



COMMISSION'S ORDER
ON
AGGREGATE REVENUE REQUIREMENT OF UHBVNL & DHBVNL
FOR THEIR DISTRIBUTION & RETAIL SUPPLY BUSINESS
AND DISTRIBUTION AND RETAIL SUPPLY TARIFF
FOR FY 2011-12

CASE No. : HERC/PRO 3 of 2011 &
HERC / PRO 4 OF 2011

27th May, 2011

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

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**HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS NO. 33-36, SECTOR - 4, PANCHKULA - 134 112**

**CASE NO: HERC / PRO-3 and HERC/PRO-4 OF 2011
IN THE MATTER OF**

Petitions/ Applications filed by Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) for determination of the Aggregate Revenue Requirements and tariff for supply of electricity by UHBVNL and DHBVNL to the consumers of the state of Haryana for the FY 2011-12.

ORDER

Present:

Shri Bhaskar Chatterjee

Chairman

Shri Rohtash Dahiya

Member

Shri Ram Pal

Member

DATE OF ORDER: 27-05-2011

The Haryana Electricity Regulatory Commission, hereinafter referred to as 'the Commission', in exercise of Powers vested in it under section 62 of the electricity Act, 2003 read with section 11 of the Haryana Electricity Reforms Act, 1997 and all other enabling provisions in this behalf, passes this order determining the Aggregate Revenue Requirement of UHBVNL, Aggregate Revenue Requirement of DHBVNL and the tariff for supply of electricity by UHBVNL and DHBVNL to the consumers of the State of Haryana for the year 2011-12. The Commission, while passing this order, has considered the ARR/ Tariff petitions filed by UHBVNL and DHBVNL, all subsequent filings made by the two utilities in response to various queries of the Commission, Objections received from various organisations and individuals, the replies / comments furnished to the Commission by UHBVNL/ DHBVNL in respect of these objections, various issues raised and the submissions made by UHBVNL and DHBVNL in the presentations in the public hearings held at Karnal and Gurgaon respectively and the clarifications given by UHBVNL / DHBVNL during the public hearing in respect of various objections/ issues. The State Advisory Committee has also been consulted and all other relevant facts and information on the record of the Commission have been perused before passing this order.

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1. PROCEDURAL ASPECTS OF THE ARR FILING

1.1. Background

The Haryana Electricity Regulatory Commission (HERC) was established in August 1998 to regulate power sector in the state of Haryana, under the provisions of Haryana Electricity Reforms Act 1997(Act 10 of 1998) which was enacted by the Government of Haryana in 1997 and came into force on 14th August, 1998 after presidential assent on 20th February, 1998 .

The Electricity Act, 2003 (EA, 2003) was enacted by the Govt. of India in June, 2003. However, the Government of Haryana, in exercise of the powers conferred by clause (d) of section 172 of the Electricity Act, 2003 , vide its notification no. 1/4/2003 -1 Power dated 8/09/2003 notified that all the provisions of the Act except section 121, which had not been enforced by the Central Government vide notification no. S.O 699 (E) dated 10/6/2003 ,shall not apply in the State of Haryana for a period of six months from the appointed date i.e. 10/6/2003. Resultantly, EA, 2003 came into force in the State of Haryana w.e.f. 10/12/2003. However, as the Haryana Electricity Reforms Act, 1997 (HERA, 1997) is a saved Act under sub – section (3) of section 185 of the Electricity Act, 2003 (EA, 2003), the provisions of HERA, 1997 not inconsistent with EA, 2003 continue to be applicable.

Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) are the two State Govt. owned companies, registered under the companies Act, 1956, engaged in the business of distribution and retail supply of electricity in the state of Haryana. While the UHBVNL hold the Distribution and Retail Supply License No. DRS-1 of 2004 to cater distribution and retail supply of electricity in the north zone of Haryana, comprising of Ambala, Yamunanagar, Karnal, Kurukshetra, Jind, Rohtak and Sonapat circles, the DHBVNL hold Distribution and Retail Supply License No. DRS-2 of 2004 to cater distribution and retail supply of electricity in the south zone of Haryana comprising of Bhiwani, Faridabad, Gurgaon, Hisar, Narnaul and Sirsa circles.

These two companies came into being in 2004 upon corporatisation/restructuring of erstwhile Haryana State Electrical Board (HSEB) carried out by the State Govt. in its pursuit to revamp the power sector and implement comprehensive power reforms in the State of Haryana under the aegis of

HERA, 1997. Prior to its corporatisation, the erstwhile HSEB was handling generation, transmission, distribution and Retail Supply of electricity business as a vertically integrated power utility. The corporatisation/ restructuring of erstwhile HSEB was carried out by the State Govt. through two statutory Transfer Schemes notified by it under the provisions of HERA, 1997. Through the first Transfer Scheme, titled 'Transfer Scheme Rules, 1998' notified by the State Govt., the Generation business (undertakings, assets, liabilities, proceedings and personnel) was separated from Transmission and Distribution business and vested in a separate State Govt. owned company, namely Haryana Power Generation Corporation Ltd. (HPGCL) while Transmission and Distribution business was vested in another State Govt. owned company, namely Haryana Vidyut Prasaran Nigam Limited (HVPNL). Through the second Transfer Scheme, titled 'Transfer Scheme Rules, 1999', the Transmission undertakings and business was separated from Distribution undertakings and business. While the transmission was retained by HVPNL, the Distribution business was segregated into two successor Distribution companies i.e. UHBVNL and DHBVNL to cater to Distribution and Retail Supply of electricity in the north zone and south zone of Haryana respectively as stated above.

After restructuring of erstwhile HSEB, the Distribution and Retail Supply license was initially granted to HVPNL by the Commission vide its licensing order dated 04.02.1999 permitting it to carry out the distribution and Retail supply business in the entire state of Haryana. Subsequently, after the implementation of second transfer scheme, the Commission permitted HVPNL to continue with the Distribution and Retail Supply business through its newly formed subsidiaries i.e. UHBVNL & DHBVNL vide its order dated 21.04.1999. Thereafter, on an application filed by HVPNL, the Commission accepted the surrender of Distribution and Retail Supply (DRS) license vide its order dated 4th November, 2004 and granted the DRS license no. DRS-1 of 2004 to UHBVNL and DRS license No. DRS-2 of 2004 to DHBVNL to conduct Distribution and Retail Supply business in the northern and southern circles of Haryana respectively.

The rights relating to procurement and bulk supply of electricity or trading of electricity were initially vested with the HVPNL at the time of restructuring of erstwhile HSEB. However, in view of HVPNL having been declared State Transmission Utility (STU) vide State Govt. notification dated 9.12.2003 and in view of sections 31 (2), 39 (1) and 41 of Electricity Act, 2003 which prohibit the STU from engaging in the

business of trading in electricity, the Govt. of Haryana vide its notification no. 1/6/2005-1/Power dated 9th June, 2005, transferred the rights relating to procurement and bulk supply of electricity or Trading of electricity from HVPNL to HPGCL. Subsequently, vide notification dated 11th April 2008 (No. 1/1/2008-1 Power), the Govt. of Haryana transferred the rights relating to procurement of electricity/ UI draws/ dispatches or Trading of electricity from HPGCL to UHBVNL and DHBVNL w.e.f 15/04/2008. Further, with effect from 1st April, 2008 the rights and obligations under agreements and contracts, relating to procurement and bulk supply of electricity or trading of electricity, to which HSEB/ HVPNL / HPGCL was originally a party, was transferred and vested to Transferee companies i.e. UHBVNL and DHBVNL in 1:1 ratio. Firm allocations in each of the Central Sector Generating Stations along with any allocations from the unallocated quota, as determined by the Government of India for Haryana, was also reallocated to UHBVNL and DHBVNL in 50:50 ratio. The power sold by HVPNL from its shared projects i.e. IP Station (Delhi) and Bhakra Beas Managements Board (BBMB) to the extent of share owned by it was also allocated to UHBVNL and DHBVNL for a period of five years w.e.f. 1st April 2008 in 1:1 ratio. The notification also provided that the day to day procurement of power and related issues shall be the responsibility of Haryana Power Purchase Centre (HPPC) on a single buyer mode.

The tariff determination with respect to supply of electricity by a generating company to a distribution licensee, transmission of electricity and wheeling and retail supply of electricity are the main functions of the Commission. The powers to determine tariff for generation, transmission, supply & wheeling of Electricity, wholesale, bulk or retail, as the case may be, within the State of Haryana are vested with the Commission in accordance with section 86 (a) of Electricity Act, 2003. UHBVNL and DHBVNL have filed their Aggregate Revenue Requirements (ARR) petitions for FY 2011-12 for approval of the Commission vide memo no. Ch – 30 / GM / RA / N / F – 25 / Vol. – XXXII (32) dated 30th November, 2010 and memo No. Ch. 43 / SE / RA / - 382 dated 26th November, 2010 respectively under the provisions of Section 26 (5) of Haryana Reforms Act, 1997 read with HERC (Terms & Conditions for Determination of Distribution and Retail Supply Tariff) Regulations 2008 and in terms of the provision of clause 27.2 of their licenses i.e. License No. DRS - 1 of 2004 of UHBVNL and Licence No. DRS – 2 of 2004 of DHBVNL issued by the Haryana Electricity Regulatory Commission. As a departure from the past, the

Commission had issued a single Tariff Order for ARR/ Tariff Petitions of both the distribution licensees i.e. UHBVNL and DHBVNL in FY 2010-11. For the FY 2011-12 also, the Commission is continuing with the same practice. Consequently, as in the last tariff order, the common issues of the ARRs of the two utilities have been dealt with together while any issue specific to UHBVNL or DHBVNL has been dealt under the separate sub head.

The Commission is in the process of introducing second generation regulatory reforms in Haryana. The Commission, with the assistance of the consultants appointed for the purpose and in consultations with public and power utilities in Haryana, sectoral experts and feedback from different stakeholders, has prepared draft regulations for MYT, intra- state ABT and amended Open Access regulations for notifications which are briefly discussed below.

MYT for Generation, Transmission & Distribution

The key issues addressed in the draft MYT mechanism to be introduced in the State include duration of the initial control period in line with national and international best practices wherein the length of initial control period has been kept relatively shorter. Under MYT frame work the generation tariff is proposed to be determined station wise except for PTPS Unit 1-4. However, all units are required to provide separate cost and performance data. The current single part generation tariff is proposed to be converted into two part tariff structure in order to implement the intra – state ABT in the State. Other features include performance benchmarking, comprehensive incentive and penalty framework, sharing of gains and losses, implementation of Standards of Performance, approval of investment plans before the control period and emphasis on network planning in the case of transmission and distribution licensees.

In addition to the above a specific provision has been made to ensure that the licensees submit the proposal for meeting the revenue gap projected for each year of the control period. In the absence of such a proposal the ARR & Tariff filing shall be considered as incomplete.

Intra State ABT & Imbalance Settlement Rules

The draft regulation attempts to address issues including initial preparations needed by the STU, Discoms and the Generating companies. The STU is expected to undertake major technical and infrastructural development such as installing ABT compliant meters, scheduling on 15 minutes time blocks basis and maintaining State energy and UI account. The methods of imbalance settlement and UI charge allocation have been aligned broadly with the principles specified by the Central Commission. Considering the various technical implementation requirements, the draft regulations provide a 3 months period for mock exercise from the date of notification of the regulations. This would help the power utilities and the Commission in indentifying issues / challenges and the difficulties which could be faced by the power utilities so that the same could be addressed by the Commission in order to ensure successful implementation of intra– state ABT in Haryana. The Commission views intra – state ABT as a win – win situation for all stake holders as it would benefit the power system by bringing grid discipline into sharp focus, it would encourage the generators for maximising generation during peak hours and introduce efficiency in power purchase by the distribution licensee i.e. least cost power should be dispatched in preference to costly power with the exception of ‘must run’ generating stations and non – conventional sources of generation.

The electricity consumers in Haryana stand to benefit as the regulations enable open access, captive generation and trading of electricity. Further, it ensures quality and reliable power and scope for reduction in power purchase cost.

Open Access

In line with the Electricity Act, 2003 the Terms and Conditions for Open Access Regulations (Regulation No. HERC / 11 / 2005 were notified on 19th May 2005 by the Commission. With the experience gained over the years including the constraints in operationalising transfer of power under open access mechanism including settlement of any over drawl / under drawl by the open access customers, the Commission, after public proceedings and discussions with various stakeholders including the power utilities, has finalised amended open access and grant of connectivity regulations. The Commission, while finalising the draft regulations, has attempted to align its regulations with the CERC framework including the CERC

regulations for short terms open access notified in the year 2008 and the connectivity and long term open access regulations notified in September, 2010. The regulations to be notified shortly shall be applicable for grant of connectivity to Intra – State transmission and distribution system; for seeking long term, medium term and short term open access and to generating companies including CPP and renewable sources of energy generation, licensees etc. Connectivity to the transmission and or distribution system would be required to be sought before applying for long term, medium term or short term open access. The draft regulations describe in details the process of grant of connectivity, the role and duties of the nodal agency, the applicable fees and charges as well as the time frame for processing of the applications.

