

Chapter II

2 Power Sector

2.1 Performance Audit

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

Dakshin Haryana Bijli Vitran Nigam Limited (Company) was incorporated on 15 March 1999 and it distributes electricity in the southern parts of Haryana. The objectives of the Company, *inter-alia*, are to develop and maintain an efficient, coordinated and economical electricity distribution system and to supply electricity to the consumers in accordance with the provisions of the Electricity Act, 2003. Some of the significant findings are as under:

Highlights

The Company had to bear an additional loss of ₹ 2,703.69 crore during 2013-16 as aggregate technical and commercial losses were more than the prescribed norms of Haryana Electricity Regulatory Commission. However, the Company has achieved the target of aggregate technical and commercial losses in 2016-18.

(Paragraph 2.1.6.2)

The Company allowed concession of ₹ 14.40 crore during 2005-06 to 2017-18 (June 2017) to women consumers in contravention of the provisions of Electricity Act and tariff orders issued by the Haryana Electricity Regulatory Commission from time to time. Further, the Company charged subsidised tariff amounting to ₹ 6.41 crore, without approval of Haryana Electricity Regulatory Commission, as a result of which it could not include this amount in its aggregate revenue requirement petitions to the Haryana Electricity Regulatory Commission.

(Paragraphs 2.1.7.1(a) (b) and (c))

The Company supplied excess power of 1,615.70 million units to unmetered agriculture pumpset consumers for which there was no revenue realisation and the Company had to suffer a loss of ₹ 18.90 crore during 2013-18.

(Paragraph 2.1.7.2(ii))

The Company short recovered an amount of ₹ 935.91 crore as additional advance consumption deposit from its consumers and resultantly had to bear an avoidable interest burden of ₹ 122.05 crore on increased borrowings.

(Paragraph 2.1.8.5)

The Company suffered loss of ₹ 15.02 crore due to short recovery of Minimum Monthly Charges from the agriculture pumpset metered consumers, fixed charges and under charging of meter rent.

(Paragraphs 2.1.9.1(a, b & d))

The Company could not achieve collection efficiency targets during the last five years ending March 2018 as prescribed by HERC and resultantly recoverable amount had increased from ₹ 4,460.18 crore in March 2014 to ₹ 7,332.70 crore in March 2018.

(Paragraph 2.1.10.1)

2.1.1 Introduction

Dakshin Haryana Bijli Vitran Nigam Limited (Company) was incorporated on 15 March 1999 and it distributes power in the southern districts¹ of the State. Tariff is fixed by Haryana Electricity Regulatory Commission (HERC) based on Aggregate Revenue Requirement (ARR) submitted by the Company.

2.1.2 Organisational set up

The activity of selling 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. Revenue collected in the banks is reconciled by the Financial Advisor.

2.1.3 Audit objectives

The audit objectives were to ascertain whether:

- availability of affordable, reliable and sustainable power for all consumers has been ensured;
- cost of providing electricity is being recovered by making correct and timely proposals in ARR;
- metering and billing was managed efficiently and effectively;
- collection and accounting of revenue was done in an economic and efficient manner; and
- adequate monitoring and internal controls exist for elimination of risk in billing and collection activity.

2.1.4 Audit criteria

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

- The Electricity Act, 2003 and tariff orders and directives/instructions issued by HERC;

¹ Bhiwani, Charkhi Dadri, Gurugram, Faridabad, Fatehabad, Hissar, Jind, Mahendragarh, Narnaul, Nuh, Palwal, Rewari and Sirsa.

- Orders issued by HERC/ Company circulars and instructions regarding collection of revenue, its accountal and prevention of thefts;
- Targets of billing & collection efficiency, Aggregate Technical & Commercial (AT&C) losses and norms for vigilance checking fixed by HERC/ Company; and
- Mahara Gaon Jagmag Gaon scheme and Ujwal Discom Assurance Yojana (UDAY) of Government of Haryana (GoH).

2.1.5 Scope of Audit and methodology

The Company had consumer base of 28.33 lakh as on March 2014 which was increased to 32.91 lakh (Domestic 25.95 lakh, Non-Domestic 3.09 lakh, Agriculture Pumpset (AP) 3.13 lakh and others 0.74 lakh) in March 2018. The audit conducted from November 2017 to May 2018 covered examination of activities of the Company relating to tariff proposals, release of connections and metering, billing and collection of revenue for energy sold during 2013-18. For achieving the audit objectives, records maintained at the Head Office of the Company and at six² out of 11 operation circles were selected through stratified random sampling method³. The selected operation circles consisted of 17 operation divisions and 32 sub-divisions. This accounted for 78.44 *per cent* of revenue assessed and 79.09 *per cent* of revenue realised by the Company during the period 2013-18. The billing data of consumers was analysed by using data extraction and analysis tool viz. Interactive Data Extraction and Analysis (IDEA) software. The results of analysis are based on the data as supplied by the Company and Audit disclaims the responsibility of any mis-statement of results made based on this data. The Audit objectives were discussed (January 2018) with the Management during the entry conference. All audit findings were reported (July 2018) to the Company and the Government and discussed (July 2018) in the exit conference which was attended by Additional Chief Secretary to GoH, Power Department and Chairman cum Managing Director of the Company. The views expressed by the Company and the Government have been considered while finalising this Performance Audit.

This activity of the sister concern *i.e.*, Uttar Haryana Bijli Vitran Nigam Limited was reviewed and featured in the Audit Report of the Comptroller and Auditor General of India for the year ended 31 March 2016 (PSUs) GoH. The Report has not been discussed by the Committee on Public Undertakings so far (November 2018).

² Bhiwani, Faridabad, Gurugram-II, Hisar, Rewari and Sirsa,

³ Stratification was done on basis of revenue billed during 2012-17 and three strata were created. One circle selected from lowest, two circles from highest and three circles were selected from middle stratum using IDEA tool.

2.1.6 Audit findings

2.1.6.1 Financial performance

The financial performance of the Company for the last five years is as below:

Table 2.1.1: Financial Performance

(₹ in crore)

Sl. No.	Particulars	2013-14	2014-15	2015-16	2016-17	2017-18
1	Paid up Capital	1,439.13	1,459.12	2,537.94	2,648.74	5,063.93
2	Long term Borrowings	10,235.5	13,370.58	12,144.24	7,622.04	5,311.72
3	Accumulated losses	-10,726.59	-12,719.03	-13,190.61	-13,951.74	-13,790.39
4	Reserves	1,057.88	1,105.51	2,955.79	5,080.91	5,257.96
5	Total revenue	11,454.06	13,400.87	15,170.03	15,628.57	16,912.33
6	Total expenditure	13,542.71	14,037.03	15,641.61	15,616.61	16,778.21
7	Financial cost	991.69	950.5	1,772.19	959.74	779.91
8	Profit/Loss of the year	-2,088.65	-636.16	-471.58	11.96	134.12
9	Net worth (1+3)	-9,287.46	-11,259.91	-10,652.67	-11,303.00	-8,726.46
10	Debt turnover (2/5)	0.89	1.00	0.80	0.49	0.31

The Company was incurring losses in its operations up to the financial year 2015-16. However, it reported profits in the years 2016-17 and 2017-18. This was partly on account of improved operational efficiency of the Company as reflected in reduced AT&C losses and also due to taking over the Company's debts by the State Government as part of incentives under the UDAY scheme and consequent reduction in financial cost. Due to huge accumulated losses, the net worth of the company remained negative during 2014-18.

UDAY Scheme envisages that State Governments shall take over 75 *per cent* of the Distribution Companies (DISCOMs) debts, clear all outstanding dues of subsidy, equity and fuel surcharge adjustment of utilities and payment of outstanding electricity dues of Government Departments. To improve operational efficiency of DISCOMs, the scheme envisaged measures like replacement of all defective and electro mechanical meters with smart meters, upgradation or change of transformers, regular tariff revisions, and comprehensive checks to reduce power theft *etc.* The outcome of the operational improvements was to be measured through reduction in AT&C losses to 15 *per cent* by 2018-19 and reduction and eventual elimination of the gap between average cost of supply of power and average revenue realised.

GoH consented (March 2016) to the scheme and entered into tripartite agreement with Ministry of Power, Government of India (GoI) and the State DISCOMs and took over 75 *per cent* of the DISCOMs' debts as on 30 September 2015 spread over two years. The State Government took over debts of ₹ 10,087.53 crore⁴ during 2015-16 and 2016-17 (₹ 6,725.02 crore in

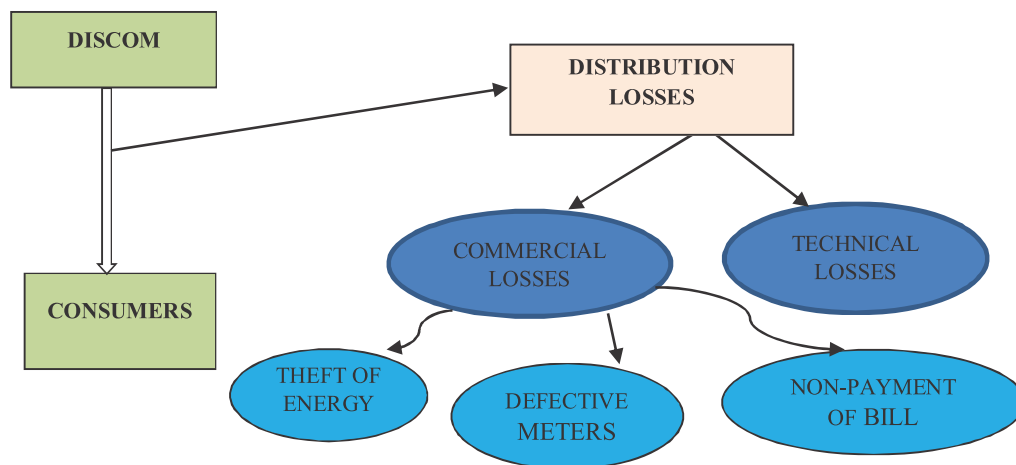
⁴ The State Government had released equity capital of ₹ 3,354.61 crore up to 2017-18 including conversion of one third State Government loan of ₹ 1,951.03 crore. Remaining loan will be converted into equity during 2018-19 and 2019-20.

