by the accounts office, MES. It will also show the consolidated amount due from consumers paying to the MES.

paying consumer is to be submitted by the BSO to the AO (GE) monthly, for floating the bills.

We noticed that bills for recovery of energy charges were not submitted timely by the BSO resulting in non-recovery of substantial amount of revenue. A few cases are discussed below:

- Three GEs⁴⁹ located in Northern Command and one GE⁵⁰ in Western Command did not float the electricity bills for the occupied accommodation, with the result an amount of ₹2.84 crore was outstanding for the years 2011-12 to 2013-14. GE (North) Udhampur and GE Mamun (September 2014) stated that action was in hand to float the bills. No reply was furnished by GE Nagrota and GE (South) Udhampur (August 2015).
- At Ahmedabad station, return of recoveries had not been floated during 2011-12 to 2013-14 in respect of JCOs/ORs by the BSO, GE (Army) Ahmedabad. It was only after a gap of three financial years that bill for ₹44.91 lakh was floated in August 2014. The GE replied (September 2014) that due to non-availability of meter reader, the delay had occurred. Similarly, GE (I) R&D RCI, Hyderabad, had not been floating return of recovery against 135 residential accommodations allotted to JCOs/ORs. The recovery was awaited (August 2015).

4.1.4.3 Non-recovery of meter rent

As per Army HQ, E-in-Cs Branch, New Delhi letter of November 2005, meter rent is to be recovered from all the domestic paying consumers at the same rate at which general public living in adjoining colonies being charged by the civil authorities. We observed that meter rent amounting to ₹92.62 lakh had not been recovered from the domestic consumers by the four GEs although the same was being recovered from the general public by the civil authorities as per applicable tariff. Further, one GE had under-recovered the amount of meter rent to the extent of ₹15.87 lakh by not applying the revised rates. Cases of this nature are given in **Annexure-XIV**.

On this being pointed out by Audit, all the GEs, except GE (East) Jabalpur, accepted the facts and stated (June 2014 to October 2014) that necessary action to recover the arrears would be taken, which was awaited as of August 2015.

4.1.4.4 Short recovery of Electricity Duty (ED)

The UPPCL revised the ED from ₹0.09 per unit to 5 per cent of electric charges (energy + fixed charges) with effect from September 2012. GE Babina had not recovered the ED at revised rates from the domestic consumers from October 2012 to March 2014, resulting in short recovery of ₹16.36 lakh. GE Babina agreed to issue the supplementary bill for recovery. Similarly GE

⁴⁹ GE Nagrota, GE (North) Udhampur and GE (South) Udhampur.

⁵⁰ GE (North) Mamun.

Jhansi had not recovered the ED at revised rates resulting in less recovery to the extent of ₹10.79 lakh for the period October 2012 to March 2014. On being pointed out by Audit, GE Jhansi stated (October 2014) that no orders for recovery of revised rates were received by them, however, recovery at the revised rates would be made, which was awaited as of August 2015.

4.1.4.5 Non/short recovery of energy charges

BSO and AO (GE) are required to recover electricity charges from the paying consumers at correct rates as specified in the tariff from time to time. We observed non/short recovery of ₹3.56 crore on account of energy charges from the domestic consumers, messes, institutes, private parties, etc., as commented below:

