Chapter 2

2 Performance Audit relating to Government Companies

Tariff, Billing and Collection of Revenue by Uttar Haryana Bijli Vitran Nigam Limited

The Uttar Haryana Bijli Vitran Nigam Limited (Company) was incorporated on 15 March 1999 for distribution of power in the northern parts of Haryana. The objectives of the Company are to develop and maintain an efficient, coordinated and economical distribution system and to supply electricity to the consumers in accordance with the provisions of the Electricity Act, 2003. A performance audit of the activities of the Company relating to tariff, billing and collection of revenue covering the period 2011-12 to 2015-16 *inter-alia* brought out under recovery of service charges, under charging of rent and excess supply of power which adversely impacted the financial position of the Company. Some of the significant findings are as under:

Highlights

The Company recovers Service Connection Charges from consumers to recover the cost incurred while releasing electricity connections. Non-revision of rates after January 2001 resulted in under-recovery of `124.24 crore from consumers during the period from 2011-12 to 2014-15.

(Paragraph 2.6.1.1)

Haryana Electricity Regulatory Commission (HERC) allowed recovery of Regulatory Assets (RAs) of `114.49 crore out of accumulated RAs of `254.42 crore as a part of tariff for 2013-14. The Company had not taken up the matter of recovery of balance RAs of `139.93 crore with HERC while filing Annual Revenue Requirements (ARRs) under the Multi Year Tariff (MYT) framework for 2014-17.

(Paragraph 2.6.1.3)

The Company supplied 15,952.82 MUs of power against HERC approval of 15,233.50 MUs during 2011-15 to agricultural pump set consumers resulting in short receipt of subsidy of `425.97 crore due to excess supply of 719.32 MUs of power.

(Paragraph 2.6.1.5(i))

The Company had to bear a holding cost of `137.86 crore due to delay in filing of claim for Fuel Surcharge Adjustments.

(Paragraph 2.6.1.7)

The Company had to suffer interest loss of `30.60 crore due to non-revision of Advance Consumption Deposit.

(Paragraph 2.7.6)

Under-charging of meter rent, delay in issue of first bills to consumers and non-adherence to the periodicity of billing led to loss of `12.73 crore. The loss of revenue was potentially higher due to increase in unauthorised use of load and delay in replacement of defective/ damaged meters and of electromechanical meters with static meters.

(Paragraph 2.7.8)

The Company also had to sustain loss of `1,729.75 crore due to its failure to contain transmission and distribution losses as per the prescribed norms of HERC.

(Paragraph 2.7.9)

2.1 Introduction

The Uttar Haryana Bijli Vitran Nigam Limited (Company) was incorporated on 15 March 1999 for distribution of power in the northern parts of Haryana. The objectives of the Company are to develop and maintain an efficient, coordinated and economical distribution system and to supply electricity to the consumers in accordance with the provisions of the Electricity Act, 2003.The Company controls transmission and distribution system up to 33 Kilo Volt (KV). The tariff is fixed by the Haryana Electricity Regulatory Commission (HERC) based on Annual Revenue Requirement (ARR) submitted by the Company.

2.2 Organisational set up

The activity of sale of power to all categories of consumers is under Director (Operations) of the Company who also monitors erection, operation and maintenance of the distribution network, billing and collection of revenue. The activity of reconciliation of revenue, collection and banking are controlled by the Financial Advisor.

2.3 Audit objectives

The objectives of performance audit were to ascertain whether the:

- entire cost of providing electricity is being recovered by submission of timely ARRs to HERC;
- tariff orders, sales circulars and sales instructions were issued without any ambiguity and implemented in time by the field offices;
- metering and billing was managed efficiently and effectively;

- collection and accounting of revenue was completed in an economic and efficient manner; and
- monitoring and internal controls were efficient to eliminate risk in billing and collection activity.

2.4 Audit criteria

The audit findings are evaluated against audit criteria which are sourced from the following:

- The Electricity Act, 2003 and regulations issued from time to time by HERC;
- Tariff orders and directives/ instructions issued by HERC;
- Guidelines issued by the HERC/ Company regarding collection of revenue, its accountal and prevention of thefts; and
- Targets of billing & collection efficiency, Aggregate Technical & Commercial (AT&C) losses and vigilance checking fixed by HERC/ Company.

2.5 Scope of Audit and methodology

The audit conducted from October 2015 to May 2016 covered examination of activities of the Company relating to tariff, billing and collection of revenue for energy sold during the years 2011-12 to 2015-16. For achieving the audit objectives, the records maintained at the Head Office of the Company and at five[1] out of nine operation circles (covering all the divisions and sub-divisions) were selected through "Simple Random Sampling Method without Replacement". The selected sample covered 65 *per cent* of revenue. The electronic data of billing of consumers maintained by the Company was analysed by using data extraction and analysis tool *viz.*, IDEA (Interactive Data Extraction and Analysis) software to ensure that the billings of consumers were done with respect to rules and regulations of the Company**.**

The audit objectives were discussed with the Company during the entry conference (January 2016). The audit findings were reported (June 2016) to the Management and discussed in the exit conference (July 2016) which was attended by management headed by the Managing Director of the Company. The views of the Management have been considered while finalizing this performance audit.

2.6 Audit findings

2.6.1 Tariff Proposals

The Company files its ARR with HERC by 30 November every year showing

[1] Karnal, Panipat, Rohtak, Sonepat and Yamunanagar.

the expected aggregate revenue, the estimated cost of providing electricity and proposals to deal with the revenue gap. The financial viability of the Company depends upon generation of surplus from its operations to finance its operational needs and future capital expansion programmes.

2.6.1.1 Delay in filing of petition for revision of service connection charges

The Company charges fixed Service Connection Charges (SCCs) from its consumers to recover the cost incurred while releasing electricity connections. The HERC Regulations 2005 require the Company to compile and publish a cost data sheet by 1st April of every year which should include SCCs to be recovered from the consumers. Audit observed that the Company had fixed the rates of SCCs for various categories[2]of consumers on 1 January 2001 and did not revise them till April 2010 despite increase in labour and material cost. Even this revision was undertaken without approval of HERC and was therefore consequently withdrawn in August 2010. The Company incurred expenditure of `178.56 crore[3] during 2011-12 to 2014-15 on release of connections to consumers and recovered `54.32 crore. Thus, there was under recovery of `124.24 crore from the consumers as compared to the cost. The Company subsequently filed a petition with HERC in January 2015 for revision of SCCs which was approved in July 2016.