2015-16 and ₹ 3,362.51 crore in 2016-17) thereby bringing down financial cost⁵ by ₹ 812.45 crore in 2016-17 and ₹ 992.28 crore in 2017-18 in comparison to financial cost of 2015-16.

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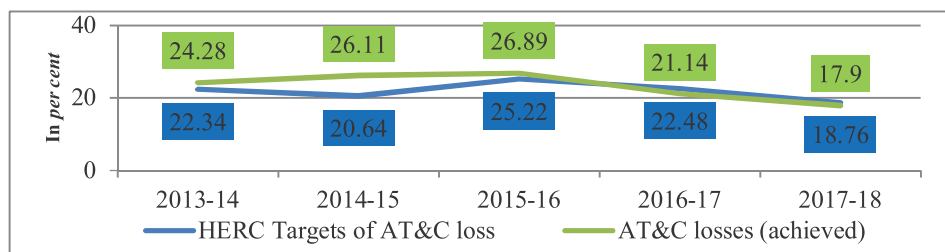
2.1.6.2 Aggregate Technical & commercial losses

There are various causes of loss of energy during the process of distribution to consumers:



The chart below indicates the targets set for the Company by HERC for reduction in AT&C losses and achievements there against from 2013-14 to 2017-18:

Chart 2.1.1: AT&C losses- targets and achievements



Source: Data provided by the Company

AT&C losses exceeded the norms during 2013-16, which cost the Company ₹ 2,703.69 crore. The Company achieved the targets set for reducing AT&C losses during 2016-18 on account of replacing defective meters and shifting

⁵ Calculated at the working capital loan rate approved by HERC for financial years 2015-16 and 2016-17.

meters outside consumer premises which helped to reduce instances of tampering with energy meters and enabled more accurate billing of energy, as also by changing bare conductors into insulated cables for reducing incidence of illegal tapping of energy as brought out in para 2.1.8.2 of this Report.

HERC while finalising (2015) the ARR of the Company for the year 2014-15 directed that the number of Rural Domestic Supply (RDS) feeders⁶ with distribution losses above 50 *per cent* as on 31 March 2015 be brought down to half by the end of 2015-16 and losses of all urban feeders be brought down below 25 *per cent* by the next ARR filing.

Reduction of RDS and urban feeder losses is as below:

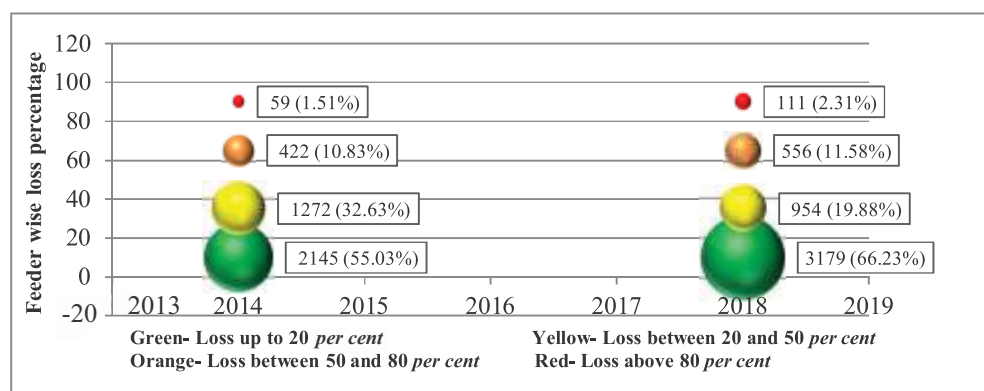
Table 2.1.2: Reduction of RDS and Urban feeders

Feeder type	March 2015		March 2016	
	Total no. of feeders	RDS Feeders with losses above 50 <i>per cent</i> and urban feeders having losses above 25 <i>per cent</i>	Targets to be achieved (in nos.) for reduction in losses as fixed by HERC	RDS Feeders still having losses above 50 <i>per cent</i> and urban feeders still having losses above 25 <i>per cent</i>
1	2	3	4	5
RDS	753	406	203	533 (70.78 <i>per cent</i> of total feeders)
Urban	608	162	0	176 (28.95 <i>per cent</i> of total feeders)

Number of rural feeders with distribution losses above 50 *per cent* increased to 431 in March 2018 which was less than 50 *per cent* of total rural feeders (871 nos.). The number of urban feeders with distribution losses above 25 *per cent* decreased to 78.

Comparative position of line losses of all feeders of the Company as on April 2014 and March 2018 is given in Chart below:

Chart 2.1.2: Number of feeders and their percentage of line losses



Source: Data provided by the Company. Above assessment of attention levels perceived by Audit.

As can be seen, the number of feeders having line losses up to 20 *per cent* increased from 55 *per cent* of total feeders in April 2014 to 66.23 *per cent* in

⁶ A high voltage supply line from a 33 kV power substation to the end consumer is known as a feeder.

March 2018 and feeders having line losses from 20 to 50 *per cent* decreased from 32.63 *per cent* (April 2014) to 19.88 *per cent* (March 2018) which resulted in overall reduction of AT&C losses of the Company and helped it achieve the target of reduction in AT&C losses in 2016-17 and 2017-18.

During exit conference, Management stated that distribution losses are on the decline and efforts are being made to reduce the losses further.

2.1.6.3 Mahara Gaon Jagmag Gaon scheme

The State Government launched (July 2015) “Mahara Gaon Jagmag Gaon” Scheme to curb losses. Out of 871 RDS feeders, 323 were covered under this scheme as on January 2018. The main points of the scheme were:

- On adoption of Scheme, the supply of electricity was to be increased to the selected feeders from 12 to 15 hours average per day;
- The Company was to replace bare conductors, replacement of defective/ electro-mechanical meters with static meters, shifting of meters outside the consumers premises *etc.* after which supply hours were to be increased from 15 to 18 hours per day;
- If the consumers paid their bills to the extent of 90 *per cent* of power supplied (after allowing technical loss of 20 *per cent*), the supply hours on those feeders was to be increased from 18 to 21 hours per day; and
- If the defaulting amount⁷ of the consumers connected to feeder became less than 10 *per cent*, the supply hours would be increased to 24 hours.

The Company had completed the upgradation works on 288 feeders out of 323 feeders by January 2018 and the overall losses in these RDS feeders decreased from 41.88 *per cent* to 31.38 *per cent* by May 2018.

However, it was observed that in respect of 127 feeders power supply was increased to 24 hours on these feeders although these were not eligible even for 21 hours power supply. The percentage of revenue realisation was as low as 11 to 20 *per cent* on two feeders and between 20 and 60 *per cent* on 68 feeders as depicted in the table below:

Table 2.1.3: Number of feeders and percentage of amount collected to electricity supplied

Sl. No	Percentage of amount collected to electricity supplied	Number of feeders
1	11-20	2
2	20-40	10
3	40-60	58
4	60-71	57

⁷ Defaulting amount pertains to the consumers connected on selected feeders under the scheme.

During exit conference, Management stated that the scheme is still in the initial stage and the implementation will improve with passage of time.

The scheme was implemented to improve the quality and supply of power subject to fulfilment of certain conditions. But the intended objective and spirit of the scheme was defeated when supply hours were increased in respect of ineligible feeders.

The Company was able to achieve its targets of reductions in energy losses which helped it in turning in profits.

2.1.7 Tariff Proposals

The Company is required to file its ARR with HERC by 30 November every year. The ARR shows expected aggregate revenue of the year, estimated cost of providing electricity and the proposal to cover the revenue gap. There are five main categories of electricity connections based on the end use as well as connected load:

1. Domestic Supply (DS) - for residential use, in hostels, places of worship, etc.
2. Non-Domestic Supply (NDS) - for commercial purpose like shops, petrol pumps, shopping malls, educational institutes, etc.
3. Low Tension (LT) Supply - industrial consumers having connected load up to 50 kilowatt (kW).
4. High Tension (HT) Supply - industrial consumers having connected load above 50 kW.
5. Agriculture Pumpset (AP) - for agriculture purpose only.

2.1.7.1 Concession to consumers

To recover the expected aggregate revenue, the HERC approves category wise tariff to be charged from different categories of consumers. 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 HERC, the State Government shall compensate the Company in advance. If compensation is not given, the directions of the State Government would be inoperative. The HERC directed the licensee (September 2015) not to issue any circular/ instructions having financial impact without prior approval of the HERC.

