Dakshin Haryana Bijli Vitran Nigam Limited

2.3 Tariff, Billing and Collection of Revenue

Highlights

The Company sustained loss of revenue aggregating Rs. 3563.83 crore during 2002-2007 on its failure to contain sub transmission and distribution losses to the prescribed norm of Central Electricity Authority due to un-metered supply, defective meters, deficient energy audit and non-installation of check meters.

(Paragraphs 2.3.8 and 2.3.10)

The Company could not cover revenue gap of Rs. 214.19 crore due to delay in filing/non-filing of annual revenue requirement applications with Haryana Electricity Regulatory Commission for revision of tariff.

(Paragraph 2.3.12)

Incorrect application of tariff in four sub-divisions of Gurgaon circle resulted in loss of revenue of Rs. 3.33 crore.

(Paragraph 2.3.23)

In contravention of rules of the Company, fresh connections were released in 535 defaulting premises without recovery of default amount of Rs. 2.06 crore.

(Paragraph 2.3.18)

Recoverables had increased from Rs. 818.88 crore to Rs. 1772.13 crore during 2002-06 as the collection efficiency of the Company decreased from 64 *per cent* in 2002-03 to 55 *per cent* in 2005-06.

(Paragraph 2.3.30)

The Company suffered interest loss of Rs. 2.28 crore due to non-recovery of consumption security of Rs. 260.92 crore from existing consumers as per directions of Haryana Electricity Regulatory Commission.

(Paragraph 2.3.14)

The Company suffered loss of interest of Rs. 1.68 crore due to delayed/non credit of remittances in Company's collection accounts by 10 out of 12 banks.

(Paragraph 2.3.34)

The Company incurred extra expenditure of Rs. 52.70 lakh on meter reading, bill generation and distribution work allotted to a firm without inviting tenders and carrying out cost benefit analysis.

(Paragraph 2.3.25)

Introduction

2.3.1 Dakshin Haryana Bijli Vitran Nigam Limited (Company) was incorporated (15 March 1999) for distribution of power in southern parts of the State. It is a subsidiary of Haryana Vidyut Prasaran Nigam Limited. The Company controls sub-transmission and distribution system up to 33 KV. Tariff is fixed by Haryana Electricity Regulatory Commission (HERC) based on Annual Revenue Requirement Reports submitted by the Company.

Tariff implementation, billing and collection of revenue for all categories of consumers is done by 113 sub-divisions under 24 operation divisions. The Director (Operation) of the Company is overall incharge of these sub-divisions/divisions and is assisted by two Chief Engineers in the field. Collection of revenue is done through departmental and non-departmental (banks) collection centres. Revenue collected by the sub-divisions is deposited in local banks for onward transmission to the banks at headquarters of the Company at Hisar.

Since its inception, the Company incurred loss of Rs. 179.93 crore, Rs. 191.70 crore, Rs. 75.40 crore, Rs. 200.45 crore and Rs. 17.41 crore during 1999-2000, 2000-01, 2001-02, 2004-05 and 2006-07 respectively. It, however, intermittently earned profit amounting to Rs. 21.33 crore, Rs. 43.14 crore and Rs. 18.43 crore during 2002-03, 2003-04 and 2005-06 respectively. As on 31 March 2007, its accumulated losses amounted to Rs. 639.66 crore.

This activity of the Company was last reviewed in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2000 (Commercial) - Government of Haryana. The Committee on Public Undertakings (COPU) discussed the review in July 2005 and March 2006 and its recommendations are contained in 52nd Report presented to the State Legislature on 24 March 2006. The Company was required to submit action taken notes within three months from the date of presentation of the Report, but it had not furnished the same to the COPU so far (August 2007).

Scope of Audit

2.3.2 The present review conducted during November 2006 to March 2007 covers performance of the Company with regard to tariff, billing, collection and accountal of revenue during 2002-07. Besides examining the records maintained at the Head office of the Company, Audit test checked records of 37 sub divisions under eight Operation divisions. Selection of divisions was made by adopting simple random sampling without replacement method.

Audit objectives

2.3.3 The Audit objectives were to ascertain whether:

- entire cost of providing electricity is being recovered by making timely proposals to HERC;
- tariff orders, sales circulars and sales instructions were issued in time and without any ambiguity to the field offices;
- tariff and related regulations were applied properly to assess the revenue correctly;
- the billing was done timely and correctly;
- collection of revenue was done and accounted for in an economic, efficient and effective manner; and
- adequate monitoring and internal controls were there for elimination of risk in measuring consumption, billing and collection.

Audit criteria

2.3.4 The following audit criteria were adopted:

- tariff orders, sales circulars and sales instructions;
- norms of distribution losses fixed by Central Electricity Authority (CEA);
- the Electricity Act, 2003;
- guidelines issued by the Company for prevention of thefts; and
- agreements with banks for collection and transfer of funds.

Audit methodology

2.3.5 Audit followed the following mix of methodologies:

- examination of tariff orders issued by HERC;
- analysis of basic data relating to purchase and sale of power, sub transmission and distribution losses, records pertaining to periodical checking of metering equipments and connections;
- examination of application of tariff to various categories of consumers with reference to sales circulars and instructions;
- scrutiny of records relating to billing, collection and accountal of revenue in selected sub divisions; and
- scrutiny of Metering & Protection and Vigilance checking reports.

Audit findings

2.3.6 The audit findings were reported (May 2007) to the Government/Management and were requested to intimate suitable date for the meeting of Audit Review Committee for State Public Sector Enterprises (ARCPSE) to discuss the audit findings. The ARCPSE meeting was not held in the absence of any response from the Government/Management. The reply of the Management, however, was received on 5 September 2007 and their views have been incorporated in the review. The audit findings are discussed in succeeding paragraphs.

Uneconomical operations

2.3.7 Cost incurred on purchase of power, revenue from sale of power, loss incurred and subsidy received from State Government to cover the loss during the last five years up to 2006-07 are given in **Annexure – 9.**

It would be seen (**Annexure – 9**) that the Company suffered loss aggregating Rs. 2,182.53 crore (excluding Government subsidy) from sale of power during the last five years up to 2006-07 against which the Company received a subsidy of Rs. 2,016.02 crore.