Domestic Consumers

- UPPCL revised the rates of energy charges and fixed charges for all consumers with effect from 10 June 2013. However, GE (East) Lucknow implemented the revised rates of energy and fixed charges with effect from April 2014 for various category of consumers. Thus, non-implementation of the revised rates from the effective date resulted in short recovery of ₹16.17 lakh from July 2013 to March 2014 from the domestic consumers.
- As per MoD letter of December 1998, the rates of electricity applicable at a particular station will be obtained by MES from the SEBs/supply agencies and also ensure subsequent changes if any from time to time. The West Bengal Energy Regulatory Commission (WBERC) revised the tariff in December 2012 with effect from 1st April 2012 with minimum increase in tariff by ₹1.10 per unit. However, GE (N) Binaguri did not effect the revised rates from 1st April 2012, which resulted in short realization of revenue to the tune of ₹65.19 lakh for the period 01 April 2012 to 31 March 2014. On being pointed out, GE agreed with the audit contention and stated that due to non receipt of tariff, the revised rates were not affected. GE's response is not acceptable as it is the responsibility of MES to obtain the revision in electricity charges from SEB.
- As per Regulation of Military Engineering Services (RMES), the responsibility for preparation of Return of Recoveries rests with the BSO. At Alipore station, due to unserviceability of electric meters in JCO's/ORs married accommodation, energy charges were to be recovered based on the electricity units fixed by the Board of Officers held in September 2003. On the pretext of shortage of meter reader and non posting of BSO, energy charges bills could not be raised in GE Alipore area, which resulted in non-realization of revenue to the tune of ₹25.22 lakh for the period from 01 April 2011 to 31 December 2012, which was awaited as of August 2015.

Messes/Institutes

- At Babina Military Station, electricity charges amounting to ₹1.29 crore for the period from April 2011 to March 2014 had not been recovered from the officers messes on account of ACs (120) and coolers installed without electric meters. While accepting the fact, the GE stated in September 2014 that the matter had been taken up with the Station HQ for recovery, which was still awaited.
- GE Satwari did not recover the energy charges based on the units fixed by the Board of Officers for ACs installed in two Officers' Mess/Officers' Institute, which had resulted in non recovery of ₹9.85 lakh for the period from 1 April 2011 to 31 March 2014, which was awaited as of August 2015.

Private Parties

The Ministry in December 1998 ordered that the recovery of electricity charges from the private consumers was to be made at the "All-in-Cost"⁵¹ rates of the preceding year. However the GEs, as well as AO GE as a primary auditor, did not adhere to the Ministry's orders for recovery of electricity charges at "All-in-Cost" rates, which resulted in under-recovery of electricity charges of ₹ 1.11 crore from the private parties as discussed below:

- GE (Base Hospital) Delhi Cantt. had recovered energy charges at the rate of ₹5.08 per unit from the Army College of Medical Sciences, Delhi Cantt. and medical hostel (Private consumers) from November 2012 to July 2014. However, as per "All-in-Cost" rates of previous years, rates applicable for the years 2012-13 and 2013-14 were ₹5.15 and ₹6.70 per unit respectively. This had resulted in under recovery of ₹26 lakh out of which GE (Base Hospital) had recovered an amount of ₹17.54 lakh from Army College of Medical Sciences in February 2015 and the balance amount of ₹8.46 lakh was yet (August 2015) to be recovered.
- Army Public School, Nehru Road, Lucknow alongwith Hostel was constructed in the year 2000 but no electric meter was installed by the MES in the school to record the consumption of electricity. We observed that no bill was floated by the GE (East) Lucknow to the school. Audit worked out the amount for consumption of electricity by the school at "All-in-Cost" rate as ₹9.80 lakh for the period 2011-12 to 2013-14, which was not recovered by the GE as of August 2015.
- Similarly, at Jabalpur, Army Public School No. 2 was running since April 2001 by Army Welfare Education Society but electricity charges were not recovered from the school from April 2001 to September 2013. The BSO (West) Jabalpur replied in October 2014 that return of

⁵¹**All-in-Cost-** All-in-Cost of electricity is worked out by dividing the total all in cost of the operation of the installation concerned, by the total quantity of energy actually supplied *per annum*.

recovery for the arrears amount of ₹5.66 lakh had been raised. Recovery of ₹5.66 lakh was still awaited (August 2015).