Subsidised tariff extended by the Company to different categories of consumers were examined to see whether these were given as per directions of the Government and whether and to what extent the Company was compensated on time by the Government.

a) Concession to woman consumers

The State Power Department informed the Company of the decision of the Government (June 2005) to reduce the tariff by 10 paise per kilowatt Hour (kWh) in respect of properties owned by women and where the domestic electricity connection of such properties is in the name of women. The Company, in pursuance of this decision, issued a sales instruction (August 2005) and started granting concession to women consumers. The Finance Department, however, denied (November 2005) any type of financial assistance to the Company and advised that shortfall of revenue should be met through efficiency gains. The HERC in its tariff orders of 2005-06 observed that issuance of sales circulars by the Company were not in line with the Electricity Act, 2003 and ordered that concessional tariff to women consumers should not be given.

The Company instead of withdrawing the concession continued to allow/ charge concessional rates and had allowed concession of ₹ 14.40 crore during the period 2005-06 to 2017-18 (June 2017). This was despite the issue being brought to the notice of the Company through audit inspection reports of the years 2010-11 and 2013-16.

The continued extension of this concession resulted in additional interest burden of ₹ 5.07 crore during 2013-18 on account of increased borrowings resorted to by the Company due to non-receipt of compensation from the State Government. It was also seen that the rebate of 10 paise per kWh applicable to women consumers in energy charges was also incorrectly given to 380 male consumers. The Company withdrew the concession from July 2017.

b) Waiver of electricity bills of farmers whose crops were damaged

As a follow up to the announcement of Chief Minister, Haryana for providing relief to farmers whose crops were damaged due to unseasonal rains, hailstorms etc. in March and April 2015, the Company issued (September 2015) orders to waive electricity bills. The Company waived ₹ 4.71 crore during 2015-16 of the electricity bills based on percentage of crops damaged in four⁸ circles on the basis of Government announcement without approval of HERC. The Company was yet to raise the claims on Government (September 2018). Thus, the amount of concession of ₹ 4.71 crore was neither received from the State Government nor included in the ARR/ true-up.

c) Rebate to Gaushalas

The State Government announced (January 2007) concessional tariff of ₹ 2 per kWh from the registered gaushalas and agreed to provide subsidy to the Company on submission of monthly statement of accounts. The maximum rebate in bill/subsidy was however not to exceed ₹ 2,000 per month per gaushala. The orders for giving subsidised energy were based on Governmental announcement and did not have the approval of HERC. The Company extended rebate of ₹ 1.70 crore during 2007-18, but it was yet (September 2018) to raise claims on the Government.

⁸ Bhiwani, Narnaul, Rewari and Sirsa.

Thus, the amount of concession of ₹ 1.70 crore was neither received from the State Government nor included in the ARR/ true-up.

During exit conference, the Management stated that subsidy on account of concession given to woman consumer, gaushalas and due to damage of crops had been worked out and consolidated subsidy claims of both the DISCOMs i.e., Uttar Haryana Bijli Vitran Nigam Limited and Dakshin Haryana Bijli Vitran Nigam Limited are being raised after being pointed out by the Audit.

2.1.7.2 Supply of power to AP consumers

(i) The tariff for supply of power to AP consumers is divided into two categories -metered and flat rate (unmetered). The State Government committed to provide subsidised supply of electricity to AP consumers and reimburse the difference between the cost of supply and the subsidised tariff charged by the Company.

The table below indicates the cost of supply of power and subsidy per kWh given by State Government to AP consumers (metered and unmetered⁹) during the years 2013-18.

Table 2.1.4: Cost of supply of power and subsidy per kWh

Year	Type of consumer	Cost of Supply	(in paise per kWh)		Up to 15 BHP	Above 15 BHP
			Approved tariff charged from consumers	Subsidy per kWh		
			Up to 15 BHP ¹⁰	Above 15 BHP		
2013-14	Metered	628	25.00	20.00	603.00	608.00
	Unmetered	628	19.55	16.76	608.45	611.24
2014-15	Metered	664	10.00	8.00	654.00	656.00
	Unmetered	664	8.38	6.70	655.62	657.30
2015-16	Metered	734	10.00	8.00	724.00	726.00
	Unmetered	734	8.38	6.70	725.62	727.30
2016-17	Metered	664	10.00	8.00	654.00	656.00
	Unmetered	664	8.38	6.70	655.62	657.30
2017-18	Metered	725	10.00	8.00	715.00	717.00
	Unmetered	725	8.38	6.70	716.62	718.30

Source: HERC orders for the years mentioned and Company's data.

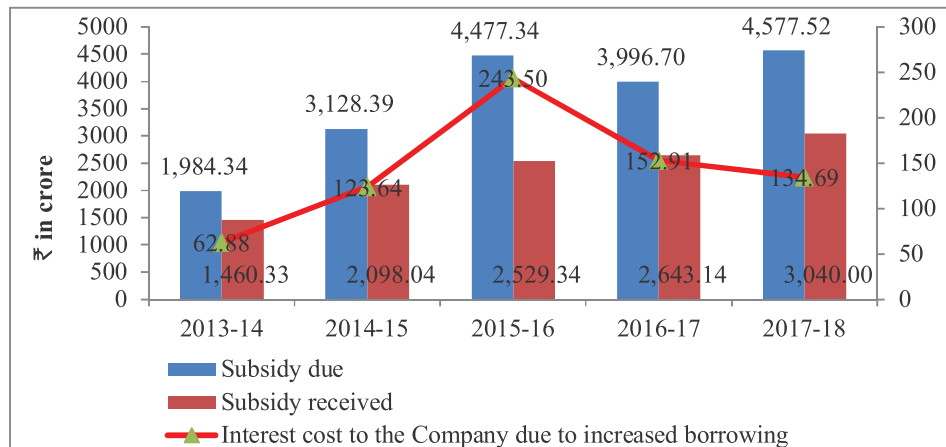
The chart below indicates the AP subsidy approved and claimed, subsidy received and associated interest cost due to increased borrowings undertaken during the last five years up to 2017-18 on account of short receipt of subsidy

⁹ Unmetered AP consumers' tariff has been calculated on the basis of monthly consumption taking eight hours consumption per day. Total energy consumed for the month is then divided by the fixed charges per Brake Horse Power (BHP) per month to arrive at the tariff chargeable. In the tariff orders of the year 2013-14, fixed charges were to be charged from unmetered AP consumers at ₹ 35 per month per BHP for load up to 15 BHP and at ₹ 30 per month per BHP for load above 15 BHP. For the period 2014-15 to 2017-18 the fixed charges were fixed at ₹ 15 per month per BHP for load up to 15 BHP and ₹ 12 per month per BHP for load above 15 BHP.

¹⁰ One BHP is equal to 0.746 kW.

as detailed in *Appendix 2*:

Chart 2.1.3: AP Subsidy due and received



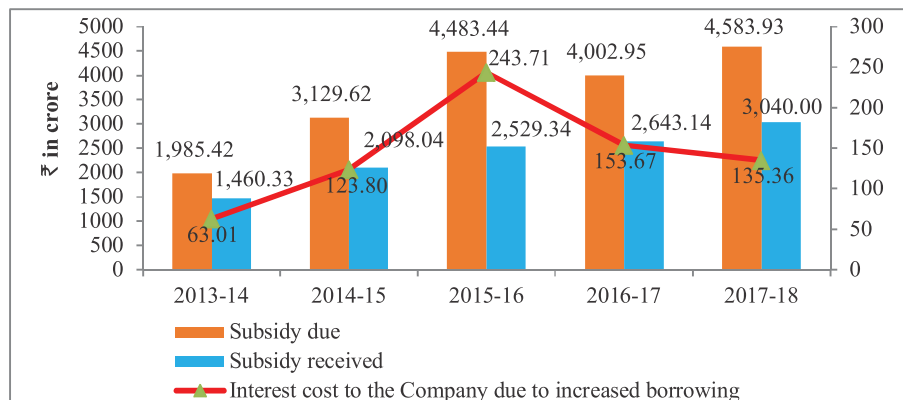
Source: Data provided by the Company

Short release of subsidy by the Government was in violation of the provisions of UDAY Scheme, which envisaged timely clearance of all outstanding dues of subsidy for ensuring financial turnaround of DISCOMs.

Value of subsidy not received in respect of concessional tariff to registered gaushalas, waiver of electricity bills of farmers whose crops were damaged and value of short receipt of subsidy in respect of AP supply, which stood at ₹ 525.09 crore in 2013-14 had increased to ₹ 1,543.93 crore in 2017-18. As a result of short receipt of subsidy, the Company had to resort to higher borrowings and bear interest burden of ₹ 719.55 crore¹¹ on its higher borrowings during the period 2013-18.