2.6.1.2 Tariff concession in contravention of the Electricity Act, 2003

Section 65 of the Electricity Act, 2003 provides that if the State Government decides to grant subsidy to any class of consumer in the tariff determined by the State Commission, the State Government shall compensate the Company by grant of subsidy. It further stipulates that no such direction of the State Government shall be operative if the payment is not made in accordance with these provisions and the tariff fixed by the State Commission shall be applicable.

On 17 June 2005, the State Government announced a discount of 10 paisa per unit in the domestic tariff of electricity supplied to a household where the connection is in the name of a woman and property is also owned by woman. The HERC in its tariff order of 9 November 2005 for the year 2005-06 refused preference to woman consumers in tariff**.** In the same month, the Company approached the Finance Department (FD) to claim the subsidy payable on this account. The FD however refused (17 November 2005) to provide any financial assistance and advised the Company to meet the shortfall from its own resources. Despite refusal of FD and HERC, the Company however continues to allow concession to woman consumers during 2005-06 to 2014-15 (up to February 2015) in contravention of the provision of Electricity Act, 2003 and tariff orders. The amount involved in such connections was `5.57 crore during 2005 to February 2015.

---

[2] Single phase Non Domestic Supply (NDS), three phase NDS, Bulk Supply, Low Tension (LT) & High Tension (HT) industrial supply *etc.*

[3] Except Agriculture Pumpset consumers.

2.6.1.3 Delay in liquidation of Regulatory Assets

Section 8.2.2 of the National Tariff Policy of Government of India (GoI) stipulates that if Regulatory Assets (RAs)[4] have been adopted by the Commission in the past to limit tariff impact in a particular year, the carrying cost of RA should be allowed to the Company and its recovery should be effected within a period not exceeding three years.

HERC had allowed the revenue gap in the form of RA every year which had accumulated to `254.42 crore for the years 2008-09 to 2012-13. The HERC, however, allowed recovery of `114.49 crore as a part of tariff in the tariff order for 2013-14 to avoid extra burden on the consumers and the uncovered portion of the RAs *i.e.* `139.93 crore (`254.42 crore-`114.49 crore) alongwith interest cost was to be recovered in the next ARRs *i.e.* of 2014-15 and 2015-16. Audit noticed that Company had not taken up the matter of recovery of balance RAs of `139.93 crore with HERC while filing the ARR under Multi Year Tariff (MYT) framework for the years 2014-15, 2015-16 and 2016-17.

The Management stated (July 2016) that the Company has approached the HERC to consider the actual cost of the Company in ARR. Final outcome of this was awaited (October 2016).

2.6.1.4 Creation of Contingency Reserve Fund not provided for under rules

The Electricity Supply Act, 1948, provided for creation of Contingency Reserve Fund (CRF) equivalent to 0.25 *per cent* of the original cost of fixed assets from the revenue in each year. The sum so appropriated was to be invested in securities authorised under the Indian Trusts Act, 1882. However, the Electricity Act, 2003, does not contain any provision for creation of CRF.

Audit observed that the Company inflated the ARRs by `21.09 crore during 2003-04 to 2007-08 by making provision for CRF which was disallowed (2008-09) by HERC. HERC directed that the corpus of `27.86 crore (including interest of `6.77 crore on `21.09 crore) should be withdrawn only after its approval. The Company while filing petition for Multi Year Tariff (MYT) framework for 2014-17 raised (May 2014) the issue for liquidation of this corpus with HERC who agreed (October 2014) and the fund was liquidated in March 2015. The Management informed (July 2016) that overdraft facility had been arranged against the FDRs.

Thus, the Company created a fund that was not covered under the extant rules. The Fund had to be subsequently liquidated under directions of the HERC and this liquidation process resulted in extra expenditure of interest of `5.20 crore (worked out for six years at lending interest rate of 12.25 *per cent* less interest at 9.14 *per cent* earned on FDRs).

---

[4] Regulatory Assets are unrecovered cost on account of financing gap between the annual revenue requirement and collectible revenue which are allowed by HERC to be recovered by DISCOMs in ensuing years.

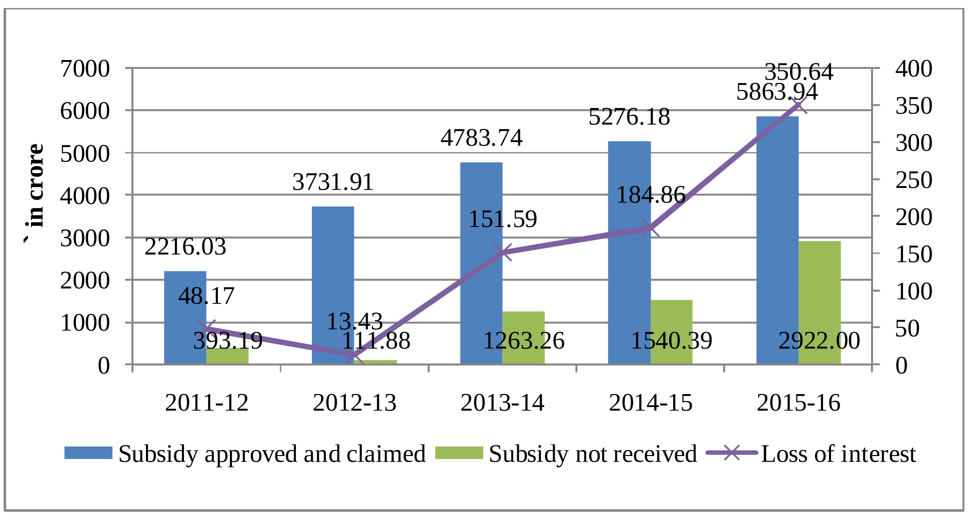
2.6.1.5 Loss due to supply of power to agriculture consumers