- GE Satwari and GE (Kangra Hills) Yol did not apply the applicable 'All-in-Cost' rates of electricity while floating bills on private parties like Cantonment Board, Military Farm, Shops *etc.*, which had resulted in under-recovery of ₹14.96 lakh during the period from 2011-12 to 2013-14. Recovery of ₹14.96 lakh was awaited as of August 2015.
- GE (W) and GE (E) Jabalpur had not floated bills on private consumers like Army Wives Welfare Association (AWWA), Banks, cable network, Canteen Store Department canteens, *etc.*, for the years 2011-12 to 2013-14, resulting in substantial loss to the Government. In the absence of returns of recoveries, the quantum of loss could not be arrived at. No reply was furnished by the GEs.
- Six GEs⁵² under Southern Command had not recovered electricity charges at 'All-in-Cost' rates from private parties such as shops, AWWA, ATMs, Wet canteen during 2011-12 to 2013-14. This had resulted in short recovery of electricity charges of ₹67.49 lakh. Four GEs *viz.* (GE (Army), Ahmedabad, GE (CME), Kirkee, Pune, GE(I) R&D (East), Bangalore and GE (Army), Trivandrum replied that due to delay in finalization of 'All-in-Cost' rate, the recovery could not be made at correct rates and agreed to recover the amount from the consumers. No reply was given by the remaining two GEs as of August 2015.
- GE Ahmedabad charged domestic rates on electric units (1,21,241) consumed by Gaurav Senani Bhawan, a private party from June 2011 to April 2014 instead of 'All-in-Cost' rates, resulting in short-recovery of ₹4.18 lakh. The GE accepted the under-recovery and floated the bills in September 2014 for recovery of ₹4.18 lakh, which was awaited as of August 2015.

4.1.4.6 Defective Meters

Section 55 of Electricity Act 2003 provides that no unmetered supply should be given to any building/consumer, even if the electricity is to be given free. As per Standing Operating Procedure (SOP) on recovery of excess consumption of electricity issued by the E-in-C's Branch in June 2008, non-functional meter should be replaced within two months.

We observed that at Lucknow, Jabalpur, Babina, Binaguri, Alipore (Kolkata) and Delhi Cantt. stations, defective meters were not made functional for the last three years. In Delhi Cantt., against 13060 quarters, electric meters in respect of 5943 quarters (46 *per cent*) were defective. The extent of defective meters was maximum with GE (East) at 75 *per cent*. Similarly, at Babina, 66 *per cent* and at Jabalpur, 20 *per cent* electric meters were defective

⁵² GE(N) Santacruz, GE (Army) Ahmedabad, GE E/M, Secunderabad, GE (CME), Kirkee, Pune, GE (I), R&D, (East), Bangalore and GE (Army)) Trivandrum.

for two years. Electricity charges were recovered from the consumers by some of the GEs based on the average units fixed by the Station Board of Officers more than three years back. In the absence of functional meters, actual excess consumption of electric units could not be worked out and therefore, loss of revenue could not be quantified. Hence, the supply of unmetered electricity at these stations was in violation of Electricity Act and the E-in-C's SOP on the subject. On being pointed out by Audit, GE (West) Jabalpur stated in October 2014 that defective meters were being replaced with electronic meters. GE (E/M) Base Hospital, Delhi Cantt. stated in November 2014 that process of declaring unserviceable/defective meters Beyond Economic Repair was in hand. No reply was furnished by other GEs, as of August 2015. The reply, however, cannot justify supply of unmetered electricity to such a large number of quarters.

4.1.4.7 Non recovery of other charges

(a) Regulatory Surcharge

- UPPCL introduced regulatory surcharge on energy charges with effect from June 2013 to be applicable till 31 March 2014 to all consumers. But the same was not recovered from the paying consumers by GE (East) Lucknow and GE Babina resulting in under recovery of ₹9.02 Lakh from June 2013 to March 2014. The GEs confirmed (August 2014) the under recovery and agreed to recover the same shortly, which was awaited as of August 2015.

(b) Fuel Surcharge

- Madhya Pradesh State Electricity Board introduced Fuel Cost Adjustment (FCA) as part of energy charges with effect from 10 April 2012 but the same was not recovered by the BSO (West) Jabalpur from the service personnel and defence civilians. The BSO in October 2014 stated that the amount of under recovery on account of FCA was ₹11.80 lakh from May 2012 to March 2014, which would require recovery.
- Five GEs⁵³ under Southern Command had not recovered, Fuel Adjustment Charges (FAC) *etc.* from the paying consumers during 2011-12 to 2013-14 resulting in less recovery of revenue to the tune of ₹3.60 crore. On being pointed out by Audit, two GEs⁵⁴ agreed to charge the FAC from the paying consumers. No reply was furnished by other GEs (August 2015).