The Management stated (September 2007) that HERC decides the amount of subsidy to be paid by the Government after adjusting cross subsidies generated by other categories to put minimum burden on the Government. The fact however, remains that the Company's accumulated loss as on 31 March 2007 was Rs. 639.66 crore.

As analysed in audit, losses were mainly due to:

- excessive sub-transmission and distribution losses (Paragraph 2.3.8);
- non submission of proposals for increase in tariff despite increase in the cost of supply (Paragraph 2.3.12); and
- faulty implementation of tariff rates (Paragraph 2.3.23).

Excessive sub-transmission and distribution losses

2.3.8 Sub-transmission and distribution losses indicate the difference between energy received for sale and energy sold. This includes technical losses and losses due to theft of energy. Central Electricity Authority (CEA) had prescribed a norm of 11.5 *per cent* for technical losses.

Details of number of units received for sale, units sold, units lost and expenditure incurred on improvement and maintenance of distribution system during the five years up to 2006-07 are given in **Annexure-10**.

It would be seen (**Annexure-10**) that sub-transmission and distribution losses reduced from 35 (2002-03) to 30 *per cent* (2006-07). Reckoned with reference to the CEA norms, excess losses during 2002-07 worked out to 10,473.64 MUs valued at Rs. 2,933.21 crore. But for the failure of the Company to contain losses to the CEA norms, the Company would have enjoyed a profit of Rs. 2,705.08 crore instead of an accumulated loss of Rs. 228.13 crore during 2002-07. Audit observed that the Company had been booking excess consumption of energy for un-metered agriculture power consumers by taking excess running hours for tubewells than those approved by HERC. Due to excess booking of energy consumption, the sub-transmission and distribution losses depicted in the accounts were less. The actual losses as worked out by Audit ranged between 42 (2002-03) and 31 *per cent* (2006-07). Loss on account of energy consumption was booked in excess during 2002-07 worked out to 2,287.34 MUs valued at Rs 630.62 crore. Thus actual sub transmission and distribution losses worked out to Rs. 3,563.83 crore during 2002-07.

Distribution losses exceeded the norm of 11.5 *per cent* fixed by CEA and resulted in revenue loss of Rs. 3,563.83 crore.

The Management stated (September 2007) that HERC had been requested to allow higher consumption for unmetered consumers. Despite the Company incurring very high sub-transmission and distribution loss, it extended low priority for its reduction as the expenditure on improvement and maintenance of distribution system was only 3.9 to 8.2 *per cent* of total expenditure during 2002-07.

Supply to agriculture power consumers

2.3.9 Supply of energy to the agriculture power (AP) consumers in the State is provided at a cheaper rate for which the State Government provides revenue subsidy to the Company since its inception (1999).

The table given below indicates units sold and revenue assessed from AP metered and un-metered consumers, subsidy received, cost of units sold and loss sustained by the Company during the five years up to 2006-07:

Sl. No.	Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	Total
1	Units sold to AP metered consumers (MUs)	507.03	629.89	737.93	905.58	1010.16	
2	Units sold to AP un-metered consumers (MUs)	1674.87	1682.24	1621.68	1618.45	1516.89	
3	Total units (MUs)	2181.90	2312.13	2359.61	2524.03	2527.05	**11904.72**
4	Revenue assessed (AP metered consumers) (Rs in crore)	29.88	34.80	28.89	24.61	29.74	
5	Revenue assessed (AP un-metered consumers) (Rs in crore)	67.18	65.70	48.11	37.38	40.58	
6	Total revenue assessed (Rs. In crore)	97.06	100.50	77.00	61.99	70.32	
7	Subsidy received (Rs. In crore)	289.44	304.88	380.00	451.21	590.49	**2016.02**
8	Total revenue from sale of power to AP consumers (Rs in crore) (6+7)	386.50	405.38	457.00	513.20	660.81	**2422.89**
9.	Revenue per unit (Paise)	177.14	175.33	193.68	203.33	261.49	
10.	Average cost per unit	340.82	330.96	369.05	341.65	383.63	
11.	Loss per unit (Paise)	163.68	155.63	175.37	138.32	122.14	
12	Loss (Rs in crore) (3 x 11)	357.13	359.84	413.80	349.12	308.65	**1788.54**

From the above it would be seen that even after taking into account the revenue subsidy received from the State Government, the Company had to

Sale of power to agriculture consumers resulted in loss of Rs. 1788.54 crore.

sustain loss of Rs. 1,788.54 crore on the sale of 11,904.72 MUs during 2002-03 to 2006-07 as the average cost per unit was more than the average revenue per unit. Contrary to the provisions of the Electricity Act 2003, 51 *per cent* (87,159 out of 1,71,625) AP consumers were getting un-metered supply as on 31 March 2007. Since bulk of the AP consumers were not provided with meters or wherever provided, these were not working in a number of cases, impact of losses due to un-metered supplies could not be verified in audit.

Management stated (September 2007) that the loss is due to non-accounting of cross subsidy available from remunerative tariff of other categories of consumers. Further the quantum and terms and conditions of subsidy are decided by HERC. The reply is not tenable in view of wide gap between the cost and revenue per unit despite subsidy from the Government and the resultant accumulated losses increasing from time to time.

Energy audit

2.3.10 Energy audit, recommended by CEA, aims at accounting for the energy received and sent out at each stage of transmission and distribution, so as to assess and control separately the technical losses (occurring due to inherent characteristics of the conductor and transformers used in the power distribution system) and commercial losses (caused by defective meters and pilferage of energy, etc.). Metering is the most crucial tool for energy audit. Audit observed that requisite attention was not given to metering aspect as discussed below:

- AP consumers consume a large chunk (30.9 to 38.4 *per cent* during 2002-07) of energy sold. As of 31 March 2007 energy consumed by 87,159 out of 1,71,625 tubewells was not metered and consumption thereof was assessed on running hours basis which was based on annual load factor. HERC observed (August 2002) that consumption by un-metered agriculture consumers was not realistic. HERC, therefore, directed the Company to put meters with maximum demand indicator (MDI) on all un-metered agriculture consumer installations for correctly assessing their energy consumption, preparing bills for subsidy and calculation of actual distribution losses. The directive had not been fully complied with so far (March 2007) as 51 *per cent* AP consumers had not yet been provided with the meters.