The Act provides for payment of transmission / wheeling charges, cross – subsidy surcharge as well as additional surcharge by the open access customers as determined by the Commission. The Commission, in the relevant chapter of the instant order, has determined wheeling charges and Cross – Subsidy surcharge payable by such open access customers. In the absence of details or an application from the power utilities regarding system redundancy as a result of grant of open access, the Commission has not determined any additional surcharge payable by the open access customers. **The power utilities, if they so require, may file the requisite details which can form the basis of determining additional surcharge by the Commission as provided in the Act.**

1.2. Filing of ARR Petitions by UHBVNL & DHBVNL

In terms of Regulation 7 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of wheeling Tariff and distribution and Retail Supply Tariff) Regulations, 2008 and applicable provisions of Electricity Act, 2003 and D & RS license, each distribution licensee is required to file its Aggregate Revenue Requirement (ARR) for the ensuing year for its Distribution & Retail Supply business, each year, by 30th November. Accordingly, UHBVNL filed its application/ petition for ARR for FY 2011-12 for its Distribution and Retail Supply business to the Commission vide Memo No. Ch-30/GH/RA/N/F-25/Vol-xxxii (32) dated 30.11.2010. Similarly DHBVNL filed its application / petition vide Memo No. Ch-41/SE/RA-382 dated 26.11.2010 for ARR for FY 2011-12.

The ARR Petitions of UHBVNL & DHBVNL were considered and, after conducting preliminary analysis, the Commission admitted ARR petitions of both the licensees.

1.3. Preliminary observations of the Commission

The ARR petitions filed by UHBVNL and DHBVNL were further scrutinised and preliminary observations were communicated to UHBVNL vide memo No. 3243 / HERC / Tariff / 2010 – 11 dated 10th January, 2011 & to DHBVNL vide memo No. 3275 / HERC / Tariff / 2010 – 11 dated 13th January, 2011. Both the distribution licensees were directed to submit their replies to the deficiencies in the ARR as pointed out by the Commission by 27th January, 2011.

The preliminary observations on the ARR and tariff filings of both the distribution licensees were mostly related to common issues. The preliminary observations made and the additional information / data sought are reproduced as under:

- i) Status of outstanding loans as on 31.12.2010 duly classified according to the purpose for which the borrowings were made i.e. borrowings for capital works, borrowings for working capital and borrowings to fund the revenue gap.
- ii) Borrowings expected to be finalized and drawn upto 31.3.2011 and classified as above.
- iii) Employee cost for FY 2009-10 showing separately the expenditure for the year as per the revised salaries according to the sixth pay commission report and arrears relating to previous years.
- iv) Number of employees as on 31.3.2010, expected retirements and new recruitments during FY 2010-11.
- v) Details of revenue generation by new tariff structure implemented vide order dated 13.09.2010 from 1.10.2010 to 31.12.2010 so as to enable the Commission to make an estimation of revenue for FY 2010-11 and FY 2011-12.
- vi) The basis for estimation of revenue as in Table- 3 at page (17/120) of the filing to be provided by UHBVNL.
- vii) Separate details to be provided of the revenue from fixed charges and energy charges for FY 2010-11 and FY 2011-12 for each consumer category and sub category.
- viii) Details of revenue earned from MMC during FY 2008-09 and FY 2009-10.

- ix)** Details of calculation of Inter State transmission charges for FY 2010-11 and FY 2011-12 forming part of power purchase cost.
- x)** Details / basis for calculating open access charges for FY 2010-11 and FY 2011-12 to be provided by UHBVNL.
- xi)** UHBVNL has shown certain revenue from sale of power outside state for FY 2010-11 and FY 2011-12. The basis of assessment and the rate of sale of such power to be provided by UHBVNL.
- xii)** The revenue gap from agriculture category has been shown higher than the subsidy estimation for FY 2011-12 by both the distribution licensees. As per the tariff regulations, the licensee is required to provide information as to how it propose to bridge the revenue gap. In the absence of such information, the filing is deemed incomplete.
- xiii)** The basis for the increase in R&M expenses in 2009-10, 2010-11 and projected increase in FY 2011-12.
- xiv)** The increase in energy sale in 2010-11 over 2009-10 is 27% in case of UHBVNL and 23% in case of DHBVNL whereas the same has been projected as 13% by UHBVNL and 15% by DHBVNL in 2011-12 over 2010-11. Both the distribution licensees should provide the methodology used for estimation of energy sale figures.
- xv)** The distribution loss level for FY 2009-10, FY 2010-11 and FY 2011-12 is at the same level i.e. 23%. Reasons for not showing any reduction in distribution loss projected for FY 2011-12 to be given.
- xvi)** The terminal benefits were allowed as per projections made by the distribution licensees in the previous years. Reasons for the shortfall and request for true up when the expenses were allowed as projected.
- xvii)** Latest applicable Schedule of general and miscellaneous charges.
- xviii)** Latest applicable Schedule of Tariff
- xix)** Annual / biannual consumer category wise data on energy sales, number of consumers and connected load from FY 2005-06 onwards upto March, 2010 / September, 2010
- xx)** Data on consumption and distribution losses recorded on the segregated AP feeders.

Replies were furnished by UHBVNL and DHBVNL vide memo No. Ch – 24 / GM / RA / N / F-25 / Vol – XXXIII (33) DATED 1ST February, 2011 and Ch – 24 / SE / RA – 406 dated 25th February, 2011 respectively. The replies were reviewed by the

Commission and rejoinders were sent pointing out continuing shortcomings in the filing and noncompliance with the observations of the Commission and also for obtaining certain additional data and information. Both, UHBVNL and DHBVNL furnished their replies to the rejoinders.

1.4. Summary of ARRs

UHBVNL has projected its total expenditure for FY 2011-12, inclusive of depreciation, at Rs. 9318.72 Crore and after adding ROE of Rs. 225.41 crore @ 14 % in line with Regulation 16 of the HERC Tariff Regulations, has projected the ARR, at Rs. 9544.13 crore. The Revenue from existing tariff & misc. charges corresponding to the projected energy sales has been worked out at Rs. 3936.36 crore, This also includes revenue of Rs. 311.18 crore for interstate sale of 1000 MUs. The Subsidy from the State Govt. has been assumed at Rs. 2231.80 crore, making the total revenue receipts as Rs. 6168.16 crore. The net revenue gap for FY 2011-12, after accounting for special appropriations on account of true up of terminal benefits (Rs. 360.29 crore), true up of employee cost for 2008-09 (Rs. 60.57 crore) & true up of the employee cost for 2009-10 (Rs. 95.41 crore), has been projected at Rs. 3831.66 crore (it, however, works out to Rs. 3892.24 crore).

DHBVNL has projected its total expenditure, inclusive of depreciation, at Rs. 8744.73 crore & after adding ROE @ 14 % amounting to Rs. 198.08 crore, the ARR for FY 2011-12 has been projected at Rs. 8942.81 crore. The revenue from existing tariff & misc. charges has been worked out at Rs. 5680.68 crore & subsidy from the State Govt. has been taken as Rs. 1541.95 crore, making the total revenue receipts as Rs. 7222.64 crore. The revenue gap for FY 2011-12 has been depicted at Rs. 1720.17 crore.

The combined revenue gap of the two licensees for FY 2011-12, as projected, works out to Rs. 5612.14 crore.

The summaries of ARRs of UHBVNL & DHBVNL as projected in their petitions are reproduced in the Table 1.1 on page 17 and Table 1.2 on page 18.

Table 1.1 - Summary of UHBVNL's ARR for FY 2011-12 (Rs. in crores)

Particulars (UHBVNL)	Previous year FY 2009-10 (Actual)	Current year FY 2010-11 (Estimated)	Ensuing year FY 2011-12 (Projected)
Power purchase (MU)	15211	18612	21239
Sale of power outside State (MU)	0	2500	1000
Sale of power within State (MU)	11267	12407	15584
Loss % (including Intra and Inter State transmission losses)	25.92%	23.00%	23.00%
1. Receipts			
a) Revenue from tariff & Misc. Charges	3074.60	3817.65	3936.36
b) Revenue subsidy from Government	2088.04	2028.91	2231.80
c) Revenue against regulatory assets	1515.58		
Total	6678.22	5846.56	6168.16
2. Expenditure			
a. Purchase of power from own stations	6083.73	2545.53	3106.91
b. Purchase of power from other sources		2588.86	2876.29
c. Intra State Transmission Charges		502.99	625.87
d. R&M Expenses	46.04	82.78	112.13
e. Employee Expenses	7555.77	760.37	817.75
f. A&G Expenses	44.84	51.20	58.84
g. Depreciation	109.74	77.30	142.25
h. Interest & finance Charges	690.85	1052.35	1674.17
i. Less: Interest & other expenses capitalised	178.03	64.53	97.44
j. Other Debits (incl. Prov. For Bad debts)	9.50	1.6441.95.17	100.69
k. Extraordinary Items			635.91
l. Other (Misc.) – net prior period credit / (charges)	28.08	0	0
Total Expenditure	7590.52	7998.49	9318.72
3. Reasonable return		201.19	225.41
4. Other Income	-	-	-
5 Annual Revenue Requirement (+2+3-4)	7590.52	8199.69	9544.13
6. Revenue Gap (4-1)	-912.30	-2353.12	-3375.96
7. Special appropriation: True up on account of terminal benefits			360.29
8. Special appropriation: True up on account of employee cost for FY 2008-09			60.57
9. Special appropriation: True up on account of employee cost for FY 2009-10			95.41
10. Surplus (+) / Shortfall (-) after adjusting for past true up	-912.30	-2353.12	-3831.66

Table 1.2 Summary of DHBVNL's ARR for FY 2011-12 (Rs. in crores)

Particulars (DHBVNL)	FY 2009-10 (Actual)	FY 2010-11 Estimated	FY 2011-12 Projection
Power purchase (MU)	15876	18612	21239
Sale of power (MU)	11601	14145	16354
Loss % (including Intra and Inter State transmission losses)	26.93%	24.00%	23.00%
1. Receipts			
a) Revenue from tariff & Misc. Charges	3823.07	4769.73	5680.68
b) Revenue subsidy from Government	1200.68	1401.78	1541.95
Total	5023.75	6171.51	7222.64
2. Expenditure			
a. Purchase of power	4142.19	5359.37	5833.41
c. Intra State Transmission Charges	290.34	658.51	746.36
d. R&M Expenses	39.71	69.50	92.59
e. Employee Expenses	892.63	498.19	503.51
f. A&G Expenses	80.88	91.62	111.57
g. Depreciation	41.80	104.80	175.19
h. Interest & finance Charges	332.38	472.33	720.17
i. Less: Interest & other expenses capitalised	80.66	102.38	138.74
j. Other Debits (incl. Prov. For Bad debts)	63.69	70.02	76.98
k. True up of employee cost			168.80
l. Extraordinary Items	0.00	0.00	454.90
m. Other (Misc.) – net prior period credit / (charges)	-0.42	0.00	0.00
n. Transfer to / from regulatory assets	-145.43	0.00	0.00
Total Expenditure	5657.12	7221.96	8744.73
3. Reasonable return	165.32	177.64	198.08
4. Other Income			
5. Annual Revenue Requirement (2+3-4)	5822.44	7399.59	8942.81
6. Surplus (+) / shortfall (-):Before tariff revision(1-5)	-798.69	-1228.08	-1720.17
7. Tariff revision impact			
8. Surplus (+) / shortfall (-):After tariff revision(6-7)	-798.69	-1228.08	-1720.17

1.5. Public Proceedings

In accordance with the provisions of section 64 (2) of the Electricity Act, 2003, UHBVNL & DHBVNL published their petitions in the abridged form in order to ensure public participation. The Public Notice was issued by UHBVNL in the Indian Express (English) & Amar Ujala (Hindi) on 10.12.2010 and by DHBVNL in the Tribune (English) & Dainik Jagran (Hindi) on 20.12.2010 inviting objections / suggestions /

comments from the stake holders. The ARR petitions were also posted by UHBVNL & DHBVNL on their websites i.e. www.uhbvn.com and www.dhbvn.com respectively.

After receipt of the petitions, the Commission also issued public notices in the Times of India (English) on 30th December, 2010 and Dainik Bhaskar (Hindi) on 31st December, 2010 inviting comments and objections from the stakeholders as per following schedule:

Last date of filing objections	Last date of filing reply to the objections	Last date of filing rejoinder to the reply
10.01.2011 (Monday)	25.01.2011 (Tuesday)	10.02.2011 (Thursday)

Originally the public hearing on the ARR filing of UHBVNL was scheduled for 3rd March at Karnal and in respect of DHBVNL for 4th March, 2011 at Gurgaon. Public notices for the information of the public and other stakeholders were issued by the commission in the Times of India (English) and Dainik Bhaskar (Hindi) on 4th and 5th February, 2011 respectively. However, on the request of distribution licensees, the dates of public hearings were rescheduled for 22nd March, 2011 in respect of UHBVNL and 24th March in respect of DHBVNL at Karnal and Gurgaon respectively. Public notice for rescheduling of the hearings was issued in the Times of India (English) on 24th February, 2011 and in Dainik Bhaskar (Hindi) on 25th February, 2011.