Conclusion

Thus, due to lack of internal control mechanism and monitoring in MES towards payment and recovery of electricity charges, an excess payment of ₹24.54 crore had been made to the electricity supply agencies and revenue to the tune of ₹23.66 crore was short recovered from the consumers. In addition,

⁵³ GE (EM)/BSO (S) Secunderabad, GE (Army) Ahmedabad, GE(I) R&D RCI Hyderabad, GE (CME), Dapodi Pune and GE (N) Santacruz.

⁵⁴ GE(CME), Dapodi, Pune and GE (Army) Ahmedabad.

electricity bills were not being floated to the consumers timely resulting in substantial loss of revenue.

The matter was referred to the Ministry of Defence in May 2015; their reply was awaited (September 2015).

4.2 Inadequate monitoring of execution of a project

Inadequate monitoring of execution of work by the Engineers for Indian Military Academy (IMA), Dehradun resulted in non-completion of main building work costing ₹22.75 crore. The delay of five years had not only deprived the Gentlemen cadets of proper training with modern facilities but also held up the other training projects valuing ₹2.50 crore.

Defence Works Procedure-2007 emphasises for effective monitoring of execution of works to ensure timely and cost effective completion of the project.

We noticed during audit of Chief Engineer (CE) Bareilly Zone (July 2014) and Indian Military Academy (IMA) Dehradun (Sep 2014) that due to inadequate monitoring of a project, the execution of works was delayed for five years, resulting in non-establishment of users projects of training needs. The case is discussed below:-

IMA Dehradun is a premier Military training establishment and imparts pre-commission training to the Gentlemen Cadets (GC). For smooth conduct of service and academic training for GC of IMA, Government of India, Ministry of Defence (MoD), in October 2006 sanctioned a work for construction of Training Team and Academic Block (TAB) at IMA Dehradun at an estimated cost of ₹21.40 crore, which was revised to ₹ 23.97 crore in December 2007 due to increase in Market Variation and Difference in Cost of Stores (MV&DCS). The project comprised of construction of class rooms, lecture halls, sand model rooms, computer lab for GC and office accommodation for training team and academic department along with allied services.

The CE Bareilly Zone concluded contract in December 2007 with M/s Villayati Ram Mittal Pvt. Ltd., New Delhi for ₹22.75 crore for construction of main building works *i.e.* construction of TAB. The date of commencement and completion of works was 5th January 2008 and 4th January 2010 respectively. The contractor could not complete the work by due date and progress of work as of July 2010 was only 43 *per cent*. Despite tardy progress of the work, extensions of time were granted by the CE, more than three times. The contractor could not accelerate the progress of work and the contract was finally cancelled at the risk and cost of the defaulting contractor in August 2011 at 50.51 *per cent* progress. The contractor, however, approached the Engineer in Chief at Army Headquarters in September 2011 and committed to complete the work by 31 August 2012. Based on this commitment, the E-in-C directed the CE to revoke the contract with a condition that monthly

progress of at least 5 per cent be achieved by the contractor. Cancellation of the contract was accordingly revoked by the CE in October 2011 and contractor was allowed to continue to complete the work by August 2012. The contractor could not progress the work diligently and the monthly progress of 5 per cent was not adhered to. Despite the continued delay and failure in achieving the committed targets, the CE gave repeated extensions of time, up to December 2013. The contract was ultimately again cancelled in March 2014, at the risk and cost of defaulting contractor at 77 per cent progress. Total payment of ₹20.41 crore (89.71 per cent) including ₹3.20 crore on account of escalation was made to the defaulting contractor. The amount of escalation paid included a component of ₹2.78 crore which pertained to the period beyond the originally approved schedule for completion of work and was therefore avoidable. To complete the remaining (23 per cent) work, a contract was concluded in January 2015 for ₹10.78 crore with M/s Nidhi Constructions, Dehradun at the risk and cost of the defaulting contractor with period of completion up to February 2016.

