



**COMMISSION'S ORDER**

**ON**

**ANNUAL REVENUE REPORT OF DHBVNL**

**FOR DISTRIBUTION AND RETAIL SUPPLY BUSINESS**

**FOR FY 2008-09 AND DISTRIBUTION AND RETAIL**

**SUPPLY TARIFFS**

**November 20, 2008**

**HARYANA ELECTRICITY REGULATORY COMMISSION**  
**BAYS 33-36, SECTOR - 4, PANCHKULA - 134 112, HARYANA**

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**HARYANA ELECTRICITY REGULATORY COMMISSION**  
**BAYS 33-36, SECTOR - 4, PANCHKULA - 134 112, HARYANA**

**ORDER ON**  
**ANNUAL REVENUE REQUIREMENT OF DHBVNL**  
**FOR DISTRIBUTION AND RETAIL SUPPLY BUSINESS**  
**FOR FY 2008-09**

**CASE No. : HERC/PRO 1 of 2008**

**PANCHKULA**

## **HARYANA ELECTRICITY REGULATORY COMMISSION**

**BAYS 33-36, SECTOR - 4, PANCHKULA - 134 112 HARYANA**

**CASE No. : HERC / PRO 1 of 2008**

In the matter of application filed by Dakshin Haryana Bijli Vitran Nigam Limited for approval of Annual Revenue Requirement for Distribution and Retail Supply Business for FY 2008-09

### **PRESENT**

**Shri Bhaskar Chatterjee, Chairman**

**Shri T.S. Tewatia, Member**

On behalf of DHBVNL

Shri Vijayender Kumar, Managing Director

Shri Kapil. K.Marwaha, CGM (Fin.)

Shri Vijay kumar Seth, GM/Admn.

Shri P. C. Gupta, DGM/RA

On behalf of the Staff of HERC

Shri Surjeet Singh, Secretary

Shri Balbir Singh, Director (Technical)

Shri Sanjay Varma, Director (Tariff)

Smt. Surbhi Jain, Dy. Director (Accounts)

Shri Gulshan Aggarwal. Dy. Director (Eco.)

Shri S. K. Goyal, Dy. Director (Distribution)

**ORDER**

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# **1 PROCEDURAL ASPECTS OF THE ARR FILINGS**

## **1.1 Preamble**

In exercise of the powers vested under Section 62 and 86 of the Electricity Act, 2003 and Section 26 of the Haryana Electricity Reform Act, 1997 and all other powers enabling it in this behalf, the Haryana Electricity Regulatory Commission passes this order and determines Aggregate Revenue Requirement (ARR) for supply of electricity by Dakshin Haryana Bijli Vitran Nigam Limited (the Licensee) for the Financial Year 2008-09.

## **1.2 Procedure envisaged in the Electricity Act 2003 for Tariff Order**

Section 64 of the Electricity Act 2003 specifies the procedure to be followed for issuance of a tariff order. Sub-sections (1) and (3) of Section 64 of Electricity Act 2003 state as follows:

Sub-section (1): “An application for determination of tariff under section 62 shall be made by a generating company or Licensee in such manner and accompanied by such fee, as may be determined by regulations”.

Sub section (3): “The Appropriate Commission, shall within one hundred and twenty days from receipt of application under sub-section (1) and after considering all suggestions and objections received from the public:

- (a) issue a tariff order accepting the application with such modifications or such conditions as may be specified in that order:
- (b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of this Act

and the rules and regulations made thereunder or the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable opportunity of being heard before rejecting his application.”

### **1.3 Procedural Aspects**

DHBVNL filed its ARR application for FY 2008-09 vide Memo No. Ch-40/SE/RA-311 dated 30<sup>th</sup> November, 2007 for approval of the Commission. Vide Memo No. Ch-27/SE/RA-237 dated 14<sup>th</sup> December, 2007, DHBVNL informed the Commission that it has issued public notices in respect of submission of the ARR for FY 2008-09 with HERC in two newspapers namely 'The Tribune' (English Edition) and 'Dainik Jagran' (Hindi Edition) on 12<sup>th</sup> December, 2007. The public objections were invited so as to reach within 30 days of publication of the notice.

The complete set of documents related to the aforesaid petition were made available for public consultation during office hours on any working day at the head office of DHBVNL and offices of SE (Operation). The condensed summary was also available on its website i.e. at [www.dhbvnl.com](http://www.dhbvnl.com).

### **1.4 Salient features of ARR**

DHBVNL has projected an Aggregate Revenue Requirement of Rs. 45950.13 million consisting of Rs. 46784.26 million of expenditure less Rs. 800.52 million of non-tariff income and other subsidy Rs. 33.61 millions. The Licensee has taken into account a subsidy of Rs. 16819.76 million from the State Government. Revenue (excluding subsidy) of Rs. 39130.17 million on the sale of 9736.92 million units has been considered for the Financial Year 2008-09. DHBVNL in its filing under consideration has submitted that the entire revenue gap shall be

met out of State Govt. Subsidy. Thus, the ARR filed by DHBVNL for FY 2008-09 is with no revenue gap and therefore no proposal as envisaged under clause 5 of the HERC ARR filing guidelines on 'Statement of Difference' which provides that if divergence between the aggregate revenue requirement and the expected revenue (at the current tariff) for the ensuing year is significant the ARR shall include a statement of how the licensee proposes to deal with the divergence.

The Commission, after initial examination of the ARR proposal, sought additional data / information from DHBVNL so as to take an informed decision on various parameters of the Distribution and Retail Supply ARR for FY 2008-09.

Further, in order to have the benefit of public consultation, the Commission issued public notice inviting comments / objections from the general public and other interested parties by 10<sup>th</sup> February, 2008 on the ARR application filed by DHBVNL. The notice was published in 'Times of India' (Chandigarh and Delhi Editions), 'Dainik Bhaskar' (Haryana Edition) on 28<sup>th</sup> January, 2008.

### **1.5 Public Hearing**

The Commission held public hearing on ARR of DHBVNL for FY 2008-09 on 28<sup>th</sup> February, 2008 at 11.30 A.M. in its courtroom. The Commission invited DHBVNL to present their case. On behalf of DHBVNL their consultant M/S Price Waterhouse and Coopers (PWC), presented the issues with respect to the ARR under consideration. The Managing Director / senior officers of DHBVNL responded to the technical and commercial issues raised by the Commission during the public hearing.

## **1.6 Issues Raised by the Interveners**

In response to the public notice, the Commission received objections from the Northern Railways. The main issue raised by the representative of the Northern Railways was rationalisation of tariff for Railway Traction. He also pointed out various anomalies in the existing tariff structure due to which they were facing hardship. Northern Railways also requested the Commission to allow them domestic tariff on consumption by their staff residing in the railway colonies.

As far as rationalisation of tariff for Railway traction is concerned, the Commission feels that rationalisation of Railway Tariff for traction load may be done along with a comprehensive review of the existing tariff structure. However, with regard to domestic consumers, the Railways may file a suitable proposal along with details of connected load, consumption etc. as well as technical requirements that they are expected to fulfil as per the terms and conditions associated with the bulk domestic tariff order of the Commission.

## **2 ANALYSIS OF THE ARR FILING AND COMMISSION'S ORDER**

This chapter analyses and presents various elements of ARR namely expenditure, capital base, reasonable return, non-tariff income and revenue requirement and Commission's order thereto.

DHBVNL's proposal refers to the Distribution and Retail Supply Business ARR filing made on 30.11.2007, additional information provided in response to the queries raised by the Commission or otherwise and the oral submissions made by the representatives of the Licensee during the public hearing.

### **2.1 Expenditure**

The main components of expenditure of the ARR under consideration are Cost of power, Operation and Maintenance expenditure, depreciation and interest expenses. All these elements are discussed in detail in the paragraphs that follow:

#### **2.1.1 Cost of Power purchased**

The Commission vide its order dated 21.4.2008 in respect of Bulk supply/Trading Margin has already determined the volume and cost of power purchase which has been considered for the purpose of determining Distribution and Retail Supply ARR of DHBVNL. In the case of DHBVNL, the Commission has approved power purchase volume of 14642 MUs during FY 2008-09 at a cost of Rs. 36458.31 million.

**In case the power purchase cost for the D&RS business changes due to any FSA over and above the approved bulk supply tariff, the D&RS Licensee shall file its FSA application as per the FSA formula & guidelines approved by the Commission.**

### 2.1.2 Transmission charges and SLDC charges

The Commission, vide its order on Transmission Tariff and SLDC charges dated 23.04.2008, has approved Rs 2683.05 million as Transmission charges and Rs. 38.45 million as SLDC charges for FY 2008-09 for DHBVNL.

### 2.1.3 Operation and Maintenance expenditure

Employees' cost, Repair & Maintenance expenses and Administration & General expenses are analysed under this sub-head, details of which are given below:

**Table 2.1 - DHBVNL Proposal for O&M expenses (Rs. in million)**

Particulars	Audited Actual of DHBVNL for FY 2006-07	HERC Order on DHBVNL for FY 2007-08	DHBVNL Proposal for FY 2008-09
Wages, salaries and related costs	2304.54	2021.84	2679.29
R&M expenses	487.41	406.28	771.95
A&G expenses	398.87	245.13	456.86
Total O&M Expenditure	3190.82	2673.25	3908.10

The Commission has considered FY 2006-07 audited accounts with suitable adjustments / changes as a base for the purpose of calculating ARR for FY 2008-09.

#### 2.1.3.1 Employees' cost

Employees' cost incorporates the cost incurred for working as well as the retired employees. The cost of working employees includes salary, dearness pay and dearness allowance and other allowances such as HRA, CCA, LTC, medical reimbursement etc. In case of retired employees and those retiring during the year, the Licensee has to discharge financial liabilities towards pension, gratuity, leave encashment benefit etc.

**A. Basic Salary, Dearness Pay and Dearness Allowance (DA)**

The Commission has estimated employees' cost by taking into account the amount as per the latest available FY 2006-07 audited accounts of DHBVNL. Commission approves Rs. 1755.72 million as basic salary, Dearness Pay and DA as proposed by the Licensee based on DA @ 50%.

**B. Other allowances**

The Commission allows 24.08% of Basic salary as other allowances, which works out to Rs. 187.93 million against Rs. 211.53 million proposed by the Licensee. Other allowances as a percentage of basic salary have increased from 19.92% in FY 2005-06 to 24.08% in FY 2006-07 as per audited accounts of DHBVNL.

**C. Terminal benefits**

The Commission allows Rs. 732.37 million as terminal benefits as proposed by DHBVNL. The Licensee should explore the possibility of provisional assessment of terminal benefits for the ensuing year from a certified actuary in order to have an accurate estimate of the liability.

**D. Employees' Cost Capitalised**

The Commission considers capitalisation of employees cost in proportion of actual expenditure incurred in the construction divisions to total expenditure as per the FY 2006-07 audited accounts. Resultantly, the employees cost capitalised works out to Rs. 21.22 million at the capitalisation rate of 1.09% as against Rs. 20.33 million proposed by the Licensee. Resultantly, the Commission approves Rs. 2654.8 million as net employees' cost as presented below in table 2.2.

**Table 2.2 - Employees' cost approved for FY 2008-09 (Rs. in million)**

Employee Cost Computation	DHBVNL Proposal	HERC Approval
Basic Salary + D.P+ D.A	1755.72	1755.72
Other allowances	211.53	187.93
Terminal benefits	732.37	732.37
Total	2699.62	2676.02
Less: Employee cost capitalised	20.33	21.22
Net Employee Cost Expensed	2679.29	2654.80

The Licensee shall not divert provident fund subscription received from its employees to its business.

### 2.1.3.2 REPAIRS AND MAINTENANCE EXPENSES

Repair and maintenance (R&M) cost is meant for the upkeep of the distribution system. The Commission allowed R&M expenses at the rate of 2% of average Gross Fixed Assets in its earlier order(s) along with the direction to the Licensee to prepare R&M norm for the equipments used in the D&RS business. The R&M norms submitted by the licensee provide for normative preventive maintenance expenditure of 0.75% of GFA. DHBVNL has claimed R&M expenses @ 3.00% of GFA for FY 2008-09 amounting to Rs. 771.95 million based on average expenditure of the previous years.

An analysis of audited accounts show the actual R&M expenses in the previous year is over 3% of average GFA (3.68%). In view of actual expenditure and with an idea to provide better service to the consumers, Commission allows R&M expenses at 3% of average GFA for FY 2008-09 which comes to Rs. 593.78 million. The difference is due to lower average GFA as given in para 2.2.2 of the order. However, the relaxation allowed by the Commission is to be exercised with caution and proper authorisation by the competent authority. **The licensee is directed to:**

- 1. Examine the reasons for excessive R&M expenditure as compared to normative**
- 2. Ensure that preventive maintenance expenditure is given preference and a special allocation is done for the same so that within a reasonable period the R&M expenditure is brought within the normative parameters.**
- 3. Analyse R&M expenditure on transformers and to formulate a time bound plan to be submitted along with the ARR for FY 2009-10 for bringing the transformer failure rate within acceptable limits for which additional funds may be earmarked**

#### **2.1.3.3 ADMINISTRATIVE AND GENERAL EXPENSES**

The licensee has proposed Rs. 427.97 million as A&G expenses net of capitalisation of Rs. 8.07 million; an increase of about 20% on year to year basis over audited expenses of FY 2006-07. The A&G expenses of FY 2006-07 are 66% more than the audited expenses of FY 2005-06. This shows an abnormally high increase in this head of account. An analysis of the expenses shows that the increase is mainly on account of outsourcing and computerisation which should therefore be reflected in a decrease in employee cost where again the licensee has shown an addition of 878 employees during FY 2007-08 and proposes adding another 1000 persons on roll during FY 2008-09. Commission therefore allows an increase of 6% for normal inflation over audited cost of FY 2006-07 as per past practice. A&G expenses as per Commission estimate comes to Rs. 346.34 million for FY 2008-09. Capitalisation @ 1.84% base on audited accounts for FY 2006-07 amounts to Rs. 6.36 million resulting in net A&G expenses of RS. 339.98 million for FY 2008-09.

In case of any unforeseen expenses during the year, the Licensee may approach the Commission for allowing such expenditure next year with proper justification.

#### **2.1.4 Interest on Loans**

The licensee has proposed gross interest cost of Rs. 1379.76 million for borrowings against capital works. The Commission has disallowed interest on Rs. 5220.90 millions opening balance and Rs. 3990 million proposed to be borrowed during FY 2008-09 on account of lower expenditure/ disallowance of capital works during FY 2007-08 and FY 2008-09 resulting in a lower interest cost of Rs. 582.12 million. Out of this, Rs. 183.64 million is capitalised based on approved capital expenditure for FY 2007-08 and FY 2008-09 as against Rs. 256.06 proposed by DHBVNL. Net interest cost amounting to Rs. 398.49 million is allowed to be recovered through ARR for FY 2008-09.