The chart below indicates total subsidy approved and claimed, subsidy short received and associated interest cost due to increased borrowings undertaken during the last five years up to 2017-18:

Chart 2.1.4: Total Subsidy due and received



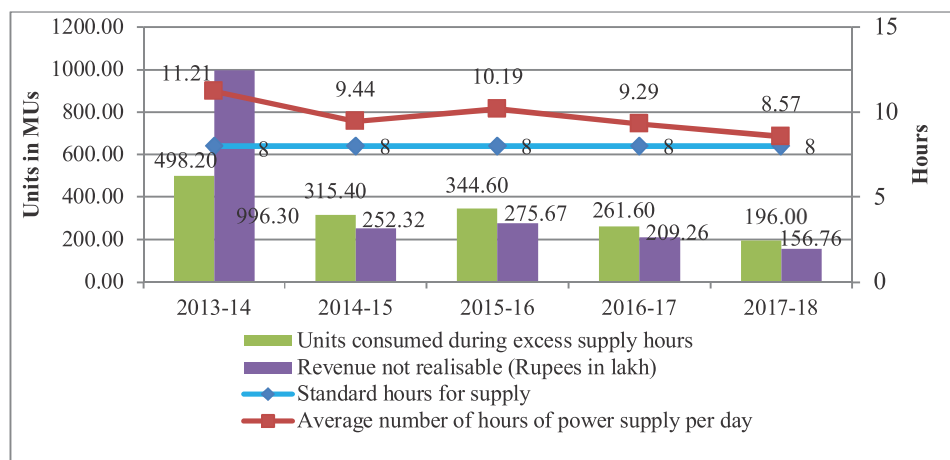
Source: Data provided by the Company

¹¹ Worked out at working capital rate of interest allowed by HERC for respective years.

(ii) The Company is required to provide power for standard eight hours per day to unmetered AP consumers. If power is supplied in excess of standard hours, the Company has to bear the cost of excess energy supplied.

The chart below indicates the average excess number of hours of energy supplied per day to unmetered AP consumers, units consumed during excess supply hours and revenue not realisable during the period 2013-14 to 2017-18:

Chart No. 2.1.5: Excess supply of power to unmetered AP consumers

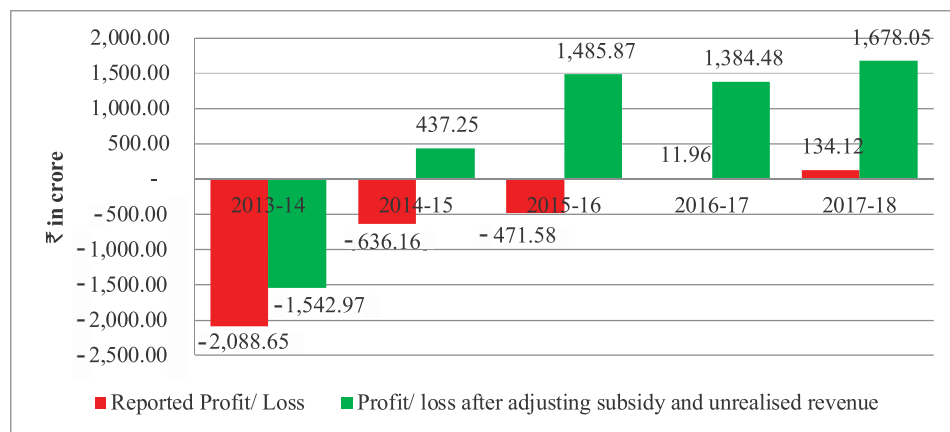


Source: Data provided by the Company

The Company supplied excess power of 1,615.70 Million Units (MUs) worth ₹ 18.90 crore during 2013-18 to unmetered AP consumers for which there was no revenue realisable. The amount not realisable during 2013-14 was higher due to higher tariffs for energy of 25 paise up to 15 BHP capacity and 20 paise for more than 15 BHP capacity motor which was reduced to 10 paise up to 15 BHP and 8 paise for more than 15 BHP in 2014-15 onwards.

The impact of excess power supply to AP unmetered consumers and non-receipt/ short receipt of subsidy on the profitability of the Company during the period 2013-14 to 2017-18 is shown below:

Chart 2.1.6 Profits/ Losses had the Company received the entire subsidy/interest



Source: Data provided by the Company.

Had the Company received the due subsidy, losses in the year 2013-14 would have reduced, losses would have converted to profit during 2014-15 and 2015-16, and the profits during 2016-17 and 2017-18 would have improved substantially.

2.1.7.3 *Disallowance of Capital expenditure by HERC*

HERC notified its Multi Year Tariff Regulations in 2012 for all licensees. These Regulations while discussing the essentials of capital investment plans of a power distribution licensee lays down that such a plan shall be commensurate with sales forecast/ load growth of the state/ loss reduction targets *etc.* HERC allows only such Capital Expenditure (CAPEX) which is incurred on approved works.

HERC approved CAPEX schemes for strengthening of electricity infrastructure of the Company of the order of ₹ 2,875.32 crore during 2013-17. As against this the Company incurred CAPEX of ₹ 2,883.72 crore. HERC disallowed CAPEX of ₹ 596.66 crore proposed by the Company due to incurring of expenditure more than approved during the same period¹². This had the consequential effect of disallowance of interest component of ₹ 78.48¹³ crore incurred on these projects (₹ 52.47 crore on unapproved work and ₹ 26.01 crore on account of delay in completion).

Further, the GoH introduced (October 2008 and June 2013) two schemes – Mahatma Gandhi Grameen Basti Yojana and Priyadarshani Awaas Yojana to provide plots to weaker sections of the society. These plots were also to be provided infrastructure including electricity connections for which the Government agreed to provide funds. However, it withdrew (January 2014) its decision to provide financial assistance. HERC also had not approved this scheme. The Company, despite the refusal of GoH to finance the Scheme, incurred CAPEX of ₹ 70.29 crore during 2014-16.

Since this expenditure was incurred without requisite prior approval, it was disallowed by HERC. The Company also could not pass on the interest cost on the disallowed portion of CAPEX in the form of tariff, thereby adversely affecting the Company's capacity to improve its distribution network.

The Management in exit conference stated that there is a provision in Multi Year Tariff Regulations 2012, to claim unapproved/unplanned expenditure from HERC in true-up petition with proper justification and they expect that these expenditures shall be allowed by HERC. They added that an amount of ₹ 29.50 crore had been reimbursed by Development and Panchayat Department under Priyadarshni Awas Yojna and balance claim had been raised.

Company extended concessions to classes of consumers without regulatory approvals. The Government did not compensate the Company adequately for its costs incurred. The Company supplied energy to unmetered AP consumers in excess of the hours for which it was to get subsidy. It undertook capital projects without regulatory approvals and in others exceeded project estimated costs.

¹² The interest for 2016-17 is yet to be trued up.

¹³ 2013-14 - ₹ 20.59 crore, 2014-15 – ₹ 41.83 crore, 2015-16- ₹ 3.35 crore and 2016-17 - ₹ 12.71 crore.

2.1.7.4 Non-payment of interest on consumer security deposits

The enabling regulations issued by HERC by virtue of provisions of Electricity Act, 2003 provide that consumers shall maintain with the Company an Advance Consumption Deposit (ACD) equivalent to four/ two months¹⁴ of their energy consumption charges and they shall be paid interest on such deposits at the bank rate as on 1 April of the year in which the ARR is filed.

The Company was to pay/ adjust interest of ₹ 345.41 crore at the prevailing rate¹⁵ during 2013-14 to 2017-18 on these ACDs. As against this, the Company adjusted interest of ₹ 120.82 crore leaving balance of ₹ 224.59 crore unadjusted. The ARR for 2013-18 was prepared by including ₹ 345.41 crore as interest cost and was hence inflated by ₹ 224.59 crore.

2.1.8 Release of connections and Metering

2.1.8.1 Electro-mechanical meters and smart meters

The Central Electricity Authority (Installation and Operation of Meters) Regulation, 2006 requires that all interface meters, consumers' meters and energy accounting & audit meters shall be static meters. These meters have electronic circuit for recording energy consumption and are more accurate. The energy consumption data is taken either by manual meter reading or connecting a Common Meter Reading Instrument (CMRI) with the meters. The HERC in its orders (March 2012) directed replacement of all existing electro-mechanical meters with static meters by March 2014. These orders were reiterated in its tariff orders for the year 2015-16 (May 2015).

The Company expressed difficulty in replacing electro-mechanical meters located in rural area due to resistance by consumers. HERC not satisfied with the progress and the reasons submitted again directed (July 2017) the Company to replace all the electro-mechanical meters in urban areas and 50 per cent of electro-mechanical meters in rural areas by December 2017. The Company however replaced only 2.38 lakh electro mechanical meters out of 5.40 lakh meters with static meters during 2013-14 to 2017-18 covering both rural and urban areas.

While notifying (1 August 2016) tariff order of the Company for 2016-17, HERC, in compliance of the revised national tariff policy issued by GoI on 28 January 2016, mandated that smart meters¹⁶ shall henceforth be installed for consumers in a phased manner and the DISCOMs were to procure only smart meters in future. In furtherance of this directive, it directed that meters of all consumers having monthly consumption above 500 kWh shall be replaced with smart meters by not later than 31 December 2017. The same exercise was to be

¹⁴ Bi-monthly for DS and NDS (up to 20 kW) and monthly for HT/LT category.

¹⁵ 2013-14 – 6 per cent per annum, 2014-15 – 8.5 per cent per annum, 2015-16 - 9 per cent per annum, 2016-17 - 8.5 per cent per annum and 2017-18 – 7.75 per cent per annum.