Delay of five years in execution of work had not only deprived the GC undergoing training at IMA of proper training with modern facilities but also resulted in deterioration of the incomplete TAB building. We also observed that projects sanctioned/contracted from various grants of IMA since 2012-13 such as Automation of TAB (₹75 Lakh), Digital Sand Model Room (₹58.50 Lakh), surveillance lab (₹70 lakh), Language Learning lab (₹47 lakh) amounting to ₹2.50 crore were also held up due to non-completion of TAB, which had adversely affected the training needs of the GC, defeating the main objective of keeping pace with world class training Institutions. Four subsidiary civil works⁵⁵ for the TAB building constructed in April 2010 at a cost of ₹1.67 crore could not be fully utilised for the intended purpose in the absence of the main building.

Thus, due to inadequate monitoring of the work and granting of abnormal extensions of time without diligent progress of work by the contractor, the construction of TAB building was delayed for five years even after payment of ₹20.41 crore (89.71 per cent) to the contractor. The other related projects sanctioned/contracted for ₹2.50 crore for effective training of the GC were also held up in the absence of TAB building, affecting the training being imparted to the cadets.

The case was referred to Ministry in January 2015; their reply was awaited; (September 2015)

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- (1) Construction of Cycle Stand
- (2) Construction of Car Parking Shed
- (3) Construction of Generator Room
- (4) Construction of Guard Room

4.3 Non-utilisation of Assets

Missiles storage shed constructed in August 2008 at a cost of ₹2.29 crore could not be utilised for the purpose as Air conditioning system could not be provided in the shed.

As per scales of accommodation, air-conditioned accommodation for storage of missiles is authorized. Further, Defence Works Procedure stipulates that since the time is of essence, the completion period stipulated in the administrative approval will not be exceeded as far as possible.

We noticed (July 2014) in Chief Engineer 31 Zone that missiles shed constructed in 2008 at a cost of ₹2.29 crore was lying unutilized for seven years due to non-provision of Air conditioning.

The case is discussed below:-

A Board of Officers held in April 2000 recommended construction of three air conditioned missile sheds with allied facilities at an Infantry Division Sector. Ministry of Defence (Ministry) in November 2001 accepted the necessity for construction of above accommodation and accorded sanction for construction of one air conditioned missile shed at Khalsar in phase-I for 35 Ammunition Point (AP) at an estimated cost of ₹2.91 crore. The work was to be completed in three working seasons *i.e.* by 2004.

Chief Engineer Srinagar Zone (CESZ) concluded a contract agreement in June 2003 for execution of building work, excluding air conditioning, at a cost of ₹1.93 crore and the work of storage shed was completed in August 2008 at a cost of ₹2.29 crore. However, air-conditioning work was not contracted although as per sanction, missile sheds were to be provided with heating as well as cooling system. The CESZ initiated a case in August 2011 for obtaining revised sanction by incorporating the Air conditioning as per climate condition of the station. Accordingly the Ministry accorded revised sanction in October 2012 for ₹3.61 crore. For execution of Air conditioning/Heating work, CESZ concluded a contract agreement (December 2013) for ₹1.25 crore. Progress of the contract was 25 per cent (Feb 2015). In the absence of air-conditioning the missiles shed could not be utilized for storage of missiles as of February 2015.

In response to an audit query (July 2014) regarding non-provision of air conditioning in missile shed resulting in non-utilization of the same, the CESZ replied (July 2014) that air conditioning/air heating part was kept in abeyance as initial provision in the job was based on thumb rule calculation which after detailed preparations of drawing and inside environment condition, required to be amended through revision in admin approval. The reply was not tenable as engineers are technically competent to decide the type of air-conditioning system according to environmental condition of the station and had sufficient time to obtain revised sanction before conclusion of the contract for building work. Evidently there was a lack of planning in execution of the project.