- While metering of consumption at consumer end was marked by a large number of meters remaining defective over years, feeder meters also were not yet (August 2007) provided on all the 11 KV feeders and these were not replaced promptly on becoming defective. Audit observed that out of 27[*] feeder meters declared (November 2002 to February 2006) slow or defective by Metering and Protection (M&P) Wing of the Company, seven meters in Gurgaon Circle were replaced (September 2006) and the balance remained unreplaced (March 2007).

- Installation of check meters at the poles/supply points to LT consumers proved (May 2003) successful in prevention of theft and reduction of losses in a Bhiwani sub-division. The Management advised (May 2003) all the sub-

[*] Gurgaon: 23 and Faridabad: 4

divisions to follow suit. No action was, however, taken thereon by the sub-divisional officers. Evidently, the Management failed to ensure the implementation of its instructions.

The Company had not prescribed any ceiling for losses on its feeders. As per HERC directions (August 2001), the Company is preparing quarterly feeder wise loss report for feeders having distribution losses above 25 *per cent*. Audit noticed that during the quarter ended March 2006 distribution losses on 737 (46 *per cent*) out of 1,609 feeders were above 25 *per cent*. Similarly, 718 (43 *per cent*) out of 1,663 feeders recorded losses above 25 *per cent* for the quarter ended March 2007. Out of these 718 feeders, 409, 288 and 21 feeders had distribution losses between 25 and 40 *per cent*, 40 and 70 *per cent* and above 70 *per cent* respectively.

In Faridabad circle, losses on 10 urban feeders ranged between 27.45 and 65.95 *per cent* during 2005-06. The same feeders again recorded losses ranging between 25.34 and 67.14 *per cent* during 2006-07. The Company had not analysed the reasons for recurring and higher losses on these feeders to take remedial measures.

As the Company had not taken adequate and prompt preventive measures such as metering of AP consumers, installation of check meters at poles, analysis of higher losses on feeders etc., the transmission and distribution losses remained higher and uncontrolled.

Tariff proposals

2.3.11 As per HERC (Tariff) Regulations, 1999 and the Electricity Act, 2003, a licensee is required to submit Annual Revenue Requirement (ARR) for the next financial year, three months in advance, showing expected aggregate revenue, estimated cost of providing electricity and a proposal to deal with the revenue gap.

The tariff was last fixed by HERC and made applicable by the Company in September 2001.

Uncovered revenue gap

2.3.12 In the ARR application (December 2003) for the year 2004-05, the Company calculated a revenue gap of Rs 363.30 crore but did not file any proposal to tackle it. Resultantly, HERC rejected (March 2004) the application. A revised application (22 December 2004) was filed by the Company with uncovered revenue gap of Rs 259.93 crore. Against this gap, HERC assessed (April 2005) a revenue gap of Rs. 34.90 crore and allowed it as regulatory assets[*] since the year 2004-05 was already over.

Thus, due to delay and incomplete ARR application, the Company was unable to cover the revenue gap of Rs. 34.90 crore.

[*] Is a fictitious asset which is to be written off over a period of five years.

In the ARR for the financial year 2006-07 filed (November 2005) by the Company there was no revenue gap, as it had taken into account an expected subsidy of Rs. 568.74 crore from the State Government. HERC, however, based on information supplied by both the distribution companies[1], worked out (August 2006) the revenue gap of Rs. 1,917.91 crore. After taking into account the revenue subsidy (Rs. 1,464.88 crore) provided by the State Government in its budget for the year 2006-07, the uncovered revenue gap of the two distribution Companies was worked out by HERC to Rs. 453.03 crore. HERC asked (August 2006) the State Government to provide additional subsidy of Rs. 453.03 crore (DHBVNL: 179.29 crore). There was no response from the State Government. The Company had also not filed any application for revision of tariff with HERC to cover up its revenue gap of Rs. 179.29 crore.

The Company failed to cover revenue gap of Rs. 214.19 crore.

Thus, due to delay in filing/non filing of ARR applications with HERC for revision of tariff, the Company could not cover revenue gap of Rs. 214.19 crore during 2004-05 and 2006-07.

While admitting the facts the Management stated (September 2007) that the uncovered revenue gap for 2006-07 had been allowed by HERC to be recovered through fuel surcharge adjustment (FSA) with effect from December 2006. The reply is to be viewed in the light of the fact that the FSA was allowed for additional cost of energy and for further payment to the suppliers of power and this would not in any way bridge the gap.

Reduction in tariff for agricultural consumers

2.3.13 During Chief Ministers' Conference (October 1996 and December 1996) it was, *inter alia,* decided that the tariff for agriculture sector should not be less than 50 paise per unit and it should be brought up to 50 *per cent* of the average cost of supply within three years' time. In consonance with the decision of the conference ibid, the erstwhile Haryana State Electricity Board (Board)/Company revised the tariff upwards during 1998 and 2001. Agriculture tariff in force since September 2001, based on depth of water table, was 38 paise to 65 paise per unit for metered supply and Rs. 48 to Rs. 104 per Horse Power (HP) per month for un-metered supply.

The State Government approved (August 2004) uniform concessional rate of 25 paise per unit for metered AP connections and Rs. 35 per HP per month for un-metered AP connections. The reduction in tariff had decreased the revenue assessment of the Company by Rs. 30.08 crore during 2004-05 and annual reduction thereafter was estimated at Rs. 48.17 crore.

Thus, reduction in agriculture tariff in contravention of the decision in Chief Ministers' Conference not only put extra burden of Rs. 48.17 crore per annum up to March, 2007 on the exchequer but the uniform rate also discriminated against the consumers of the areas where water table was deep.

Revision of consumption security

[1] UHBVNL and DHBVNL.