¹⁶ They have General Packet Radio Service (GPRS) enabled communication device (Modem) for enabling meter reading from consumers premises to the data centre of the Company remotely without human intervention.

completed for consumers with monthly consumption above 200 kWh by 31 December 2019. Number of consumers falling in consumption category of above 500 units per month whose meters were to be replaced with smart meters was 6.14 lakh as on 30 September 2018. Number of consumers in consumption category of 200 to 500 units per month was 8.18 lakh as on 30 September 2018.

The Company has not yet procured any smart meters (July 2018). The Management stated in exit conference (July 2018) that a Memorandum of Understanding had been signed (July 2018) by DISCOMs with a vendor for procurement and installation of one million smart meters, within a period of three years.

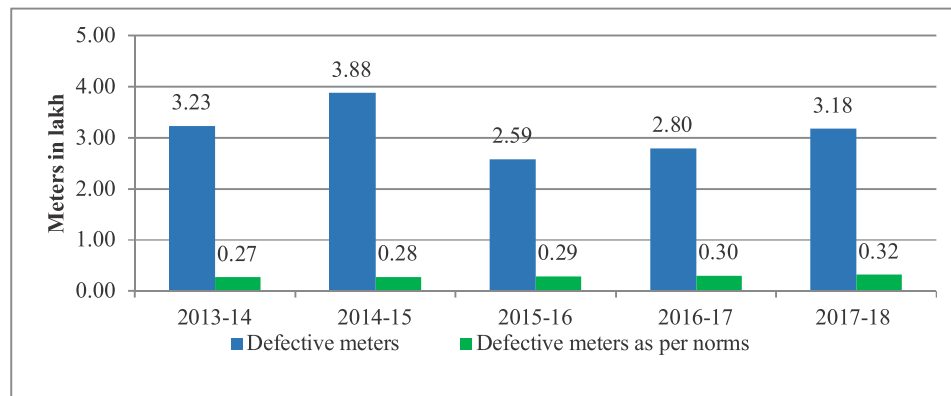
The Company could not replace electro-mechanical meters with static meters due to which desired level of accuracy in accounting of energy could not be achieved.

2.1.8.2 Replacement of defective meters

The 'Standards of Performance for the Distribution Licensee' issued (July 2004) by the HERC specify the minimum standards with reference to quality, continuity and reliability of service that a licensee shall achieve. These standards lay down that faulty meters shall not exceed one *per cent* of the total meters installed. The Sales Manual provides that defective meters should be replaced within one month of their being reported.

The Company had 27.40 lakh metered consumers during 2013-14. This increased to 29.33 lakh in 2015-16 and stood at 31.99 lakh as on 31 March 2018. The position of maximum defective meters at any time during the period of audit as per standards set and actual defective meters during 2013-18 is given below:

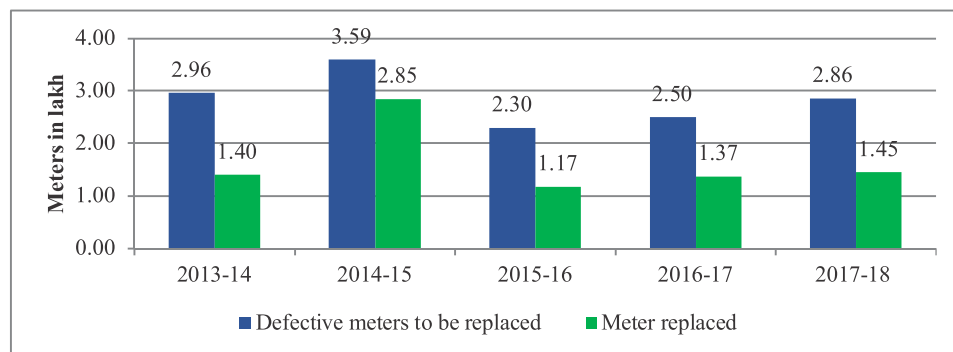
Chart 2.1.7: Defective meters norms and actual defective meters



Source: Data provided by the Company

The Company could not replace the defective meters as per the norms. The position of replacement of defective meters is depicted in the graph below:

Chart 2.1.8: Defective meters and their replacement



Source: Data provided by the Company

Analysis of records of billing data (2013-18) of DS and NDS consumers having connected load up to 20 kW in selected¹⁷ circles revealed that as many as 24.97 lakh bills (14.51 *per cent*) out of 4.05 crore bills issued showed meter code as defective. Of these 24.97 lakh bills, 8.76 lakh bills (51,034 consumers) were issued on defective meter for more than five months whereas 8.31 lakh bills (38,150 consumers) were issued continuously on defective meter for more than one year. This indicates that defective meters were not replaced within stipulated period of one month.

Further, analysis of 1.03 lakh domestic consumers revealed that average energy charges during the period when the meter remained defective were less than the energy charges during the period when consumer meter was working properly. It indicates that the company was suffering revenue loss due to non-replacement of defective meters as detailed in the table below:

Table 2.1.5: Comparison of billing in defective and OK period

Particulars		Defective period bill less than OK period		Defective period bill more than OK period		Total bill period		
Code		Defective	OK	Defective	OK	Defective	OK	Total
Consumers	No.	1,03,135	1,03,135	1,03,135	1,03,135	1,03,135	1,03,135	1,03,135
Bills	No.	2,74,313	6,66,592	2,34,587	5,41,170	5,08,900	12,07,762	17,16,662
Current energy charges	₹ in crore	28.01	1,242.41	182.30	142.37	210.31	1,384.78	1,595.10
Bill period	month	6,17,948	15,39,960	5,17,615	12,70,018	11,35,563	28,09,978	39,45,542
Average monthly energy charges	in ₹	453	8,068	3,522	1,121	1,852	4,928	4,043

Source: Data provided by the Company

On the notification issued by Central Electricity Authority in March 2006, the Company introduced (July 2006) policy of shifting of energy meters outside the consumer premises. The Company has been implementing this policy and during the period of review, 8.24 lakh energy meters have been replaced/shifted. However, the data for location of meters (inside/outside of consumer premises)

¹⁷ Bhiwani, Faridabad, Gurugram -II, Hisar, Rewari and Sirsa

was not available with the Company despite the fact that this scheme was in vogue since 2006.

During exit conference, Management stated that now maximum defective meters in urban areas had been replaced. The Company was however facing problems in replacing the defective meters in rural areas. Assurance was given that defective/electro mechanical meters would be replaced soon.

Due to non-replacement of defective meters, the actual consumption of energy could not be recorded and accounting of energy was done on estimation basis. The Company was suffering revenue loss due to non-replacement of defective meters as the average energy charges during the period when the meter remained defective were less than the energy charges during the period when consumer meter was working properly.

2.1.8.3 Metering at Distribution Transformer in R-APDRP areas

‘Re-structured Accelerated Power Development and Reforms Programme’ (R-APDRP) scheme was launched by GoI in September 2008 and implemented in 18 towns of the Company. Under the scheme, GoI sanctioned ₹ 93.44 crore for development of infrastructure in 18 towns and ₹ 60.50 crore were incurred in the scheme on the basis of detailed project reports approved in September 2013. Under Part 'A' of the scheme, all commercial operations like metering, billing, collection, release of new connection, disconnection, energy audit *etc.* were to be done through use of information technology enabled systems and without any manual intervention. The R-APDRP scheme also envisaged metering and automatic data collection/ transmission by use of distribution transformer meters to be installed at all transformers in areas covered under the scheme. The distribution transformer meters were installed on Distribution Transformers (DTs) connected to a particular area. The energy transmitted through the DT was to be recorded and compared with the energy billed to consumers connected on the DT. The objective was to identify area where distribution losses were higher and take necessary remedial action. These DT meters have advanced data recording capabilities and are provided with communication ports that help take corrective action for curtailing distribution losses.

As on 31 March 2018, of the 29,757 DTs in R-APDRP areas, only 13,931 (47 *per cent*) had DT meters, out of which only 4,077 meters (29 *per cent*) were found communicating data. Thus, calculation of DT wise distribution losses through the system could not be fully achieved.

There was increase in the area covered under the scheme during the period 2015 to 2018. Consequently, the number of DTs increased from 18,316 in 2015 to 29,757 in 2018. This increase in number of DTs was not factored into the detailed project reports prepared in 2013 when the scheme was launched. Hence, due to inadequacy of funds under the scheme, there was shortfall in installation of DT meters. The Management stated that work had been awarded (February 2018) to install the balance DT meters.

The Company failed to install DT meters on all its transformers. Hence, the objective of calculation of DT wise distribution losses was only partially achieved.

2.1.8.4 Energy consumption recording of High Tension category consumers through AMR/ CMRI

Automatic Meter Reader (AMR) is an electronic device which captures the energy consumption data along with other details of the consumer's energy consumption pattern and transmits the same to the data centre for generation of bills. In AMR system, General Packet Radio Service (GPRS) enabled modems are installed with the energy meters for data communication. R-APDRP scheme mandated installation of AMR for all HT¹⁸ category consumers.

The Company had 6,033 HT consumers as on March 2018 in R-APDRP areas. Of these, AMR instruments were installed on 3,219 (53 per cent) consumers only. Energy readings of 1,040 HT consumers were being taken through CMRI and of remaining 1,774 consumers, readings were being taken manually.