Public hearings were held as per the revised schedule i.e. on 22nd March, 2011 at Karnal in respect of UHBVNL and on 24th March, 2011 at Gurgaon in respect of DHBVNL. Some of the objectors who had submitted written objections did not attend the hearing. However, some other persons representing different consumer categories, who had not filed written objections, were present in the hearing. The distribution licensees i.e. UHBVNL and DHBVNL made detailed presentation of their respective ARR proposals in the hearings. The objectors, who were present in the hearings, were also provided an opportunity to make their oral submissions.

Stakeholders deliberated various issues relating to ARR filings of the distribution licensees for FY 2011-12 and the tariff order for FY 2010-11 in their written as well as oral submissions during the public hearing. The issue regarding introduction of two part tariff by levying of fixed charges and MMC in the tariff order for 2010-11 was also

discussed. The stakeholders expressed concern about the huge revenue gap which is increasing year after year despite hike in tariff, inadequacy of the RE subsidy as per FY 2011-12 budget estimates of the State Government and non reduction of the AT&C losses of the distribution licensees. It was also stressed that instead of giving tariff hikes, cost of supply should be reduced by bringing efficiency in the performance of the distribution licensees besides curtailing expensive short term power purchases by effective Demand Side Management (DSM) measures. The interveners also submitted that the system losses should reduce commensurate with the capital expenditure, distribution licensees should curtail their other expenses and take effective steps to recover their outstanding receivables. It was opined that if all these steps are taken, then a part of the ARR gap can be mitigated.

The Commission have taken note of the views given and issues raised by the stakeholders in the public hearings as well as in their written submissions which are discussed at the relevant places in this order.

1.6. Objections from Public and response of the Distribution licensees

In response to the public notice issued by the Commission, objections / comments were filed by the stakeholders. The list of objectors, who filed objections on the ARR filings of the distribution licensees for FY 2011 12, is given below:

Common list of objectors on the ARR filing of UHBVNL and DHBVNL

- i. Sh. Jagdish Jindal, Hisar Industries Association, resident of 3, IDC, OP Jindal Marg, Hisar. (on UHBVNL and DHBVNL ARRs)
- ii. Sh. Rampal Majra, H. No. 202, Sector 20, Kaithal (on UHBVNL and DHBVNL ARRs)
- iii. Sh. S.K. Kashyap, Chief Electrical Distribution Engineer, Northern Railway (on UHBVNL and DHBVNL ARRs)
- iv. Sh. Sampat Singh S/o Ram Chander, resident of Flat No. 23, MLA Flats, Sector-3, Chandigarh (on UHBVNL and DHBVNL ARRs)
- v. Sh. K. C. Papreja, Hony. General Secretary, Gurgaon Industrial Association, GIA House, IDC, Mehrauli Road, Opp. Sector 14, Gurgaon (On UHBVNL and DHBVNL ARRs)

- vi. Sh. Krishan Kumar Lohia, 9, Industrial Development Colony, Delhi Road, Hisar (only on the ARR filing of DHBVNL)
- vii. Chairman, Faridabad Industries Association, FIA House, Bata Chowk, Faridabad(only on the ARR filing of DHBVNL)
- viii. S.K. Ahuja, Secretary General, Gurgaon Chamber of Commerce & Industry, Opp. Sector 10-A Market, Khandsa Road, Gurgaon. (only on the ARR filing of DHBVNL)
- ix. Shri Rajesh Kumar, assistant Professor, Department of Economics, Maharshi Dayanand University, Rohtak.
- x. Shri Rakesh Kumar Goyal, Chief of Party WENEXA Project, Tetra Tech ES Inc., India, DLF Cyber City Building No. 9 , 11th Floor, Gurgaon (Haryana) – 122002.

The objectors have raised issues / objections on almost all the components of ARR. The Commission has taken note of the objections and the replies given by the distribution licensees. It may not be possible to reproduce each and every objection and reply in detail. As the issues raised by the objectors / stakeholders on the ARRs of both the distribution licensees are common in nature, therefore, all these issues have been dealt with collectively and a brief summary of the objections as well replies given by UHBVNL and DHBVNL is presented below:

i. Category wise energy consumption estimates

Objection

The distribution licensees are not adhering to the sales estimates approved by the Commission. The Commission has been reducing the sales figures of agriculture sector and adding the resultant extra energy to the figures of other paying categories; however the distribution licensee are just doing the reverse. This results in higher booking of electricity to agriculture sector, highly overstated RE subsidy thereby making the sales estimating exercise of the Commission futile.

Reply by distribution licensees

Both the distribution licensees have maintained in their respective replies that the quantum of sales approved by the Commission is for the purpose of estimation.

Demand and supply of electricity cannot be restricted to the figures approved by the Commission as both depend upon various uncontrollable factors such as monsoons, weather, usage by consumers, availability of more energy etc. Hence energy sales cannot be taken as controllable variable. Due to various reasons unmetered agriculture consumers consume more energy than the metered consumers. The RE subsidy is given by the State Government on the basis of running hours determined by the Commission, which are consistently lower than the actual running hours. Therefore, the contention that the distribution licensee is misrepresenting the running is fallacious. Moreover, the revenue subsidy projected in the ARR for FY 2011-12 is on the basis of budget estimates of the State Government.

ii. Power supplied to metered and un-metered agriculture tube wells

Objection

The Commission has approved average running hours of un-metered tube wells in its order for 2010-11; however the distribution licensees have shown higher running hours in their filings for 2011-12 with the intention of hiding actual distribution losses which are on the higher side and for claiming higher RE subsidy. Despite repeated directions of the Commission to submit actual consumption figures of agriculture consumer from the 11 kV segregated feeders the distribution licensees have not submitted the same. It was pointed out that the farmers do not operate tube well for 365 days in a year and remain inoperative for approximately four months during the lean season.

The power consumption by agriculture sector in UHBVNL has been shown as 52% and as 28% in DHBVNL of the total electricity consumption for FY 2011-12. This can be reduced drastically by installing energy efficiency pump sets cost of which can be recovered in 5 years period. Moreover State Government should give subsidy for replacement of pump sets instead of consumption of power.

Reply of the distribution licensees

Since there was good monsoon in FY 2010-11 it could not be made basis for projecting running hours for agriculture consumers. Therefore, the running hours have been projected on the basis of actual running hours recorded during 2009-10. Further, at the time of filing of ARR data from segregated feeders was not readily available. The running hours of unmetered agriculture consumers have been kept

higher because these consumers have a tendency to consume higher energy due to various reasons. DHBVNL has submitted that data of some segregated feeders has been submitted to the Commission alongwith ARR for 2011-12. UHBVNL has submitted that records of data flow from segregated feeders is being prepared. ICRA is carrying out study to estimate agriculture consumption in the State by collecting data from sample feeders. The agriculture consumer is not being cross subsidised by any other category of consumers.

iii. Distribution losses

Objection

The Commission approved 23% distribution losses for FY 2010-11 but as per ARR filings for 2011-12 the distribution licensees have, instead of showing reduction have again projected the same at 23%. It was observed by the objectors that the actual distribution losses are in the range of 30% despite claim to the contrary by the distribution licensees. The corresponding losses in Punjab are less than 18%. The distribution losses are higher due to overstatement of un-metered agriculture consumption by 30-40%. This results in hiding of distribution losses, which should otherwise be at least 5-8% higher than reported. The Commission should true up the energy sales figures and then arrive at a distribution loss level. AT&C losses are also high and the receivables are increasing exponentially. AT&C losses in some districts such as Jind, Rohtak, Bhiwani and Jhajjar are to the tune of 68%, 61%, 52% and 43% respectively. The Commission should compel the utilities to reduce AT&C losses and recover the outstanding receivable amount including outstanding dues from various government departments.

On the basis of information sought under RTI losses of only 13 industrial consumers of Faridabad circle of DHBVN have been worked out to Rs. 120.18 crores in 2008-09. The T&D losses of Vidyut Sadan Hisar are 26.21%. There have been huge financial losses in the DHBVNL due to non-implementation of PLEC since 2000-01.

Objections to loss reduction plan of DHBVNL: The claim of Nigam that defective meter is replaced within 15 days time is wrong. There was no time table for establishment of new 33 KV substations and conversion of HVDS. The claim that bill acknowledgement booklet has been introduced is false and bills are mostly dropped on the last date of payment.

No. of feeders having more than 50% losses is higher in DHBVNL.

Reply of the distribution licensees

There has been consistent improvement in terms of reduced AT&C losses which have come down from around 40% in 2000-01 to 27% in 2009-10 (DHBVNL) and 37% in 2001-02 to 25.31% in 2010-11 (UHBVNL). Distribution licensees are taking effective steps in this direction which include implementation of HVDS, replacement of conductor, meter relocation, bifurcation / trifurcation of feeders, planning of implementation of advanced metering infrastructure, reduction in theft of electricity, introduction of surcharge waiver and incentive schemes etc. distribution licensees also plan to spend huge capital expenditure in this direction. High loss making feeders are given due attention by the distribution licensees and efforts are being made to reduce losses on these feeders.

Bad and doubtful debts are bound to happen as distribution of electricity is high risk business because of a large and highly diverse consumer mix. However, distribution licensees are making all efforts to recover receivables as soon as possible.

iv. Computation of cost of service to the consumers:

Objection

The interveners brought to the notice of the Commission that despite repeated directions from the Commission the distribution licensees are not submitting data to substantiate the actual cost of service to various consumer categories. Comparison of cost of service and tariff gives unrealistic figures. In 2010-11 ARR order, the cost of power purchase was worked out Rs. 2.60 / unit whereas the average cost of service was worked out as Rs. 4.93 / unit. This shows that overhead cost is as high as 90% of the power purchase cost. The distribution licensee has referred to cost of service report of ICRA according to which average cost of service at LT is over Rs. 6 / unit with power purchase cost of Rs. 3.00 / unit. Such studies need to be substantiated with facts and figures to inspire confidence rather than to be theoretically worked out as the tariff design including cross subsidy surcharge is based on these calculations.

Reply of the distribution licensees

On the directives of the Commission M/S ICRA Management Consulting Services Ltd. was assigned the job of determination of cost of service. The report was submitted to the Commission and it has further been directed by the Commission to take into account the data of the segregated feeders. The methodology adopted and the data used by the consultants is based on audited accounts and is in order. There are various factors responsible for high cost of service such as increasing power purchase cost, increasing agriculture consumption, increasing O&M expenses, inadequate Government subsidy and equity.

v. O&M Cost, power purchase cost and other expenditure

Objection

The actual R&M figures are less than those claimed by the distribution licensees. The Commission may call for data on actual utilization and improvement achieved in the performance. It was pointed out that after adding up of capacity at Yamunanagar and Jhajjar the power purchase cost should have come down. Employees cost and A&G expenses have gone up drastically over the years. The loss making entities should curtail all these costs.

DHBVNL has shown true up of employee cost and extraordinary items in its P&L account without any details of costs of the previous years.

Reply of the distribution licensees

Distribution licensees try to spend the amount allowed by the Commission for O&M and R&M expenses. It may sometimes happen that the amount spent is less than the amount allowed. O&M expenses have increased due to implementation of Sixth Pay Commission report as well huge CWIP. The Commission allows O&M expenses after taking into account the data provided by the distribution licensees and after exercising prudence checks.

vi. Capital expenditure plan

Objection

While allowing capital expenditure by the Commission, it should be linked with improvement in performance. Any capital expenditure should show direct quantifiable results. Diversion of funds also needs to be curbed.

Reply of the distribution licensees

The capital expenditure is equal to the amount allowed. The capital expenditure scheme is segregated in four major heads which are AT&C loss reduction, load management, reliability improvement and infrastructure development. There is improvement in system efficiency and reduction in AT&C losses. The capex is approved by the Commission taking into account past performance and after conducting prudency checks. In addition to above the DHBVNL has also submitted in its reply that appointment of third part consulting firm for carrying out detailed cost benefit analysis of capex done in the past few years is under their consideration.

vii. Return on equity

Objection

Seeking return on equity by utility incurring continuous losses is not justified. It also would add further burden on ultimate consumer. It should be allowed only after the past losses are wiped out.

Reply of the distribution licensees

In its reply DHBVNL has submitted that return on equity is being claimed in accordance with the HERC regulations. UHBVNL has submitted that return on equity is claimed to mitigate the risk associated with infusion of new investment, disallowance of which results in accumulation of losses.

viii. Continued poor performance of the distribution licensees

Objection

It was argued by the interveners that the distribution licensees have failed on all fronts like the reliability of power supply, voltage, new connection consumer billing, complaint handling system, availability of spare transformers / meters, delay in replacement of defective meters etc. The Commission should give them final ultimatum to show marked improvement or initiate action for cancellation of their licence. The distribution licensees should act as commercial entity instead of a State Government arm for fulfilling its social obligations. The State Government should think of privatization of the distribution business to improve consumers satisfaction.