2.3.14 HERC notified (July 2005) that the licencee should recover consumption security* equivalent to consumption charges of four months in case of bi-monthly billing and two months in case of monthly billing cycle from all existing consumers to safeguard against any default in payment. Adequacy of the amount of security was to be reviewed once in three years based on the average consumption of the previous financial year. The notification provided that the first review of existing consumers would be carried out within a period of six months i.e. up to January 2006 and any deficit in the consumption security should be recovered in six instalments through energy bills. Security from the new consumers under various categories was to be recovered at the revised rates from 1 November 2005.

Audit scrutiny revealed that the Company revised the rates of consumption security for new consumers with effect from 25 November 2005 instead of 1 November 2005. Delayed implementation resulted in short recovery of Rs. 51.34 lakh based on connected load released during 1-24 November 2005. The Company had not carried out the required review of average consumption of the existing consumers for working out revised security requirements so far (March 2007). Recovery of additional security deposit was to start after preparation of consumption security registers by field offices and billing agencies. The security registers have not been prepared so far (March 2007). Based on consumption for the year 2004-05, the amount of additional security recoverable from existing consumers as worked out by Audit amounts to Rs. 260.92 crore. Non-recovery of additional security of Rs. 260.92 crore from the existing consumers not only violated the directions of HERC and increased the risk of bad debts in case of default in payment by consumers; this had also resulted in loss of interest of Rs. 2.28 crore@ up to March 2007 after giving margin of six months.

Non recovery of consumption security of Rs. 260.92 crore from existing consumers caused loss of interest of Rs. 2.28 crore.

Management stated (September 2007) that there was no loss as the security was not meant for earning interest and it was basically a safeguard against defaulters. The reply is not tenable as timely implementation of the directives would have not only generated additional funds but also ensured safety against defaulters and bad debts.

Release of connections

2.3.15 As per the provisions contained in the Electricity Act, 2003 and HERC notification (July 2005), the distribution licensee on receipt of an application from owner of any premises would release electricity connection within one month of receipt of application complete in all respects. Where supply of electricity requires any extension of distribution system and the applicant opts for getting the work of such extension executed through the licencee, the licencee shall release the connection within 45 to 180 days depending upon the voltage level on which connection is required to be released.

* Represents cash deposit obtained from consumers at the time of receipt of application for release of connection to safeguard against default in payments.

@ Calculated at 1.5 (7.5 *per cent* cash credit rate – 6 *per cent* payable to consumers) *per cent* per annum.

Pending applications

2.3.16 As on 31 March 2007, 37,355 applications were pending for release of connections. Out of these, 19,026 (51 *per cent)* were for agriculture power, 14,540 (39 *per cent)* for domestic, 2,197 (6 *per cent)* for non-domestic and 822 (2 *per cent)* for LT industrial connections. Besides, applications for HT Industrial (342), Bulk Supply (47) and Public Water Works (377) connections were also pending. These applications were pending due to delay in processing (4,987), incomplete formalities (1,626), want of material (6,562) and work in progress (5,154). No reasons were available with the Company for the pendency of 19,026 agriculture connections. Load requirement of these pending connections was not indicated and age wise details of the pending applications were also not available.

Test-check of records of Operation Circle, Gurgaon revealed as under:

- Vipul Infrastructure, Mehrauli Road, Gurgaon was awaiting (March 2007) connection (Load: 1860 KW) for over 34 months after the applicant had submitted the requisite test-report in April 2004.
- Demand notices in 20 cases were not yet (March 2007) issued although applications (Load: 49000 KW) completed in all respects were received 8 to 53 months ago.
- Period of 3 to 46 months was taken in issuing demand notices to eight applicants who applied for load of 13000 KW between October 2002 and September 2006.

Delay in processing and non-release of connections had resulted not only in non-compliance of the statutory provisions, but also hampered the economic development of the State. The Company had also to forego revenue of Rs. 1.28 crore per month at minimum monthly return of Rs. 200 per KW on 63860 KW in respect of Operation Circle, Gurgaon.

Loss of potential revenue

2.3.17 As per present standard of living, most of the households in the villages cannot remain without electricity. The Chairman of the Company had observed (August 2005) that people in villages had switched from using traditional fuels to electric heating for cooking. He emphasised that there was an urgent need to launch a vigorous campaign by holding camps in villages and persuade all the disconnected consumers and those having no electric connection to have regular connections in rural areas.

Audit observed that in 891 villages in Operation Circle, Gurgaon, 33,528 out of 2,59,253 houses (as on 30 November 2006) had their electricity connections disconnected and in other 96,258 houses the electricity connections were never released/provided. The percentage in terms of houses to which electricity connections were not provided, in relation to total houses in the villages, worked out to about 50. The possibility of theft of energy is high in the localities where houses are not provided with connections. No efforts were, however, made to persuade these villages to have power connections.

The Company was exposed to revenue loss of Rs. 9.34 crore in respect of 891 villages in Gurgaon circle.

In view of the possibility of theft/unauthorised use of electricity in these cases, the Company is exposed to revenue loss of Rs. 9.34 crore per annum based on domestic tariff for rural areas (calculated at monthly minimum charges of Rs. 60 per month).

Management stated (September 2007) that it has started regularisation of kundi connections and connections were being provided at the consumers door step. The fact, however, remains that 50 *per cent* houses in the villages were without electricity connections.

Release of new connections in the premises of defaulting consumers

Company released fresh connections in defaulting premises without recovery of default amount of Rs. 2.06 crore.

2.3.18 According to the terms and conditions of supply of electricity, reconnection or new connection is not to be given to any premises where there are arrears due to the Company, unless these are cleared in advance alongwith interest. Circle level committees constituted (December 2005) by the Company reported (January – October 2006) that six* sub divisions of Gurgaon circle restored supply to 308 premises against whom arrears of revenue aggregating to Rs. 1.57 crore were outstanding. Similarly, connections were given by 9** sub divisions of Faridabad Circle to 227 consumers against whom an amount of Rs. 52 lakh was outstanding, out of which Rs. 2.71 lakh has been recovered.

The Company has taken no action against the delinquent officials for restoring supply to defaulting premises without recovery of arrears of revenue along with interest.