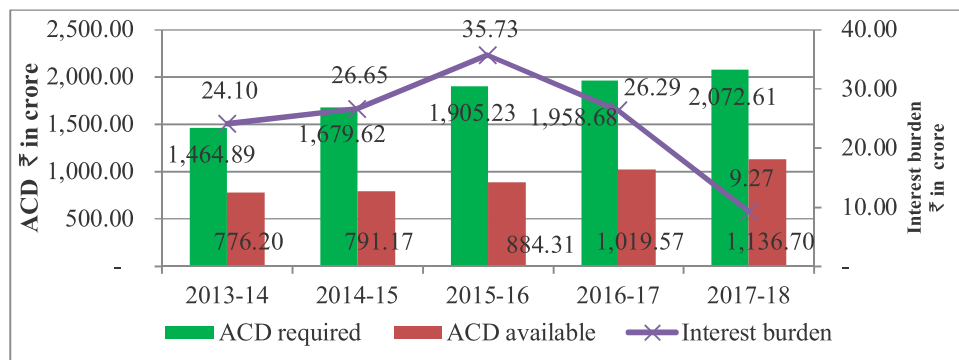
The objective of automation in meter readings for generation of error free bills could not be achieved due to non-installation/ functioning of AMR on meters of HT consumers. Meter readings were taken manually and punched in the system.

2.1.8.5 Non-revision of Advance Consumption Deposit

HERC notified (2014) the New Supply Code Regulations of the Company. As per Regulation 4.15.4, all consumers shall maintain an ACD to cover estimated power consumption for two billing cycles i.e., equivalent to two/ four months of energy consumption charges. The ACD was to be revised annually, based on 12-month consumption pattern of the previous year. ACD safeguards the Company against non-payment of dues by consumers.

The chart below indicates the ACD required to be collected and ACD available with the Company during the years from 2013-14 to 2017-18.

Chart 2.1.9: ACD required and available



Source: Data provided by the Company

The Company had short recovered ₹ 935.91 crore as of 31 March 2018 as ACD, based upon consumers' consumption pattern of previous periods. The short

¹⁸ Industrial Consumers having connected load more than 50 kW falls under HT Category

recovery of ACD had resulted in higher borrowings and consequent increase in interest burden amounting to ₹ 122.05 crore¹⁹ during 2013-18.

During exit conference, the Management stated that ACD had been revised for consumers in R-APDRP areas for the year 2016-17 in the first quarter of 2017-18 and the process to revise ACD is in progress for other areas.

The Company had short recovered ACD based upon consumers' consumption pattern of previous periods. The short recovery of ACD had resulted in higher borrowings and consequent increase in interest burden.

2.1.8.6 Release of agriculture tubewell connections in Prohibited/ Dark Zone

The Central Ground Water Authority (CGWA) notified (1998-99 to 2012-13) nine critical/ over exploited areas in districts falling under the Company's jurisdiction for regulation of ground water. CGWA prohibited construction of new ground water structures in these areas. It was observed that despite prohibition by CGWA, the Company released 4,811 new tubewell connections during 2013-14 to 2017-18 in these critical areas. The Company belatedly issued instructions in April 2016 to implement the CGWA notification. Despite this, nine²⁰ operation sub-divisions released 428 new connections in these prohibited areas after April 2016. However, Company had not disconnected any tube well connection released in Dark Zone after CGWA notification.

The Management accepted the issue and stated that the Company has now stopped (since March 2018) issuing new agriculture tubewell electric connections in these prohibited/ Dark zone.

Company released agriculture tubewell connections in Dark Zone in violation of instruction issued by CGWA and has not disconnected the connections issued after notification.

2.1.9 Billing of energy

2.1.9.1 In towns where power distribution infrastructure was created under the R-APDRP scheme, billing function was undertaken in-house by the Company. In the remaining areas, billing function was being done through Haryana State Electronics Development Corporation Limited (HARTRON - a Haryana state PSU).

Audit examined the billing data of the six selected operation circles for the

¹⁹ Worked out at difference between rate of interest on working capital allowed by HERC in the tariff order of respective years and rate of interest allowed to be paid to consumer on ACD.

²⁰ Rania, Jiwan Nagar, Ellenabad, Panjuana, Madhosigania, Badshahpur, Pataudi, Farukhnagar and Bhora Kalan.

period 2013-14 to 2017-18. The following shortcomings were noticed:

- a. The Company had not charged Monthly Minimum Charges²¹ (MMC) from AP Metered consumers as notified in the tariff orders resulting in short recovery of ₹ 1.68 crore;
- b. The Company had not levied/ short levied fixed charges²² on consumers having sanctioned load of above 20 kW in LT category resulting in short recovery of ₹ 12.99 crore;
- c. The Company charged meter rent of ₹ 6.63 crore in 14.41 lakh bills of 1.55 lakh consumers whose meters had become inoperative or inaccurate;
- d. Meter rent at prescribed rates of ₹ 20 and ₹ 30 per month on single and three phase meter respectively had not been charged in two lakh bills of 1.28 lakh consumers resulting in short recovery of ₹ 35.19 lakh.
- e. The Supply Code provides that the Company should issue bills to consumers for a period not exceeding two months in respect of domestic and non-domestic consumers having load up to 20 kW load. The laid down periodicity for preparation of bills had not been adhered to. During 2013-18, 19.54 lakh bills worth ₹ 1,558.31 crore were raised with delay (after allowing margin of 10 days) as detailed below:

Table 2.1.6: Delay in raising of bills

Range of days	No. of bills (in lakh)		Amount of bill (₹ in crore)	
	R-APDRP	HARTRON	R-APDRP	HARTRON
71-80	4.42	0.39	299.55	35.66
80-100	3.90	0.48	274.78	26.69
100-120	1.51	0.60	135.61	44.67
120-200	5.41	2.83	478.99	262.34
Total	15.24	4.30	1,188.93	369.36

- f. The Company had not obtained mobile numbers of 5.56 lakh consumers out of 13.58 lakh R-APDRAP consumers. Records of 3 lakh consumers shared duplicate mobile numbers. Number of duplications ranged from 2 to 1,456 consumers. As a result of not obtaining mobile number and entering wrong mobile number, the objective of establishing faster communication with the consumers was not achieved.

The Management stated in the exit conference that for (a) and (b), the amount had been recovered at the instance of audit. However, this has not been verified in audit. Assurance was given to take corrective action in other circles as well;

²¹ To secure revenue in the event of drop in energy consumption and minimum fixed cost of energy supplied MMC and fixed charges are levied on consumers. MMC are minimum charges, a consumer has to pay in the event the monthly energy charges are less than the minimum charge approved in the tariff order for the relevant year. In case the energy charges exceed the MMC, amount as per actual consumption are payable.

²² Fixed charges are additional charges, which are levied on large and medium industrial consumers (HT and LT) and on non-domestic category consumers having sanctioned load above 20 kW. They are levied irrespective of energy consumption.

for (c), (d) and (e), corrective action was assured to be taken under intimation to Audit.

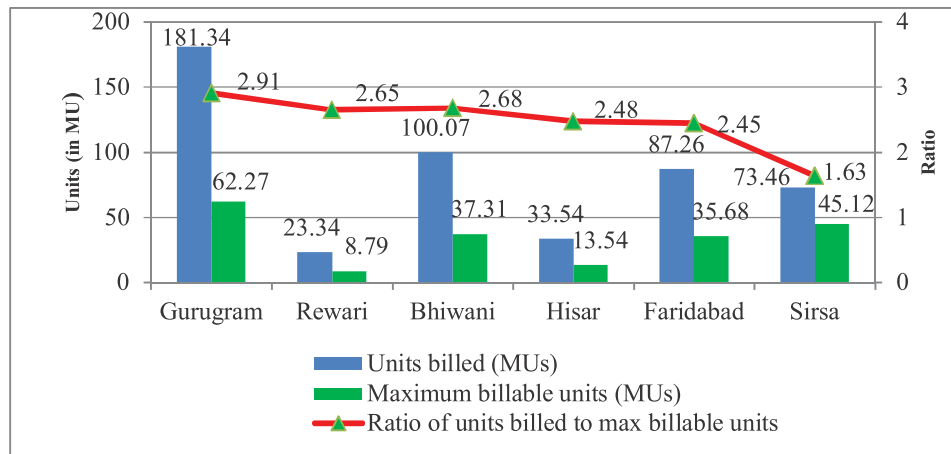
Company requires strengthening the logical control in the billing software used for issue of error free bills to consumers. The deficiencies in logical control resulted in short charging of MMC & fixed charges, meter rent on defective meters and delay in raising of bills.

2.1.9.2 Energy consumption in excess of sanctioned load

The energy consumption pattern of consumers captured in billing data, *inter-alia*, contains information about sanctioned load, energy consumed and connected load. This information is helpful for the Company to plan its distribution infrastructure and load. Further, the Sale Manual of the Company provides for levy of one time penalty in case of energy consumption exceeding the sanctioned load by more than 10 *per cent*.