The capitalisation of Interest during construction (IDC) is in accordance with the AS 16 issued by the Institute of Chartered Accountants of India wherein interest on borrowed capital is capitalised till the date of commissioning of assets. The date of commissioning of assets is assumed to be the last day of operation of the year as per the fixed assets register. Interest on loan component of opening balance of CWIP for FY 2008-09 is capitalised for the full year and interest on new borrowings for additions to capital works during FY 2008-09 is capitalised for 6 months assuming that the loans are disbursed uniformly during the year.

The Licensee has proposed interest of Rs. 1216.56 million on working capital borrowing of Rs. 9372.39 Million for FY 2008-09. The Commission allows working capital borrowings limited to 1 month of ARR as per orders of the Hon'ble Appellate Tribunal for Electricity dated 10.11.2006, which works out to approximately Rs. 2800 million.

Commenting on the excessively high cash and bank balance maintained by the Licensee, the Commission in its order dated 20.4.2005, directed the Licensee to restrict its cash and bank balances to 7 days of collection by the end of FY 2005-06, failing which the Commission would be constrained to reduce the allowed borrowings for working capital by the amount of excess cash and bank borrowings. The Licensee took over 6 months to act on the direction and issued instructions only in November 2005 for rescheduling of billing cycle. However, the instructions seem to have had no impact as the cash and bank balance as on 31.3.2007 stands at Rs. 1910.54 million as against Rs. 1171 million as on 31.3.2006 and is projected at Rs. 1689 million for FY 2008-09. The licensee has justified the cash balances as being a result of heavy billing at the end of the month, but was unable to provide weekly balances to support its statement. The licensee should manage its billing in such a manner that its dependence on external borrowings is reduced to the minimum. Excessive cash balance is nothing but a burden on the utility and the consumer and in no way adds to the efficiency of the Licensee. Reasonable cash and bank balance as per Commission estimates amounting to 7 days of collection for FY 2008-09 amounts to approximately Rs. 647 million. Therefore the excessive cash and bank balances amounting to Rs. 1040 million have been reduced from the allowable working capital borrowings of Rs.2800 million. On the balance allowable working capital borrowings amounting to Rs. 1760 million, the Commission approves interest of Rs. 182.19 million at 10.35%p.a. (being the rate of working capital borrowings projected by the Licensee). In case the Licensee is able to reduce the average cash and bank balance to the normative level as worked out by the Commission, the Commission would examine the possibility of restoring the interest on Rs. 1040 million for FY 2008-09.

The Licensee has projected interest on consumers' security deposits amounting to Rs. 198.79 million which the Commission allows subject to

the compliance of the “the Haryana Electricity Regulatory Commission (Duty to supply electricity on request, Power to recover expenditure incurred in providing supply & Power to require security) Regulations, 2005 and also subject to the following conditions:

- a. The interest is actually adjusted in the bills of the consumers during April/ May of the subsequent year in accordance with the said regulations.
- b. The actual payment will be adjusted against the amount allowed in the ARR and any deficit or surplus on this account will be taken care of in the subsequent ARR on the basis of audited accounts.

The computation of interest expenses is presented in table 2.3.

**Table 2.3 - Interest Expenses approved for FY 2008-09 (Rs. in million)**

Interest on Loans	DHBVNL Proposal	HERC Approval
Gross Interest on Capital Expenditure Loans	1379.76	1344.62
Less disallowed on account of CWIP		762.50
Allowed Interest on CAPEX borrowings		582.12
Less: Interest Capitalised	256.06	183.64
Net Interest on Capital Expenditure Loans	1124.70	398.49
Interest on Working Capital Loans	1216.56	182.19
Interest on consumers' security deposits	198.79	198.79

### 2.1.5 Depreciation

The Licensee has proposed depreciation amounting to Rs. 1170.96 million for FY 2008-09. The Commission allows Rs. 883.28 million, calculated at the rate of 7.57% being the proposed rate of depreciation as per ARR filing. The difference in depreciation is due to lower opening balance of GFA as on 1.4.2008. The GFA for the purpose of calculating depreciation is after excluding assets funded by consumer contribution. The details are as presented in table 2.4.

**Table 2.4 - Depreciation charges approved for FY 2008-09 (Rs. in million)**

Particulars	DHBVNL Proposal	HERC Approval
Gross Fixed Assets at the beginning of the year net of consumer contribution	15467.52	11667.51
Depreciation rate	7.57%	7.57%
Depreciation Expense	1170.96	883.28

The utilisation of depreciation amount shall be as per the Commission order dated 13.11.2001 (Paragraph 12 page 9),

### 2.1.6 Special Appropriations

#### a) Contribution To Contingency Reserve

The licensee has sufficient amount of contingency reserve available to it amounting to Rs. 272.32 million. As this provision formed part of now repealed Electricity (Supply) Act 1948 and finds no mention in the Electricity Act, 2003, the Commission decides not to allow contribution to contingency reserve for FY 2008-09. The existing corpus, however, shall not be drawn without the prior approval of the Commission.

#### b) Fringe Benefit Tax Provision

The Licensee in its filing has proposed to include Rs. 3.15 million as provision for fringe benefit tax for FY 2008-09, which the Commission allows the licensee to recover in the ARR being a statutory levy.

- a) The Licensee will provide proof of payment of the amount of fringe benefit tax along with the next filing;
- b) The provision being allowed in the ARR will be adjusted against actual liability on account of fringe benefit tax on final assessment.

### **2.1.7 Additional interest cost**

The Licensee has proposed to recover Rs. 388.44 million as interest cost transferred by HVPNL on account of borrowings made by HVPNL on behalf of DHBVNL. The Commission allows interest on borrowings for capital works to individual licensees as projected and interest on working capital borrowings on normative basis and no additional interest cost of working capital for any licensee will be allowed.

### **2.1.8 Other Expenditures**

The Licensee has proposed Rs. 207.46 million as a consequence of HERC order dated 21.8.2006 relating to HPGCL, which is allowed to be recovered in the ARR for FY 2008-09.

### **2.1.9 Total Expenditure**

The total expenditure approved by the Commission with respect to the Distribution and Retail Supply business of DHBVNL for the financial year 2008-09 is Rs. 44641.73 million as against Rs. 45970.70 million proposed by the Licensee. The details are presented in table 2.5 :

**Table 2.5 - Total expenditure approved for FY 2008-09 (Rs. in million)**

Description	DHBVNL Proposal	HERC Approval
<b>Expenditure:</b>		
Purchase of energy	33947.67	36458.31
Trading charges		
Transmission charges	3730.14	2683.05
SLDC charges		38.45
Wages, salaries and related costs	2679.29	2654.80
R&M Expenses	771.95	593.78
A&G Expenses	456.86	339.98
Interest cost on borrowings		
- For capital expenditure	1123.70	398.49
- For working capital	1216.56	182.19
- On Consumer Security Deposit	198.79	198.79
Depreciation	1170.96	883.28
<b>Total Expenditure</b>	<b>45295.92</b>	<b>44431.12</b>
<b>Special Appropriations:</b>		
Income Tax		
Fringe Benefit Tax	3.15	3.15
Prior period expenses	207.46	207.46
Contribution to Contingency Reserve	75.74	0
Additional interest cost	388.44	0
Total Special Appropriations	674.79	210.61
<b>Total Expenditure (including special appropriation)</b>	<b>45970.71</b>	<b>44641.73</b>

## 2.2 Capital Base

### 2.2.1 Capital Works In Progress (CWIP)

All the information supplied by the licensee in regard the progress of FY 2007-08 works has been examined and analyzed. Additional information was also obtained from the licensee through references and personal perusal with the concerned officers of the licensee. Based on all the details received from the licensee, physical progress reported/projected by licensee or assessed by the Commission in respect of the capital works approved for FY 2007-08, has been taken into consideration. The licensee indicated that material worth Rs. 2200 million has been purchased by the end of March, 2008, but did not

supply any details in spite of perusal. As such, it is not possible to consider the same.

FY 2007-08, investment proposals of the licensee were allowed on repeated assurances by the licensee that all the proposals covered in the investment plan will be executed, but the licensee has been able to execute/ utilize less than 50% of the approved plan funds of Rs. 831.05 crores during FY 2007-08, even after excluding Rs. 160 crores for DSM which, according to the licensee, could not be utilized for want of finalization of specifications by BEE. This performance does not show any improvement over previous years. Still the licensee has come up with a bigger Capex proposal of Rs. 9482.5 million during the ensuing year.

The licensee has intimated revised allocation of proposed investments in respect of various works as late as per its memo dated 02.04.2008. While re- allocating the amount, the licensee has clubbed various works and has also changed their nature in certain cases without providing the corresponding details of breakup of expenditure, quantum and physical details etc. In the absence of this information, it is not possible to examine the revised proposal on the basis of reallocated funds. Therefore, approval has been made on the basis of its earlier proposal of allocation. Though, the licensee has indicated the road map for investment plan by mentioning the dates of finalization of specifications, works allotment and completion period but the information is sketchy and does not throw any light on the status of NITs floated and allotment of work keeping in view the normally required process time, as well as, execution schedule vis-a-vis quantum of work. The projections of road map appear to be unrealistic in many cases.

The analysis and assessment made by the Commission indicates that it would not be realistically possible for the licensee to execute and complete all the works proposed by it. As such, approval of funds

against each work has been allowed based on the performance of the licensee in the execution of capital investment plans during the previous years and taking into account the quantum, works since allotted & in progress and reported status of actions taken/ envisaged by the licensee in regard to the proposals for FY 2008-09. Some of the proposed works are too large to be fully completed during the year and are likely to spill over to the ensuing year(s). Therefore; the investments which do not appear to be realistic to be achieved during the year, have been curtailed. The Commission desires the licensee to try the new schemes proposed by it first in certain selected pockets and extend the same after ensuring its success in those pockets. In view of above, the amount allowed against each work of the proposed plan is indicated as under: -

Sr. No.	Name of Scheme	Total
1	Metering (part expenditure)	80.00
2	Capacitor Installation	6.25
3	DSM (part expenditure)	10.00
4	HVDS 600 villages and tube well connections (part expenditure)	120.00
5	33/0.433 KV system (part expenditure for pilot project)	5.00
6	Rehabilitation of 11 kV feeders (100 feeders)	50.00
7	30 no. New 33 kV S/Stns., including 20 no. spilled over and 10 approved with concurrence of HVPNL, along with 33 kV Lines and aug. of 15 no. sub stations	55.00
8	RGGVY (part expenditure)	112.50
9	Installation of RMUs Replacement of 1000 HT breakers (part expenditure)	15.00
10	SCADA	25.00
11	Autoreclosures, Sectionalizers and wedge connectors (part expenditure)	20.00
12	Civil Infrastructure	18.00
13	IT Implementation (part expenditure)	30.00
14	Solar Power Plant (one at Hisar)	2.50
	Total	549.25

Though this investment would be well above the execution achieved by the licensee during FY 2007-08, but since some of the major works are

already allotted and are in progress, the licensee should achieve the same and carry out full execution.

**The Commission directs the licensee as under:**

- 1. Since the work of replacement of consumer meters with electronic meters is going on for the past few years, the licensee shall supply within one month details regarding phase wise and capacity wise no. of meters required to be replaced, those replaced till FY 2007-08 and the balance yet to be replaced . The information as above shall be accompanied with the action plan to complete the balance work and the costs involved.**
- 2. The licensee shall supply similar information in respect of the feeder meters also within one month.**
- 3. The licensee is to ensure that the procurement and installation of meters is in line with CEA regulations.**

The capitalisation of CWIP for FY 2008-09 is based on capitalisation schedule of 70:30 as proposed by the Licensee; meaning thereby that 70% of capital works are completed in the year these are initiated. The balance is capitalised in the next year. The resulting closing balance of CWIP as calculated by the Commission works out to Rs. 1647.75 million as given in table 2.6.

**Table 2.6 - Calculation of CWIP for FY 2008-09 (Rs. in million)**

Schedule of CWIP	DHBVNL Proposal	HERC Approval FY 2007-08	HERC Approval FY 2008-09
Opening balance	2493.15	829.14	1008.00
Additions during the year	9482.50	3089.60	5492.50
Transfer to GFA	9130.90	2910.74	4852.75
Closing balance of CWIP	2844.75	1008.00	1647.75
Funding of CAPEX :			
Equity	1896	1399	1896
Loan funds	6976	1080	2986
Government grants	10	10	10
Consumer contribution	600	600	600
Other funds including internal accruals	0	0	0
Total Funds	9482	3089	5492

### 2.2.2 Gross Fixed Assets (GFA)

The opening balance of GFA as on 1.4.2007 is derived from the closing balance of GFA as per the audited accounts of the Licensee for FY 2006-07. Additions to GFA are derived from the Capital Works in progress computation referred to at para 2.2.1. The closing balance of GFA for FY 2008-09 works out to be Rs. 22218.90 million as presented in table 2.7.

**Table 2.7 - Gross Fixed Assets approved for FY 2008-09 (Rs. in million)**

	DHBVNL proposal	HERC Approval
Opening Balance of gross fixed assets	21166.26	17366.15
Add: Additions to GFA	9130.90	4852.75
Closing balance	30297.16	22218.90
Assets funded out of consumer contribution	6308.64	6308.64

### 2.2.3 Amount of Working Capital (Capital Base)

#### 2.2.3.1 Cash in Hand and at Bank

The cash and bank balance of the Licensee on 31.3.2007 as per audited accounts comes to Rs. 1910.54 million, which is approximately 29 days of sales revenue which is up from Rs. 1171.14 million as on

31.3.2006 being approximately 20 days of sales revenue as is shown in table 2.8 :

**Table 2.8 – High Cash and Bank Balance maintained by DHBVNL  
(Rs. in million)**

Particulars	31.3.2004	31.3.2005	31.3.2006	31.3.2007
Cash in Hand	0.148	91.57	112.53	33.06
Balance in Current Accounts	1101.31	1168.73	1046.25	1864.01
Balance in Deposit Accounts	10.10	10.10	12.62	13.39
Total balance at DHBVNL	1111.55	1270.41	1171.41	1910.54
<i>Comparative position at UHBVNL</i>	369.32	234.25	223.92	706.48

**An efficient cash management by the licensee would be able to reduce the costs substantially. The Licensee should utilise real-time banking and modern collection services offered by the banks to this effect. The Licensee is directed to submit quarterly reports on efforts made by it to limit the cash and bank balances and indicate the resultant decrease.**

#### **2.2.3.2 STORES**

The closing balance of stores as on 31.3.2007 at Rs. 1350.674 million as per audited accounts is higher than the balance as on 31.3.2006 at Rs. 602.346 million. The maintenance stores as on 31.3.2007 at Rs. 927.647 millions, when compared with the repair and maintenance expenditure of Rs. 487.41 million for FY 2005-06 shows that the Licensee is carrying more than 2 years worth of maintenance stores. **The Licensee in its own interest is advised to pay adequate attention to inventory management with an eye on minimising the cost of inventory including stores.**

### **2.3 Return on Capital Base**

The licensee in the filing under consideration has proposed return on equity at 10% of its paid up share capital as on 31.3.2008 amounting to Rs. 813.57 million. The existing tariff regulations of the Commission do not provide for any return on equity but provides for return on capital base which is negative as per Form 1.1 of the ARR submitted by the Licensee. Consequently, no Return on Equity or Capital Base has been considered by the Commission in FY 2008-09.