Relative achievement of private distribution companies in the neighbouring States may be compared with. The information and data given in the ARRs speaks about inefficiencies of the distribution licensees. The amount recovered against the penalties levied is negligible. Frequent power outages result in loss to industrial consumers. Number of pending consumer complaints, lesser number of theft detection in current FY in comparison to previous years, unrealistic R&M expenses etc. should be seen by the Commission before fixing tariff. DHBVN is not allowing interest on ACD on regular basis, which may also be looked into.

Reply of the distribution licensees

Continuous efforts are being made to improve performance. There is increase in running hours of supply to industrial and urban consumers, DT failure rate and AT&C losses have come down, segregation of feeders, replacement of electromechanical meters with electronic meters, implementation of HVDS, review of high loss feeders, system augmentation and many other works undertaken in this direction are showing good results. Consumer satisfaction is given due importance by establishing Bijli Suvidha Kendras, Customer Care Centers and Forums. There are many performance improvement schemes in pipeline.

ix. Introduction of two part tariff in Haryana

Objection

It was pointed out that the Commission has recently introduced two part tariff without giving opportunity of being heard to the consumers and even without bringing the matter to the notice of the State Advisory Committee. No corresponding relief in energy charges has been given and the industrial consumers are the worst hit. MMC has been doubled and fixed charges introduced without assessing the effect on consumers. The increase in tariff has been as high as 50-60%. The Commission should not pass on the inefficiency of the distribution licensees on the hapless consumers and the issue may be looked into while deciding tariff for 2011-12.

Levy of fixed charges and MMC will result in increased consumption of electricity as the consumer will not switch off lights or loads even when not required because he is bound to pay MMC.

Reply of the distribution licensees

DHBVNL has submitted that determination of tariff structure is the prerogative of the Commission. In its reply UHBVNL has submitted that two part tariff is a requirement as per National Tariff Policy. It is more balanced, appropriate and justified method of recovery of costs which ensures that a consumer consuming less energy does not get undue advantage by paying less electricity charges as compared to another consumer who is making full use of the contract demand and eventually cross subsidising the first consumer. The fixed charges introduced in 2010-11 order are less than the proportion of fixed cost in the total cost of supply.

x. Levy of peak load exemption charges

Objection

Peak load exemption charges were introduced in 2000-01 to control power drawl during notified peak load hours. The position regarding availability of peak power has changed over years. Now sufficient power is available during peak hours throughout the year and even the rates of energy during peak hours are relatively quite cheap. As is evident from the Energy Exchange data after August 2009 there has been peaking shortage only in June 2010 with normal variation in rates. The rates during peak hours are marginally higher than the rates in off peak hours. If there is a need for PLEC then there should be rebate during off peak hours. States like Maharashtra, Andhra Pradesh and Gujarat have levied peak load surcharge and corresponding rebate for consumption during off peak hours at very nominal rates unlike Rs. 2-4 unit in Haryana. This may be reviewed in accordance with the prevailing situation.

Reply of the distribution licensees

Peak load restrictions are imposed on industrial consumer keeping in view demand supply position during peak load hours and in order to ensure that they don't consume electricity during peak load hours. Further, by levy of peak load restriction attempt is made to flatten the peak load curve. DHBVNL has also submitted that consumer have been allowed open access to meet their demand during peak load hours. UI charges during this period are as high as Rs. 9.50 against the PLEC of Rs. 2/- levied by the licensee. Morning peak load restrictions have been abolished. UHBVNL has submitted that Rs. 2 per unit are charged upto 50% of contract demand

instead of 10% of contract demand. Review of peak load charges is beyond the purview of the distribution licensees.

xi. Introduction of measures to increase consumer efficiency

Objection

Other States like Uttar Pradesh and Madhya Pradesh are giving incentive for better load factor. In Delhi differential tariff has been introduced for two parts of the year. In April – September the tariff is lower by 10%. However, in Haryana the distribution licensee is unnecessarily taxing

Reply of the distribution licensees

Distribution licensees are in favour of broad tariff design which helps in demand side management. Two part tariff is one such measure. Fixed charges go on reducing with the better load factor.

xii. Non compliance of the directives given by the Commission

Objection

There are directives pending even for over 10 years. The distribution licensees go unpunished for such lapses. The Commission should impose financial sanctions for non-compliance of the directives.

Reply of the distribution licensees

Proper reply to the directives issued by the Commission is being given in the ARR filings. Updated status is filed in case of shortfall in compliance.

xiii. Introduction of new technologies and schemes

Objection

The Commission may introduce time of day tariff, remote metering to check pilferage, massive drive for checking power thefts, introduction of HVDC in theft prone areas, making sub-division as a profit centre by checking its performance and implementation of specific area system improvement schemes.

Reply of the distribution licensees

Distribution licensees are already taking necessary steps in line with many of the suggestions given by the objectors.

xiv. Introduction of human resource planning

Objection

Distribution licensees are lagging in this respect and need to have a comprehensive human resource plan duly integrated with training to employees. There is wide spread corruption in the field offices which need to be checked.

Reply of the distribution licensees

Restructuring plan has been submitted to the State Government for approval. Distribution licensees have drafted a regulation for employee conduct and also taking action for preventing corruption.

xv. Grant of RE subsidy by the State Government

Objection

In its tariff order dated 13th September, the Commission has stated that matter of additional subsidy of Rs. 467 Crore to agriculture consumer has been referred to State Government and on receipt of decision of the State Government issue shall be taken up separately. Since then no order has been passed by the Commission as per provisions of section 65 of the Act, subsidy should be paid in advance. The Commission may immediately take follow up action in accordance with the statute. Even in 2011-12 filings the distribution licensees have claimed agriculture subsidy of Rs. 3774 crores without any corresponding approval from the State Government. The Commission should not proceed with the tariff order for 2011-12 without prior commitment from the State Government.

Reply of the distribution licensees

DHBVNL has submitted in its reply that no comments can be given as the matter relates to the Commission. UHBVNL has submitted that the State Government has to

make payment of subsidy in advance in the manner as may be prescribed by the Commission. Therefore, there is no violation of the provisions of the Act.

xvi. Revenue gap in 2010-11 order

Objection

Despite massive hike in tariff, there is revenue gap of Rs. 5096 crores (Rs. 3376 crore in respect of UH and Rs. 1720 crores in respect of DH) as per 2010-11 order. No proposal has been submitted by the distribution licensee to bridge the gap. The petition should be rejected till necessary disclosures are made by the petitioner. The revenue gap should be bridged from Government subsidy instead of increasing consumer tariff.

DHBVNL has shown that power purchase cost has come down from Rs. 3.32 to Rs. 2.78. The revenue from sale of energy is increasing because of tariff hike. Hence it is not understood as to how the losses have increased from Rs. 798.69 in 2010 to Rs. 1720.17 crores in 2012.

Reply of the distribution licensees

There was no tariff revision for a decade which resulted in huge revenue gap. The Commission has allowed carrying forward the revenue gap as regulatory assets, which as per National Tariff policy is required to be recovered within a period not more than 3 years. Commission has also observed in its tariff order dated 13th September, 2010 the revenue gap is due to non increase in tariff since 2000-01, increase in power purchase costs, increase in agriculture consumption, increase in O&M expenses and inadequate subsidy and equity from the State Government. To meet this revenue gap the Commissions has been requested to approve suitable tariff hike.

xvii. Non implementation of MYT framework

Objection

Despite provisions in the National Tariff Policy MYT framework has not been implemented by the distribution licensees.

Reply of the distribution licensees

HERC has issued draft MYT regulations comments on which have been submitted by the distribution licensees. MYT terms and conditions have to be finalised by the Commission.

xviii. Domestic consumer category slabs

Objection

The assumption of UHBVNL that 0-40 slab of domestic consumers consumes 37.44% of power is unrealistic.

Reply of the distribution licensees

UHBVNL has submitted in its reply that allocation of sales within the domestic category has been done on the basis of sample studies based on field data.

xix. Loan funds, interest expenses and current assets / liabilities

Objection

The loan funds and interest expenses of the distribution licensees are increasing and have almost doubled in comparison to 2009-10. Similarly current liabilities have also increased but the current assets have decreased.

Reply of the distribution licensees

UHBVNL has submitted in its reply that interest on loans is based on the actual payment made and the interest charged on new loans is based on the current market conditions. The borrowing projected for 2011-12 include the financing of revenue gap as approved by the Commission in its tariff order for 2010-11. The financial burden of the distribution licensee has increased due to disallowance of working capital by the Commission.

xx. Guaranteed standards of performance

Objection

Despite being in place since 2004, the guaranteed standards of performance are not being implemented by the distribution licensees and not even a single consumer out of nearly 40 lakh consumers in Haryana has received any compensation for deficiency in services. DHBVNL is violating Peak Load Hour Restriction by switching off some industries while allowing 100% power to some other on the independent feeders. This is continuing since 2000-01 and thousands of crores have been lost by the distribution licensee by not levying PLEC. Defective meters should be replaced immediately to minimise losses. DHBVNL data of checking of bills by AE /JE / RA / Officials appear to be fictitious.

Supply interruptions are high in DHBVNL and as admitted in ARR there are 46.11% unattended consumer complaints in 6 months period in 2010-11. Most consumers are still unaware about complaint handling mechanism

Reply of the distribution licensees

Several steps are being taken regarding standards of performance. Bijli Suvidha Kendras have been set up in 11 district headquarters, which are working round the clock. Further, for redressing consumer complaints, Consumer Grievance Redressal Forum and Electricity Ombudsman are in place. Information in this regard is also being placed by UHBVNL on its website.

xxi. Domestic consumers living in Dhanis

Objection

The consumers living in Dhanis are being provided power supplies as per agriculture PRM i.e. for 6-8 hours a day and charged domestic tariff. They should be connected to rural domestic feeders.

Reply of the distribution licensees

UHBVNL has submitted that Government of Haryana has recently given its consent for meeting 50% expenditure regarding the shifting of Dhanis from segregated

agriculture feeders to domestic feeders. Necessary exercise in this regard is underway.

xxii. Depreciation

Objection

Depreciation is not a real expense. If value of some assets depreciates the value of land appreciates. Thus there should be no depreciation. However depreciation on assets like vehicles and furniture & fixture may be allowed. Depreciation in DHBVNL ARR has increased by more than four times in 2011-12 which need to be explained.

Reply of the distribution licensees

Depreciation is being claimed in accordance with the provisions of HERC regulations. The increase in depreciation is due to huge capital expenditure.

xxiii. Auditors comments on balance sheet

Objection

Auditors have recorded adverse comments on many items in the balance sheet of DHBVNL for which explanations may be obtained.

Reply of the distribution licensees

Outstanding amount against Govt. departments is increasing because they need to be given uninterrupted supply without disconnection. Some amount is involved in litigation and waiver schemes while some amount is involved in permanently locked premises. Inter Unit Transactions (IUT) are in the process of reconciliation. Interest on security is not payable if the security amount is less than Rs. 100/-.

xxiv. Traction tariff

Objection

Northern Railways have pointed out the following:

- a) That as per UHBVNL filing the cost of supply to railways is 4.03 which is the lowest amongst all the consumer categories. Whereas the cross subsidy

being levied is very high. Cross subsidy should not be more than $\pm 20\%$ of the cost of supply. They are making timely payments and drawing uninterrupted supply by contributing negligible T&D losses and are a public utility, therefore, their tariff should be reduced suitably.

- b)** Railways invest for erection of infrastructure and its maintenance for drawl of power. Distribution licensees do not need to spend anything on this. Further, they are also discharging social obligation. Therefore, demand charges should not be levied on Railways.
- c)** Load of Railways exceed due to various technical reasons which are not within the control of the Railways. Therefore, Railways may be exempted from payment of load violation charges.
- d)** Contract demand revision of Railways should be done by distribution licensee within 30 days from the date of application.
- e)** Incentive for timely payment should be provided to the Railways.
- f)** To minimise line losses the meter should be provided at Railways traction substation instead of grid substation of distribution licensee
- g)** Just like Uttarakhand and Delhi, Haryana should also allow high voltage rebate to Railways.
- h)** Just like UPPCL, BSES, NDPL, JVVNL schedule of domestic tariff should be allowed for Railways instead of bulk supply tariff for consumption in its residential colonies.
- i)** Since Railways maintain total infrastructure of substations, distribution network and individual metering etc. 15% rebate be given over total energy bill towards maintenance.