The issue regarding effect of operational efficiency due to non-completion of missile shed with complete facility of heating as well as air-conditioning was raised by Audit (May 2015) with user (35 AP). It was replied (May 2015) that the drawl plan of missile had been affected as the missile were held at another location (31 AP) at distance of 110 km crossing highest motorable pass involves much time in transit.

Thus by not making proper planning for provision of Air-conditioning while contract for construction of missile shed was being concluded, the assets created at a cost of ₹2.29 crore were lying unutilized since August 2008. This has affected operational preparedness as in shifting of missiles from holding unit on behalf of 35 AP involves huge time delay in transit.

The case was referred to Ministry in April 2015; their reply was awaited (September 2015).

4.4 Blockage of government money due to conclusion of contracts without availability of site

Chief Engineer, Jabalpur Zone, Jabalpur concluded contracts without availability of clear site, which was not only in contravention of the codal provisions but also resulted in payment of ₹1.68 crore without execution of work.

Military Engineer Services, Manual of Contracts-2007 prescribes that before acceptance of tender a certificate shall be obtained from Garrison Engineer (GE) to the effect that a clear site, free from all encumbrances, is available for all works. Military Land Manual and Cantonment Land Administration Rules 1937 stipulate that land which is actually used or occupied by Military Authorities for the purpose of rifle ranges are class 'A'-1 land.

We noticed during audit of GE Ramgarh in December 2013 that in contravention of the codal provisions Chief Engineer Jabalpur Zone (CEJZ), Jabalpur concluded two contracts for ₹12.27 crore for construction of Baffle Range at Ramgarh Cantt. without availability of clear site. Such conclusion of contract eventually resulted in blockage of government money of ₹1.68 crore. The case is discussed below:-

Based on the recommendation of Board of Officers (BOO) held in October 2001, Ministry of Defence (MoD), in March 2004, accorded sanction for construction of Baffle Range at Ramgarh Cantt. on existing class 'A'-1 defence land for ₹2.44 crore, which was subsequently revised in February 2006 to ₹4.26 crore. Though the layout of Baffle Range met technical requirements set by Terminal Ballistic Research Laboratory (TBRL), it was changed by the Station commander, Ramgarh Cantt. due to land dispute. The alternative site suggested by Station commander for construction of Baffle Range was approved (April 2007) by TBRL, though the same was located on

(B-4⁵⁶ land). Revised administrative approval was accorded by MoD in May 2010 for ₹9.65 crore for construction of Baffle range. Further the Ministry issued corrigendum to the Administrative approval in November 2012 for ₹12.36 crore.

Class 'A'-1 defence land is prerequisite for construction of Baffle Range, a case for conversion of 'B'-4 land to 'A'-1 land was initiated by Station Headquarters in September 2010 but sanction of the Government was still awaited of May 2015. However, overlooking the fact that clear 'A'-1 defence land was not available and a case for conversion of 'B'-4 land into 'A'-1 land was still under process, CEJZ Jabalpur concluded contract in February 2012 for provision of compound wall and gate for ₹1.29 crore. The work was commenced in March 2012 to be completed in March 2013. Another contract was concluded in November 2012 by the CEJZ for construction of Baffle range for ₹10.98 crore. As per the work order issued (January 2013) the work commenced in January 2013 and was to be completed in July 2014. Accordingly, the contractors commenced preparatory works and procured steel for which payments were made to the tune of ₹ 1.68 crore. The Station Commander in January 2013 directed the GE to stop the work pending receipt of MoD sanction for conversion from 'B'-4 land to 'A'-1 land. The work was stand still since January 2013. Statement of Case for foreclosure of the contracts was processed in June 2014 and decision was pending as of December 2014. An expenditure of ₹1.68 crore had been incurred on the work towards payment made to the contractors on account of procurement of steel. GE intimated to audit that the utilization of steel (₹1.68 crore) which was lying at site as of December 2014 would be decided after foreclosure of the work.

Thus, the case revealed that the Station commander, Ramgarh Cantt., obtained revised administrative approval for Baffle Range in May 2010 on 'B'-4 land but sanction of the Ministry for its conversion to 'A'-1 land could not be obtained till yet (May 2015). The CEJZ concluded contracts without ensuring availability of site free from all encumbrances, which not only violated the codal provisions but also had resulted in blockage of government money to the tune of ₹1.68 crore.