### **2.4 Non-Tariff Income**

The Commission allows Rs. 800.52 million as non-tariff income as proposed by the Licensee.

### **2.5 Aggregate Revenue Requirement**

In light of the above analysis, the Commission approves Rs. 43841.21 million as the aggregate revenue requirement of the Distribution and Retail Supply business of DHBVNL for FY 2008-09.

**The Licensee has considered subsidy amount of Rs. 16819.76 million for FY 2008-09; this being the total gap in the ARR for FY 2008-09. However, the Licensee has made no efforts to calculate cost to serve, cross subsidy and the subsidy required to be paid by the state government under section 61 & 65 of the Electricity Act 2003. The computation of approved Aggregate Revenue Requirement for FY 2008-09 is presented in table 2.9.**

**Table 2.9 - Total Aggregate Revenue Requirement approved for FY 2008-09 (Rs. in million)**

Description	DHBVNL Proposal	HERC Approval
Reasonable return/ ROE	813.57	0.00
Total expenditure	45970.70	44641.73
Minus: Non-tariff income	800.52	800.52
Minus: Outstanding customer rebates	-	-
Minus: Other Subsidy	33.61	
<b>Total Aggregate Revenue Requirement</b>	<b>45950.13</b>	<b>43841.21</b>
Minus: Subsidy from State Government	16819.76	
<b>Total Net Aggregate Revenue Requirement</b>	<b>29130.37</b>	

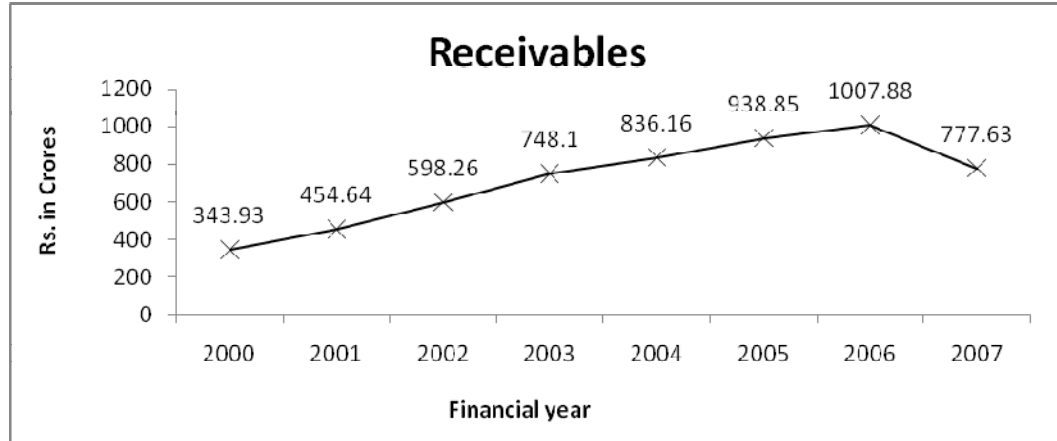
## 2.6 Other Issues

### 2.6.1 Receivables of Electricity Sales

The Licensee's revenue collection efficiency against the bills raised on the consumers has continuously fallen short of targeted collection efficiency resulting in unmanageable increase in outstanding dues leading to excessive borrowings. There is decline in the receivables in FY 06-07 vis-à-vis FY 05-06 but a lot still remains to be done in this direction. A graphical presentation of increase in receivables is shown below:

**Table 2.10 Trend of receivables (Rs. In Crores)**

Date	2000	2001	2002	2003	2004	2005	2006	2007
Receivables	343.93	454.64	598.26	748.1	836.16	938.85	1007.88	777.63



*Domestic consumer category accounts for 45% of the receivables even though their sale is only about 20% of total sales in unit terms and only 10% in revenue terms (Consumer category wise receivables data not given). Huge outstanding dues from Government departments are also a matter of concern. On the one hand the total receivables have shown recession but on the other hand the receivables from Government departments have shot up from Rs. 1854.70 million in 2006-07 to Rs. 3197.65 million in 2006-07. This increasing trend has continued even in FY 2007-08 as is evident from the fact that receivables from government departments stand at Rs. 2482.80 million on 30<sup>th</sup> September, 2008 as against Rs. 2348.97 million on 30<sup>th</sup> September, 2006. In a cost plus regime the commercial discipline makes it obligatory on the part of the utilities to apply the same yardstick and 'condition of supply' to all its consumers whether a government body or an individual or a corporate entity.*

The circle-wise collection efficiency for FY 2005-06, FY 2006-07 and the first six months of FY 2007-08 is given in table 2.11.

**Table 2.11 - Circle-wise Receivables Collection Efficiency**

S.No	CIRCLE	COLLECTION EFFICIENCY FY 2005-06	COLLECTION EFFICIENCY FY 2006-07	COLLECTION EFFICIENCY 4/2007 to 9/2007
1	BHIWANI CIRCLE	49.83%	56.91%	65.45%
2	FARIDABAD CIRCLE	87.62%	88.98%	88.51%
3	GURGAON CIRCLE	92.89%	93.54%	88.08%
4	HISAR CIRCLE	80.37%	82.33%	81.99%
5	NARNAUL CIRCLE	62.13%	66.72%	71.06%
6	SIRSA CIRCLE	86.47%	84.79%	85.53%
	Average	81.66%	83.83%	83.82%

Although there is an overall downward trend in the collection efficiency but the present collection efficiency in respect of Gurgaon and Sirsa circles is even less than that achieved in FY 2005-06. Time bound measures need to be taken to achieve the targeted collection efficiency and to maintain it at the highest level.

The Aggregate Technical and Commercial Losses (AT&C) of the Licensee has also been computed after considering the distribution losses, as presented in table 2.12 :

**Table 2.12: Calculation of AT&C loss**

Year	Collection Efficiency for Current Year	Distribution Loss %	AT&C Loss (in %)
1	2	3	4=3/2
4/07 to 9/07	83.82%	28.62%	34.14%
FY 2006-07	83.83%	29.65%	35.37%
FY 2005-06	81.66%	30.90%	37.84%
FY 2004-05	80.47%	32.72%	40.66%
FY 2003-04	81.74%	33.34%	40.79%

FY 2002-03	87.57%	35.02%	39.99%
FY 2001-02	87.43%	33.86%	38.73%

**AT&C losses reflect two crucial parameters viz. accurately billing the energy sold and prompt collection of the 'dues'. In the hands of the management this should be an effective tool to measure success or failure of various programmes and policies of the utilities. High AT&C losses reveal poor performance of the Licensee on two crucial fronts i.e. its technical competence and commercial acumen which may undermine the entire reform process.**

### **2.6.2 Electricity Arrears Waiver Scheme**

The licensee was directed by the Commission in its tariff order for FY 2007-08 to carry out a study as to what extent the waiver scheme has realised its aim and submit the report along with the next ARR. The licensee has submitted in its ARR filing for FY 2008-09 that waiver scheme was opted by 61.79% of domestic consumers and 93.17% of AP consumers. As a result the utility realized an amount of Rs. 194.08 crores upto 31.03.2007 against current bills for the period from 17.06.2005 to 31.03.2007. The total amount waived off under the Arrear Waiver Scheme has been worked out to Rs. 644.31 crores upto 31.03.2007 against which the State Government has compensated the utility to the extent of Rs. 203.50 crores upto 30.09.2007. The utility has further submitted that the scheme has resulted in enhanced collection efficiency in case of rural domestic as well as AP consumers.

Any such scheme can be called to be successful only if the defaulting consumers who have been brought under the preview of the scheme do not default in future. Although the licensee has given data of the amount recovered from consumers and compensation amount received from

the State Govt. but the information, as to whether all such consumers are continuing to pay their current bills without any default or there are some consumers who have again defaulted and action taken by the licensee in case of default has not been given by the licensee. The Commission observes with concern that compensation amount outstanding from the State Govt. does no good to the cash-starved utility.

**The licensee is directed to furnish complete details on the observations of the Commission within one month from the date of issue of the order.**

### **2.6.3 Ownership and maintenance of 66 KV substations**

The distribution licensees i.e. DHBVNL and UHBVNL are responsible for performing the duties and obligations to supply quality power to the consumer as per the terms and conditions of licence granted to them by the Commission. Thus, it is highly desirable that the coordination between the Transmission company and the distribution companies should be of such order that it facilitate smooth operation of the system.

In this regard the commission has observed that there are no clear cut instructions for the consumers seeking connection at 66 KV and above. It is further observed that if a connection is given on 66 KV and above then though the system is owned and operated by transmission licensee but the consumers belongs to the distribution licensee. The system would have been running smoothly before trifurcation of the erstwhile HSEB but after its trifurcation a question arises as to how these connections are released and regulated. There are issues related to ownership and maintenance of the system, accounting / allocation of losses / costs. **Keeping in view the above observations of the Commission the distribution licensees and the transmission licensee are directed to submit the following details within three months from date of order:**

- 1) **Copy of the instructions, if any, being followed for release of connections at 66KV and above.**
- 2) **Detailed note on:**
  - (a) **Present system for application and grant of connections to such consumers**
  - (b) **how the billing is done for 66 KV and above consumers, whether at the consumer premises or at substation and if the billing is done at consumer premises then who bears line losses between substation and consumer premises.**
  - (c) **ownership and maintenance of the system at which connection is given to such consumers**
  - (d) **present number of consumers, their locations and connected load who are connected at 66 KV and above**
  - (e) **difficulties being faced by the licensees and such consumers in the present system**
  - (f) **Suggestions for overcoming these difficulties.**

#### **2.6.4 Renewable Energy**

Fossil fuel i.e. coal, oil and natural gas based energy accounts for a overwhelming percentage of energy use in Haryana with a very small volume coming from hydel sources and bagasse based co-generation. Thus, the system lacks diversity and security. The pressure on fossil fuel is driving their prices upward thereby frequently increasing the cost of generation. The more critical issue, however, is that fossil fuels are running out. Resultantly, the need for non-conventional fuel based electricity generation aptly referred to as 'Green Energy'. Green Energy is also the solution to air pollution and global warming. In compliance with the statutory provision in the Electricity Act 2003, the Commission vide its order dated 15th May 2007 and 25th April 2008 determined the percentage of electricity that the distribution licensees in Haryana will procure from non-conventional sources. The renewable portfolio is reproduced as under:-

Year	Minimum%
2008-09	5%
2009-10 & thereafter	10%

The wheeling charges have been determined as 2% of the energy fed to the grid. Transmission utility / distribution licensee to bear the cost of LHV/HV transmission line up to a distance of 10 Km from the point of energy meter. Beyond that the cost of transmission line to be shared equally between the developer and the STU/distribution licensee. Banking facility has also been allowed within the same financial year. The tariff approved by the Commission are as under:-

	Wind	Mini Hydel (upto 2 MW)	Biomass	Bagasse (co-generation)
Tariff (Rs./Kwh for FY 2007-08)	4.08	3.67	4.0	3.74
Annual Escalation from FY 2008-09	1.5%	1.5%	2%	2%

The tariff determined for Solar (SPV) is Rs.15.96/Kwh for Solar Power Plants commissioned upto 31.12.2009 and Rs.15.16/Kwh for Solar Power Plants commissioned after 31.12.2009 but by 31.3.2010. The tariff determined by the Commission is for the projects qualifying for GOI (MNRE) incentive and limited to the maximum of 10MW capacity as stipulated in the MNRE policy guidelines. The Discoms shall pay the difference in the tariff determined by the Commission and the incentive available under MNRE policy of GOI.

#### **2.6.5 Reliability-based charges on the electricity consumers of Gurgaon urban area to make the city power cut free zone.**

A petition was filed by the Confederation of Indian Industry (CII), Gurgaon Industrial Association (GIA) and RICO Auto for imposing reliability-based charges on the electricity consumers of Gurgaon urban area to make the city power cut free zone modelled on a similar scheme being successfully implemented in Pune in Maharashtra. The hearing of the petition was done on 16.07.07 by the Commission.

After hearing the views of interveners, the Commission noted that main concern expressed by the consumers who had appeared in the hearing in large number was that even if reliability charges are paid as determined by the Commission, the guarantee for continuous power supply in the present scenario is practically impossible. After going through filings and after hearing the proposers, DHBVNL and the residents of the city, the Commission rejected the proposal as it was not found feasible for acceptance in the form it was presented before the Commission. The Commission advised the proposers to re-examine the scheme and frame the proposal after considering the views expressed by various stake holder during the hearing. The Commission would welcome any practical, technically feasible and commercially viable proposal for making Gurgaon a power cut free city.

#### **2.6.6 Release of connection to the Flat Owners of Group Housing Societies/Multi-Storey building.**

DHBVNL, Hissar issued Sale Circular No. D-21/206 dated 26.05.06 that bulk supply connections will not be released henceforth to the multi storey buildings/complexes being developed by Private Developers/colonizers. However, the individual connections will be released after approval of the electrification plan as in the case of Group Housing Societies or multi storey buildings being developed by HUDA or other Govt. Agencies. The Commission directed DHBVNL, Hisar vide its Memo No. HERC/663-64 dated 17.07.06 to withdraw the aforesaid Sale Circular. Further in the order dated 13.10.2006 Commission provided separate schedule of tariff for bulk domestic supply consumers and it was proposed to direct the Licensee to submit Action Taken Report on the direction issued vide letter dated 17.7.06.