Reply of the distribution licensees

- a)** The average cost of service for FY 2011-12 is Rs. 6.12 per units and according to National Tariff Policy maximum tariff can be fixed at Rs. 7.34 / unit and minimum tariff at Rs. 4.89 / unit. The revised effective tariff for railways comes to Rs. 4.71 / unit which is below the limit of $\pm 20\%$.
- b)** UHBVN is sensitive to the social obligations of the Railways and ensure quality and uninterrupted supply by giving priority to railways over other consumers.
- c)** Over drawl of power results in load strain and wear and tear of the transmission and distribution systems for maintenance of which distribution

licensee has to spend extra money. Therefore, penalty is being imposed only when over drawl of power takes place.

- d) The distribution licensee agrees to formulate a time bound schedule as proposed by the Railways.
- e) There is no system of providing incentive / rebate for timely payment. Moreover this will increase financial burden of the distribution licensee.
- f) The current metering system of metering at distribution licensee substation is pragmatic and in line with the commercial principles. Further the downstream network is maintained by the Railways hence losses shall also be to their account.
- g) The tariff structure provides for lower tariff at higher voltage.

In some cases the objectors have also submitted rejoinders on which the distribution licensees have submitted the reply. The rejoinders and replies have been more or less the reiteration of the original submissions, cognizance of which has already been taken by the Commission. Hence, it is not considered necessary to give a summary of the same in this order for fear of repetition.

1.7. State Advisory Committee (SAC)

In accordance with the provisions of the Act and HERC (Establishment of State Advisory Committee) Regulations, 2004 the Commission held a meeting of the State Advisory Committee (SAC) on 29th March, 2011 in its conference hall at Panchkula. The agenda along with executive summaries of the ARR petitions of the distribution licensees were circulated well in advance. The Members discussed at length the issues of ever increasing revenue gap, system losses and consumer affairs. It was pointed out that despite reduction in cost of generation / power purchase, increase in sales and revenue the distribution licensees have shown increase in the revenue gap, which, for commercial organisations, is not acceptable. Non submission of proposal for bridging the revenue gap by the distribution licensees was objected to by a number of Members. The SAC Members were of the view that some revenue deficit could be covered by recovering outstanding dues, reducing system losses and interim subvention / subsidy by the Government of Haryana. The issue regarding introduction of two part tariff by levying of fixed charges and MMC in the tariff order for 2010-11 was also discussed. The Members of the SAC offered their valuable

comments / suggestions on the consumer services of the distribution licensees. The Members representing agriculture consumers gave their views as to how to reduce energy consumption by installing energy efficient pump sets and also desired the Commission to direct Power Utilities to hold camps in villages to release on-the-spot DS connections and to settle other issues relating to rural areas. The Commission has duly considered the views of the Members of SAC while finalizing the instant Tariff order.

2. ANALYSIS OF ARR FILINGS AND COMMISSION'S ORDER

The Commission, while passing this order for determination of ARRs of the UHBVNL and DHBVNL for the FY 2011-12, has taken into account their respective ARR Petitions, additional information/data provided by them, objections / suggestions of the stakeholders, replies of distribution licensees thereto, views expressed by the objectors during the public hearings and the valuable suggestions of the Members of State Advisory Committee.

2.1 Commission's Estimate of Energy Sales

2.1.1 AP Consumption

The Commission observes from the consumer category wise sales projections of the distribution licensees that about 51% of the total projected sales in FY 2011-12 in UHBVNL are to the Agriculture Power (AP) consumers, up from 47% in the previous year. The same in the case of DHBVNL is static at around 28%. The Commission observes that, even in the unmetered Agriculture category in both the distribution companies, despite the fact that the Commission over the years has clearly directed that no new unmetered connection should be released, the connected load as well as sales have increased as compared to the previous year. The licensees i.e. UHBVNL and DHBVNL have now submitted energy data from the segregated AP feeders. Accordingly, the estimate of energy sales to AP category by the Commission is on the basis of energy consumption recorded on the meters installed on the 11 KV AP feeders at the feeding sub – stations, which the Commission feels would provide a more realistic picture of the power flow to the AP consumers.

The Commission, for FY 2011-12, has estimated consumption of AP consumers on the basis of the actual consumption recorded by the energy meters installed on 11 KV segregated AP feeders at the grid substations as reported by UHBVNL and DHBVNL as well as a small percentage of consumption of AP consumers connected on feeders

other than the segregated AP feeders has been suitably accounted for. UHBVNL and DHBVNL have provided complete data of consumption recorded by the meters provided on segregated 11 KV feeders from April 2010 to February 2011 whereas the consumption data of the AP consumers connected on feeders other than segregated AP feeders has been provided up to December 2010 by UHBVNL and upto February 2011 by DHBVNL. The Commission has estimated AP consumption on segregated 11 KV feeders for the month of March 2011 and AP consumption from January 2011 to March 2011 on feeders other than segregated feeders in the case of UHBVNL and for March 2011 in the case of DHBVNL based on the past trend in order to assess the AP consumption for the complete year i.e. FY 2010-11.

As the above consumption data (except a small percentage of AP consumption on feeders other than the segregated feeders) is as per the 11 KV segregated AP feeder meters, the same has been adjusted for the estimated losses on the feeders so as to arrive at the consumption at the consumer end. The Commission has considered a loss level on the 11 KV segregated AP feeders at 16% to arrive at, the actual consumption at the consumer's end. To the consumption figure so arrived at, the AP consumption on the feeders other than the segregated feeders has been added to estimate the total AP consumption in FY 2010-11.

In order to work out the projected AP sales in FY 2011-12, the Commission has considered the load growth of 7% and 5% for UHBVNL and DHBVNL respectively based on the likely number of Agriculture tube wells to be added during the year.

The AP sales based on data submitted by UHBVNL and DHBVNL emanating from the 11 KV segregated Agriculture Feeders is presented in the Table 2.1 & Table 2.2 respectively.

Table 2.1 - AP Consumption data for FY 2010-11: UHBVNL

Months	AP Units 11 KV segregated feeders (MU)	AP Units on other feeders (MU)	AP consumption on segregated feeders (after adjusting 16% Loss) MU	AP Total Consumption (MU)	AP Connected Load (KW)
Apr-10	201.061	14.262	168.89124	183.15324	2648009
May-10	313.969	37.435	263.73396	301.16896	2709410
Jun-10	491.340	23.403	412.7256	436.1286	2771965
Jul-10	629.163	22.858	528.49692	551.35492	2826372
Aug-10	603.626	22.794	507.04584	529.83984	2864181
Sep-10	323.612	16.125	271.83408	287.95908	2919894
Oct-10	430.397	17.977	361.53348	379.51048	2922156
Nov-10	195.101	14.283	163.88484	178.16784	2926207
Dec-10	253.839	15.22	213.22476	228.44446	2933801
Jan-11	202.228	14 (Assumed)	169.87152	183.87152	2960576
Feb-11	169.69	14 (Assumed)	142.5396	156.5396	-
Mar-11	202.228 (Assumed)	13 (Assumed)	169.87152	182.87152	-
TOTAL	4016.251	225.3567	3373.65336	3599.01	2864437
LOAD FACTOR (%)				14.69	ALF (Average)
RUNNING HOURS				3.44	Per Pump Per Day
2011-12 Proj					
Taking in to account 7% load growth				3850	MU

As evident from the table above the recorded AP consumption is 4016 (rounded off) MU after adjusting the same for a line loss level of 16% i.e. 643 MU the net AP consumption in the case of UHBVNL works out to 3373 MU. The total AP consumption after adding the AP consumption on feeders other than AP segregated feeders i.e. 225 MU works out to 3599 MU. **In view of the above AP consumption for FY 2011-12 in the case of UHBVNL , after taking into account 7% load growth is assessed at 3850 MUs.**

Table 2.2 - AP consumption data for FY 2010-11: DHBVNL

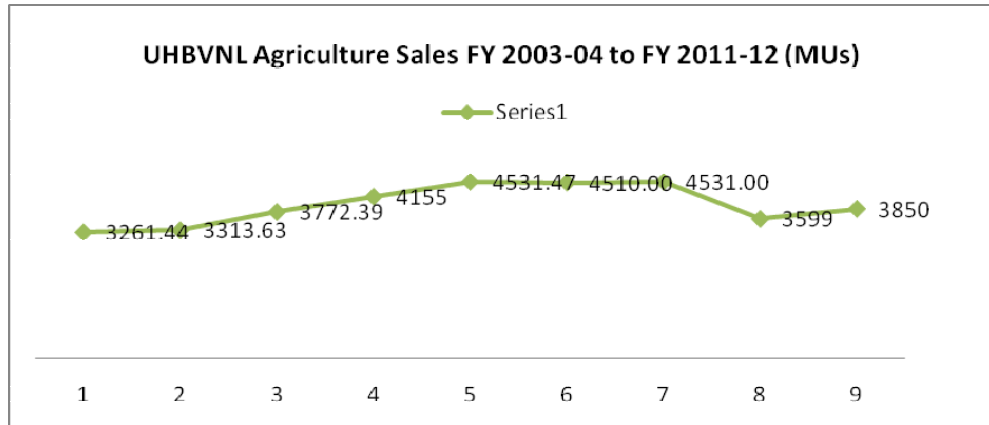
Months	AP Units 11 KV segregated feeders (MU)	AP Units on other feeders (MU)	AP consumption on segregated feeders (after adjusting 16% Loss) MU	AP Total Consumption (MU)	AP Connected Load (KW)
Apr-10	160.409	17.9122	134.74356	152.65576	1858381
May-10	244.237	17.9622	205.15908	223.12128	1894077
Jun-10	297.970	11.347	250.2948	261.6418	1912765
Jul-10	283.805	4.006	238.3962	242.4022	1931005
Aug-10	284.962	3.92	239.36808	243.28808	1941365
Sep-10	230.093	3.964	193.27812	197.24212	1950127
Oct-10	298.307	5.29	250.57788	255.86788	1955901
Nov-10	274.943	6.191	230.95212	237.14312	1952564
Dec-10	342.721	6.50	287.88564	294.38564	1962567
Jan-11	367.456	15.832	308.66304	324.49504	1970226
Feb-11	284.064	14.7	238.61376	253.31376	1977697
Mar-11	250.00 (Assumed)	15 (Assumed)	210	225	1936970
				-114*	23243645
TOTAL	3318.967	122.624	2788	2796.56	1936970
LOAD FACTOR (%)				16.48	ALF (Average)
RUNNING HOURS				3.96	
2011-12 Proj	Taking into account 5% load growth			2937	

**Consumption of consumers other than AP on the 11 KV segregated AP feeders.*

Similarly in case of DHBVNL, as is evident from the table above, the recorded AP consumption is 3319 (rounded off) MUs & after adjusting the same for a loss factor of 16% i.e. 531 MU, the net AP consumption works out to 2788 MU. The total AP consumption after adding the AP consumption on feeders other than AP segregated feeders i.e. 123 MU and reducing the same by 114 MU on account of consumption of other categories i.e. DS, NDS, Industrial etc. on segregated AP feeders works out to 2797 MU. **In view of the above, AP consumption for FY 2011-12 in the case of DHBVNL, after taking into account 5% load growth is assessed at 2937 MUs.**

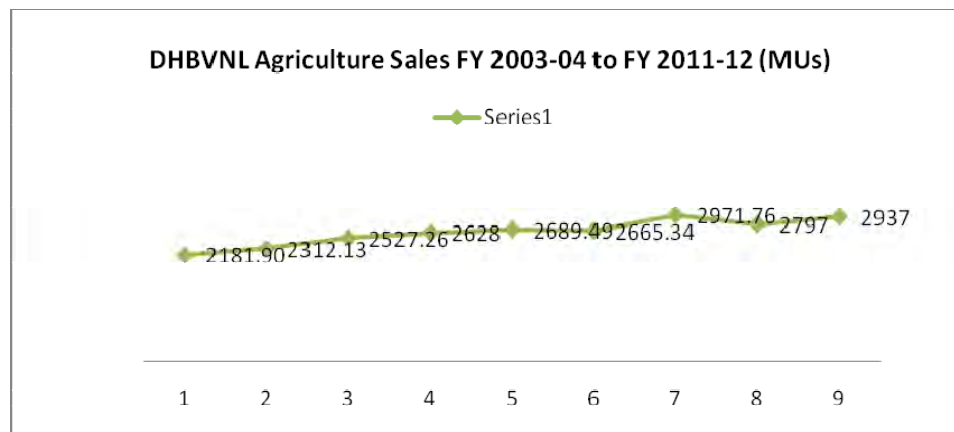
Accordingly, the total AP sale approved by the Commission for both UHBVNL and DHBVNL is 6787 Million Units for FY 2011-12.