The supply to Agriculture Pumpset (AP) consumers is divided into two categories *i.e.* metered and flat rate (un-metered) consumers. The State Government reimburses the deficit on account of power supply to AP consumers in the form of subsidy. Audit observed the following:

i) HERC approved supplying of 15,233.50 MUs of power to AP consumers during the years 2011-12 to 2014-15. The subsidy ranged between `5.04 and `6.53 per unit. The Company, however, supplied 15,952.82 MUs of power to AP consumers during this period. Resultantly, subsidy of `425.97 crore due to excess supply of 719.32 MUs of power was not claimable. The Management informed (July 2016) that the subsidy on account of excess supply of power to agriculture consumers is claimable in the true–up petition. The reply is not tenable as in its true-up petitions of 2011-14, the Company itself has not claimed the extra subsidy.

ii) Chart 2.1 below indicates the position of subsidy approved and claimed, subsidy not received and the extra interest paid on borrowing due to less receipt of subsidy during the last five years up to 2015-16:

Chart 2.1: Loss due to non-receipt of subsidy

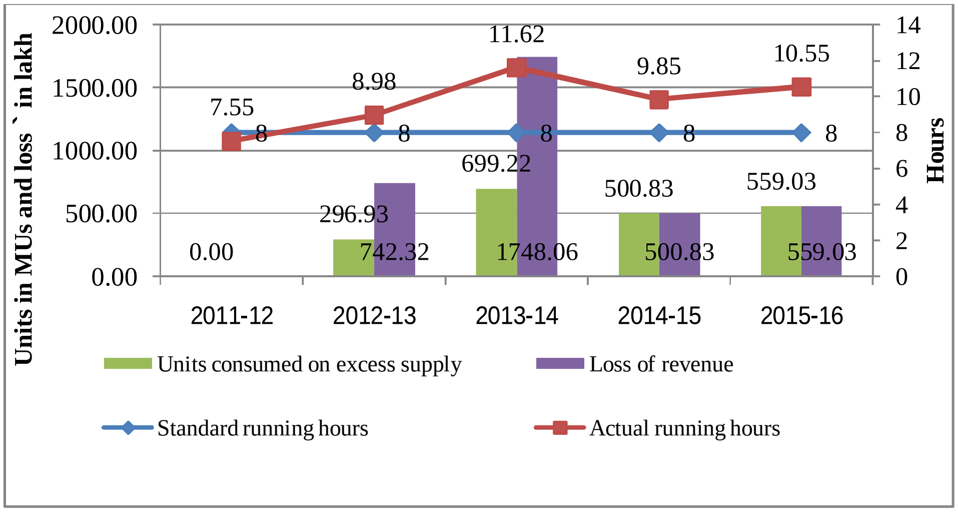


Source: Data provided by Company

It would be seen that the value of subsidy short received had increased from `393.19 crore in 2011-12 to `2,922 crore in 2015-16. The Company also paid interest of `748.69 crore on its excess borrowing undertaken due to delayed receipt of subsidy as detailed in ***Appendix 3.***

iii) As per the Power Regulatory Measures (PRMs) adopted by the Company, AP consumers shall be provided power for minimum eight hours every day so as to meet their needs and to keep AT&C losses to a minimum. If power is supplied in excess of the standard hours to unmetered AP consumers, the Company has to bear loss of revenue on the proportionate volume of energy supplied in excess of standard hours.

Chart 2.2: Excess supply of power to AP consumers



Source: Data provided by Company and annual accounts of the Company

The Company supplied excess power of 2,056.01 MUs to unmetered AP consumers valuing `35.50 crore during the 2012-13 to 2015-16 which being not claimable was a loss to the Company.

2.6.1.6 Non-payment of interest on consumer security deposits

As per the Electricity Act, 2003 and the enabling regulations issued by HERC, the Company can recover advance consumption deposit (ACD) equivalent to four[5]/ two[6] months of energy consumption charges from consumers of the respective categories on which interest is payable.

Audit observed that as against payable interest of `206.04 crore, the Company in its ARRs got approved `231.16 crore from HERC during 2011-12 to 2015-16. This resulted in excess claim of `25.12 crore. The Company actually paid `157.81 crore as interest against `231.16 crore approved by HERC during this period. Thus, the Company inflated its ARRs by claiming excess interest on consumer security but paid less interest to the consumers.

2.6.1.7 Delay in filing of FSA claims

Tariff Regulations 2008 require the Company to file Fuel Surcharge Adjustments (FSA)[7] claims with HERC on a six monthly basis. In May 2010, HERC amended the Regulations in order to reduce the burden of holding cost on consumers and allowed the Company to recover FSA on monthly basis up to 10 *per cent* of approved per unit variable power purchase cost. By the MYT Regulations issued in December 2012, FSA was allowed to be recovered on a quarterly basis.

[5] In respect of Domestic Supply (DS) and Non Domestic Supply (NDS) consumers, where bi-monthly billing is done.

[6] In respect of consumers other than DS and NDS consumers, where monthly billing is done.

[7] In case actual power purchase cost is higher than the approved power purchase cost, the HERC compensate the Company for the higher power purchase cost in the form of FSA.

Audit observed that the power distribution companies instead of claiming FSA on monthly basis from May 2010 onwards, claimed FSA of `1,576.46 crore[8] for 2010-11 belatedly in October 2011. The HERC allowed FSA of `1,453.25 crore and allowed holding cost from April 2012 onwards due to delay in filing claims. The holding cost of `137.86 crore[9] from April 2010 to March 2012 thus became an avoidable cost to the Company.

The Management stated (July 2016) that the matter would again be taken up with the HERC at the time of filing petition for next true-up or ARR. The point stands that HERC has already decided the matter against the Company.

2.6.1.8 Inability to claim expenditure on CAPEX

The Company proposed Capital Expenditure Plan (CAPEX) of `5,246.16 crore during 2011-15. The HERC, however, disallowed `2,419 crore out of the total proposed as the Company could not identify the improvements achievable and benefits likely to accrue as a result of the investments. Further, HERC had also disallowed (May 2015) capital expenditure of `31.30 crore (`2.61 crore on Priyadarshini Scheme and `28.69 crore on High Voltage Distribution System works at Kaithal during 2013-14) incurred by the Company without obtaining prior approval of the schemes from HERC which was a necessity.

Audit observed that inability to demonstrate improvements to be able to claim CAPEX as well as incurring expenditure without requisite prior approvals of HERC resulting in their disallowance may adversely affect the Company's capacity to invest in and improve its distribution network**.**

2.6.1.9 Implementation of Scheme without necessary approval of HERC

Section 46 of the Electricity Act, 2003 provides that expenditure reasonably incurred by the Company in providing an electric line may be charged from the consumer. HERC orders allow the Company to issue any sales circular having financial implications only with prior approval.