Non-clubbing of connections

2.3.19 Sales instructions/circulars issued from time to time by the Company provide that more than one industrial connection may not be issued in one premises as this leads to circumvention of the law and splitting up the load which causes loss of revenue to the Company. Connections having load of 70 KW and above are released on HT line and such connections, if fed through LT line, attract surcharge at the rate of 25 *per cent* of energy charges.

Audit noticed that five*** operation sub-divisions of Faridabad and Gurgaon circles of the Company released (February 1990 to October 2004) more than one connection in six cases on LT line, though their aggregate load was more than 70 KW. As the individual connections were less than 70 KW, the sub divisions could not levy LT surcharge amounting to Rs. 64.98 lakh on these consumers.

The Management stated (September 2007) that the cases were under scrutiny and necessary action would be taken against the delinquents.

Short recovery of service connection charges

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* Maruti, City I, Industrial Area, Udyog Vihar, Operation cum Construction (OCC) and New Colony Gurgaon.

** No. 1 to No. 5, Jawahar Colony, Mathura Road, West (Faridabad) and Industrial Area Ballabgarh.

*** No. 5, City I and West of Faridabad Circle and OCC and Badshahpur of Gurgaon Circle.

2.3.20 As per the schedule of tariff (2001), all the applicants seeking industrial, non-domestic and bulk supply connections are required to pay fixed service connection charges as per rates mentioned in the schedule of general and miscellaneous charges. The prevailing service connection charges are Rs. 750 per KW for non-domestic connections with load exceeding 3 KW and Rs. 500 per KW for bulk supply (BS) connections.

Operation cum Construction (OCC) and Maruti sub-divisions of Operation Circle, Gurgaon released (July 2002 to July 2005) 27 BS connections, instead of non-domestic connections, to non-residential commercial establishments (shopping malls and arcades, commercial complexes, commercial towers, clubs, etc.) and accepted service connection charges applicable to BS connections. Release of BS connections to commercial establishments had resulted in undue favour to these consumers and loss of Rs. 1.19 crore to the Company due to short recovery of fixed service connection charges.

Billing for power supplied

2.3.21 Reading of meters, taken monthly/bi-monthly by employees of the Company or by outside agencies, forms the basis of billing. Billing of domestic supply (DS) and non-domestic supply (NDS) consumers with connected load below 20 KW is done bi-monthly while consumers of all other categories are billed on monthly reading basis. Unmetered AP consumers are billed monthly on the basis of sanctioned load. Billing of all categories except BS and street light connections had been computerised. Test-check in audit revealed the following deficiencies in billing/application of tariff.

Meter reading and preparation of bills

2.3.22 In accordance with the standards of performance prescribed by HERC, billing mistakes i.e. incorrect bills should not exceed 0.1 *per cent* of the bills issued. Test check of records revealed that in city Sub-division I, Gurgaon, wrong billing in respect of two out of four groups of DS/NDS consumers in 980 (out of 43199) cases was corrected subsequently (January 2005 to January 2007). Billing error for both these groups worked out to 2.27 *per cent* of the bills issued. In Satrod and Barwala Sub divisions of Hisar circle, cases of incorrect billing worked out to one *per cent*.

Audit observed that incorrect billing in the above cases was the result of incorrect reading of meters, which indicated below-par quality of service to the consumers.

The Management stated (September 2007) that necessary directions had now been issued for improvement in billing work.

Incorrect application of tariff

Incorrect application of tariff resulted in loss of revenue of Rs. 3.33 crore.

2.3.23 As per schedule of tariff, NDS tariff is applicable to all non-residential premises such as business houses, cinemas, clubs, public offices and hotels etc. whereas bulk supply (BS) tariff is available for mixed or general load for military, railways, CPWD, hospitals and educational institutions etc.

Industries having load above 70 KW are covered under HT Industrial Category. As per the tariff applicable since September 2001, HT Industrial and BS consumers are billed at Rs 4.09 per unit while non-domestic consumers are billed at Rs. 4.19 per unit. Test check (March 2007) of records of four sub divisions[$] of Gurgaon Circle revealed that the Company charged BS tariff from 27 consumers and HT Industrial Tariff from 10 consumers instead of NDS tariff which resulted in loss of Rs 3.06 crore[@]. On being pointed out in audit, category of six (out of 10) consumers was corrected (June/September 2006) without making good the loss already suffered. Further, in two cases connections released (October 1997 and March 2000) by OCC sub division under NDS category were correctly charged NDS tariff up to July and August 2003, respectively. BS tariff was, however, applied thereafter without assigning any reasons. Change of category had, thus, resulted in loss of revenue of Rs 27.26 lakh[#].

Low Consumption cases

2.3.24 Exception lists being generated (since January 2004) by the billing contractors include a list of low consumption cases i.e. consumers billed on minimum monthly charges (MMC). The sub divisional officer is required to make a careful scrutiny of such cases to ensure that low consumption is not due to theft of power and the position does not persist for long.

Audit scrutiny in Operation sub-division No.3 Faridabad, revealed low consumption of 56 (out of 1952) LT industrial consumers for more than six months as of December 2006. They were being billed on MMC basis but action to check these consumers for ascertaining the reasons for their low consumption and possible leakage of revenue was not taken. Probable loss of revenue in these cases worked out by Audit on the basis of their sanctioned load amounted to Rs 1.68 crore per annum.

Extra expenditure on meter reading, bill generation and bill distribution

2.3.25 In order to reduce billing time and curb malpractices, the Company awarded (January 2004) a pilot project of digital camera based meter reading, bill preparation, distribution and collection of cheques for two[*] sub-divisions to KLG Systels Limited, Gurgaon for six months at Rs. 11 per connection. The contract was extended (March 2004) to other six[*] sub-divisions without carrying out any cost benefit analysis and invitation of tenders. The period of contract was further extended up to March 2006.

[$] Maruti, OCC, Udyog Vihar and Industrial Area.

[@] Loss worked out up to February 2007 (date of audit).

[#] Loss worked out up to February 2007 (date of audit).

[*] Maruti, Gurgaon and East Faridabad.