Instead of complying with the directions of the Commission, DHBVNL issued the modified Sale Circular No. 16/2007 dated 21.03.07. After examination of the Sale Instructions No. 16/2007, the Commission vide

office Memo No. 2506-07/ HERC/T-129-30 dated 30.11.07 conveyed that Condition No. 4 incorporated in the said sale circular which refers to Haryana Electricity Reform Act, 1997 is no longer valid since it is not consistent with Electricity Act, 2003. The Commission further directed to delete Condition No. 4 from the above sale instructions No. 16/2007. This resulted in substantial relief to the consumers of multi storey buildings/complexes being developed by Private Developers/colonizers.

### **2.6.7 Multi Year Tariff**

In order to attract long-term investment in the power sector the price-setting methodology ought to be such that regulatory risks are minimized. Thus a Multi Year Tariff (MYT) based on credible database is essential. The Commission would like to put in place MYT framework based on incentive based revenue and cost pass through i.e. a mechanism that rewards the regulated entity for improvement in efficiency for cost items under their control. Thus determining the methodology to allocate costs between controllable and uncontrollable becomes an important issue besides ensuring cost effective nature of existing and future tariff levels as well as the structure of tariffs. The cost components that need to be looked into are demand related costs, generation and transmission costs, technical and commercial losses, wages and employee related costs, material costs, rent and rates, depreciation, investments costs etc.

The Commission, since its first tariff order, had been directing the power utilities in Haryana to examine the issue and submit a detailed proposal about its preparedness to implement the multi-year tariff (initially for three years period), incorporating loss reduction, reduction in working capital loans and receivables trajectory during the control period. In its reply the licensee has submitted that the terms and conditions for MYT are to be notified by the Commission and M/S IMACS have been

awarded the work of CoS study which is expected to be completed by the end of the FY 2007-08.

It is apparent from the response of the licensee that it is not serious about implementation of MYT. Even the report on Cost of Supply reported to be completed by the end of FY 2007-08 is awaited from the licensee. The directions of the Commission are not being implemented in letter and spirit by the licensee and the Commission is unable to implement MYT unless the preparedness of the licensee with the accurate base data is ensured. **The licensee is again directed to submit the proposal on MYT as sought in the Commission's tariff order for FY 2006-07 within one month from the date of this order.**

#### **2.6.8 Availability Based Tariff**

Despite repeated directives by the Commission the licensee has failed to submit the requisite report regarding its preparedness and timeline for the implementation of intra-state ABT as per requirements outlined in the Commission's order for FY 2006-07. The Commission observes with concern that the licensee is not willing to implement the directives of the Commission in a time bound manner and the issue is reported to be still under its consideration. **The licensee is directed to explain the reasons for not initiating action for compliance of directive since 4/2005 and intimate the expected date of completion of activity within one month of the date of the order.**

#### **2.6.9 Human Resource Plan**

The Commission on more than one occasion, beginning with its order dated 6th August 2001 on ARR FY 2001-02, has emphasized the need and significance of a comprehensive manpower planning and budgeting. Needless to emphasize that human resources more than technology and machinery are the key to an organizations success. Thus their efforts as public utility including the quality of service that the

distribution licensees deliver is directly influenced by the efforts it attaches to HRM & HRD solutions. The Commission, from the feedback its gets from different stakeholders, feels that no serious efforts have gone into addressing this key area.

Quite a few key positions in Finance, Accounts & Audit and Engineering division including J.Es/Foreman/ALM and other field staff are inadequately manned. **The Distribution licensee is directed to review its human resources with an eye on activity wise assessment of the existing manpower and future requirements as the business expands. The assessment should also include re-training/re-skilling, relocation & redeployment of surplus staff (if any) in gainful activities. The Discoms should submit a status report within one month and a comprehensive human resource plan within six months of this order.**

## **2.7 Performance of Distribution System**

The Commission observes with dismay that despite its directions and efforts reported by the licensee to implement the same, no tangible improvement is being observed in performance of its system, customer care/ satisfaction and the supply position. A few key parameters for assessing the performance of the licensee in respect of operation of its system and to gauge the level of consumers satisfaction achieved are as under:-

1. Distribution losses
2. Position of power supply including power regulatory measures
3. Damage rate of distribution transformers
4. Fatal and non-fatal accidents
5. Power supply to agriculture sector

Though, the reports of performance received from the licensee do indicate some improvements achieved here & there during FY 2007-

08 but the level of performance still falls short of the desired standards and prescribed norms and calls for much better improvements in a short time. In certain areas, the position is observed to have shown deterioration as compared to the previous years. The observations of the Commission in this regard are as followed:-

### 2.7.1 Distribution losses

The year-wise position of the distribution losses on the basis of performance reports/ data supplied by the Licensee is presented in table 2.13:

**Table 2.13 Year wise distribution losses of DHBVNL**

S.No	Circle	Distribution Loss (%)						
		2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (upto 11/07)
1	Gurgaon	25.06	28.13	25.00	23.54	22.08	21.45	19.48
2	Narnaul	24.71	32.28	26.29	26.30	24.13	29.02	23.03
3	Faridabad	28.59	31.02	29.96	28.77	27.05	28.15	23.76
4	Sirsa	25.03	34.83	28.88	32.36	28.11	32.39	26.52
5	Hisar	35.66	39.45	35.13	36.45	33.21	34.07	28.12
6	Bhiwani	36.66	46.83	41.41	40.10	39.32	42.14	33.37
7	<b>DHBVNL</b>	<b>29.33</b>	<b>34.62</b>	<b>30.70</b>	<b>30.17</b>	<b>28.01</b>	<b>29.65</b>	<b>24.52</b>

\*Actual distribution losses for FY 2006-07

Perusal of year wise data of the licensee contained in table 2.13 does not indicate a uniform profile of distribution losses for the past six years. Zigzag pattern is observed in all the circles except Gurgaon circle creating doubts on the correctness of the data. The Commission directs the licensee to analyze this phenomena and to verify the correctness of the information being reported to the Commission. **The licensee may identify the reasons for repeated rise and fall in the distribution losses of different circles and to send a report to the Commission within two months.**

The report of the licensee has indicated that during April to November 07 the line losses and AT&C losses of as high as 33.37% and 43.55%

are shown to have been recorded in Bhiwani circle, which even surpasses the previous year losses of 26.82% during FY 2006-07. Moreover, the report of the licensee for the Apr. - Sept. 07 quarter indicates that 130 feeders of the licensee are still reporting losses more than 50%. It is disappointing to note that the no. of feeders having more than 25% losses has gone up from 762 to 837 instead of getting reduced in the wake of huge amount of capital investment and other measures being taken by the licensee. The Commission is alarmed and deeply concerned to note that at least 7 feeders in Hisar, Faridabad and Bhiwani circles are recording more than 90% losses in this quarter. It is impossible to continue with such situations and as such drastic and meaningful efforts are required to control high loss feeders and to bring down the losses to acceptable levels. Special mention of the efforts carried out on these feeders may be made in the next Technical Performance report to be submitted by the licensee.

### **2.7.2 Position of power supply including power regulatory measures**

The licensee's report indicates an increase in no. of interruptions during the period April 2007 to September 2007 as compared to the previous two quarters. The interruptions have shown an increase in all the circles except Gurgaon and Narnaul. The licensee has attributed the increased interruptions to seasonal behavior and the quality base of consumers. This plea is not acceptable since these factors are not new and the licensee is required to provide improved quality of supply for all categories of customers in all seasons every year especially as large funds are being and spent on addition, improvement and toning up of the distribution system. As reported, the licensee has not yet been able to place in position a system for catching up on consumer satisfaction but envisages conducting a survey on trial basis in selected areas in future. The licensee has also reported that it has undertaken to set up customer care centers in a big way and has also set up Bijli Suvidha

Kendras for handling supply related complaints and ensuring prompt service in attending to the same on out sourcing basis. There is need to provide quality services to the consumers without any further delay to ensure that their complaints on all accounts are addressed promptly and effectively. **The Commission would like to receive a feedback on the actions taken and improvement achieved in this respect, within a period of 6 months.** The Commission is pleased to observe that voltage profile has shown improvement in Hisar & Narnaul circles of 33 kV belt. Special efforts are required to be made in Sirsa & Bhiwani circles too. The licensee has indicated that power supply to urban sector and industrial sector has been given for 20 & 19 hours during FY 2006-07 and for 19 & 18 hours during FY 2007-08. Similarly, to the rural sector power supply provided on three phase and two phase is reported to be close to 9 hours and 5 hours during FY 2006-07 but the same has also come down to about 7.5 hours & 3 hours on average during FY 2007-08. So much, so that lighting hour supply to rural sector is observed to be less than 2 hours during July 07 to January 08. This clearly shows that the availability of power supply to all categories of consumers has gone down in FY 2007-08. In actual practice, the supply hours are further curtailed due to faults and break downs in certain areas. Therefore, feedback to the commission indicates even lesser supply hours to rural sector. It is therefore, essential for the licensee to revamp and tone up its power regulatory implementations, so as to ensure maximum availability of quality power to all consumers.

### **2.7.3 Damage rate of distribution transformers**

The Commission is pleased to note that the licensee has been showing improvement by achieving reduction in the damage of distribution transformers during the previous few years, which has come down from 22.9% in FY 2000-01 to 11.49% during FY 2007-08. Damage rate is still much higher than the prescribed norms of 5% in for urban areas and 10% in rural area. It is pointed out that Gurgaon and Bhiwani circles

are still reporting damage rate in the range of 13% or higher which is required to be brought down. The licensee needs to achieve the levels set in the standard of performance regulation, 2004. It should also report separately the transformer damage rate for urban and rural areas in its further reporting.

**Table 2.14 Year-Wise failure rate of Distribution Transformers**

S.No.	Year	Failure rate including those damaged within warranty period (%)	Failure rate excluding those damaged within warranty period (%)
1	1999-2000	22.9	Not Available
2	2000-01	22.3	19.27
3	2001-02	17.9	15.90
4	2002-03	18.7	15.93
5	2003-04	18.6	15.49
6	2004-05	19.4	15.30
7	2005-06	17.6	13.92
8	2006-07	13.13	11.83
9	2007-08	11.49	9.14

#### 2.7.4 Fatal and non-fatal accidents

The data regarding number of fatal and non-fatal accidents involving humans and animals up to 30.9.2007 is presented in table 2.15

**Table 2.15 Accidents in Distribution System**

Year	FY 2004-05			FY 2005-06			FY 2006-07			FY 2007-08 (up to Dec. 07)		
	Fatal	Non Fatal	Total	Fatal	Non Fatal	Total	Fatal	Non Fatal	Total	Fatal	Non Fatal	Total
Licensee' Employees	6	43	49	24	48	72	42	35	77	24	47	71
Private Persons	24	8	32	28	9	37						
Animals	103	0	103	73	4	77	87	0	87	55	12	67
Total	133	51	184	125	61	186	129	35	164	79	59	138

There are two different sets of information provided by the licensee. As per information at P 7-124 of Vol-II, the total number of fatal and non fatal accidents as on 30.09.07 is 115 whereas as per

information at P 6-113 Part –I, the total number is 47 (table 1) and 41 (table – 2) respectively. The above information is misleading. However, quarter wise information up to December 07, subsequently supplied by the licensee has, therefore, been considered for evaluation and is indicated in table no.2.15.

Specific instructions are contained in annual ARR orders of the licensee to achieve marked reduction in accident rates with a view to minimize the same. The Commission expresses its displeasure that during the last four years, the no. of accidents continue to remain in the same range. The Commission has already issued directions to follow the safely precautions, use of proper materials and T&P, as well as for improvements in the systems to minimize accidents. The Commission is, however, dismayed that no tangible improvement in this regard is being achieved. As many as 138 fatal and non-fatal accidents have been reported for the first three quarters of FY 2007-08. These include 24 fatal and 59 non- fatal accidents of human being and 55 fatal accidents of animals. Therefore, urgent corrective action as per earlier directions of the Commission is warranted to achieve sharp reduction in no. of accidents.

## **2.8 Projected Distribution Losses**

The Licensee has projected a distribution loss level of 26 % for FY 2008-09. The ARR order for FY 2007-08 was based on a distribution loss level of 28.5% with an additional improvement target of loss reduction by 2.5%.The Commission has based its calculations for FY 2008-09 on a loss level of 26%.

## **2.9 Licensee's Consumption Estimates**

The Licensee has done sales forecast on the basis of Annual load factors (ALFs) and sales data available up to 31.3.2007. A comparison of the DHBVNL's actual consumption during the year 2006-07 vis-à-vis

the estimated consumption during the year 2007-08 is shown in table 2.16:

**Table 2.16 - Comparison of the DHBVNL's actual consumption (MU) during FY 2006-07 vis-à-vis estimated consumption in FY 2007-08**

Sr. No.	Consumer Category	Actual Consumption FY 2006-07	Estimated consumption FY 2007-08	Growth %
1	Domestic	1564.43	1756.23	12.26%
2	Non-Domestic	533.31	639.50	19.91%
3	HT Incl. 70 KW & above	2227.15	2571.30	15.45%
4	L.T. Incl. Less than 70 KW	506.84	527.18	4.01%
5	AP(Metered)	1010.16	1089.09	7.81%
6	AP(un-metered)	1516.89	1477.68	-2.58%
7	Lift Irrigation	136.46	147.38	8.00%
8	Bulk Supply	317.64	375.91	18.34%
9	Railway Traction	129.08	134.22	3.98%
10	Street Lighting	28.86	30.98	7.35%
11	Public water works	220.30	232.3	5.45%
	Total	8191.13	8981.78	9.65%

A comparison of DHBVNL's estimated consumption during the year 2007-08 vis-à-vis the estimate for 2008-09 is shown in the table 2.17 :

**Table 2.17 – Comparison of DHBVNL’s estimated consumption (MU) for FY 2007-08 vis-à-vis the projected consumption for FY 2008-09**

Category	Estimated consumption FY 2007-08	Projected Consumption FY 2008-09	Difference %
Domestic	1756.23	1893.18	7.80%
Non-Domestic	639.50	759.03	18.69%
HT Incl. 70 KW & above	2571.30	3034.91	18.03%
L.T. Incl. Less than 70 KW	527.18	556.18	5.50%
AP(Metered)	1089.09	1213.95	11.46%
AP(un-metered)	1477.68	1312.99	-11.15%
Bulk Supply	375.91	394.70	5.00%
Lift Irrigation	147.38	148.27	0.60%
Railway Traction	134.22	134.22	0.00%
Street Lighting	30.98	32.81	5.91%
Public water works	232.3	256.69	10.50%
Total	8981.78	9736.93	8.41%

From the above table, it is noticed that the forecast in some of the consumer categories does not conform to the past trend.