The Company obtained approval of State Government for release of AP connections under 'Tatkal Scheme' stating that approval would be obtained from HERC before issuing circular. However, the Company issued (May and August 2015) sales circulars for the release of connections under the scheme without obtaining the required consent. The Company charged `one lakh over and above the normal cost from the consumers who desired to get the AP connections on priority. The Company received `7.57 crore from 515 applicants and incurred `2.44 crore on release of 206 connections till December 2015. The connections to 309 consumers could not be released due to non-availability of material in stores.

---

[8] FSA claims include FSA charges and prior period expenses.

[9] 48.57 *per cent* representing FSA share of UHBVNL * (`1453.25 crore *12.50 *per cent* interest allowed by HERC in ARR on working capital * 6 months (2010-11) + `1544.08 crore (`1453.25 crore + `90.83 crore representing interest on `1453.25 crore for six months) *12.50 *per cent* (2011-12).

The Management stated (July 2016) that petition had been filed (January 2016) with HERC to regularise the Scheme and the decision of HERC was awaited (October 2016). The point remains that the scheme was introduced without approval of HERC.

2.7 Metering and Billing for power supply

As per the Electricity Act, 2003 read with HERC notification of July 2005, the Electricity Supply Code and Sales Manual, 2013, supply should be given to consumers only through installation of a meter. The Company is required to replace meters when they become defective/ burnt due to technical reasons including voltage fluctuation attributable to the Company or due to natural events including rain, cyclone and floods. It also requires that bills be raised to the consumers in time as per the tariff order and other schedules approved by the HERC from time to time.

2.7.1 Loss due to non-adherence to the Supply Code

As per the Supply Code, connections for 50 KW to 2000 KW load should be released on three phase at 11 KV line. As per Sales Circular (U-47/2009 dated 31 December 2009), release of connection by tapping on the independent feeder is allowed after the consumer who wants to get electricity connection on independent feeder has deposited the cost of distribution line from sub-station to the metering point at consumer end. However, there is no provision of tapping from feeding line.

Audit observed that the Company had provided (19 May 2010) a new connection of 850 KW load to a consumer in Newal sub division (Karnal circle) by allowing tapping on existing 33 KV grid line instead of from the independent 11 KV feeder. Audit observed the following:

- The tapping of 33 KV line resulted in non-recovery of sharing cost of `54.52 lakh[10] which would have been recovered from the consumer had the connection been given from independent 11 KV feeder from 132 KV Sub Station.

- HERC had allowed (14 March 2013) DISCOMs to levy reliability charges at `1.50 per unit from consumers who opted for reliable power. Though the supply to this consumer was reliable being connected on grid line, the consumer has not been brought under the ambit of these instructions and not levied reliability charges of `55.32 lakh during 2013-14 to 2015-16 for the energy supplied.

Thus, providing energy connection to a consumer in non-compliance with codal provisions resulted in loss of revenue of `1.10 crore. Management did not offer its reply (October 2016).

[10] `54.52 lakh = (`18, 69,938/.650x3.79)/2.

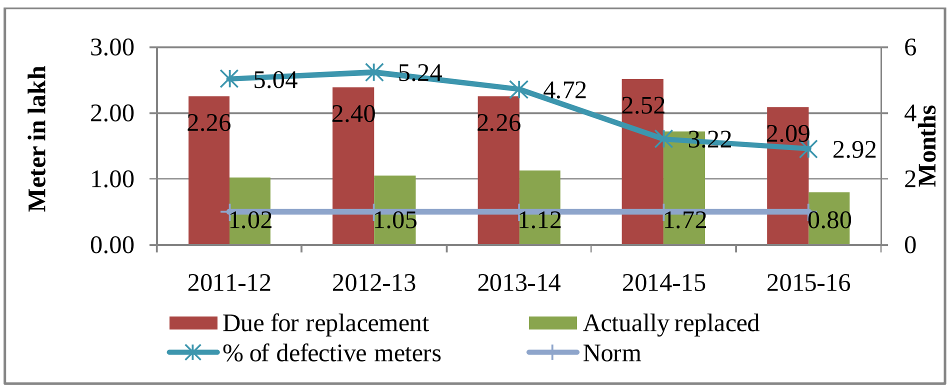
2.7.2 Loss due to issue of connection in wrong category

The tariff of consumer categories under Public Water Works (PWW)[11] and Non-Domestic Supply (NDS[12]) categories is higher as compared to Low Tension (LT) Industrial[13]/Bulk Supply[14] category. Audit observed that out of 94 connections categorised under Low Tension (LT) in 13 sub divisions of Yamunanagar Circle, 25 connections should have been categorised under PWW as these were issued for water supply in Haryana Urban Development Authority (HUDA) area and 69 under NDS category as these were issued to banks, schools, hotels, telephone exchange and offices of Forest Department. This incorrect categorisation resulted in short recovery of `34.79 lakh (`18.51 lakh in PWW connections and `16.28 lakh in NDS connections) during 2011-12 to 2015-16 (up to February 2016). The Company had not taken any action to change the category of connections affecting the recovery of the amount under charged (March 2016).

2.7.3 Non replacement of defective/ burnt/ stop meters

HERC Regulation of 16 July 2004 on 'Standard of Performance' requires that faulty meters should not exceed one *per cent* of the meters installed. The Company's Sales Manual provide for replacement of defective meter within one month of their being reported. The chart 2.3 below indicates the status of replacement of defective meters during the last five years up to 2015-16:[15]

Chart 2.3: Status of replacement of defective meters



Source: Data provided by Company

It would be seen from the above that the norm of one *per cent* of defective meters was never achieved. Further analysis of billing data showed that defective meters were not replaced within the stipulated time limit of one month as 1.34 lakh consumers were billed on average basis continuously for one year or more during 2011-16 in selected circles. The HERC in its Tariff

---

11 PWW include the pumps (other than irrigation) including, sewerage disposal/ treatment plants *etc.* installed by the Government and Government undertakings.