[*] City I and City II Ballabgarh, West Faridabad and No 4 Faridabad and City II and New colony Gurgaon.

The Company incurred extra expenditure of Rs. 52.70 lakh on meter reading, bill generating and bill distribution work.

Audit observed that during the same period, the Company allotted the work of meter reading (manually), bill generation and bill distribution as individual activities in other places/circles at an aggregate rate of Rs. 2.69 per connection through competitive bidding. Further, against subsequent tender enquiry (October 2005), the lowest competitive rate offered for the same work (with camera based reading) was Rs. 4.82 per connection which was rejected without any basis on the plea that the rate offered was too low to carry out the work satisfactorily. Due to non-carrying out of cost benefit analysis and non-invitation of tenders, the Company incurred extra expenditure of Rs. 52.70 lakh on these activities up to March 2006 in comparison with the rates received in October 2005. The work of the firm was also not found satisfactory as internal auditors detected (April 2005) short recoveries of Rs. 1.97 crore due to wrong billing on account of excess/double posting of cash realisation, non-posting of advices of sundry charges and allowances, incorrect reading on change of meters, non-levy of surcharge, excess average adjustments and short carrying over of balances.

The Management stated (September 2007) that the pilot project was discontinued when the system was found not working according to expectations. The fact, however, remains that the project was discontinued after two years though the Chief Auditor of the Company had reported (April 2005) that the project had failed to achieve any improvement in billing.

Defective energy meters

2.3.26 As per the terms and conditions of supply of electricity, a correct meter would be installed and maintained by the Company at each point of supply to the consumers and would remain the property of the Company. HERC regulation (July 2004) on 'Standards of Performance' required that faulty meters should not exceed one *per cent* of the meters installed. The table below depicts defective meters noticed and meters replaced during the four years ending 2005-06:

Year	Total metered connections	Opening balance of defective meters	Defective meters noticed during year	Meters replaced	Cost of meters replaced (Rupees in crore)	Defective meters at year end	Percentage of defective meters	Average replace-ment period (months)
2002-03	1517993	141643	59620	97929	6.37	103334	6.8	13
2003-04	1577980	103334	65648	78651	5.11	90331	5.7	14
2004-05	1652019	90331	49157	61415	3.99	78073	4.7	15
2005-06	1717342	78073	83762	53829	3.77	108006	6.3	24
2006-07[$]								

From the above table it would be seen that the percentage of defective meters ranged between 4.7 and 6.8 during these years as a result 94,936 (average of four years) consumers were billed on average basis. Further, average replacement period ranged between 13 and 24 months during 2002-06. Sales Manual of the Company do not permit to charge a consumer for more than six preceding months for the difference between average energy already billed and actual average consumption of new meter after replacement of defective meter. Thus, loss of revenue due to average billing in such cases for longer periods cannot be ruled out. Moreover, longer duration of defective meter

[$] Figures not available.

tempts an unscrupulous consumer to indulge in wasteful consumption of electricity for which he had to pay nothing extra.

During test check of records of selected sub divisions it was noticed that burnt or dead/defective meters of 179 out of 7,405 (2.42 *per cent*) LT industrial consumers of eight sub-divisions* were lying unreplaced for periods ranging from 6 to 23 months and were being billed on average basis. Percentage of defective meters during the quarter January – March 2006 of domestic/non-domestic consumers in Satrod and Barwala Sub divisions of Hisar circle worked out to 6.92 (2,953 out of 42,696 consumers). In respect of AP (metered) consumers in Satrod, Barwala and Adampur Sub divisions, the percentage of defective meters worked out to 30, 17 and 20 during July 2006 to February 2007 respectively.

Thus, the standard fixed (July 2004) by HERC for performance of meters was not achieved.

The Management stated (September 2007) that all out efforts were being made to bring the percentage of defective meters within norm.

Periodical checking of connections

2.3.27 The Company had prescribed, for its field officers, a schedule to check the consumer premises to ensure that the consumer was complying with the terms and conditions of supply and that he was not indulging in prejudicial use/theft of energy or other malpractices. Number of consumer premises checked, cases of theft of energy detected and revenue realised during 2002-07 are shown in the table below:

Year	Number of connections			Cases of theft/metering defects detected			
	Due for checking by various officers	Actually checked (percent-age)	Shortfall (percent-age)	Number (percentage of connections checked)	Penalty imposed	Amount recovered	Loss of potential revenue due to shortfall in checking#
					(Rupees in crore)		
2002-03	510464	134922 (26)	375542 (74)	14771 (11)	16.21	7.48	21.30
2003-04	576176	135193 (24)	440983 (76)	16686 (12)	18.01	6.41	20.30
2004-05	604186	103104 (17)	501082 (83)	8442 (8)	15.66	5.53	27.00
2005-06	633131	167951 (27)	465180 (73)	34689 (21)	36.30	16.12	43.58
2006-07	695144	149799 (22)	545345 (78)	24596 (16)	25.65	10.07	35.70
Total					**111.83**	**45.61**	**147.88**

As would be observed from the table, 8 to 21 *per cent* of consumer premises checked were found indulging in pilferage of power and the checking had yielded revenue of Rs. 45.61 crore up to March 2007 out of imposed penalty of Rs. 111.83 crore. Based on the average recovery output of these checkings,

Shortfall in checking of connections resulted in loss of potential revenue of Rs. 149.92 crore.

* Jawahar colony, East Faridabad, West Faridabad, Mathura Road, No. 3 Faridabad, Industrial Area Ballabhgarh, city-II Ballabhgarh and city-I Gurgaon.

\# (Amount recovered on account of theft of energy X Percentage of shortfall in checking) ÷ Percentage of connections checked.

shortfall in checking of connections (ranging between 73 and 83 *per cent*) resulted in loss of potential revenue of Rs. 149.92 crore up to March 2007.

The Management stated (September 2007) that it had decided to get the meters checked through outsourced agencies and there would be no pendency of checking.