A graphical analysis of the agriculture sales and connected load data from FY 2004-05 to FY 2010-11 and projection for FY 2011-12 is presented below:-



It is evident from the above sales graph that from FY 2004-05 to FY 2007-08 there was an increasing trend due to the fact that the load factor and hence the tube – well running hours data presented by UHBVNL was exaggerated. In the absence of segregated agriculture feeders and their metering data it was not possible for the Commission to correctly quantify the agriculture sales and hence the Commission had to rely on the load factor of the metered sales to AP consumers to assess the consumption of the un – metered AP consumers. Now with the availability of data from the segregated agriculture feeders, the projected sales graph shows a dip in FY 2010-11 as the tube well running hours estimated from the 11 KV feeders' data including AP consumption data from feeders other than AP feeders has yielded a lower load factor and lesser average tube well running hours per pump per day. As the sales figure of FY 2010-11 has been increased by 7% to estimate AP sales for FY 2011-12, the graph shows an increase over the previous year's sales but still AP sales for 2011-12 are at a lower level when compared to FY 2006-07 to FY 2009-10 AP sales figures estimated in the absence of segregated AP feeders.

Graphical analysis of AP sales in the case of DHBVNL from FY 2004-05 to FY 2010-11 and projection for FY 2011-12 is presented below:-



It may be seen from the above sales graph that from FY 2004-05 to FY 2008-09 there was an increasing trend due to the fact that the load factor and hence the tube – well running hours data presented by DHBVNL was exaggerated though not to the extent witnessed in UHBVNL. In the absence of segregated agriculture feeders and their metering data it was not possible for the Commission to correctly quantify the agriculture sales hence the Commission relied on the load factor of the metered sales to assess the consumption of the un-metered agriculture consumers. However, Now with the availability data from the segregated agriculture feeders the projected sales graph shows a dip in FY 2010-11 as the tube well running hours estimated from the 11 KV feeders data is on the lower side. Further, for estimating AP consumption in FY 2011-12 the Commission has considered a sales growth factor of 5% over the estimated AP consumption in FY 2010-11 the graph shows a rising trend. However, for the reasons already explained the AP consumption figure now estimated for FY 2010-11 and FY 2011-12 is still lower than AP sales figures for FY 2008-09 estimated in the absence of AP segregated feeders.

Despite the fact that the Electricity Act, 2003 prohibits unmetered supply to any category of consumers and the Commission's directive that no tube – well connections should be released without meters, the Commission observes from the connected load data of un-metered AP consumers that the same shows an increasing trend. The connected load of un-metered AP consumers has increased from 1176750 KW in FY 2004-05, in case of UHBVNL, to 1701660 KW in FY 2009-10 & is

above 60 % of total connected load in 2010-11. Similarly in case of DHBVNL, the connected load of un-metered AP consumers has increased from 639285 KW in FY 2004-05 to 790938 KW in FY 2009-10. This needs to be looked into by both the licensees. The increasing trend in the AP sales in the past & the projection for 2010-11 & 2011-12 also replicate the same though the number of un-metered AP consumers have marginally declined. Due to the increasing past trend the projection for FY 2010-11 and FY 2011-12 also replicates the same though the number of unmetered agriculture consumers has marginally declined.

2.1.2 Metered Sales (Other than AP)

As the Commission's estimate of sales to the agriculture consumers is lower than the sales volume of AP consumers estimated by the utilities, the sales mix as well as financial profile gets impacted. The distribution losses get restated as excess units allocated to the agriculture consumers' shift to other categories of consumers in proportion to their annual growth as well as growth in overall power availability in Haryana and the distribution loss target set by the Commission. Due to rapid urbanization and commercialization / industrialization specially in the NCR region with a high degree of elasticity in electricity demand, it is not surprising to see a much faster growth in electricity consumption / sales in consumer categories like domestic, non – domestic and Industries. Resultantly, the revenue as assessed by the Commission for these categories, as such, is also on a higher side as compared to that assessed by the utilities.

Till FY 2010-11 there existed substantial unmet demand in Haryana as was evident from power regulatory measures adopted by the distribution companies and restricted supply to the Agriculture consumers despite short term power purchase from the market over and above power purchase tied up through long term PPAs. The scenario in FY 2011-12 seems to be changing with commissioning of new projects in the central, state as well as private sector from which additional power is expected to flow to Haryana.

The Commission has traditionally based estimation of power availability on the CEA generation targets. Thus the Commission has relied on the CEA's generation targets provisionally determined for FY 2011-12 with suitable adjustments to account for auxiliary consumption and share of home state in the hydel Power Stations of NHPC. The Commission observes that in view of the likely coal shortage, CEA has lowered the estimate of power availability from the central thermal power stations. However, with commissioning of new generating power stations in Haryana, the overall availability of power is expected to be comfortable.

The power utilities have proposed availability of 44029 million units in FY 2011-12 as against 38693 MU estimated availability in the previous year. The proposed availability includes 2676.47 million units from short term sources. The Commission, in FY 2011-12, has decided not to make any provision for drawl of power under short – term / bilateral sources including UI mechanism on the belief that both thermal units of 300 MW each at Yamunanagar would stabilise & besides two Units of RGTPP (Hisar) of 600 MW each would also be available to their full capacity in FY 2011-12. In addition to power availability from new sources including 750 MW from NTPC IGSTPS Jharli in FY 2011-12, there may not arise the requirement of drawing short term power. Thus the short term Power Purchase has not been considered by the Commission while estimating likely power availability in FY 2011-12.

The Commission has earlier determined the target for intra-state transmission losses for FY 2011-12 as 2.1% in its ARR/ Tariff order dated 26.04.2011 for Transmission and SLDC business of HVPNL. The distribution loss target for the distribution licensees for FY 2011-12 has been approved by the Commission at 22% i.e. a reduction of 1% over the loss target fixed by the Commission for 2010-11. Accordingly, the energy available in the distribution system of the distribution licensees work out to 36075 MUs as per details given in Table 2.14 here in after and the total energy available for sale to the consumers of UHBVNL & DHBVNL work out to 28138 MUs. The consumer category wise sales forecast based on Annual Average Load Factor (excluding agriculture) has accordingly been adjusted to the extent of volume of energy

available as above, in proportion to the consumer category wise projected sales, excluding agriculture. Based on the aforesaid methodology, the Commission's estimate of energy sales to various categories of consumers, other than AP, alongwith AP consumption (metered and unmetered) as determined in the earlier paragraphs and fisheries and Horticulture consumption for FY 2011-12 is presented in the table below:

Table 2.3 - Approved Sales FY 2011-12 (Million Units)

Consumer Categories	HERC Approval - UHBVNL	HERC Approval - DHBVNL
Metered Sales (Other than AP)		
Domestic	2480	3470
Non Domestic	855	1216
HT Industry	3003	5713
LT Industry	778	792
MITC	4	0
Lift Irrigation	34	173
Railway Traction	148	203
Bulk Supply	266	1307
Street Light	49	37
PWW	349	445
Metro (DMRC)	0	26
Sub Total	7965	13382
AP Sales		
Agric. Metered	1620	1832
Agric. Un Metered	2230	1105
Fisheries & Horticulture	4	0
Sub - Total	3850	2937
Total	11819	16319

2.2 Power Purchase

2.2.1 Projections by UHBVNL / DHBVNL

The Haryana Government in exercise of powers conferred by section 131 of the Electricity Act, 2003 transferred the rights relating to procurement of electricity /UI draws/dispatches or trading of electricity from HVPNL/HPGCL to UHBVNL and DHBVNL (the two state owned distribution licensees in Haryana) w.e.f. 1/04/2008 with the functional arrangements becoming operational w.e.f. 15/04/2008. Consequently Haryana Power Purchase Centre (HPPC) was set up to manage the bulk power purchase (both intrastate and interstate) and bulk supply functions for two distribution licensees. HPPC procures power from the

Central Generating Stations from where power has been allocated to Haryana and from time to time additional allocations are made from the central un – allocated quota in the CPSUs and other external sources i.e. NTPC, NHPC, NPC, short term/bilateral arrangements, shared projects such as BBMB as well as power made available by HPGCL from the state generating stations. The shortage in supply due to excess demand is met through trading sources.

In order to assess the availability of power from different generating stations to meet their sales requirement in FY 2011-12 the distribution licensees have considered the following:-

- (a) Actual generation available from April 2010 to September 2010.
- (b) Program energy for the period September 2010 to March 2011 (considering the program energy for the entire year, less the program energy till September 2010); and
- (c) Past trend of actual generation achieved vis –a – vis program energy for each station, taking a weighted average over the past three years giving a greater weight to the immediate previous year i.e. FY 2009-10.

The total volume of Power Purchase for 2011-12 has been estimated by UHBVNL & DHBVNL combined as 44029 MUs.

2.2.2 Commission's Estimate of power purchase

As per the submissions of the distribution companies, Haryana is an energy deficit state at present and will likely to continue to be so during FY 2011-12 despite the fact that a few new generation sources will be functional in near future. However, it is apprehended that the likely demand increase will outstrip the availability / supply. Thus, the licensee(s) power procurement projections are not demand - driven but based on estimates of power availability from various generating sources, traders and bilateral arrangements.

In a supply driven market, the Commission believes, that the generators themselves are the most reliable source for projecting power availability from their respective power stations. The issue of forecasting power availability becomes complex in the cases where Haryana shares power from a generating station with other states. Availability of power in such instances does not solely depend on Haryana's own share but also on complex factors like over or under drawl of power compared to its share, distribution of unallocated power to member states, availability of other members' unused share and non-utilization of its own share.

The entitled volume of power according to allocated and unallocated power from CPSUs for FY 2011-12 can be projected on the basis of overall generation targets finalised by the Central Electricity Authority (CEA) in consultation with the generators. The generation targets are arrived at by the CEA based on discussions with the respective states, the generation programme given by Generators, the performance of the generating stations, planned maintenance requirement and average forced outages during the last few years as well as anticipated coal supply scenario in case of the thermal powerhouses. As the generation targets for FY 2011-12 have not been, so far, finalized by the CEA, the Commission, in order to estimate the share of Haryana from Central Sector power Stations and other sources wherever applicable i.e. BBMB has relied on the generation targets provisionally determined by CEA for FY 2011-12 with suitable adjustments for the known factors based on the past trend including for the new sources that are likely to be available in the current financial year.

The Commission's approval of the volume of power purchase in FY 2011-12 is based on the following:

- i) The Commission has reduced the CEA's gross generation targets by normative auxiliary power consumption and reduced the total availability from NHPC stations to the extent of free power commitment to the respective home state. Haryana's shares in the Central projects, allocated plus unallocated, have been pegged at the previous year's level as determined by the Northern Region

Power Committee. The volume of energy has been estimated from the net generation so arrived at.

- ii) As the Commission has determined HPGCL's Generation target(s) and tariff(s) for FY 2011-12, the same has been adopted as the volume of power available from HPGCL generating stations i.e. PTPS (Units 1-8), DCR TPS (Units 1&2), RGTPS (1 & 2) and WYC & Kakroi hydel stations.
- iii) As per the terms and conditions of the Power Sale Agreement (PSA) signed with PTC for Lanco Amarkantak Power and Budhil Power, the same should have been available to Haryana in FY 2010-11. However, as reported by the power utilities in the public hearings, these projects have been delayed and power availability from these projects did not materialise in FY 2010-11. However, the Commission observes from CEA's generation targets that power from Budhil (Lanco Green Power Pvt. Ltd) Karcham Wangtoo (Jaypee Kraccham Hydro Corporation Ltd.), ,Koteshwar (Tehri HYdor Development Corporation Ltd.) Uri II (J&K) and Mejia Stage II would be partly available during FY 2011-12. Consequently, for the purpose of estimating power availability in FY 2011-12, availability of power from these new sources has been considered.

The volume of power purchase from each source approved by the Commission for FY 2011-12 is discussed in the next few paragraphs. As the Power Purchase Agreements have been allocated in 1:1 ratio to UHBVNL & DHBVNL and HPPC procures power on behalf of both the Distribution licensees, the projections are for Haryana as a whole.

2.2.2.1 Availability of power from HPGCL

The Commission has considered power availability at the bus bar from HPGCL sources as per its order dated 18th April 2011 in Case No. HERC/PRO-1 of 2011 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariffs for FY 2011-12. The details are presented in the table below.

Table 2.4 - Power purchase volume from HPGCL (MUs)

Particulars	Power Purchase in FY 2010-11	Discoms Proposal for FY 2011-12	HERC Approval for FY 2011-12
HPGCL	19,294.88	21,820.22	21,631

2.2.2.2 Availability from NTPC Faridabad CCGT (FGPP)

The 432 MW Faridabad gas based power station of NTPC is a dedicated station for Haryana. It was expected to generate 2900 MUs in FY 2010-11. However, as per Discoms filing 2856.63 MUs was available to Haryana in FY 2010-11. The volume from this source has been considered as per CEA's generation target for FY 2010-11. The generation target determined by CEA is 2844 MUs and after reducing auxiliary power consumption from gross generation target the Commission allows 2759 MUs from this source in FY 2011-12. The Commission's approved volume from FGPP is as per the table below.