12 NDS tariff applies to all non-residential premises e.g. business houses, schools, cinemas, clubs, public offices, hotels *etc.*

13 LT industrial load to all small industrial connections up to 50 KW.

14 Connections under bulk supply category are released for general or mixed load exceeding 10 KW for M.E.S, Railways other than traction, Central P.W.D, Hospitals, educational institutions and other institutions.

15 Up to February 2016.

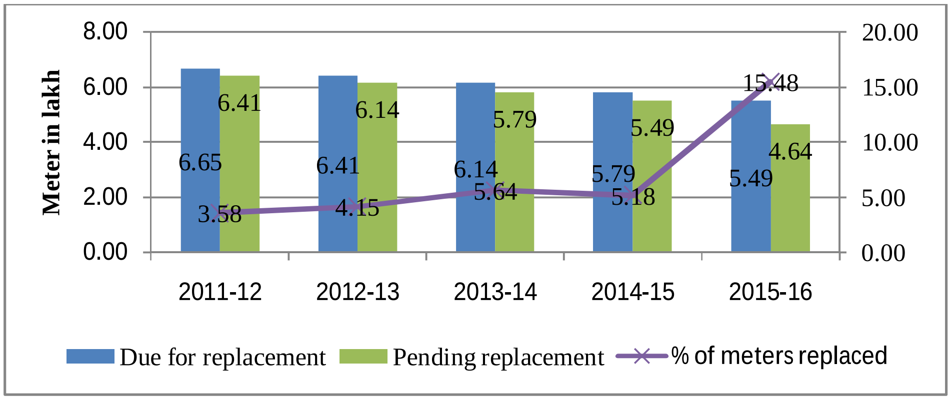
orders had observed (10 January 2013) that supply of electricity through defective/ dead/ stop meter for long periods not only results in harassment to the consumer but also affects the revenue of the Company due to improper billing and measurement of power supplied.

2.7.4 Non replacement of electro-mechanical meters with static meters

In March 2006, the Central Electricity Authority prescribed that all consumers' meters shall be of static type. The meters not complying with these regulations should be replaced by the Company on its own or on consumers' request. HERC in tariff orders (26 June 2012 and 7 May 2015) noticed that large numbers of electro mechanical meters which were not recording energy accurately were to be replaced by 31 March 2016.

The chart 2.4 below indicates the status of electro-mechanical meters replaced and pending for replacement during the last five years up to 2015-16:

Chart 2.4: Status of replacement of electro-mechanical meters with static meters



Source: Data provided by Company

It would be seen that though the percentage of replacement of meters had increased during 2011-14, a total of 4.64 lakh electro mechanical meters were pending replacement with static meters as on 31 March 2016 which resulted in under assessment and consequent loss.

The Management informed (July 2016) that 70-80 *per cent* meters had been replaced in urban areas but the Company was facing problems in rural areas and assured to replace all the defective/electro mechanical meters.

2.7.5 Short charging of units from independent feeder consumers

The Sales Manual provides that in case of independent feeder, two meters should be installed, one at the consumer end and another at the sub-station end. In case of difference of consumption between the two meters, the higher of two would be taken for billing.

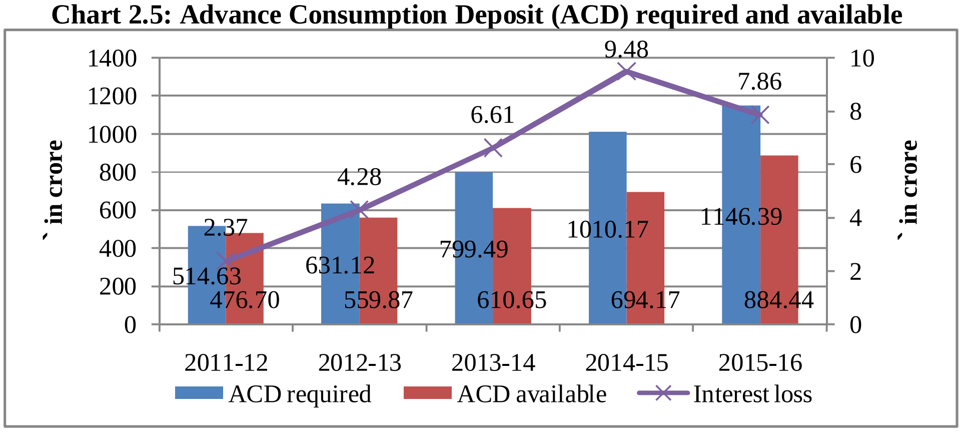
Audit observed that the Company did not charge `26.84 lakh that was due based on higher reading of the two meters installed, in respect of six consumers (five in Yamunanagar and one in Sonepat Circle) during April 2013 to March 2016. The Company has not taken any action for recovery of this amount from the consumers (July 2016).

2.7.6 Non revision of Advance Consumption Deposit

As per the Electricity Act, 2003 and the enabling regulations issued by HERC, the Company can recover Advance Consumption Deposit (ACD) equivalent to four/ two months of energy consumption charges of the respective consumer categories. The revision of ACD on the basis of annual consumption should be done in the beginning of the financial year.

The chart 2.5 below indicates the ACD required and available during the last five years from 2011-12 to 2015-16.

Chart 2.5: Advance Consumption Deposit (ACD) required and available



Source: Data provided by Company and annual accounts

It would be seen that the recoverable ACD had risen from `37.93 crore in 2011-12 to `261.95 crore in 2015-16 based upon the consumption pattern of previous periods. The Company had to incur extra interest cost due to un-recovered ACD amounting to `30.60 crore (worked out at difference between lending rate and the rate of interest allowed by HERC to be paid to consumers on ACD) due to raising of funds from banks.

The Management stated (July 2016) that ACD had been revised in some circles and efforts were being made to revise the ACD through the computerised system itself.

2.7.7 Non deduction of TDS on interest paid on consumer securities

As per Section 194 A of the Income Tax Act, 1961, the Company is responsible for deduction of tax at source at the rate of 10 *per cent* (individual) and 20 *per cent* (companies) on interest exceeding `5,000 each. In case of non-deduction of tax at source, the payee is liable for penalty equivalent to the amount of tax deductible at source besides interest at the rate of one *per cent* per month on the defaulting amount.