## 2.10 Commission’s Consumption Estimates

The licensee failed to submit sufficient filed data of segregated agriculture feeders and install MDI meters (as directed by the Commission in its order dated 16/08/2002) to record energy flow to the agriculture pump set consumers being billed at ‘flat rate’ on the basis of BHP of the pump – sets. Resultantly, the quantum of energy booked to the agriculture unmetered category is on the basis of assumptions and approximations only. As agriculture sales accounts for about 29% of DHBVNL’s total sales volume the distribution loss figures becomes distorted and unreliable.

The Commission is perturbed by the fact that the average running hours of the tube wells per day per pump for the metered agriculture consumers (which forms the basis of estimating sales volume for the

unmetered agriculture tube-well consumers) has increased from 4.39 hours in FY 2002 to 5.54 hours as per Commission's estimates for FY 2008-09. The projected annual average load factor (ALF) too, for no apparent reasons has increased from 18.2% in FY 2001-02 to 23.1% presently.

The Commission is of the view that the licensee's assessment is not accurate. **DHBVNL is directed to probe this issue in detail and carry out a study on their own or through third party and come up with accurate assessments in their filings, duly supported by methodology and data.**

Consequently, the authenticity of the metered agriculture sales data also needs to be put beyond all doubts. The contradiction in the metered sales data creeps in because of the fact that a large number of meters are defective, slow or dead and hence meters are not read or the energy recorded is un-reliable. DHBVNL has failed to provide any satisfactory response to this issue.

The Commission, for FY 2008-09, has projected consumption of metered agriculture tube – well consumers on the basis of Average Annual Load Factor (ALF) which in turn is based on the trends in the volume of sales and the connected load as reported by the distribution licensee and that of the un – metered agriculture tube – well consumers on the basis of the ALF of the metered category. As the Commission's estimate of sale to the agriculture consumer is lower than the sales volume estimated by the utilities the sales mix as well as financial profile gets impacted. The distribution losses gets restated as excess units allocated to the agriculture consumers shifts to other categories of consumers in proportion to their annual growth as well as growth in power availability to Haryana and the distribution loss target set by the Commission. Due to rapid urbanisation and commercialisation / industrialisation specially in the NCR region with a high degree of

electricity demand elasticity it is not surprising to see a much faster growth in electricity consumption / sales to consumer categories like domestic, non – domestic and Industries. Resultantly, the revenue as assessed by the Commission for these as such is also on a higher side as compared to those of the utilities.

**Un Metered Agriculture Sales Trend FY 2001-09**

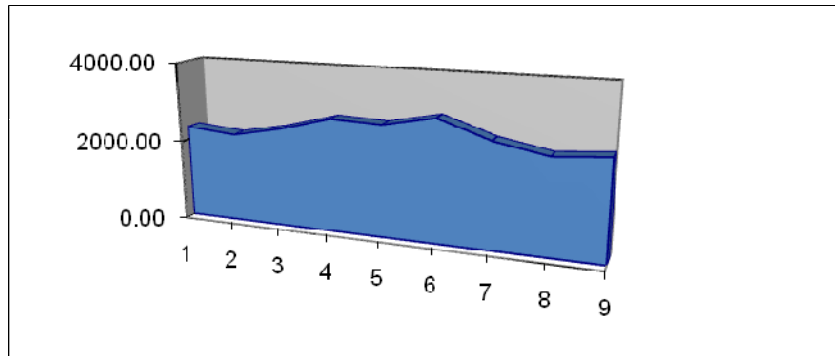


Table 'X' Axis Represents Year(s) beginning FY 2001

Table 'Y' Axis Represents Agriculture Unmetered Annual Sales (MU) beginning FY 2001

The graph above depicts the trend in agriculture un-metered tube – well consumption. The rising trend started from FY 2002-03 and peaked in FY 2006-07. This compelled the Commission to scrutinise the underlying ALF data of the metered agriculture consumption which forms the basis of projecting un metered agriculture tube – well consumption. The Commission pointed out quite a few inconsistencies in the data and hence froze the running hours of the unmetered category in FY 2007- 08 till authentic field data including those from the segregated agriculture feeder is made available.

The methodology adopted by the Commission since FY 2001-02 for estimating consumption of all other categories of consumers has proved to be more accurate, the Commission has followed the same

methodology for FY 2008-09 i.e. based on ALF. The consumption estimates for each category in FY 2008-09 have been arrived at by applying the average ALF on the average projected connected load of each consumer category.

As Haryana is a energy deficit state and would continue to be so in FY 2008-09, the time series of sales data is understated to the extent of availability during the respective years. The Commission, based largely on the CEA generation targets for FY 2008-09 and the generation targets determined by it for HPGCL's own generation including some provision from short – term / bilateral sources depending on the exigencies arising out of behaviour of 'Monsoon' in FY 2008-09 has determined the availability of power. The Commission has also determined the target for transmission and distribution losses in FY 2008-09. Consequently, consumer category wise sales forecast based on ALF (excluding agriculture) has been adjusted to the extent of volume of power available, net of losses, from all generating stations where Haryana has a share in proportion to the consumer category wise projected sales, excluding agriculture, for FY 2008-09.

Based on the aforesaid methodology the consumer category wise consumption estimates for FY 2008-09 is presented in the table below:

**Table 2.18 Estimation of Approved Sales to Consumers FY 2008-09  
(Million Units)**

Consumer Categories	DHBVNL Estimates	HERC Estimates
Domestic	1893.18	2254
Non Domestic	759.03	838
HT Industry	3034.91	3191
LT Industry	556.18	793
Agric. Metered	1213.95	1206
Agric. Un Metered	1312.99	1266
MITC	0	0
Lift Irrigation	148.27	164
Railway Traction	134.22	171
Bulk Supply	394.7	586
Street Light	32.81	33
PWW	256.69	333
Total	9736.93	10835

## 2.11 Subsidy From the State Government

The Licensee has considered an amount of Rs. 16819.76 million as subsidy from the Government of Haryana in its filing under consideration. The Licensee has not filed a tariff application for the year under review. Cost of service calculation that is required to be submitted as per the ARR (Tariff) Regulations has also not been submitted by the Licensee. The amount of subsidy is directly dependent on the electricity units supplied to the agriculture pump set consumers. The Commission has estimated the agriculture pump set consumption as explained in para 2.10.

As per section 65 of the Electricity Act, 2003, in case the State Government requires the grant of subsidy to any consumer or class of consumers, it shall pay the same in advance. In case the payment is not made in accordance with the provisions of the said section, the tariff fixed by the Commission shall be applicable from the date as per the order. Also, as per section 61 of the Electricity Act 2003 and the Tariff Regulations of the Commission, the embedded cost of service to each

consumer category forms the basis of fixation of tariff for that consumer category.

Both the distribution Licensees in Haryana viz. DHBVNL and UHBVNL are State-owned and it is, therefore, appropriate that the retail tariff for the various consumer categories remains same across the state as has been the practice in the past. The options available to the Commission in order to maintain the uniformity of retail tariff in Haryana are :

- (1) Introduce tariff differential at the bulk supply level giving due weightage to the consumer/ sales mix, which is *fait accompli*.
- (2) Adjust the subsidy to be provided to each of the two D&RS Licensees to counterbalance the cross subsidy available with each of two distribution utilities.

The end result in both cases would remain same. The Commission decides to adopt the second option in order to have a uniform D&RS tariff across the state.

**The Commission approves ARR for UHBVNL Rs. 43187.02 millions and DHBVNL Rs. 43841.21 million adding up to Rs. 87028.23 million. As against this, the revenue at current tariff for UHBVNL is Rs. 26283.74 million and DHBVNL is Rs. 33503.24 million i.e. a total of Rs. 59786.98 million resulting in a revenue gap of Rs. 27241.25 million.**

### 3 ANALYSIS OF THE TARIFF FILING AND COMMISSION'S ORDER

#### 3.1 Treatment of Revenue Gap:

As per final analysis of the ARR presented in Chapter – 2 of this order a revenue gap of Rs. 27241.25 million remains to be addressed. The Commission vide memo no.2940/HERC dated 14.3.2008 and Memo no. 137/HERC dated 24.4.2008 sought commitment of the State Government for subsidy to be provided to the agriculture consumers. The State Government vide memo no. 2/21/2006-1/Power dated 07.07.2008 intimated the Commission that in its budget for FY 2008-09 it has provided a subsidy amount of Rs. 23700.9 million for the agriculture pump-set consumers of the State, which is adequate to cover the shortfall of Rs. 23593 million in the estimated cost of service and the revenue at current tariffs of the agriculture pump set consumers. After taking into account the amount required for RE subsidy out of the commitment made by the State Government as mentioned above, the revenue gap that remains to be addressed in the ARR of FY 2008-09 works out to Rs. 3648.25 Millions.

The HERC order dated 26.9.2007 on the review petitions relating to the ARR and Tariff orders for FY 2007-08, has resulted in an additional revenue requirement of Rs. 1243.52 million. In the mean time the State Government vide its memo no. 2/21/2006-Power dated 10.7.2008 proposed to meet the share of agriculture pumpset consumers in the revenue gap arising out of review petition amounting to Rs. 354.4 million by way of additional subsidy. Thus Rs. 889.12 million after taking into consideration the additional subsidy committed by the State Government needs to be added in the ARR gap of FY 2008-09 .  
**Consequently, a revenue gap of Rs. 4537.37 Million (Rs. 3648.25 Million + 889.12 Millions) needs to be addressed.**

The Commission, after initial review of FY 2008-09 Annual Revenue Report (ARR) submitted by UHBVNL & DHBVNL, tentatively assessed the revenue gap at Rs. 5221.52 Millions and directed them vide letter dated 25/4/2008 to file a proposal to bridge the revenue gap. UHBVNL & DHBVNL vide their Memo dated 10/07/2008 filed an identical tariff proposal to bridge the above mentioned revenue gap. The proposal included change in tariff structure, change in tariff design including switching to non telescopic billing and introduction of new tariff slabs in various consumer categories. The Commission in order to have the benefit of the views of different stakeholders including general public invited objections / comments and held a public hearing on 18/8/2008 which witnessed un-precedented participation from the electricity consumers of Haryana. In the light of the detailed deliberations and feedback from different stakeholders the Commission passed an order dated 1/10/2008 remanding the case back to the distribution licensees with a direction to submit additional information / data along with consumer category wise Cost to Serve (COS) report within one month from the date of the order so as to enable the Commission take a decision in the case. UHBVNL & DHBVNL vide their memo no. Ch-11/GM/RA/N/F-25 dated 3/11/2008 and memo no.Ch-24/SE/RA-327 dated 27/10/2008 respectively sought extension in time for submission of requisite information / data as well as COS as the same were not readily available with them. The additional time sought was acceded to by the Commission vide memo no. 2019-20 dated 20/11/2008.

**The Commission examined the status of the ARR report in the light of the pending tariff revision petition of the utilities. It is observed that passing an order in accordance with Section 64 of the Electricity Act 2003 requires additional inputs / clarification to be obtained from the distribution companies. Since at present it is likely to take some time, the Commission thought it necessary to finalise the ARR order for FY 2008-09 in the meantime. A further**

delay in communicating the order will defeat the purpose for which the entire exercise was initiated almost a year back. Any order passed on different issues mentioned in the ARR at the fag end of the financial year would make the order totally irrelevant. The ARR comprises detailed technical & financial appraisal of the utilities as well as observations on the feedback that it receives from various sections of consumers / stakeholders. The observations / directions of the Commission are the guiding factors essential for chalking out action plan, strategy and fixing priorities for the utilities.

Further, as per the terms of license the submission of ARR for the year 2009-10 is also falling due by 30<sup>th</sup> November 2008 and hence it was considered appropriate by the Commission to close the ARR for 2008-09 by keeping open the revenue gap which will be decided later as and when the response / details are re-submitted by the distribution companies.

In view of the above, Commission decides to finalize the ARR for the year 2008-09 of the distribution companies with the following observations:-

1. Keeping in view the reasonable high amount of Capex sanctioned to the distribution licensees in the recent past, which the Commission feels, if executed without any cost and time over – run, would make it possible for the utilities to achieve 1% distribution loss reduction from the level of 26% considered by the Commission for the purpose of estimating FY 2008-09 ARR. Resultantly, additional revenue of approximately Rs. 1097.99 million that is expected to be

**generated on account of 1% distribution loss reduction shall be utilized to partly set – off the net revenue gap.**

- 2. Since the tariff review proposal is pending and response from the distribution licensee(s) is awaited, the balance revenue gap amounting to Rs. 3439.38 Millions, for the time being is left uncovered. Some of this may be funded by way of institutional loans if absolutely needed. In such eventuality, the borrowing cost of the same shall be allowed as a 'pass through' in the Distribution & Retail Supply ARR of FY 2009-10.**
- 3. In the absence of required response from the distribution licensees, the Commission is not taking any decision on the proposed amendment in the distribution and retail supply tariffs at present. The revenue gap so left uncovered will be considered at the time of taking final decision on the proposed amendment in the distribution and retail supply tariff. Consequently the exiting tariffs and charges shall continue to be applicable till further order.**

The approved ARR is summarised as below:

	Description	UHBVNL	DHBVNL	Total
		Rs. Million	Rs. Million	Rs. Million
A	Annual Revenue Requirement	43187.02	43841.21	87028.23
B	Expected Revenue at Current Tariff.	26283.74	33503.24	59786.99
C	Resultant Revenue Gap (A-B)	16903.28	10337.97	27241.25
D	Allocation of total RE subsidy	13703.00	9890.00	23593.00
E	Revenue gap for FY 2008-09 as per ARR (C-D)	3200.28	447.97	3648.25
F	Revenue gap resulting from review petitions for FY 2007-08 allocated in the ratio of approved ARR for FY 2008-09	441.12	448.00	889.12
G	Total Revenue Gap(E+F)	3641.40	895.97	4537.37
H	Approximate revenue resulting from 1% loss reduction	522.56	575.43	1097.99
I	Uncovered revenue gap (G-I)	3118.84	320.54	3439.38

## **4 Wheeling charges, cross subsidy surcharge and additional surcharge**

As per HERC (Terms and conditions for Open Access for Intra-state Transmission and distribution system) Regulation, 2005 wheeling charges, cross subsidy surcharge and additional surcharge shall be as determined by the Commission in terms of regulations framed by it for determination of tariff. Since the HERC (Tariff) Regulations, 1999 do not provide for the methodology for determination of these charges and revised tariff regulations as per the Electricity Act, 2003 are under the process of finalization, therefore, the Commission has adopted the following approach for determination of these charges for FY 2008-09.