Table 2.5 - Power purchase volume from FGPP (MUs)

Particulars	Power purchase in FY 2010-11	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
Faridabad CCGT	2856.63	2919.14	2759

2.2.2.3 Availability of power from shared projects of BBMB & IPGCL

HPPC has share (to the extent of shares owned by HVPNL in the shared projects) in capacity entitlement to the extent of 33.02% in Bhakra, 32.02% in Dehar, 16.67% in Pong (all BBMB stations) and 33.33% in IPGCL (units 2, 3&4).

The Commission approves the volume of power purchase equivalent to the share entitlement of Haryana in BBMB projects as per generation target(s) approved by CEA for FY 2011-12 after reducing the same by 0.5% on account of auxiliary consumption. The details are as under:

	Installed Capacity	Generation
	AS ON 31.03.2012	2011-12
	(MW)	(MU)
BBMB		
Bhakra (L) & (R)	540.00	4900.00
Aux Consumption (%)		0.50%
Net Available (MU)		4875.50
Haryana Share		1609.90

Dehar	990.00	3000.00
Aux Consumption (%)		0.50%
Net Available (MU)		2985.00
Haryana Share		955.80
Pong	396.00	1123.00
Aux Consumption (%)		0.50%
Net Available (MU)		1117.40
Haryana Share		186.30
Total Haryana share		2752.00

The availability of power purchase volume from IPGCL has not been considered as the IPGCL generating station in which Haryana has share entitlement has been phased out and hence no generation will be available from this source.

Table 2.6 - Power Purchase Volume from Shared Utilities (MUs)

Particulars	Power purchase in FY 2010 -11	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
BBMB	2700	2700	2752
IPGCL	126.91	0	0
Total	2826.91	2700	2752

Consequently, the total volume of power projected to be available to the Discoms from the shared utilities during FY 2011-12 is 2752 million units.

2.2.2.4 Availability of power from NTPC power stations

Haryana continues to draw more than its entitlement of power from NTPC stations. The overdrawals are largely because of the following reasons:

- NTPC stations generating over and above the CEA Schedule as they operate much above the normative plant load factor.
- Allocation out of 15% unallocated central quota by Ministry of Power, Govt. of India based on the needs of the State.
- Drawing un-requisitioned shares of other constituents.

The Commission has based its approval on the CEA's generation targets for FY 2011-12 after adjusting the same for actual availability reported up to February 2011. Availability has been adjusted for

Haryana's share, inclusive of allocation out of unallocated power from Central Sector Power Stations.

The details of power availability during FY 2010-11, Discom's proposal for FY 2011-12 and Commission's approval of power purchase volume from NTPC stations are presented in the table below.

Table 2.7 - Power purchase volume from NTPC (MUs)

Particulars	Power purchase in FY 2010 - 11	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
Singrauli	1787.93	1696.35	1837
Rihand I	477.78	604.3	658.5
Rihand II	584.49	560.89	608.5
Unchahar I	92.46	103.30	102
Unchahar II	236.72	235.24	232
Unchahar III	100.76	120.79	119
Anta Gas	233.65	200.41	248.46
Auraiya Gas	308.56	299.49	319
Dadri Gas	331.63	322.79	329.14
Farakka STPS	53.23	85.63	184.71
Kahelgaon I & II	442.30	395.60	410.37
IG STPS	709.70	4116.24	492
Total	5359.21	8741.03	5540.68

2.2.2.5 Availability of power from NHPC sources

The Commission's approval of availability from NHPC sources for FY 2011-12 is based on the CEA's generation targets adjusted for auxiliary consumption, home state's share and actual availability reported up to February 2011. The Commission's approval of volume of power purchase volume from NHPC generating stations is presented in the table below:-

Table 2.8 - Power purchase volume from NHPC (MUs)

Particulars	Power Purchase in FY 2010-11	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
Bairasiul	218.84	194.88	164.86
Salal	452.92	446.51	395.86
Tanakpur	23.89	28.59	24.75
Chamera I	378.99	346.71	212.79
Chamera II	120.30	106.38	73.03
Uri	159.58	147.18	128.59
Dulhasti	172.56	148.90	148.84
Dhauri Ganga	92.37	78.84	54.05
Sewa II	24.33	27.32	24.50
Total	1643.78	1525.31	1227.27

2.2.2.6 Availability from NPC sources

The Commission's approval of power purchase volume from Nuclear Power Corporation (NPC) i.e. NAPP and RAPP sources is again based on Haryana's share in the target generation, including allocation out of unallocated quota based on the past trend, net of auxiliary consumption. The Commission's approval of power purchase volume from NPC source is presented in the table below.

Table 2.9 – Power purchase volume from NPC (MUs)

Particulars	Power purchase in FY 2010 - 11)	Discoms proposal for FY 2011-12	HERC approval for FY 2011-12
NAPP	66.14	93.88	138.67
RAPP	482.66	482.66	447.20
Total	548.8	576.54	585.87

2.2.2.7 Power purchase through short term/bilateral/UI mechanism

The Discoms in their FY 2011-12 ARR petition have proposed drawl of power under short - term / bilateral & UI mechanism to the extent of 2676.47 MUs.

The Commission has been allowing short term purchases based on agreements entered into for the purpose. In the instant case the distribution companies have not submitted any agreements with the Electricity Traders / IPPs etc. The Commission, in principle, does not object to purchase of short term power from time to time at a rate not exceeding the average approved power purchase cost. However, with the commissioning of HPGCL's 2X600 MW RGTPS, Hisar and stabilization of 2 X 300 MW DCR TPS, IG STPS and availability of additional power from other new sources, the power availability scenario in the State is expected to improve considerably in FY 2011-12 as compared to the previous years. This is also evident from the fact that UHBVNL has proposed inter-state sale of 1000 MUs. Thus there may not be any need to depend on expensive short term power / UI drawls. Consequently, the Commission, while estimating volume of power purchase, has not considered any power from short – term arrangements including drawl under UI mechanism in FY 2011-12. The

Commission, however, has no objection in case the power utilities sell / bank any surplus power available to them after meeting the requirements of the electricity consumers of Haryana. The approved power purchase volume from short term/bilateral sources is presented in the table below.

Table 2.10 – Power purchase Short-term bilateral/UI mechanism (MUs)

Particulars	Power purchase in FY 2010-11)	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
Short Term/ Bi-lateral/UI	5142.84	2676.47	Nil

2.2.2.8 Power Purchase from Other Sources

a) Power Procurement from a few other sources proposed by the distribution companies includes SJVNL and Tehri Hydro Development Corporation Ltd., PTC (J&K), Mejia TPS, Parbati III, Koteswar THDC, Pragati CCGT III, Ultra Mega Projects Mundra and Koderma. The Commission allows availability from these sources based on CEA's generation targets for FY 2011-12 where ever available adjusted for actual availability from these sources in the recent past as reported by the distribution utilities.

Table 2.11 - Power Purchase from Other Sources (MUs)

Particulars	Power purchase in FY 2010 - 11	Discoms proposal for FY 2011-12	HERC Approval for FY 2011-12
SJVNL HEP	393.46	329.86	311.89
Tehri HEP	265.12	157.41	158.45
Tala HEP	52.84	57.64	47.30
PTC (J&K)	300.60	300.60	300.6
Parbati III	0.00	12.13	12.13
Koteswar THDC	5.53	12.91	11.39
Pragati CCGT	0.00	495.11	480.18
Ultra Mega (Mundra)	0.00	272.52	272.52
Koderma	0.00	459.79	459.79
Mejia TPS II	113.55	681.31	407.40
Total	1131.1	2779.28	2461.65

Note: The volume of power purchase from PTC (J& K) Parbati III, Ultra Mega (Mundra) and Koderma is as proposed by the Discoms

b) Availability of Power from Independent Power Producers

In addition to the power availability from Central Sector, State Sector and Shared Utilities, the distribution licensees have projected availability

of power from Budhil (Lanco Green Power Private Ltd). The Commission observes that besides Budhil, the Commission has also approved PPA with Karcham Wangtoo (Jaypee Karcham Hydro Corporation Ltd) and as per CEA's projection, power flow from this source is expected from September 2011. Hence the Commission, based on CEA's generation target for FY 2011-12 has considered availability of power from these sources as well in accordance with the entitlement as per the PPAs approved by it. The details are as under:-

	Power purchase in FY 2010 - 11 (MU)	Discoms proposal for FY 2011-12 (MU)	HERC Approval for FY 2011-12 (MU)
Budhil	0.00	239.91	56.72
Karcham Wangtoo	0.00	0.00	246.16
Total	0.00	239.91	302.88

c) Availability of Power from Renewable Energy Sources

The Commission is committed to encourage cogeneration and non-conventional fuel based generation in the State and accordingly allows power purchase volume, as proposed by Discoms, from renewable sources for which PPAs have been approved by the Commission.

The approved power purchase volume from renewable energy sources is presented in the table below:

Table 2.12 - Approved power purchase volume from renewable energy sources

	Power purchase in FY 2010 - 11 (MU)	Discoms proposal for FY 2011-12 (MU)	HERC Approval for FY 2011-12 (MU)
P&R Gogripur	1.31	2.63	2.63
Bhoruka Power	10.38	11.11	11.11
Puri Oil Mills	0.00	14.57	14.57
Solar Power	0.00	9.51	9.51
Total	11.69	37.82	37.82

2.2.2.9 Total approved power purchase volume:

Based on the source wise approvals as presented above, the Commission determines gross power availability of 37,298.17 MUs rounded off to 37298 MUs during FY 2011-12 as per details given in Table 2.13.

2.3 Power Purchase Cost

The cost of purchase of power is largely a known parameter. The amount payable by the Distribution licensee(s) is based on power purchase agreements with various generators that clearly establish the price determination procedure. In case of central power sector units (CPSU's) or other generators supplying power to more than one state, the tariffs as approved by the Central Electricity Regulatory Commission (CERC) are applicable. Most of the elements constituting the total cost of generation i.e. capacity charges, base energy related charges, adjustment of base energy charges for cost of fuel and other factors, taxes, duties, incentive payments etc. are well defined and can be estimated with a reasonable degree of accuracy.

The Power Purchase cost has been estimated by the distribution licensees largely based on the relevant tariff orders, recent bills, existing arrangement and an assumed escalation factor for each source of power. The total power purchase cost for the projected purchase of 44029.19 MUs in FY 2011-12 for both UHBVNL and DHBVNL together have been assessed at Rs. 116668.2 Million in the ARR petitions.

The Commission had laid down the following approach for determination of power purchase cost in its previous orders:-

- "Where a PPAs / MOUs exist, cost should be determined accordingly".
- "In case of CPSUs or other generators, who are supplying power to more than one state, where payments are governed as per generation tariffs as approved by CERC, the cost should be taken based on CERC tariffs & the methodology adopted therein".
- "Where neither PPA nor CERC Tariff or Notifications are available for any reason, projections can be made based on the latest available rates as per invoices".
- "Estimation should be made for various components separately and a reasonable level of escalation in costs should be assumed for those elements that are expected to undergo change".

The Commission observes that the licensees have not generally complied with the principles of projecting power purchase cost set in the previous orders of the Commission. Consequently, the Commission feels that the most appropriate basis for estimation of power purchase cost would be the actual annual average cost of power from various generating / trading sources in FY 2010-11 and as per the tariff as applicable as per the approved PPA / generation tariff order in the relevant cases including renewable sources of power. Thus, for the station wise power purchase rate, the Commission has considered the actual average rate available up to February 2011 or the rate as per the approved PPAs.

The Commission has not considered any escalation factor as the amended FSA Regulations notified by the Commission provide for the adjustments (both plus or minus) on account of variation in cost of power purchase from the approved sources due to variation in CERC

rates or fuel cost in case of CPSUs including for any FSA claimed by HPGCL due to variations in fuel cost on a monthly basis without filing any FSA petition seeking approval of the Commission.

2.3.1 Tariff for power from CPSUs (NTPC, NHPC & NPC)

The tariff for power purchase from central sources have been considered at the average rate of power purchase in FY 2010-11 (up to February 2011).

2.3.2 Price for HPGCL power

The Commission under sub - section 1(a) of section 86 and sub section 1(a) of section 62 of the Electricity Act 2003 has determined HPGCL's generation tariffs for FY 2011-12 vide its order dated 18th April 2011 (Case No HERC/PRO – 1 of 2011). The approved station wise rates in the above-mentioned order of the Commission have been considered for determining the cost of power from HPGCL stations.

2.3.3 Price of Shared utility power.

HVPNL, as per the transfer scheme notified by the Government of Haryana, has ownership interest to the extent of equity shares in IPGCL and BBMB projects and the corresponding share in capacities have been allocated to HPPC. HVPNL has to bear its share of net O&M cost in respect of BBMB projects, i.e. net of O&M charges less credit for HVPNL share of revenue for sale of power to common pool consumers. However, in line with the Hon'ble Appellate Tribunal's order on cost of BBMB power, the Commission for FY 2011-12 allows tariff for power from BBMB as proposed by the Discoms which, besides O&M expenses, also includes depreciation and interest on Haryana's share of the Capital Expenditure.