Audit observed that in two sub-divisions[16] of Sonepat circle, the Company had paid interest of `1.99 crore to Large Supply (LS) and Medium Supply (MS) consumers on their ACDs but did not deduct income tax of `22.51 lakh though the interest payment exceeded `5,000 in each case during 2011-12 to 2014-15. This attracted levy of penalty of `22.51 lakh and further penal interest of `9.95 lakh (up to March 2016). Thus, failure to deduct tax at source had created liability of `32.46 lakh.

2.7.8 Deficiencies noticed in analysis of Billing data

The Company awarded (February 2007) the work of generation of bills (*i.e.* data entry, generation and printing of computerized bills) to two agencies who maintain the data base for all the consumers. Besides this, the Company has established a system through an outside agency for generation of bills in 18 towns where it supplied electricity under the Re-structured Accelerated Power Development and Reforms Programme (R-APDRP).

a) Under charging of meter rent

As per Schedule of General and Miscellaneous Charges (Sales Circular U-27/ 2011), the Company is required to charge meter rent of `20 per month for a single phase meter and `30 per month for three phase meter from September 2011 where the meters were installed by the Company. Audit observed that the Company had short charged meter rent of `47.64 lakh from 1.86 lakh consumers in 2.23 lakh bills during 2011-16. The Company had not taken any action for the recovery from its consumers.

b) Recovery of meter rent on defective/burnt meters

As per the Sales Manual, if a meter supplied by the Company becomes inoperative or inaccurate, no Meter Service Charges (Meter Rent) are recoverable for the period the meter remains inoperative or inaccurate. We observed that the Company had charged meter rental of `9.22 crore in 22.14 lakh bills for the period in which meters remained defective during 2011-16 which was a burden on the consumers.

c) Delay in issue of first bill to consumers

As per the Supply Code, the first bill of a new connection would be issued to the consumers alongwith the bills of next billing cycle. The Sales Manual also requires that the concerned Sub Divisional Officer and Executive Engineer will ensure that first bills are issued in time for all the new connections released. Audit noticed that first bills of new connections were issued with delays ranging from four months to over 17 years in non-domestic supply category and four months to over 18 years in domestic supply category in the selected circles. This had resulted in loss of interest of `3.19 crore on delayed realisation of revenue of `27.65 crore during 2011-16.

[16] City Sub division and Rai Sub division.

d) Non-levy of Electricity Duty

As per the Sales Manual, Electricity Duty (ED) would be charged from the consumers on kWh units consumed during a billing cycle. Government of Haryana had exempted levy of ED on Central Government organizations. However, their residential colonies and canteens were not covered from exemption from levy of ED. Audit observed the following:

i) The Company provided two connections to Railways, one to Northern Railway Workshop, Yamunanagar and another to Railway Colony Sonepat which were used for residential township purpose. ED amounting to `25.90 lakh was not charged on the energy billed to the consumers in the residential colony during April 2010 to December 2015.

ii) ED amounting to `15.69 lakh was not charged from 1,283 consumers in 6,809 bills against 15.69 MUs of power supplied during 2011-16.

Thus, the Company had short levied ED of `41.59 lakh. The non-payment of ED may also attract penalty of a sum not exceeding four times the duty not recovered.

e) Surcharge not levied for delayed payments

As per the Sales Manual, in case the consumers do not pay the energy bills by the due date, surcharge at 1.5/ 3 *per cent* for delayed payment of monthly/ bimonthly bills would be charged.

Audit noticed that surcharge of `71.76 lakh was not levied in 30 thousand bills issued to 21 thousand consumers having Sale of Power (SoP) arrear of `21.53 crore during 2011-16. The Company had not taken any action for recovery so far (March 2016).

f) Unauthorised use of load by consumers

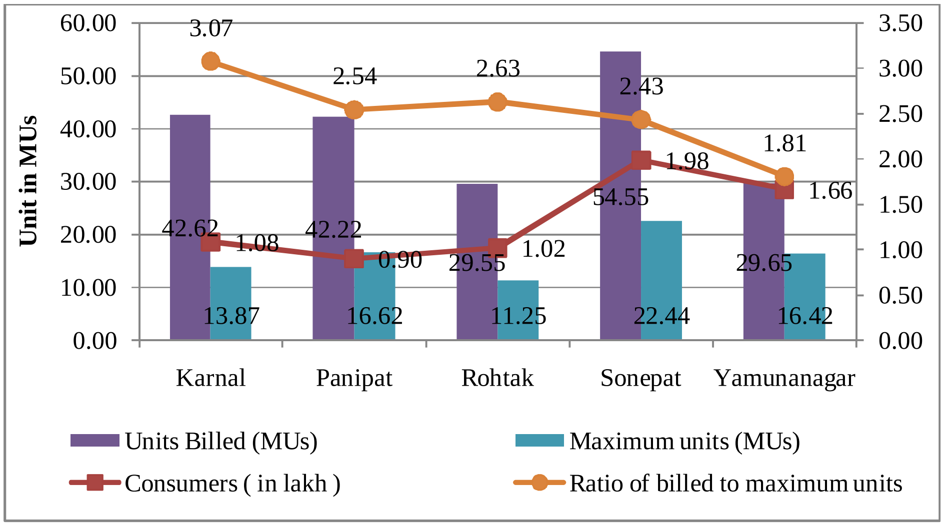
The Sales Manual stipulates that one time penalty shall be levied if the connected load is detected to be more than 10 *per cent* of the sanctioned load. In case the actual consumption is not available, the assessment of energy of the domestic consumers is to be done on the basis of LDHF[17] formula.

Audit observed that 9.52 lakh DS consumers consumed 1,407.78 MUs of power during 2011-16 whereas as per LDHF formula the consumption should have been only 754.80 MUs. Further, maximum possible units to be consumed at full sanctioned load for 24 hours at 100 *per cent* load factor worked out 1.81 to 3.07 times the units as per sanctioned load as depicted

[17] Formula used for levy of penalty in case of theft of power (L= load of the consumer, D = Days, H= 16 hours, F= 0.25 factor applicable to DS).

in the chart 2.6 below:

Chart 2.6: Unauthorised use of load by consumers



Source: Data provided by Company

The unauthorised use of load during the last five years up to 2015-16 resulted in excess consumption of 117.99 MUs of electricity after considering maximum possible consumption according to their sanctioned load. The Company taking cognizance of the consumption pattern of the consumer should have asked them to enhance their sanctioned load and obtained additional security. The Company did not make use of the technical features/ capabilities already available in the static meters**.**

g) Non adherence to the billing periodicity

The Supply Code provides that the Company should issue bills to consumers for the period not more than two months in respect of DS and NDS (up to 20 KW load).The table below indicates loss of interest due to delay in raising bills during the last five years up to 2015-16.