### **4.1 Wheeling charges:**

The distribution systems of a distribution licensee shall be used for supply of electricity to their consumers, by captive generators for wheeling of electricity for their own use and by the open access consumers. Therefore, the Commission is of the firm view that all the users of the distribution system should share the costs of wheeling of electricity in an equitable manner.

The following costs have been considered for determining wheeling charges for FY 2008-09:

1. Demand related costs
2. Distribution system losses (technical losses).

#### **4.1.1 Demand related costs**

The Commission is of the view that only those costs which are related to the 'wire' business of the distribution licensee ought to be considered under this head. The ARRs for FY 2008-09 submitted by the distribution licensees i.e. UHBVNL and DHBVNL do not provide segregated cost of

distribution and retail supply. In the absence of the same the Commission calculated the costs allocable to the distribution business at around 8% of the net ARR of both the distribution licensees. UHBVNL has submitted segregated annual accounts for the FY 2006-07 and as per these the percentage of costs allocated to the distribution business are around 11%. The Commission, however, prefers to rely upon its calculations because the segregated annual accounts of UHBVNL do not contain detailed justification regarding costs allocated between distribution and retail supply business. As per the Commission's approved ARR for FY 2008-09 the net expenditure of UHBVNL (Rs. 43187 million) and DHBVNL (Rs. 43841 million) is Rs. 87028 million. Resultantly the demand related costs @ 8% of this expenditure work out to Rs. 6962 million.

#### **4.1.2 Distribution system losses**

For arriving at distribution system losses and determination of cost of supply, data relating to voltage wise and consumer category wise assets, energy supply and losses are the basic requirement. The Commission observes with concern that despite its repeated directives the distribution licensees have failed to provide the requisite data. The loss figures provided by the distribution licensees are inclusive of commercial losses. For the purpose of determination of wheeling charges the segregation of losses at various voltage levels as well as consumer category wise is essential. In absence of relevant data the Commission has no alternative but to rely on the Central Electricity Authority (CEA) norms for determination of distribution system losses. The CEA has suggested a minimum level of 4% and a maximum level of 7% losses for 'distribution lines and service connections'. The Commission had been allowing huge capital investment to the distribution licensee for bringing efficiency improvements in the distribution system and also for reduction in losses to the normative level. The outcome of the investments made by the distribution

licensees in efficiency improvements and loss reduction has yet to be witnessed. It will not be proper to allow the minimum normative level of losses at 4% because of state specific characteristic and constraints of the distribution system at the same time it will also not be appropriate to allow the maximum level of losses at 7%, therefore, the Commission has considered the distribution system losses at 6% for the purpose of working out wheeling charges for FY 2008-09.

Based on the above premises the Commission approves wheeling charges at 40 Paise / unit on a provisional basis limited to FY 2008-09. The computational details are provided in the table below:

**Table No. 4.1 Calculation of wheeling charges**

Item	Components	Derivation
1		
a.	Network establishment and operation cost (@8% of net ARR) (Rs. In millions)	6962
b.	Allowed gross volume of power purchase by the distribution licensees (MU)	28400
c.	Expenses per Kwh (Paise / unit) (a/b)	25
2.	Cost of losses in the system	
a.	%age distribution system losses (technical).	6%
b.	Losses (million units) (1bx2a)	1706
c.	HERC approved average cost of power purchase (Rs. /unit)	2.49
d.	Total cost of losses (Rs. Million) (2bx2c)	3900
e.	Cost per unit of losses (Paise / unit) (2d/1b)	15
3.	Wheeling charges (Paise / unit) (1c+2e)	40

## 4.2 Cross subsidy surcharge

The cross subsidy surcharge shall be payable by all intra-state open access consumers except those persons who have established captive generating station and availing open access for carrying the electricity to a destination for their own use.

The objective of levying surcharge as per the National Tariff Policy is to compensate the existing distribution licensee (s) for the loss of cross-subsidy (as long as the retail tariffs have cross-subsidy component) that they might suffer due to migration of consumers from them to procurement of power through 'open access' from any other source thereby exposing some categories of consumers currently receiving cross-subsidy to a tariff shock. Consequently, the surcharge is construed as the difference between the existing consumer category wise tariff and the respective cost to serve.

The table below presents the difference between the average cost of supply and current tariffs in respect of the categories of consumers who are paying cross subsidy:

**Table No.4.2 Cross subsidy**

Sr.	Consumer Category	Average cost of supply (Paise / unit)	Current Tariff (Paise / unit)	Cross subsidy (Paise / unit)
1	HT industry	318	409	91
2	Street Lighting	394	415	21
3	Railway Traction	287	396	110
4	Bulk supply (Excepting Bulk domestic)	317	409	92

The Commission approves the amount of cross subsidy, being paid by the relevant consumer category as shown in the above table, as the cross subsidy surcharge for the respective consumer category. The surcharge shall be utilised by the distribution licensees to meet the requirements of current level of cross subsidy within their area of supply.

### **4.3 Additional surcharge:**

As per Tariff Policy additional surcharge is payable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be

stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent of such a contract. Since neither the distribution licensees have proposed anything on this account nor do the Commission feel that there will be any unavoidable obligation and incidence forcing the distribution licensees to bear fixed costs consequent upon their consumers opting for open access as such no additional surcharge is approved by the Commission for the FY 2008-09.

#### **4.4 Govt. of Haryana notification:**

With a view to encourage customers to avail open access the Govt. of Haryana had waived cross subsidy surcharge and additional surcharge for FY 2007-08. The above approved surcharge shall not be levied if the same is waived by the Govt. of Haryana for the FY 2008-09 as well subject to the condition that the distribution licensees are compensated to the extent of the loss of cross-subsidy suffered by them .

**As stated above, determination of wheeling charges, cross subsidy surcharge and additional surcharge needs segregated accounts including voltage wise assets and losses for the distribution and retail supply business, the distribution licensees are directed to submit the same alongwith the next ARR.** Since these charges have been determined in absence of detailed data, the Commission also invites objections / suggestions from the stake holders, duly supported with the documentary evidence, so as to enable the Commission revise / review the same, if need be.

## **5 CONCLUSION**

Haryana is a power deficit state. Despite the fact that generation capacities in the state as well as from other long term sources have been augmented, Haryana continues to witness base as well as peaking shortages. Thus due to the increasing per capita electricity consumption in the State the supply keeps lagging. As this phenomena is true in almost all the states in the Northern Region very less quantum of power is available in the open market on a short term basis. This has pushed up the cost of short term power. An aggressive demand side management by the utilities could have delivered the desired result.

The distribution licensees must 'connect' to its consumers and ensure two way flow of communication at all times inorder to maximise consumer's satisfaction. The Commission has already put in place Regulation on standard of performance for Distribution Licensees published in the Haryana Government Gazette (Extra) on 16.7.2004. This provides for payment of even monetary compensation for failure of the Utilities to redress the grievances of the consumers within the stipulated time. Nevertheless, the consumer often complains about non-compliance of the time schedule. The Commission would not expect ordinary consumer to knock the door of the court including the Forum set up by the utilities to redress their grievances. The best administration is the one which is responsive to the consumers' demand and makes utmost effort to satisfy them without provoking them to go for litigation/ agitation. HERC has issued Regulation No.02/2004, dated 12.04.2004 to provide a system of Redressal of Consumer Grievances as per which the Licensees have established consumer grievances Forums in their respective jurisdictions and HERC has appointed Electricity Ombudsman for settlement of representation of the consumers who are aggrieved by the non redressal of their grievances by the Forums. It has come to the notice of the Commission that the

consumers in large number, specially in rural areas are not aware of the existence of the said Forums and the Electricity Ombudsman and their functions. Thus, there is a need to give a wide publicity regarding the existence and functions of these agencies so that consumers at large can benefit. It is suggested that the licensees shall print the details about these agencies on the Electricity Bills and display the details on notice boards in front of their offices and complaint centres.

At present only one Forum each has been set up in the jurisdiction of UHBVNL and DHBVNL with headquarters at Panchkula and Hissar respectively. Necessary arrangements may be made so that consumers located away from Panchkula and Hissar can register their grievances at the nearest office of the licensee which can be forwarded to the office of the Forum. Moreover, the Forum may hold the hearings at the locations other than Panchkula and Hissar near to the location of the consumer. In this context the Commission welcomes the proposal from UHBVNL to set – up one more Forum at Rohtak to facilitate redressal of consumer's grievances. The Commission expects its early operationalisation.

The Commission has been increasingly emphasizing the need for proper scrutiny of the feeder wise losses. We find that these statements are not being regularly sent to us. Even when they are sent, they are not being properly analysed by senior level officers. There are instances in some well to do urban areas with feeder losses exceeding 50% for which we are unable to find any concrete reason. A proper analysis of these losses will give clear ideas for the same to initiate necessary follow up action.

Distribution losses have been the main focus of attention over the years. For the ARR FY 2007-08 the Commission had taken distribution losses at 28.5% as compared to 30.5% in the previous year (FY 2006-07). This was further reduced by 2.5% keeping in view the huge amount sanctioned for the capex work. Despite instructions given to the

distribution companies from time to time, we find that there has not been appreciable improvement in this regard. Apart from the technical reasons, theft of energy can also be a major cause for excessive distribution losses. The licensees are required to find ways and means to tackle this problem. They should identify the areas where traditionally there have been theft cases and take the help of police and district administration to detect and curb the same. Technical measures like HVDS scheme framed by them should be completed and implemented at a fast pace. Accurate assessment of losses is essential to arrive at correct position in order to take the remedial measures. In 2007-08 an ambitious budget of Rs.800 crores for DHBVNL, Rs.500 crores for UHBVNL and Rs.460 crores for HVPNL was sanctioned as part of their capital expenditure to improve the transmission and distribution system in the State. While sanctioning the same, the Commission had expressed its apprehension that the past record of the power utilities in this regard does not inspire confidence. However, keeping in view the eagerness and commitment, the Commission gave approval for such high amount as wanted by them. While giving these sanctions, the Commission was optimistic that if these investment plans were efficiently implemented and effective energy audit system is put in place, then there is likely to be substantial improvement in the system, which in turn would financially help the Utilities. The distribution companies should devise methods to improve their functioning to implement the ambitious capital expenditure plan. Strengthening of transmission and distribution system in the state would help the government to reduce the subsidy to be given to the distribution companies for the loss of revenue for supplying power to agriculture sector.

In predominantly agrarian states like Haryana the quantum of power going into the farm sector for running the agriculture tubewells has always been a debatable one in the absence of reliable data. In the

earlier years the figure supplied by the distribution companies in this regard were not found to be fully authentic and acceptable and as a result some adhoc quantity was allocated by the Commission. The situation has been further complicated since the number of unmetered agriculture tubewell is more than the metered one. Even out of the metered one, a huge number of them are lying defective for long time which is alarming. In our last year ARR report we had advised the power utilities to commission an independent study to get to know the exact quantum of power going to agriculture sector. We find that this has not been done by them so far. During our inter-action with the officers of the utilities we were told that segregation of feeder in the rural areas is being taken up on priority and once that is completed, it would be easier to quantify power going into the agriculture sector. This is also one of the important segments of the capital expenditure plan of the Utilities. However, the work relating to the segregation of feeders has not been implemented with the desired speed and much work is still left to be done. The Commission expects expeditious action in this regard.

The Companies are not paying adequate attention towards prompt replacement of damaged meters, which resulted in inaccurate measurement of energy sold which is detrimental to their revenue generation. They should assess the extent of consumer meters going defective and keep ready and available sufficient meters for prompt replacement as per the regulation. The availability of Meters with the Discoms, particularly of Single Phase and Three Phase Meters is poor. This is bound to result in delays in release of new connections as well as replacement of damaged and defective meters of the existing consumers. This leads to consumer's dissatisfaction. In most of the cases the consumers are advised to purchase meters from the firms approved by the Licensees. Though most of the consumers purchase their own meters, even in such cases, there is delay in replacement as

the meter bought by the consumer is required to be tested in the Laboratory of the Licensee before installation. In case, meters were easily available with the Licensee, the consumer could be saved from lot of harassment.

With the decentralization of powers of purchase, it is expected that the availability of Meters would have improved. The licensee should make all out efforts to improve the availability of meters in the field by proper planning and better Inventory control. Rate Contract can be signed with some of the approved firms for purchase of meters upto a certain limit in case of non availability in the stores. Strict action needs to be taken against the suppliers whose large number of meters are found to be defective within the warranty period. Efforts need to be made to improve the satisfaction level of the consumers by attending to their complaints promptly by replacement of damaged/defective meters quickly, thereby bringing down the cases of Average Billing considerably.

It is a matter of concern that the efforts to implement Commission's directives on management of receivables including computerization, audit and segregation of collections into current sale of power and arrears have been tardy. It is again reiterated that a large part of the receivables which is in excess of Rs. 1300 Crore (UHBVNL) and Rs. 777 Crore (DHBVNL) is on account of un – realized dues from the domestic consumers and Government departments. Thus the sector becomes 'cash strapped' and the proceeds from sales falls short of operating expenditure and consequently internal accruals turn negative eroding the net – worth of the company despite the fact that all the order(s) passed by the Commission are balance with no revenue gap. The power utilities should, on a priority basis, take all possible measures to ensure that no un – realized 'book debt' other than what is absolutely necessary due to the 'billing cycles' remain in their financial accounts.

The national tariff policy mandates that cross – subsidy should be gradually reduced to +/- 20% of the cost of supply. The Distribution Licensee(s) should, as per the requirements of the Guidelines for Filing Tariff Proposal, file embedded cost study as well as marginal cost of licensee's business along with its ARR proposal so that the existing tariff(s) can be benchmarked against cost (s). The Discoms, despite being directed by the Commission time and again (since FY 2001 order) failed to conduct and submit consumer category wise voltage wise cost of service.

The Commission vide its order dated 11/08/2001 directed the Distribution licensee to submit a proposal for two – part tariff supported by reliable and authentic data but to no avail. Thus, in the absence of baseline data on various parameters including transmission and distribution losses and medium to long term business plan, the Commission was unable to proceed with introduction of Multi Year Tariff (MYT) in Haryana.

The licensee(s) failed to provide the requisite time series on consumer category wise sales, number of consumers and connected load. Despite seeking repeated extension in time for submitting the same nothing came forth. In the absence of rationalization and re-alignment of tariff to cost, the financial health of the Discoms has not witnessed the desired turn – around.