A few cases of potential loss of revenue due to delayed/defective checking noticed during audit of selected sub divisions are discussed below:

Theft of energy

2.3.28 Test check of records of Udyog Vihar sub-division under Gurgaon Circle, revealed that contrary to the instructions (Meter Manual 1989) of the Company, LT line and distribution transformer were allowed to remain in the consumers' premises. During checking (October 2004) by the Company's Vigilance Wing, the four LT industrial connections in the premises were found indulging in theft of energy. Penalty aggregating Rs. 55.16 lakh was levied for the preceding six months as per codal provisions. The recovery was yet to be effected as the cases were pending in courts.

Audit noticed that the average consumption of these consumers was very low (1 to 79 hours during a month) during April 2002 to September 2004 indicating that the consumers were indulging in theft since April 2002. Due to non-shifting of LT line and distribution transformer outside the consumers' premises, the Company suffered revenue loss of Rs. 60.36 lakh based on sanctioned load of these consumers during April 2002 to March 2004 as penalty is not leviable for periods exceeding six months.

Similarly, nine industrial consumers in respect of Udyog Vihar, Gurgaon (eight) and Jawahar Colony, Faridabad (one) checked by the Vigilance Wing (May 2003 to November 2004) were found indulging in theft or unauthorised use of energy. They were charged penalty for preceding six months. Scrutiny of consumption data of these consumers revealed that their consumption was very low since January 2000. The sub-divisions took no steps to enquire into the reasons for their low consumption so as to take appropriate preventive measures. Thus, inaction on the part of the sub-divisions resulted in loss of revenue of Rs. 56.21 lakh (January 2000 to May 2004) based on probable consumption calculated on sanctioned load (excluding the period of six months already charged).

Short levy of penalty

2.3.29 The sales instructions (October 1998) of the Company provided that in case of theft of energy, penalty would be assessed maximum for preceding six months, if the actual period of theft could not be determined. Further, inspection for the purpose of meter reading for recording consumption would not be deemed to be the inspection for detecting theft.

Premises of an HT non domestic consumer* under Industrial Area Sub-Division, Gurgaon was checked (March 2004) by M&P and consumer was found indulging in theft of energy. A penalty of Rs. 2.75 lakh for theft of energy for a period of 23 days only from the date of last reading to the date of checking was assessed.

Audit observed (March 2006) that consumption of the consumer dipped from above 22,000 units per month up to October 2003 and ranged between 5,592 to 13,944 units during November 2003 to March 2004. After checking and change of meter the consumption again picked up above 20,000 units per month from April 2004. Keeping in view the reduction in consumption from November 2003 the penalty of Rs. 30.59 lakh should have been imposed for a period of five months from November 2003 to March 2004.

Incorrect assessment of penalty thus, resulted in loss of Rs. 27.84 lakh to the Company.

Collection of revenue

2.3.30 Collection and accounting of revenue is an important activity of a distribution Company. It is imperative for sound financial management to ensure that the revenue due to the Company is collected promptly and arrears are not allowed to accumulate.

Details of revenue assessed, its collection and outstandings at the end of the four years up to 2005-06 are given in **Annexure 11.**

From the annexure it would be seen that:

Despite waiver of surcharge/principal by the Company, the recoverables of the Company increased from Rs. 818.88 crore to Rs. 1772.13 crore.

- balance of revenue outstanding represented 6.7 to 10 months' collection period as against consumer security deposits limited to only two months' assessment.
- collection efficiency# had decreased from 64 *per cent* in 2002-03 to 55 *per cent* in 2005-06.
- recoverables had increased from Rs 818.88 crore to Rs. 1,772.13 crore during 2002-06 despite waivers of surcharge/principal outstanding against defaulters by the State Government.

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* Narula Corner House Private Limited

\# This represents percentage of amount realised during the year to total amount due for collection.

Revenue in default

2.3.31 In accordance with the conditions of supply of energy, supply to the consumers' premises should be disconnected after the expiry of notice period of 15 days in the event of his failure to make payment by the due date. Category-wise position of arrears of revenue for the five years up to 2006-07 is tabulated in **Annexure - 12.**

Perusal of the annexure revealed that:

- amount in default had increased by 135 *per cent* in five years from Rs. 704.27 crore in 2002-03 to Rs. 1658.26 crore in 2006-07 as compared to 63 *per cent* increase in revenue (Rs. 1,688.08 crore to Rs. 2,746.80 crore) during the same period. Increase in the defaulted amount was attributable to lack of timely action for recovery.

- amount in default against domestic/non domestic and AP consumers had increased from Rs. 493.89 crore in 2002-03 to Rs. 1,205.61 crore in 2006-07 whereas the number of defaulting consumers had increased from 5,51,066 in 2002-03 to 7,98,959 in 2006-07. The steep increase of 144 *per cent* in defaulting amount and 45 *per cent* increase in number of defaulting consumers was an indicator of increasing tendency of consumers to resort to default hoping for waiver schemes* in future.

- the number of defaulting consumers not yet disconnected had increased from 3,65,867 in 2002-03 to 5,54,689 in 2006-07. The percentage of defaulting connected consumers to total consumers ranged between 23 (2002-03) and 31 (2006-07).

Test check of records in the selected sub divisions revealed as under:

Amount in default against temporary supply consumers

2.3.32 Sales instructions of the Company require sufficiency of the security to cover the dues in case of temporary connections.

Test check of records of five** sub divisions, revealed that Rs. 57 lakh was recoverable (March 2007) from 472 temporary consumers disconnected during 1999-2005 after adjustment of the securities. As all the connections already stood disconnected, chances of recovery were remote.

Acceptance of part payments

2.3.33 As per the Company's Sales Manual acceptance of part payment of energy bills was not permissible. Audit scrutiny revealed that partial payments were being accepted in contravention of the instructions. This could lead to

* 'Final surcharge waiver scheme' for domestic, non domestic and agriculture consumers of rural areas was launched in April/May 2002, wherein 75 *per cent* of the defaulting amount was waived off by the Company.