Table no. 2.1: Loss of interest due to delay in raising bills.

Range of days	No. of bills (in lakh)	Amount of bill (` in crore)	Loss of interest (` in crore)
70-80	1.87	7.46	0.14
80-100	1.36	5.46	0.38
100-120	1.56	7.24	1.02
Above 120	5.84	29.99	7.52
Total	**10.63**	**50.15**	**9.06**

Source: Data provided by Company

Non-adherence to the laid down periodicity for preparation of bills had resulted in loss of interest of `9.06 crore[18] besides violation of provisions of the Supply Code.

[18] Against the prescribed period of 60 days, interest loss was calculated on the amount of bill having consumption period of more than 70 days.

h) Non maintenance of complete details of consumers

The Supply Code provides that application form for providing new connection must be complete in all respects including a photograph of the applicant, identity proof, ownership or legal occupancy over the premises, proof of applicant's current address. The name, address and account number of the consumer is to be printed on the bill. Audit observed that the address in 32.07 lakh bills of 4.17 lakh consumers were not maintained in the billing database during 2011-16. Resultantly, the Company would be handicapped at the time of tracing of premises of defaulting consumers and issuing of no dues certificate in case of release of new connection on the same premises.

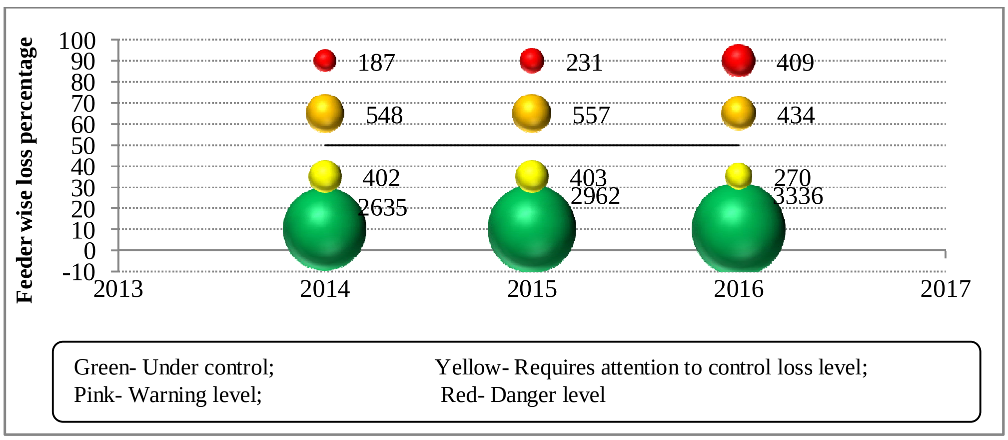
2.7.9 Excessive Sub Transmission and distribution losses

Loss of electricity during distribution occur mainly on two reasons *viz.* technical and commercial. Technical losses occur due to inherent character of equipment used for transmitting and distributing power and commercial losses occur due to theft of energy, defective meters and drawl of unmetered supply.

Audit observed that while the Aggregate Technical and Commercial (AT&C) losses of the Company in 2011-12 were within HERC norms, they exceeded during 2012-16 as shown in ***Appendix 4.*** Resultantly, the Company had to bear additional losses of `1,729.75 crore. The main reasons for high AT&C losses, as analysed in audit, were unmetered supply to AP consumers, under billing due to defective meters and non-replacement of electro-mechanical meters as discussed above.

The Company had not prescribed any ceiling for losses on its feeders. Chart 2.7 below indicates the overall position of feeder wise range of line losses during March 2014 to March 2016:

Chart 2.7: Number of feeders and their percentage of line losses



Source: Data provided by Company

It would be seen from the above that number of feeders having line losses more than 50 *per cent* increased from 735 as on March 2014 to 843 in March 2016 and number of feeders on which losses were more than 80 *per cent* also increased from 187 as on March 2014 to 409 in March 2016.

Further, HERC in its tariff order (2015) had directed that the number of Rural Domestic Supply (RDS) feeders having line losses above 50 *per cent* as on 31 March 2015 be brought down to half by March 2016 and losses of all urban feeders be brought down to below 25 *per cent* by March 2016. Audit observed that the line losses in 765 out of 823 RDS feeders as on 31 March 2015 were more than 50 *per cent* and these increased to 806 out of 950 feeders in 2016. Similarly, the line losses of urban feeders could not be reduced to 25 *per cent* as 183 out of 602 feeders incurred line losses more than 25 *per cent* (March 2016).

2.8 Collection of Revenue

The revenue billed in respect of all categories is collected at respective sub divisions and also by collection agencies appointed by the Company for the purpose. It is imperative for financial viability of the Company to ensure that the revenue due is collected promptly and arrears are not allowed to accumulate.

2.8.1 Efficiency of revenue collection

The details of revenue assessed, collected and the balance outstanding during last five years ending 2011-12 to 2015-16 as given in ***Appendix 5*** revealed that:

- despite increase in collection efficiency from 57 *per cent* in 2011-12 to 67 *per cent* in 2015-16, the balance outstanding had increased from `2,735.84 crore in April 2011 to `3,802.47 crore in March 2016;

- balance of revenue outstanding represented 5.56 to 8.41 months' assessment as against the consumer security deposits limited to only two months' assessment;

- age-wise analysis of outstanding amount revealed that it included `822.46 crore outstanding for more than three years which showed that necessary steps were not taken to recover outstanding dues; and

- outstanding debtors of `3,802.47 crore as on 31 March 2016 includes `593.74 crore recoverable on account of Inter-State sale leaving other debtors of `3,208.72 crore. Consumer ledgers (connected and disconnected consumers) of debtors maintained by Commercial wing of the Company showed debtors of `1,925.54 crore leaving a difference of `1,283.18 crore which had not been reconciled so far (March 2016).

The Management informed (July 2016) that the revenue assessed increased due to raising of bills in theft detection cases/ load reduction plan while actual collection thereagainst remained low during initial period. The Management added that efforts were being made for recovery from consumers.