The Commission notes that DHBVNL expects to end FY 2007-08 with a loss of Rs. 3716.59 million as against a loss of Rs. 1093.79 million in FY 2006-07. The financial distress of UHBVNL is more pronounced i.e. year (ended 31<sup>st</sup> March 2007) is expected to close with a loss of Rs. 3014.96 million as against a loss of RS. 2853.67 million in the previous year. It is therefore seen that the financial losses are mounting year after year eroding the net worth of these companies. The Discoms are advised to improve upon their financial as well as operational efficiency

including financial re-structuring, better receivable management as well as improvement upon their capital/labour output ratio. Stepping – up of the Capital Investment by leveraging 30% new equity to raise 70% debt (there is no internal accrual) without optimizing the incremental capital output ratio will only add to financial distress making viability and pay – back of such investment doubtful.

**The order of Member Sh. T.S. Tewatia dated 1/10/2008 stands modified to this extent.** This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on November 20<sup>th</sup>, 2008.

Date : 20.11.2008

Place : Panchkula.

T. S. Tewatia  
(Member)

Bhaskar Chatterjee,  
(Chairman)

## **ANNEXURE - 1: LIST OF DIRECTIVES NOT FULLY COMPLIED WITH**

1. The Commission had directed the Licensee to develop a modern system of data collection, storage, retrieval and analysis through computerisation at sub-divisional level. (Direction given in 11.8.2001 order)

The licensee has reported that the work has been awarded to M/s Telecommunications Consultants India Ltd. (TCIL), a Govt. of Indian Enterprise. The project is on BOOT basis and shall be completed in 3 years and 7 months from 02.05.2007. In the initial stage 13 locations have been earmarked where customer-care centres have to be established and based on success of first phase road map for next phases would be prepared.

2. The investment planned for reduction of losses should be taken on priority and should be evaluated on completion of the same. A report on such schemes should be sent to the Commission on quarterly basis. (Direction given in 11.8.2001 order)

The licensee has reported that annual capital investment plan has been submitted to the Commission in 10/07 and ensured submission of progress of the scheme under this plan quarterly. But the utility has not given any report regarding the impact of capital investment done in the past vis-à-vis %age reduction in losses, theft and voltage availability. Any investment can be said to be worth only if the same results in achieving the target for which the investment was made.

3. Load survey should be carried out for all categories of consumers and attention be focused on such consumers who pay on MMC basis or on an average basis for a long time; or where consumption indicated is much lower than possible with the stated connected load, without any valid reason. (Direction given in 11.8.2001 order)

The licensee has reported that it has initiated the process for load survey through CMRI on HT and LT industrial connection. The licensee keeps track of the domestic consumers who are paying MMC or average bill for a long time. The licensee has provided load extension data of AP consumers for the period ending 10/07

4. The Commission had directed the licensee to submit a proposal for two-part tariff with the next tariff filing supported by reliable and authentic data. The licensee should also submit detailed data relating to consumers billed on MMC basis for all categories of consumers and slabs. (Direction given in 11.8.2001 order)

The licensee has reported that prior to 10/84 the industrial consumers were charged two part tariff thereafter this practice was stopped. Presently all consumer categories are billed on MMC, which amounts to two part tariff. The licensee has requested the Commission to continue with the existing practice.

5. The Commission directed the Licensee to physically verify all the fixed assets created out of consumer contribution, which are currently not appearing in its books of accounts and include the value of such assets in their books of accounts after verification from an independent auditor. (Direction given in 16.8.2002 order)

The licensee has reported that the work for asset mapping and consumer indexing has been awarded to M/S ABB Ltd. who have completed 70% of the work. After this the physical verification shall be done by an independent auditor and the Commission shall be intimated as and when the work is completed by the company.

6. The Commission directed that :
  - (a) The licensee is required to prepare the plan for strengthening energy audit specific to feeder or an area

and ultimately to the division level (Direction given in 11.8.2001)

- (b) The licensee is required to finalise and submit a comprehensive metering plan for achieving 100% metering in the state, including its implementation schedule encompassing both the aspects namely provision of meters at the consumers' premises and the energy audit. The Commission also directed the licensee to complete the 100% metering at the earliest. A quarterly progress report to achieve the goal should be regularly submitted to the Commission by 20th of April / July / October / January respectively. (Direction given in 16.8.2002, 29.1.2004 and 20.4.2005 orders)
- (c) The licensee is required to put MDI meters, which also record energy, on all the agriculture pump sets which are currently being billed at flat rate, so that billing continues to be on flat rate but based on the contract demand / connected load, or the actual maximum demand as recorded by the meter, whichever is higher, and the energy reading can be used for correctly assessing the energy consumption by these consumers for energy audit, preparation of bills for subsidy and calculation of actual distribution losses etc. (Direction given in 16.8.2002 order)
- (d) The licensee is directed to submit the status report on account of replacement of defective meters including the steps taken to tackle this endemic problem within one month of issue of this order. (Direction given in 20.4.2005 order)

- (e) The licensee is directed to pay due attention to the selected model division and submit the requisite compliance report. (Direction given in 20.4.2005 order)
- (f) The Licensee is required to fully comply with the direction of the Commission regarding MDI meters in order to effectively redress its long-standing grievance about the Commission's approach of arriving at the estimated energy consumption for AP flat-rate consumers. It will conclusively prove the load put on the system by a given flat-rate AP consumer viz-a-viz the sanctioned load and help the licensee to recover its legitimate dues. (Direction given in 20.4.2005 order)
- (g) The licensee is directed to submit the findings of a comparative study of energy billed before launching of meter replacement campaign viz-a-viz after accomplishing the target sub-division-wise / feeder-wise within 3 months of issue of this order. (Direction given in 20.4.2005 order).
- (h) The licensee is directed to analyse the cause(s) of the meters being defective and take remedial steps to procure good quality meters only from proven suppliers. A report on the number of meters, which have failed during warranty period from different suppliers during last 3-4 years, be submitted to the Commission within six months of issue of this order. (Direction given in 14.11.2005 order)
- (i) With reference to Cent Percent metering at the Consumers' premises and effective energy audit scheme the Commission directed
  - the licensee to confirm availability of feeder-wise ledgers in all its operation sub-divisions.

- the licensee for submission of a comprehensive metering plan including its implementation schedule covering consumers' premises as well as the energy audit scheme for proper accounting of energy in the licensee's sub-transmission and distribution system forthwith and without any further delay.
- the licensee to implement its campaign for replacing electromechanical meters by electronic meters on targeted feeders in all its seriousness and desist from slip shod implementation of the scheme. The feeders covered by the phase-I be tackled immediately and the comparative study be carried out thereafter to know the impact of policy exercise. (Direction given in 14.11.2005 order)

Licensee has reported that the following plan has been prepared:

1. Work of preparation of feeder wise ledgers on all the 1879 11 KV outgoing feeders has been completed
2. Conversion of Electromechanical meters on 11 KV feeders to electronic meter is in process and shall be completed in few months.
3. Contract for GIS survey for Hisar and Faridabad Circles was awarded to M/S ABB, which shall be extended for all the circles.
4. DT metering is planned to be done in two stages. In first stage out of total 11919 urban DTs as on 31.07.07 work for 6169 DTs has been allotted and work on 387 DTs completed. In second stage rural DT metering shall be done. Out of Total 79649 DTs with DHBVN as on 30.06.07 only 688 DTs are metered all the DTs shall be metered by 2009-10. Similarly all

the consumers have been planned to be metered by 2009-10 and all the feeders shall be installed with downloadable meters by 2010-11.

5. Plan to take simultaneous energy recording.
6. Installation of MDI meters on new tube well connection
7. Energy audit planned in every sub division at least once in a year

All these plans are on implementation stages and results could be observed after a year or two.

(b) Comprehensive metering plan has been prepared and all the consumers shall be metered in next two years

(c) All new tube well connection are installed with MDI meters and for old connection due to resistance from farmers M/S HESL have been appointed for third party verification of load and losses.

(d) Out of total number of 18.39 lakh metered connections as on 30.06.07 83.06 thousand meters are defective. The percentage of defective meters in 4.52%. Steps are being taken to reduce the number of defective meters by bringing the meters on poles, providing temper proof electronic meters, executing meter replacement job on turnkey basis, having sufficient number of meters in stores, speedy identification of defective meters, authorising field officer to purchase meters at DGS&D rates etc.

(e) Gurgaon Division City is a model Division where complete renovation of 11 KV feeders to bring down losses below 15%, augmentation of over loaded transformers, 100% electronic

meters and laying of armoured cables to avoid theft have been planned. The results are encouraging.

(f) Same remarks as against (c) above

(g) Line losses have been reduced after meter replacement from 30.69% in 2003-04 to 26.74% in 2006-07.

(h) Main causes of meters being defective are:

(1) increase in connected load by the consumers

(2) manipulation of meters by consumers

(3) quality of meters

Remedial measures: procurement of good quality meters, Anti temper meters, factory calibrated meter, immune to external magnetic field, log and display of tampers, immune to abnormal frequency, load survey availability and other features. Rate contracts finalised.

(j) Feeder wise ledgers and GIS awarded to M/S ABB. The ABB has failed to achieve the target. The Commission is requested for orders for indigenous preparation of ledgers, detailed metering plan etc.

7. The Commission directed that:

(a) The Licensee should computerise all the receivable accounts at the earliest. This will help in ascertaining the precise amount of consumer category-wise and age-wise receivable position separately for sale of power, delayed payment surcharge, municipal tax and electricity duty. The period-wise recovery against current arrears as well as old arrears should also be known correctly.

- (b) The Licensee should undertake detailed receivable audit, preferably from an independent agency. The receivable audit should be undertaken consumer category-wise. The licensee has responded that computerisation of receivables is likely to be completed in January 2007 after which the audit of receivables will be taken up. The licensee may keep its word.
- (c) The Licensee should submit a report giving details of the action taken in each case to recover arrears from the consumers having arrears above Rs. 1 lakh and the reasons as to why supply in all such cases have not been disconnected so far.

(Directions given in 11.8.2001, 20.8.2003 and 20.4.2005 orders)

The licensee has reported that:

- (a) Efforts have been made in this direction and computerised records of disconnected consumers are maintained at field office with certain limitations.
- (b) M/S Bhudladia & Company, Chartered Accountants have been appointed for carrying out independent audit of receivables.
- (c) There is no undisputed consumer having arrear above Rs. 1.00 lakh. The Waiver scheme announced by the Govt. have encouraging results. Out of total 622711 defaulting consumers as on 16.06.05 402856 consumers opted for the scheme upto 31.03.07 and on 267553 consumer completed the scheme upto 01.10.07. The actual amount frozen is Rs. 391.65 crores.

**8.** he Licensee was directed to obtain the necessary ISO 9000 / 14000 certification at the earliest. (Direction given in 20.8.2003 order)

The licensee has reported that consultants have been appointed for documentation of ISO compliance.

9. The Commission directed the licensee to act upon the establishment of computerized State-of-the-art Area Load Dispatch Centre stipulation of the license at once and submit quarterly progress reports to the Commission. (Direction given in 20.4.2005 order)

The implementation of SCADA / DMS / EMS for HVPNL / DHBVNL / UHBVNL in a unified manner is proposed to be given to M/S KEMA, USA proposal for which has been sent to Govt. for approval.

- 10.(a) The Commission directed the licensee to undertake a detailed analysis of its human resources, assess its medium to long-term needs and submit a Human Resource Management Plan for consideration of the Commission. (Directions given in 20.8.2003 and 20.4.2005 orders)

(a) The licensee is directed to immediately complete recruitment of its staff. (Direction given in 23.08.2006 order)

The licensee has given it man power plan and submitted that against 16270 post only 10201 men are in place. The licensee is making recruitment on regular basis and has planned to outsource most of works to reduce the financial burden.

11. (a)The licensee is directed to investigate the causes of high damage rate of distribution transformers and increase in damage rate for FY 2003-04 over FY 2002-03. The transformer failure rate for Gurgaon circle has increased enormously during FY 2003-04 for which the utility is required to pay special attention. Appropriate action be taken to reduce the damage rate to achieve the levels set in the Standard of Performance Regulations, 2004 (i.e. 5% in urban area and 10 % in rural area).

The licensee is further directed to submit the above information separately for urban and rural areas (Direction given in 20.8.2003 and 20.4.2005 orders)

- (b) The licensee is directed to ponder over the situation of high failure rate of distribution transformers and take concrete steps to ensure purchase of qualitatively better distribution transformers/qualitatively better repair of damaged distribution transformers accompanied with rigorous implementation of preventive maintenance drill by the field offices. Appropriate action be taken to reduce the damage rate to achieve the levels set in the standard of performance regulation 2004 (i.e. 5% in urban area and 10 % in rural area). The licensee is further directed to submit its action taken report within three months of issue of this order and also submit these statistics for FY 2005-06 separately for 'urban' & 'rural' areas. (Direction given in 14.11.2005 order)
- (c) The DHBVNL is directed to confirm within one month of issue of this order that the failure rate of distribution transformers being reported to the Commission comprises failure due to various reasons including failure of the distribution transformers within warranty period. In future, the transformer failure data be supplied separately for urban and rural areas and failure of transformers within warranty period vis-à-vis the total number of transformers within warranty period as on 31<sup>st</sup> March of previous year, be also shown separately. (Direction given in 23.08.2006 order)

The licensee has reported as under:

- (a) The damage rate of DTs has come down from 15.93% in 2002-03 to 11.83% in 2006-07. The causes for high rate of damage

are overloading, unbalancing of phase, improper size of fuses and lowering of oil due to leakage. The licensee has proposed remedial measures such as VDS, augmentation, maximum loading limits for urban 90% and rural 70% fixed, balancing of phases, ensure proper size of fuse and keeping vigil on oil level.

(b) Licensee is procuring better quality of DTs, pre-receipt third party inspection of DTs, damage rate of supplier should not be more than 10%, sample testing from any Govt. Lab and engagement of dedicated people for proper maintenance of DTs.

(c) The damage rate of DTs in urban areas has come down from 26% in 04-05 to 8% in 06-07. The damage rate of DTs in rural has increased from 74% in 04-05 to 92% in 06-07. About 20% DT are reported to be damaged during warranty period.

**12. (a)** The Commission directed the licensee to review its entire safety drill to ensure that the workmen in the field perform and execute the job as per relevant standards to minimise the accidents involving human beings and live stocks. (Direction given in 20.4.2005 order)

(b) The Commission, keeping in view the gravity of situation, directs the licensee as under (Direction given in 23.08.2006 order): -

(i) To submit a summary of field investigation report in respect of 61 fatal accidents involving human beings & the action taken thereon by the management case by case.

(ii) To entrust 25% of the accidents involving fatality to human beings to a 3<sup>rd</sup> party for independent investigation into causes of such accidents and thereafter submit a comparative analysis of above report vis-à-vis the corresponding departmental investigation report with management's comments thereon.