** OCC, Industrial Area and Maruti of Gurgaon Circle, No. 3 Faridabad and Satrod, Hisar.

accumulation of arrears of dues resulting in ultimate disconnection and the revenue becoming irrecoverable. Test Check in audit revealed (February 2007) that an LT consumer made part payment (July 2003) of Rs. 2.91 lakh (against energy bill of Rs. 3.51 lakh) and Rs. 2.47 lakh (against energy bill of Rs. 6.51 lakh) in October 2003 through cheques. The first cheque was dishonoured but action against the consumer under Section 138 of the Negotiable Instruments Act, 1881 was not taken. The consumer did not make payment of his energy bills during August 2003, September 2003 and from November 2003 to August 2005. Supply to his premises was disconnected (August 2005) when the defaulting amount had accumulated to Rs. 20.43 lakh. After levying surcharge for six months defaulting amount accumulated to Rs. 24.33 lakh in March 2006 which had not yet been recovered (March 2007). Non compliance of the instructions, thus, facilitated accumulation of defaulting amount to the tune of Rs. 24.33 lakh. Action to recover the amount, as arrears of land revenue, had not been taken so far (March 2007).

Delay in credit of remittances in* Company*'s account

2.3.34 The Company had arrangements with 12 public/private sector banks for collection of its revenue. Revenue receipts from consumers are remitted by the sub divisions into the designated branch of a collecting bank which accounts for and transmits the same to its main branch at Hisar (at the Headquarters of the Company). As per the terms of the agreement with these banks, the collecting branch of the bank shall transmit the amount deposited by the sub division on the same or the next working day to its main branch and the main branch shall transfer that amount the same day to the Company's main collection account.

The Company suffered loss of interest of Rs. 1.68 crore due to delayed/non-credit of remittances in company's collection account.

Audit observed that collecting branches of 10 out of 12 banks did not transfer these receipts to the account of the Company within the prescribed time causing thereby loss of interest of Rs. 1.68 crore as discussed below:

- There were delays ranging between 11 and 99 days in accountal of remittances (above Rs. 10,000 in each case) aggregating Rs. 21.85 crore (made by the depositing officers) by the collecting branches of the banks and Rs. 204.86 crore (transferred by collecting branches) were credited by their main branches during 2005-06 with delays ranging between 11 and 60 days. Loss of interest caused by these delays at cash credit rate worked out to Rs. 60.68 lakh, after allowing a margin of seven days.

- As per reconciliation statement for the period ending September 2006, revenue aggregating Rs. 80.65 crore deposited by the field offices of the Company was awaiting to be credited to the Company's main collection accounts at Hisar. Of this, Rs. 8.74 crore relating to the period from December 2001 to October 2005 had been credited to the Company's account after a delay of 28-1315 days entailing loss of interest of Rs. 58.94 lakh up to August 2007.

- Reports generated by the Company did not take notice of delays caused by collecting branches in transmitting the collections to their main branches. Often, the amounts were transmitted once a week or at fortnightly intervals causing huge un-noticed loss of interest. In case of 7 collecting branches test-checked in audit, the loss of interest on account of daily cash balances retained by these branches worked out to Rs. 48.57 lakh during April - September 2006.

Agreement with the banks provided for recovery of interest at Prime Lending Rate on the delayed transfer of funds. The Company, however, did not take up the matter with the banks and continued to suffer loss of interest.

Admitting that the delay in transfer of funds was primarily due to inherent weakness of the banking system, the Company stated (September 2007) that it was not practically possible to bring the balances to zero and Rs. 75 crore to Rs. 100 crore were likely to remain in the balance for seven days. The reply shows hesitation of the Company in remedial measures without considering the agreements with the banks which provided for transfer of funds on the same or the next working day.

Internal control and internal audit

2.3.35 Internal control is a management tool used to provide a reasonable assurance that the objectives of the management are being achieved in an efficient, effective and orderly manner.

Audit noticed the following deficiencies in the internal control system of the Company:

- maximum demand indicator meters were not provided on the flat rate agriculture tubewells to detect unauthorised extension of load and to correctly assess the consumption of energy by these consumers. This might lead to prejudicial use of energy by consumers.

- the sub-divisions had not maintained records to monitor the replacement of defective energy meters showing the dates when meters became defective and replacement thereof.

- sundry charges and allowances registers were not maintained properly in the sub divisions. In a number of cases items were not authenticated by the Sub Divisional Officer incharge; month of posting of the item was not indicated and monthwise abstracts of sundry charges and allowances were not prepared, which might affect posting and recovery of sundry charges and allowances. This could lead to fraud and embezzlement.

- register of theft of energy had not been maintained properly by sub-divisions to monitor the progress of recovery in theft cases as action taken against the consumers was not reflected.

- ledgers of permanent defaulters were not maintained properly as these did not record permanent disconnection order number (PDCO) and date, month of transfer of account in defaulters' ledger alongwith reference to item of sundry charges and allowance register and action taken to recover the amount in default.

- registers to monitor cases referred to revenue authorities for recovery had not been maintained by the sub-divisions to watch recoveries.

Internal Audit Reports were not placed before the Board of Directors (BOD) for consideration. The statutory auditors in their reports on the accounts for the years 2002-03 to 2005-06 had pointed out that the internal audit was not commensurate with the size of the Company and nature of its business.

Conclusion

The performance of the Company with regard to tariff, billing and collection of revenue was found to be deficient as the Company sustained huge losses due to its failure to contain sub-transmission and distribution losses to the prescribed norms of Central Electricity Authority, lack of submission of proposal to Haryana Electricity Regulatory Commission for increase in tariff to cover up the revenue gap, unmetered supply, defective meters, deficient energy audit, non recovery of revised consumption security and incorrect billing. Laxity in prompt recovery of its dues resulted in heavy accumulation of outstandings. Delay in transfer of funds from collecting branches of the banks caused delay in inflow of funds and loss of interest to the Company.

Recommendations

The Company may consider:

- **declaring divisions as profit centres for accountability and identifying unremunerative operations ;**
- **conducting energy audit regularly to identify leakages of power and taking prompt remedial measures;**
- **strengthening vigilance measures against weak areas identified as an outcome of energy audit;**
- **approaching HERC for timely implementation of revision of tariff and recovery of the revenue gap; and**
- **ensuring prompt credit of remittances and their transfer by the banks.**

The matter was referred to the Government in May 2007; the reply had not been received (September 2007).