0.70 lakh out of 16.09 lakh DS consumers in the selected circles had consumed 499.00 MUs²³ of energy during 2013-18 whereas maximum possible units that could have been consumed at full sanctioned load for 24 hours at 100 *per cent* load factor should have been 202.72 MUs. Energy consumption as per full sanctioned load *vis-à-vis* actual consumption in six selected circles is depicted in the chart below:

Chart 2.1.10: Usage of load by consumers during 2013-18



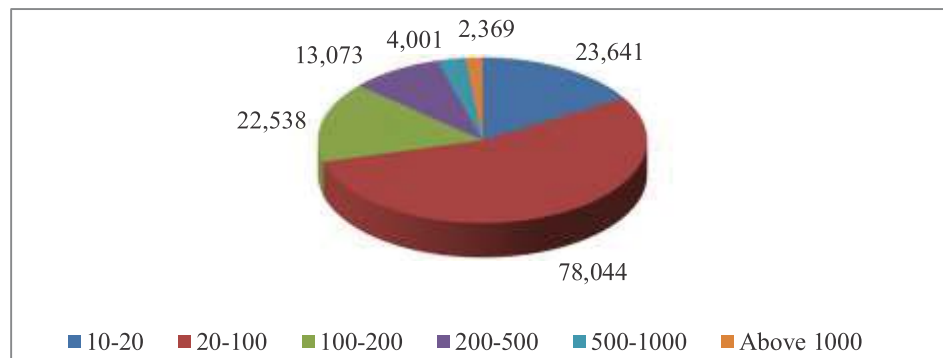
Source: Data provided by the Company

The Company had not taken the data of actual load used at the time of taking meter reading of domestic consumers, due to which the cases of load used more than the sanctioned load could not be detected at the time of billing. The chart below indicates that out of 1.44 lakh bills in 0.78 lakh bills (54 *per cent*), there was excess consumption in the range of 20 to 100 *per cent* of the sanctioned load, 0.23 lakh bills (16 *per cent*) had excess consumption in the range of 100

²³ The bills having kWh consumed more than 30 times of the maximum possible consumption (Sanctioned load* 24 hours* number of days) have been ignored being unrealistic.

to 200 per cent of sanctioned load and in 2,369 bills (2 per cent) excessive load was more than 1,000 per cent.

Chart 2.1.11: Number of bills and range (in per cent) of excess load used by domestic consumers



The Company taking cognizance of the consumption pattern of the consumer should have ensured enhancement of their sanctioned load. Had the Company undertaken this exercise, it could have obtained additional charges on account of ACD and Service connection charges besides being able to improve the quality of power supply by augmenting the infrastructure as per actual load of the consumers.

During exit conference, Management stated that matter will be passed on to Vigilance Wing for checking and taking further necessary action on the basis of audit findings. The Company may investigate the matter for fixing responsibility on officers/ officials for their lapse in monitoring due to which consumers continued to use power much in excess of sanctioned load.

Company had not analysed the billing data of the consumers to detect the cases of use of load more than sanctioned load and could not recover additional charges (i.e., fixed charges, minimum monthly charges and service connection charges) associated with the enhancement of load from the consumers.

2.1.10 Collection of Revenue

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

2.1.10.1 Revenue billing and collection efficiency

The position of billing and collection efficiency of the Company against the targets set by HERC/ UDAY during last five years ending 31 March 2018 is indicated in *Appendix 3*.

The total outstanding debtors²⁴ of the Company had increased from ₹ 4,460.18 crore as on 31 March 2014 to ₹ 7,332.71 crore as on 31 March 2018. The arrear in terms of number of months of energy billed ranged between 5.17 months to 6.22 months during 2013-18.

- The age-wise analysis of outstanding receivables at the end of years 2014-15 to 2017-18 is detailed below:

Table 2.1.7: Statement showing outstanding receivables

(₹ in crore)

Year	More than 3 years (percentage)	2-3 Years	1-2 Years	6 Months to 1 Year	Up to 6 months	Total
2013-14	1,312.95 (29.44)	297.20	356.14	993.74	1,500.15	4,460.18
2014-15	1,652.94 (30.98)	857.13	1,263.55	778.91	779.10	5,331.63
2015-16	1,843.96 (29.00)	1,593.71	1,892.88	400.39	627.63	6,358.57
2016-17	2,803.19 (39.78)	2,208.67	1,346.72	235.62	452.30	7,046.50
2017-18	3,850.06 (52.51)	1,296.13	1,900.31	265.79	20.42	7,332.71

- As seen from above, share of receivables outstanding for more than three years in total outstanding receivables increased from 29.44 *per cent* in 2013-14 to 52.51 *per cent* in 2017-18.
- The unpaid balance of electricity bills from the Government Departments stood at ₹ 569.28 crore as on March 2016 which increased to ₹ 632.97 crore as on March 2018. This was in contravention of UDAY Scheme (Clause 1.2 m) which stipulated that all outstanding due of the Government Departments for supply of electricity should be paid to DISCOMs by 31 March 2016.
- Company's collection efficiency ranged from 64.67 to 68.01 *per cent* against the target of 98 to 99 *per cent* set by HERC during the period of audit.

The Management stated that about ₹ 300 crore had been recovered in March/April 2018 from the Government Departments and efforts are being made to recover the balance amount.

Outstanding debtors of the Company had increased during review period and the targets of collection efficiency were also not achieved as prescribed by HERC.

2.1.10.2 Periodical checking of connections

Section 163 of Electricity Act, 2003 authorises the Distribution Company to enter the premises of a consumer for inspection and testing the apparatus. The Vigilance Department of the Company, functioning under an Additional Director General of Police is tasked with checking the premises of the consumers with the assistance of departmental officers besides checking by the

²⁴ It includes debtors for sale of power to consumers, debtors for unbilled revenue of one month (March), amount outstanding from permanently disconnected consumers and debtors for interstate sale of power.

operational staff of the Company. The number of consumer premises checked by Vigilance and Operation Wing, cases of theft of energy detected and revenue realised during 2013-14 to 2017-18 are shown in **Appendix 4**.

The number of connections checked ranged between 3.11 and 4 *per cent* of total number of connections during 2013-14 to 2017-18. The percentage of theft detection by Vigilance Wing ranged between 44.89 and 68.82 *per cent* and that by Operation Wing ranged between 13.37 and 46.83 *per cent*. The percentage of amount realised against the amount assessed during checking decreased from 51.96 in 2013-14 to 50.02 in 2017-18.

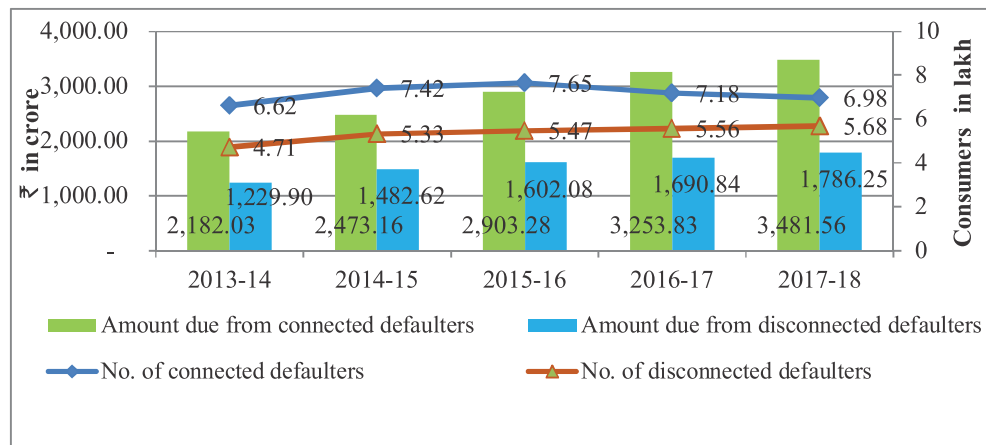
The Management stated that the periodical inspection is a costly affair and is not consumer friendly especially in rural areas. They however, assured to increase number of checking.

2.1.10.3 Arrears from defaulters

The HERC Supply Code, 2014 stipulates that in case the consumer fails to make the payment of electricity bill within 15 days of the due date given in the bill, the consumer shall be liable for disconnection of supply. Power supply to the premises so disconnected should not be restored until full settlement of all outstanding dues are made and in case the disconnection of a consumer is not effected within six/three²⁵ months of default, the arrears of bills would be assigned as financial penalties to the concerned officers/ officials.

The position of arrears of revenue collection for the last five years ending 31 March 2018 is shown in the chart given below:

Chart 2.1.12: Position of connected and disconnected defaulting consumers

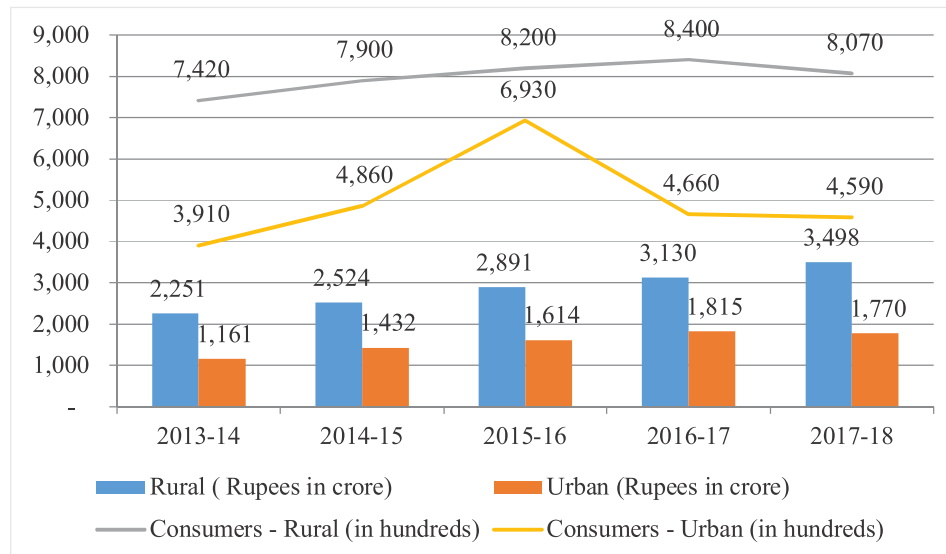


Source: Data provided by the Company

²⁵ Six months for DS/NDS category and three months for all other consumers.