- (iii) The licensee to review its on-job training programme for workmen/supervisory staff and officers to make it more focused in light of the reports referred to at (i) & (ii) above.
- (iv) To induct fresh blood in the work force duly trained and trimmed for the assignment

The licensee has reported as under:

- (g) Providing of adequate safety tools, training, strict disciplinary action at supervisory level and creation of awareness among workman.
- (h) The licensee has devised format for uniform reporting system, 25% investigation from third party is being looked into, phase wise training programmed chalked out and new blood is inducted on continuous basis.

**13.** The licensee is directed to look into its failure to get even a single stay vacated out of 1426 appeals filed in operation circle, Faridabad and, also, file the outstanding information in regard to the number of miscellaneous applications / appeals against the stay orders of the connected defaulting consumers for Hisar, Bhiwani, Narnaul and Gurgaon circles within one month of issue of the order. The licensee is also directed to submit half yearly progress reports (regarding recovery of dues by preparing land revenue cases) to the Commission by first week of April and September of each year. (Direction given in 14.11.2005 order)

The details submitted by the licensee are for the period 4/05 to 9/05 in respect of 670 stay cases out of which application has been made for vacation for 76 cases and the stay has been vacated only in 6 cases

**14.** The Commission directs that 169 No. 11 KV feeders (having more than 50% distribution losses) be put under a system of monthly monitoring at the management level and the report submitted to the

Commission regularly. The licensee is also directed to clear the backlog of submission of such reports and be regular in submission of monthly / quarterly reports. (Direction given in 14.11.2005 order).

The licensee has reported that close watch is kept on feeder losses and in case losses are higher than prescribed limits study is made to find out reasons and remedy thereof. Process of feeder wise ledger preparation is over and outcome shall be provided to the Commission in future.

- 15.** The Commission directs the licensee to take the requirements for reporting of performance levels in terms of the HERC regulations into consideration while finalising the policy for introduction of IT in distribution and supply business. (Direction given in 14.11.2005 order)

The licensee has reported that implementation is under process in which reporting on basis of HERC regulations has been considered. Computerisation of billing and other process is on. Computerisation job has been awarded to M/S TCIL.

- 16.** The licensee is directed to submit quarterly reports on efforts made by it to limit the cash and bank balances and the resultant decrease, starting from one month of this order. In case the licensee is unable to restrict its cash and bank balances to 7 days of collection by the end of 2006-07, the Commission would be constrained to reduce the allowed working capital borrowings for FY 2006-07 by the excess cash and bank balance maintained by the licensee and will recover the interest on such disallowed working capital borrowings from the succeeding ARR. (Direction given in 23.08.2006 order)

The licensee has provided details of steps taken by it to limit the cash and bank balances on the norms prescribed by the Commission.

**17.** The Commission directs the licensee to examine the issue and submit a detailed proposal about its preparedness to implement the multi-year tariff (initially for three years period) with its next ARR filing. The multi-year tariff proposal should incorporate loss reduction, reduction in working capital loans and receivables trajectory during the control period. To achieve this the licensee will require to first identify the controllable and uncontrollable costs. The uncontrollable cost can then be linked to some benchmark or escalation index, if required. While controllable cost including technical / commercial losses can be set on a reduction trajectory. (Direction given in 23.08.2006 order)

The licensee has reported that petition has been filed for finalizing terms and conditions of MYT and the discoms have jointly appointed M/S ICRA for conducting the COS report of which will be submitted as and when it is finalised.

**18.** The Commission directs the licensee to get compensation from the State Government within 3 months from issue of this order otherwise the Commission's approved schedule of tariff shall apply to the relevant category of consumers. (Direction given in 23.08.2006 order).

The licensee has reported that the Govt. was requested to provide compensation vide letter dated 05.04.06.

**19.** The Commission directs DHBVNL to inform the Commission, within 3 months of the date of this order, their preparedness with respect to the requirements for implementation of Intra – State Availability Based Tariff (ABT) mentioned hereunder (Direction given in 23.08.2006 order): -

- Forecast demand in their area of supply and draw – up demand schedule for the day, on a day ahead basis.

- Adhere to the committed schedule, failing which they shall be liable to pay UI charges.
- Billing ability especially with respect to UI and reactive energy draws.

The Commission directs the licensee to submit detailed justification for the consistent increase in load factor in respect of metered agricultural pump-sets, within one month of the issue of the order. (Direction given in 23.08.2006 order).

The licensee has reported that due to non availability of any live display units / SCADA system they are not in a position to monitor the energy drawal or to take any corrective measure. M/S NELCO have been appointed on turnkey basis for data acquisition in 4 substations of DHBVN and 5 substations of HVPNL. Billing ability shall be possible after of commissioning of ALDC. Lowering of water table is the main reason for increase in metered AP consumers.

- 24 The Commission is allowing the expenditure for DSM works as proposed by the Licensee with a directive that monies recovered from consumers or otherwise on account of this plan will be utilised only towards Capital expenditure with the approval of the Commission and the institutional borrowings shall be reduced to that extent. (Chapter 3, Para 3.2.1)

The licensee has reported the progress towards the implementation of DSM works by installation of CFL and BEE pump sets.

20. The Licensee is directed to carry out a study as to what extent the waiver scheme has realised its aim and submit the report along with the next ARR. (Chapter 3, Para 3.6.2)

The licensee has reported that the Waiver scheme announced by the Govt. have encouraging results. Out of total 622711 defaulting consumers as on 16.06.05, 402856 consumers opted for the scheme upto 31.03.07 and on 267553 consumer completed the scheme upto 01.10.07. The actual amount frozen is Rs. 391.65 crores.

- 21.** The Commission directs the licensee to file a compliance/ progress report on important issues raised by the Commission in its previous orders within 3 months of this order. (Chapter 3, Para 3.6.3)

The licensee has reported that:

- (a) The concession in tariff was given to some categories of consumer on the directive of the Govt. against which the Govt. has been requested to give subsidy which has been turned down by the Govt. The same will be considered in ARR.
- (b) 100% metering shall be done by replacing electromechanical meters with electronic meters, introduction of HVDS to AP consumers, conversion AP flat rate consumers from LT to HT, and providing advanced technology meters to LT and HT consumers.
- (c) Sales circular No. D-38/2004 issued

- 22.** The Licensee must ensure that transformer failure data be provided strictly as directed in the ARR order of FY 2006-07 in the annual performance report to be submitted by 30th June 2007. (Chapter 3, Para 3.7.1)

- 23.** The Commission directs the Licensee

- (i) To ensure provision of proper material, T& P and equipment to its workman.

- (ii) To ensure that due safety precautions are always taken while working on live lines and equipments & safety norms are not allowed to be ignored in any case. Supervisory staff should be made responsible for the same.
- (iii) System improvements be carried out on urgent basis to avoid accidents.

Compliance of the above directions along with earlier directions on the same issue be reported to the Commission within two months of issue of this order. (Chapter 3, Para 3.7.3)

- 24.** The Commission directs that causes for high durations of low/ high voltage regimes be investigated and expeditious action taken to ensure voltage levels within the prescribed parameters. (Chapter 3, Para 3.7.4)

The licensee has reported that voltage excursion on higher side is due to reduction of load of AP consumers in rainy season and low voltage excursion is due to reactive power with drawl. These are being taken care of by make staff at substations and on lines knowledgeable. Proposal for augmentation of various substations has also been submitted.

- 25.** The task of preparing 11kv feeder wise consumer ledgers doesn't brook any more delay. The licensees are directed to accomplish the above task by August, 2007 and submit compliance report to the Commission immediately thereafter(Chapter 3, Para 3.8)

- 26.** The Commission directs the licensee to engage a third party to carry out a sample survey of metered agriculture pump set consumers (say 30% of the installation) under guidance of the Commission:-

(a) to determine and comment upon proper installation of energy meter vis-à-vis the licensee's standard on the subject.

(b) to determine the working and accuracy of meter at site by a standard method used for site testing of consumer meter.

(c) to ascertain and report the treatment meted out to the metered agriculture pump set consumer in case his meter is defective/ damaged for raising his energy bills and working out the corresponding quantum of his consumption included in the sales data transmitted to head-quarters.

The report along with the licensee's analysis be submitted before submitting the ARR for FY 2008-09 so that the ground position to use the sales data for metered agriculture pump set consumers is clear to the Commission.(Chapter 3, Para 3.10.1)

The directives issued by the Commission should be carefully studied, objectives of the same grasped and then complied with. DHBVNL is advised, in their own interest to ensure compliance of the Commission's directives and if extension of time has been sought / proposed, stick to its commitments.

## **ANNEXURE – 2 : LIST OF NEW DIRECTIVES**

The Commission has given the following new directives in this order.

1. The licensee is directed to:
  - (a) Examine the reasons for excessive R&M expenditure as compared to normative
  - (b) Ensure that preventive maintenance expenditure is given preference and a special allocation is done for the same so that within a reasonable period the R&M expenditure is brought within the normative parameters.
  - (c) Analyse R&M expenditure on transformers and to formulate a time bound plan to be submitted along with the ARR for FY 2009-10 for bringing the transformer failure rate within acceptable limits for which additional funds may be earmarked. (Para 2.1.3.2)
2. The Commission directs the licensee as under:
  - (a) Since the work of replacement of consumer meters with electronic meters is going on for the past few years, the licensee shall supply within one month details regarding phase wise and capacity wise no. of meters required to be replaced, those replaced till FY 2007-08 and the balance yet to be replaced . The information as above shall be accompanied with the action plan to complete the balance work and the costs involved.
  - (b) The licensee shall supply similar information in respect of the feeder meters also within one month.
  - (c) The licensee is to ensure that the procurement and installation of meters is in line with CEA regulations. (Para 2.2.1)

3. The Licensee is directed to submit quarterly reports on efforts made by it to limit the cash and bank balances and indicate the resultant decrease. (Para 2.2.3.1)
4. The licensee is directed to furnish complete details on the observations of the Commission within a month from the date of issue of the order whether all such consumers are continuing to pay their current bills without any default or there are some consumers who have again defaulted and action taken by the licensee in case of default has not been given by the licensee ( Para 2.6.2)
5. Keeping in view the observations of the Commission the distribution licensees and the transmission licensee are directed to submit the following details within three months from date of order:
  - a) Copy of the instructions, if any, being followed for release of connections at 66KV and above.
  - b) Detailed note on:
    - i) Present system for application and grant of connections to such consumers
    - ii) how the billing is done for 66 KV and above consumers, whether at the consumer premises or at substation and if the billing is done at consumer premises then who bears line losses between substation and consumer premises.
    - iii) ownership and maintenance of the system at which connection is given to such consumers
    - iv) present number of consumers, their locations and connected load who are connected at 66 KV and above
    - v) difficulties being faced by the licensees and such consumers in the present system
    - vi) Suggestions for overcoming these difficulties.(Para 2.6.3)

6. The licensee is again directed to submit the proposal on MYT as sought in the Commission's tariff order for FY 2006-07 within one month from the date of this order. (Para 2.6.7)
7. The licensee is directed to explain the reasons for not initiating action for compliance of directive since 4/2005 and intimate the expected date of completion of activity within one month of the date of the order.(Para 2.6.8)
8. The Distribution licensee is directed to review its human resources with an eye on activity wise assessment of the existing manpower and future requirements as the business expands. The assessment should also include re-training/re-skilling, relocation & redeployment of surplus staff (if any) in gainful activities. The Discoms should submit a status report within one month and a comprehensive human resource plan within six months of this order. ( Para 2.6.9)
9. It is directed to report separately the transformer damage rate for urban and rural areas in further reporting ending June, 2008.( Para 2.7.1)
10. The Commission is of the view that the licensee's assessment of unmetered agriculture pumpset consumer consumption is not accurate. The licensee is, therefore, directed to probe this issue in detail and carry out a study on their own or through third party and come up with accurate assessments in their filings, duly supported by methodology and data.( Para 2.10).
11. Determination of wheeling charges, cross subsidy surcharge and additional surcharge needs segregated accounts including voltage wise assets and losses for the distribution and retail supply business, the distribution licensees are directed to submit the same alongwith the next ARR.

**ANNEXURE – 3 : SCHEDULE OF TARIFF**

Category of Consumers	Fixed Charge (Rs./KVA)	Energy Charge (Paise/ unit)
<b>DOMESTIC</b>		
Upto 40 units		263
41-300 units		363
Above 300 units		428
<b>NON-DOMESTIC</b>		
		419
<b>H.T. INDUSTRY</b>		
Above 70 kW		409
Furnace		409
Special Agreement		409
<b>L.T. INDUSTRY-up to 70 kW</b>		
		428
<b>AGRICULTURE</b>		
<b>Metered</b>		<b>25</b>
		(Rs. /BHP/month)
<b>Un-metered</b>		35
<b>Irrigation</b>		
Direct Irrigation Tubewells		400
Augmentation Canals		400
Lift Irrigation		400
<b>BULK RAILWAY TRACTION</b>		
	60	385
<b>BULK SUPPLY at LT</b>		
		419
<b>BULK SUPPLY at 11 kV</b>		
		409
<b>BULK SUPPLY Domestic at 11 kV</b>		
		350
<b>STREET LIGHTING SUPPLY</b>		
		415
<b>PUBLIC WATER WORKS</b>		
		400

## **6 GLOSSARY**

ARR	Annual Revenue Report
ALF	Annual Load Factor
A&G	Administration and General
CAPEX	Capital Expenditure
CCA	City Compensatory Allowance
CWIP	Capital Works in Progress
DA	Dearness Allowance
D&RS	Distribution & Retail Supply
DHBVNL	Dakshin Haryana Bijli Vitran Nigam Limited
Discom	Distribution Company
DS	Domestic Supply
DSM	Demand Side Management
FSA	Fuel Surcharge Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GoH	Government of Haryana
HRA	House Rent Allowance
HT	High Tension
HVPNL	Haryana Vidyut Prasaran Nigam Limited
KV	Kilo Volts
KVA	Kilo Volt Ampere
KWh	Kilo Watts hour
LT	Low Tension
MDI	Maximum Demand Indicator
MITC	Minor Irrigation Tubewell Corporation of Haryana
MMC	Monthly Minimum Charges
MU	Million Units
MVA	Mega Volt Ampere
NDS	Non Domestic Supply
O&M	Operations and Maintenance
PF	Provident Fund
PPA	Power Purchase Agreement
R&M	Repairs and Maintenance
SAC	State Advisory Committee
SOP	Sale of Power
T&D	Transmission and Distribution