The case was referred to the Ministry in January 2015; their reply was awaited (September 2015).

4.5 Infructuous expenditure due to procurement of substandard pipes

Procurement of defective pipes led to execution of substandard work. Consequently firefighting infrastructure created at a cost of ₹2.33 crore had to be abandoned rendering entire expenditure infructuous.

Ministry of Defence (Ministry) accorded sanction in March 2003 for construction of 20 numbers of Explosive Store Houses (ESH) for storage of

⁵⁶ B-4 Land: Vacant land that not included in any other class such as Churches, Cemeteries, Communal grave yards.

ammunition at Bharatpur for ₹32.85 crore which was revised to ₹35.32 crore in March 2007. The sanction, inter alia, catered for firefighting works of ₹2.30 crore, comprising of supply, laying and connecting of 'Cast Iron (CI) class B pipes' for fire hydrants. Chief Engineer, Jaipur Zone (CEJZ) concluded a contract in November 2004 for ₹42.92 lakh for laying of pipeline using Ductile Iron (DI) pipes. The DI pipes were to be issued by the department under schedule 'B' of the Contract. The work commenced in December 2004 and was to be completed in December 2005, the same was however not completed as of August 2015. In the meantime work for construction of ESH was completed in December 2005.

As DI pipes were not on rate contract (RC), specifications were changed to CI pipes by the CEJZ. The CEJZ accordingly placed Supply Order for CI pipes (for ₹2.13 crore) on three DGS&D approved firms viz M/s Kejriwal Castings, M/s Dharam Engg Co. Batala and M/s Arko Pipegrams Jalandhar. The pipes were supplied by these firms between June 2005 and June 2007.

However, the pipes received from M/s Dharam Engg. Co. Batala and M/s Kejriwal Casting were sent for independent testing by the Garrison Engineer, Bharatpur to verify the quality. The samples, however failed in Hydraulic Test. Hence whole lot was rejected by Board of Officers in June 2005 & July 2005. However, on the directions of CWE Jaipur the samples were again sent to National Test House, Ghaziabad, which as per the Technical Board of Officers even lacked necessary fixture for Hydraulic Test. The samples were passed in September 2005. Accordingly, all the supplies were accepted at firm's premises.

The Pipes were issued to the contractor, however in April 2009, the contractor intimated that the pipes issued by the department were of 'Inferior quality' and major quantity of 100mm diameter pipes were damaged, having holes and cracked. The CEJZ instructed CWE Jaipur in June 2009 to personally look into the matter and directed Assistant Garrison Engineer (Independent), Bharatpur to recheck all the issued pipes through joint inspection. A Board of Officer was held at AGE (I) Bharatpur and HQrs CWE Jaipur on 14 November 2011 to investigate reasons for leakage and bursting or splitting of pipes at their flanges. Board attributed the probable causes of failure of pipes to 'selection of wrong types of pipes', manufacturing defects and improper planning. In February 2012, Audit highlighted the usage of substandard pipes in the work. And it was consequent to that the Zonal CE took the matter with the Command CE to get the matter investigated through a Court of Inquiry.

Head Quarters CE South Western Command convened Technical Board of Officers (TBO) in March 2012 to ascertain reasons and for suggesting remedial measures. TBO found that 'material and workmanship of pipes were very poor', which was major reason for all problems. TBO has finally concluded (July 2014) that existing scheme of firefighting could not be modified and made operational and hence fresh scheme had to be prepared. The Court of Inquiry however, was under progress (April 2015) to establish the accountability for procurement of substandard pipes.

The case therefore reveals that due to procurement of sub-standard pipes the expenditure of ₹2.33 crore incurred so far on the firefighting work had become infructuous. Further no alternative arrangement for fire-fighting is in place and additional liability for laying fresh scheme for fire-fighting works remained to be implemented.

The case was referred to the Ministry in February 2015; their reply was awaited (September 2015).