Defaulters have been further segregated into Rural and Urban consumers.

Chart 2.1.13: Position of defaulting amount from Rural and Urban consumers



As seen from the above, the amount recoverable from connected consumers had increased from ₹ 2,182.03 crore in 2013-14 to ₹ 3,481.56 crore in 2017-18. The number of rural defaulters (8.07 lakh) was higher than the number of urban defaulters (4.59 lakh). Amount recoverable from rural consumers in 2017-18 was ₹ 3,498 crore as against amount recoverable from Urban consumers (₹ 1,770 crore). The amount recoverable from Rural²⁶ consumers increased from ₹ 2,251 crore in 2013-14 to ₹ 3,498 crore in 2017-18 while for urban²⁷ consumers the amount increased from ₹ 1,161 crore to ₹ 1,770 crore during the same period.

The Company has not maintained data on period of default of connected defaulters. Hence, it was not possible to examine the extent of delay in disconnecting defaulting consumers. The Management stated that efforts were being made to reduce the accumulation of arrears.

The defaulting amount (connected and disconnected) were increased from ₹ 3,411.93 crore in 2013-14 to ₹ 5,267.81 crore in 2017-18. The data of defaulting period of connected consumers was not available due to which average time taken in disconnection of a consumer could not ascertained.

2.1.10.4 Loss of interest due to delayed realisation of cheques

In pursuance of HERC orders on ARR for the financial year 2015-16, the Company instructed (May 2016) its field offices that all payments above

²⁶ Rural consumers comprise of rural domestic and agriculture connections.

²⁷ Urban consumers comprise of urban domestic, non-domestic, industrial and Government consumers.

₹ 1 lakh should be accepted through RTGS/NEFT²⁸ mode only. The limit was reduced to ₹ 25,000 during January to March 2017 and to ₹ 15,000 from 1 April 2017. The Company, despite the instructions, accepted payments through cheques beyond prescribed limits rather than through RTGS/ NEFT, which resulted in delayed realisation and suffered loss of interest of ₹ 14.12 crore²⁹ on the principal amount of ₹ 8,008.01 crore.

There was also delay in realisation of cheques of those consumers which were within the prescribed financial limits, of 16 to 1,117 days, which had resulted in loss of interest of ₹ 12.50 crore³⁰ on the principal amount of ₹ 13,194.74 crore. The Company had not taken up the matter with the banks for delayed credits. Further, the Company was giving credit in consumers account prior to realisation of cheques.

The Management stated that now the payment through RTGS/NEFT/Online is being pursued instead of by cheques and a system would be evolved wherein a provisional receipt would be given to the consumers on receipt of cheques and credit would be given only after clearance of cheque from the bank.

2.1.10.5 Delayed transfer of funds in the main account of the Company

In order to save on interest costs on the Company, funds lying in different accounts should be transferred immediately to main account of the Company through Cash Management System (CMS) account. As on 31 March 2018, the Company was having 143 different collection accounts out of which only 69 accounts were linked to CMS and balance 74 were non-CMS accounts.

In three³¹ Sub Divisions Offices, ₹ 97.13 crore was transferred to Head office during April 2015 to March 2017 with delay of two to 65 days. Of this amount, ₹ 75.50 crore was transferred with delay up to 10 days and remaining ₹ 21.63 crore with delay of more than 10 days. Due to this delayed transfer of funds, the Company could not settle its cash credit limit accounts to the same extent, which resulted in additional interest burden of ₹ 27.28 lakh³².

The Management admitted the facts and stated that efforts will be made to convert all the existing non-CMS accounts into CMS accounts to avoid delays in transfer of funds.

2.1.10.6 Non-reconciliation of cash and cheques deposited in bank

Analysis of data of reconciliation of remittances into bank revealed that cash of ₹ 2.23 crore and cheques amounting to ₹ 26.30 crore deposited during January 2011 to March 2018 in various banks by the sub-division offices remained un-

²⁸ Methods of electronic transfer of funds.

²⁹ Worked out at weighted average rate of interest of working capital allowed by HERC in the ARR for the years 2013-18 - 11.31 *per cent*.

³⁰ Worked out at weighted average rate of interest of 11.31 *per cent* of working capital allowed by HERC during 2013-18 after allowing a margin of five days.

³¹ Kanina, Ateli Mandi and Nangal Chaudhary.

³² Worked out at average interest rate of 11.90 *per cent* allowed by HERC on working capital loans in the ARR of 2015-17.

reconciled with the bank statements. Age wise analysis of aforesaid un-reconciled cash and cheques revealed that cash of ₹ 1.36 crore and cheques amounting to ₹ 8.25 crore remained un-reconciled for more than three years. Further, 4,055 cheques amounting to ₹ 21.45 crore reported dishonored by Sub-Division offices from January 2011 to March 2018 were not found in the respective bank statements. Due to non/ delayed reconciliation possibility of misappropriation cannot be ruled out.

During exit conference, Management stated that a special drive has been initiated by constituting 16 teams and final status would be apprised to Audit.

Company accepted payments through cheques beyond the prescribed limits instead of RTGS/ Online mode resultantly suffered loss of interest on delayed clearance. The Company had not taken up the matter with the banks in cases where delayed credit of cheques was given by banks. Company could not reconcile cash and cheques periodically with bank statements due to which possibility of misappropriation cannot be ruled out. The funds were transferred from different local bank accounts to main account of the Company with delay due to non-conversion of its bank accounts into CMS accounts.

2.1.11 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.

The Company has entrusted the work of internal audit to firms of Chartered Accountants (CAs) and Internal Audit Wing of the Company test checks the work done by the CAs. Review of the internal audit procedures revealed the following deficiencies:

- Sales Manual, 2013 of the Company needs to be updated to bring in provisions brought in HERC Supply Code, 2014. Due to the introduction of the new supply code many issues of importance have undergone change. For example - timelines for grant of electricity connections to low tension consumers decreased from 45 days to 30 days, period of review of ACDs from consumers reduced from once in three years to beginning of every year, lumpsum assessment of theft penalty charges of ₹ 2,000 per BHP on AP consumers changed to load based assessment (assuming eight hours of supply for 20 days in a month) *etc.* The Company has issued sales circulars reflecting the changes but has not revised its Sales Manual till date (November 2018).
- Analysis of Internal Audit Reports revealed that the comments made in these reports are of general nature *viz.* expenditure incurred without sanction, non-disposal of damaged transformers, non-recovery of advances from the concerned officials and under-assessment of revenue due to release of connection in wrong category *etc.* However, observations on issues of delayed/ non-submission of subsidy claims, excess supply of power to AP consumers *etc.* were not raised.

During exit conference, Management stated that necessary steps would be taken to update the Sales Manual and necessary directions will be issued to all CA firms to look into such type of irregularities.

Company has not updated its Sales Manual and the activities where major revenue and expenditure are involved, were not covered in internal audit.

Conclusion

The performance of the Company with regard to tariff, billing and collection of revenue was found lacking in many aspects. The Company has not claimed subsidy of ₹ 20.81 crore on account of waiver of electricity bills to farmers and rebate given to women consumers and registered gaushalas. The Company was yet to replace 3.02 lakh electro mechanical meters with static meters as directed by HERC. The Company had short recovered an amount of ₹ 935.91 crore as additional ACD from its consumers. Short recovery of fixed charges and under charging of meter rent resulted in revenue foregone amounting to ₹ 15.02 crore. The loss of revenue was potentially higher due to unauthorised energy consumption in excess of sanctioned load. The Company could not achieve collection efficiency targets as prescribed by HERC during the last five years and resultantly recoverable amount had increased from ₹ 4,460.18 crore (March 2014) to ₹ 7,332.70 crore (March 2018). The Company has not maintained age wise analysis of connected defaulters. The internal control system was not adequate as remittances into banks were not reconciled periodically with the bank statements. Internal Audit had not pointed out the deficiencies in the database of consumers which adversely affected the revenue of the Company. As the audit findings are based on test check of records it is recommended that the Company may undertake checks in all operation circles and strengthen the logical controls on consumer database.

Recommendations

The Company may consider:

- institutionalising a robust mechanism for ensuring that rebate on power supply is given to different category of consumers with due approval of HERC;
- replacing the defective and electro-mechanical meters as per orders of HERC and revising the ACD recoverable from the consumers as per consumption pattern of previous periods;
- undertaking analysis of consumption pattern of consumers *vis-à-vis* sanctioned load for identifying cases of excess consumption and stopping excess supply of power to unmetered AP consumers,
- ensuring timely raising of bills and prompt collection of arrears from defaulting consumers; and
- improving its fund management and strengthening internal control system.