2.8.2 Periodical checking of connections

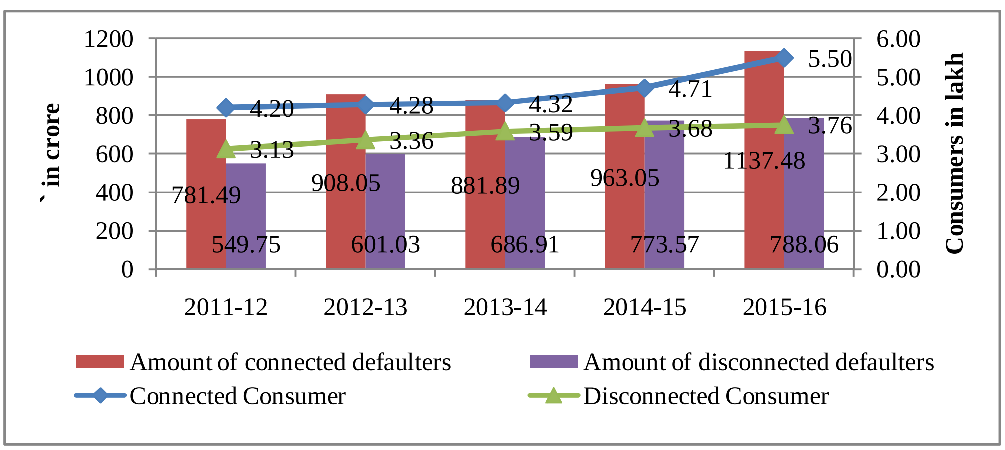
Section 163 of the Electricity Act, 2003 authorised the licensee to enter the premises of a consumer for inspection and testing the apparatus. Vigilance teams under the control of Additional Director General of Police were entrusted with the work of conducting raids by checking the premises of the consumers with the assistance of departmental officers besides checking by the operational staff of the Company.

Audit observed that the checking of consumers remained low, ranging from two to seven *per cent* of total number of consumers during 2011-16 and `134.27 crore remained recoverable from assessed theft cases. Further, the Company had not worked out any strategic plan to conduct raids on feeder with high losses.

2.8.3 Accumulation of arrears from defaulters

As per the Sales Manual, if the payment of bill is not received within 15 days after expiry of grace period, the supply of consumer should be disconnected. The supply to the premises so disconnected should not be restored until the entire dues are cleared by the consumer. Category wise position of arrears of revenue (excluding Jind[19] circle) for the last five years up to March 2016 is shown in ***Appendix 6***. The position of disconnected defaulting consumers is brought out in chart 2.8 below:

Chart 2.8: Position of connected and disconnected defaulting consumers



Source: Data provided by Company

As brought out above, the connected defaulter consumers had increased from 4.20 lakh in 2011-12 to 5.50 lakh in 2015-16 and the outstanding dues also increased from `781.49 crore to `1,137.48 crore during the same period which indicates that the connections were not disconnected on default by the consumers. Similarly, the defaulting amount recoverable from disconnected consumers had increased from `549.75 crore in 2011-12 to `788.06 crore as on 31 March 2016 which indicates that the Company had not taken adequate steps to recover its outstanding defaulting amount from the consumers. Audit

[19] Jind circle transferred to DHBVN in August 2013.

further observed that defaulting amount of `2.26 crore against 492 disconnected temporary consumers remained unrecovered as on January 2016 in the selected circles.

2.9 Internal control and internal audit

Internal control is a management tool used to provide reasonable assurance that the management objectives are being adhered to in an efficient and effective manner. Effective internal audit is one of the most potent instruments for exercise of internal control and oversight.

The Company has conducted the audit of High Tension, Low Tension and Temporary connection and Bulk Supply category connections up to 2014-15 through its own internal audit wing and outsourced audit of DS, NDS and AP connections had been completed up to June 2014. We observed that 9,303 audit observations with financial implications of `46.70 crore raised during July 2007 to March 2014 were neither charged nor settled by the concerned sub divisions till date (March 2016). Further, the internal audit wing has not commented on the system deficiencies like delay in filing adjustment claims, release of connections in wrong category, undercharging of meter rent, recovery of meter rent on defective/burnt meters, delay in issue of first bills, non-compliance of voltage regulations and unauthorised extension of load which have bearing on the revenue of the Company.

Conclusion

The performance of the Company with regard to tariff, billing and collection of revenue was found wanting on many aspects. Delay in filing of petitions of service connection charges and fuel surcharge adjustment claims before the HERC resulted in under-recovery or additional cost to the Company amounting to `262.10 crore. Excess supply to AP consumers resulted in cost of `425.97 crore that was non-recoverable. This impacted the liquidity of the Company. Further, non-adherence to the Supply Code relating to providing of electricity connections to consumers, metering and billing led to loss or non recovery of `1.71 crore. The Company had not revised the Advance Consumption Deposit of `261.95 crore recoverable from the consumers on regular basis depending upon their consumption pattern of previous periods. Under-charging of meter rent, delay in issue of first bills to consumers and non-adherence to the periodicity of billing led to loss of `12.73 crore. The loss of revenue was potentially higher due to increase in unauthorised use of load and delay in replacement of defective/ damaged meters and of electro-mechanical meters with static meters. The Company had also to sustain loss of `1,729.75 crore due to its failure to contain transmission and distribution losses as per the prescribed norms of HERC.

Recommendations

Based on the audit findings, it is recommended that the Company may:

- Ensure more accurate and timely formulation of its ARRs so that all costs and claims are duly reflected in the proposals for consideration of the HERC;
- Ensure stricter adherence to the tariff orders, provisions of the Electricity Act and the Supply Code while billing for power supply and when allowing concessions to consumers;
- Develop a time-bound programme with adequate commitment of financial and manpower resources for replacing defective meters as well as the electro-mechanical meters as per orders of HERC;
- Strengthen the logical controls on the consumer data base used for raising of consumer bills and periodical review of cases where consumption is in excess of sanctioned load;
- Develop a strategy for progressive reduction of AT&C losses as per the prescribed norms of HERC; and
- Ensure better coverage of its internal audit and timely remedial action on system deficiencies.

The matter was referred to the Government in August 2016, its reply was awaited (October 2016).