The cost of power from IPGCL in respect of Unit No. 2,3 & 4 has not been considered as these power stations, in which Haryana had share, have been phased out.

2.3.4 Price of Power Purchased from Other Sources

The Commission has relied upon the average power purchase rate as per the FY 2010-11 invoices raised by the generators in case of SJVNL,

Farakka, Tala HEP, Dhulhasti, Dhauliganga, Tehri, Kahalgaon I and Kahalgaon II in lieu of Tala. The Commission has not separately allowed wheeling, Open Access and other charges for these power stations as no separate details were provided by the Discoms thus the same is assumed to be included in the per unit average rates considered by the Commission.

2.3.5 Price of Short term Power purchase/bilateral arrangements

The Commission has not considered any short term purchases or drawl under UI mechanism and hence for estimating power purchase cost in FY 2011-12 the cost of the same has not been considered.

2.3.6 Details of volume, rate & cost of power purchase from various sources

The details of approved rates (Rs/kWh) and cost (Rs. Million) for purchase of power alongwith approved volume (million units), from various sources for FY 2011-12 are presented in the following table.

Table 2.13 - Details of volume, rate & cost of power purchase, as approved by the Commission, from various sources for FY 2011-12

Sources of Energy	Volume (MUs)	Rate Rs/unit	Cost (Rs. Mln)
(A)Energy Generated within the Haryana State			
HPGCL	21631	3.15	68,137.65
FARIDABAD CCGT	2759	3.02	8332.18
INDIRA GANDHI STPS (HR)	492	2.46	1210.32
Renewable (Haryana)			
P&R Gogripur	2.63	3.84	10.10
Bhoruka Power	11.11	3.17	35.22
Puri Oil Mill	14.57	3.89	56.68
Solar (JNNISM)	9.51	17.92	170.42
Sub Total (A)	24919.82		77,952.57
(B) Energy procured from out of the State sources			
<u>BBMB</u>			
Bhakra	1609.9	0.55	885.45
Dehar	955.8	0.55	525.69
Pong	186.3	0.55	102.46
NTPC Ltd.			

SINGRAULI STPS (UP)	1837	1.76	3233.12
RIHAND STPS (UP)	1267	2.15	2724.05
UNCHAHAR TPS (UP)	453	2.82	1277.46
ANTA CCGT (Rajasthan)	248.46	3.13	777.68
AURAIYA CCGT (UP)	319.14	3.12	995.72
DADRI CCGT (UP)	329	3.13	1029.77
FARAKKA STPS (WB)	184.71	2.89	533.81
KAHALGAON TPS (Bihar)	410.37	3.17	1300.87
NHPC			
Baira Siul (HP)	164.86	0.94	154.97
Salal I (J&K)	395.86	0.72	285.02
Tanakpur (Uttra.)	24.75	1.42	35.14
Chamera St.-I (HP)	212.79	1.33	283.01
Chamera St.-II (HP)	73.03	2.96	216.17
Uri (J&K)	122.77	1.5	184.16
Uri - II (J&K)*	5.82	3.32	19.32
Dulhasti (J&K)	148.84	4.81	715.92
Dhuali Ganga (Uttra.)	54.05	2	108.10
Sewa-II (J&K)	24.5	3.02	73.99
NPC			
NAPP. Total	138.67	2.04	282.89
RAPP Total	447.2	2.68	1198.50
Other Sources			
Nathpa Jhakri (SJVNL)	311.89	2.5	779.72
Tehri HEP (THDC)	158.45	4.16	659.15
Koteswar * (THDC)	11.39	4.67	53.19
Tala (THPA, Bhutan)	47.3	1.84	87.03
PTC J&K	300.6	3.74	1124.24
Parbati III (NHPC)	12.13	3.69	44.76
Pragati CCGT (Delhi)	480.18	3.35	1608.60
Ultra Mega (Mundra)	272.52	2.3	626.80
Koderma (DVC)	459.79	2.56	1177.06
Mejia TPS Stg II (DVC)	407.4	3	1222.20
IPPs			
LANCO Budhil *	56.72	2.28	129.32
JAYPEE Karcham Wangtoo*	246.16	2.33	573.55
Sub Total (B)	12378.35		25028.89
Grand Total A+B	37298.17		102,981.46

* New generating stations from which power is expected to be available in FY 2011-12

In accordance with the source wise volume and cost of power approved by the Commission as indicated in the table above, the

total volume of power expected to be available in FY 2011-12 works out to 37,298 MUs at a cost of Rs. 102981.46 million. The average rate of power purchase allowed by the Commission in FY 2011-12 works out to Rs. 2.76 / kWh without accounting for inter-state and intra-state transmission losses.

The rates approved by the Commission are inclusive of transmission/wheeling charges, open access charges, central RLDC charges and LC charges. These charges have not been, accordingly, separately provided for.

2.4 Transmission Losses

The Commission in its order on Aggregate Revenue Requirement for Transmission Business & SLDC for FY 2011-12 dated 26th April 2011 (Case No. HERC/PRO – 2 of 2010) has approved the intra-state transmission losses at 2.1% for FY 2011-12 and has also provided that inter- State transmission losses for FY 2011-12 shall be taken as 3.63%, the actual for 2009-10. Resultantly, the net energy available for sale to the Discoms works out to 36,075 million units. The details are presented in the table below.

**Table 2.14 - Energy available for sale to distribution business
(FY 2011-12)**

	Description	Computation	HERC Approval
1	Gross Energy Procured from out of state sources (MU)	1	12378.35
2	Interstate transmission loss %	2	3.63
3	Interstate transmission loss (MU)	3= 1*2	449.33
4	Net Energy available from out of state sources (MU)	4 = 1-3	11929
5	Add energy generated within the State (MU)	5	24,919.8
6	Net Energy available for use in Haryana	6=4+5	36,849
7	Intra - state transmission loss (%)	7	2.1
8	Intra - state transmission loss (MU)	8=6*7	774
9	Energy available for sale to distribution licensee	9= 6-8	36,075
10	FY 2011-12 Power Purchase Cost	Rs. Million	102981.46
11	Average Bulk Supply Tariff	Rs/kWh	2.85

2.5 Renewable Purchase Obligation (RPO)

Section 86 (1) (e) of the Electricity Act, 2003 mandates the Commission to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for mandatory purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of distribution licensee. Accordingly the Commission notified HERC (Terms and Conditions for determination of Tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable energy Certificate) Regulations, 2010. As per regulation 64 of these regulations, it is obligatory upon the distribution licensee to purchase the specified percentage of their electricity consumption from renewable energy sources during each financial year. The RPO for FYs 2010-11 and 2011-12 has been decided as under:

Table 2.15 - Renewable Purchase Obligation for 2010-11 and 2011-12

Financial year	Energy Consumption or energy available for sales with the discoms (MU)	%age of overall RPO	Renewable energy (other than solar) required to be purchased as per overall RPO (MU) (2x3)	%age of solar RPO (as a %age of overall RPO)	Energy required to be purchased as per solar RPO (MU) (4x5)	Total renewable energy required to be purchased (MU) (4+6)
1	2	3	4	5	6	7
2010-11	32996	1.50%	495	0.25%	1.24	496
2011-12	36075	1.50%	541	0.31%	1.69	543

The volume of energy to be purchased from renewable energy sources as per above table is the total RPO of the distribution licensee for the financial years 2010-11 and 2011-12. Therefore, the volume of renewable energy purchase as approved by the Commission in Table 2.13 shall be adjusted against the total RPO of the distribution licensees. Further, RPO of 543 MUs shall be part of total power purchase volume approved by the Commission for FY 2011-12 and set off against the costliest power in the merit order.

In case the distribution licensees fail to purchase the requisite energy from renewable energy sources then the difference between energy required to be purchased from the renewable energy sources and the actual energy purchased from such sources shall be regulated in accordance with the provisions of regulation 65, 66 and 67 of the aforesaid regulations of the Commission.

The State Agency i.e. HAREDA shall submit, by 15th of 1st month of each quarter, requisite quarterly status of RPO met, separately for overall RPO and solar RPO, in accordance with the provisions of regulations 66 (3) of the HERC renewable energy regulations in the following format.

Name of distribution licensee	Overall RPO / Solar RPO (MU)	Name of renewable energy source	Capacity	Generation during the financial year (MU)	Quantum of energy procured by distribution licensee (MU)	Difference (MU) (2-6)
1	2	3	4	5	6	7

The distribution licensees are directed to provide requisite information to the State Agency on monthly basis by 10th of every month to enable the State Agency to submit quarterly status to the Commission.

2.6 Intra-State Transmission Charges & SLDC Charges

The Commission, vide its order on Transmission Tariff and SLDC charges dated 26.4.2011, has approved Rs 8687.18 million as Transmission charges and Rs. 127.84 million as SLDC charges for FY 2011-12. For UHBVNL, the transmission charges @ Rs. 363.99 million per month translate into an annual cost of Rs. 4367.91 million. The SLDC charges are to be shared in 1:1 proportion between UHBVNL and DHBVNL and hence the SLDC cost for UHBVNL is considered as Rs.63.92 million for FY 2011-12.

For DHBVNL, the intra-state transmission charges are Rs 359.94 million per month and this translates into annual transmission cost of Rs. 4319.27 million for the full year. The share of SLDC charges for DHBVNL is Rs. 63.92 million for FY 2011-12.

2.7 Operation and Maintenance expenditure

The operation and maintenance expenditure comprises of Employees' cost, Repair & Maintenance expenses and Administration & General expenses which are analyzed under this sub-head. The actual audited expenses for FY 2009-10, expenses approved by the Commission for 2010-11 and expenses projected by the licensees in the ARR petitions

for FY 2011-12 under each of these account heads are given in the Tables 2.16 & 2.17.

Table 2.16 - UHBVNL Proposal for O&M expenses (Rs. million)

Particulars	Audited Actual of UHBVNL for FY 2009-10	HERC Order on UHBVNL for FY 2010-11	UHBVNL Proposal -for FY 2011-12
Wages, salaries and related costs	7557.70	5999.85	8177.50
R&M expenses	460.40	634.86	1121.30
A&G expenses	448.40	458.03	588.40
Total O&M Expenditure	8466.50	7092.74	9887.20

Table 2.17 - DHBVNL Proposal for O&M expenses (Rs. million)

Particulars	Audited Actual of DHBVNL for FY 2009-10	HERC Order on DHBVNL for FY 2010-11	DHBVNL Proposal - for FY 2011-12
Wages, salaries and related costs	8926.30	5210.63	5035.10
R&M expenses	397.10	586.97	925.90
A&G expenses	808.80	735.32	1115.70
Total O&M Expenditure	10132.30	6532.92	7076.70

UHBVNL and DHBVNL in their ARRs under consideration have projected their expenditures on the basis of FY 2009-10 audited accounts. This being the latest available audited accounts, the Commission has also considered the same with appropriate adjustments for approving various expenses comprising the aggregate revenue requirements for FY 2011-12 for the distribution and retail supply business.

2.7.1 Employees' cost

Employees' cost includes cost incurred for the employees presently working as well as for the retired employees of the distribution licensees. The cost of working employees includes salary, dearness allowance and other allowances such as HRA, CCA, LTC, medical reimbursement etc. While In the case of retired employees and those who would retire during the year, the Licensee have to discharge financial liabilities towards pension, gratuity, leave encashment benefit etc and the same has been taken into account while estimating employees cost in FY 2011-12.

A. Basic Salary & Dearness Allowance (DA)

UHBVNL, in their ARR petition for FY 2011-12 has proposed expenditure on account of salaries at Rs. 2819.40 million. Also, DA @ 55% has been proposed at Rs. 1550.70 million. The Commission has based its calculations on the audited accounts for FY 2009-10 after adjusting the same for arrears on account of pay revision due to implementation of the recommendations of the 6th pay Commission report. Thus the Commission allows Rs. 2311.49 million as basic pay and Rs. 1271.32 million as DA @ 55% in FY 2011-12.

DHBVNL in their ARR for FY 2011-12 has proposed basic salary amounting to Rs. 2256.10 million and DA @ 55% amounting to Rs. 1240.80 million. Following the methodology enunciated above the Commission allows expenditure on account of basic salary at Rs. 1881.19 million and DA @ 55% of Rs. 1034.65 million in the case of DHBVNL.

B. Other allowances

The 'other allowances' as part of employees cost proposed by UHBVNL is Rs. 551.50 million and by DHBVNL Rs. 423.20 million. The Commission, finding these estimates to be reasonable approves the same for FY 2011-12.

C. Terminal benefits

UHBVNL has proposed Rs. 3255.90 million as contribution towards pension trust on account of terminal benefits in FY 2011-12 in its ARR under consideration including contribution for employees covered under the new pension scheme. DHBVNL has proposed Rs. 1098.90 million as contribution to the pension trust and Rs. 35.40 million as contribution to new pension scheme.

The Commission, in its order on the ARR and Tariff application for FY 2011-12 filed by HVPNL has brought about the inconsistencies in the disclosed value of assets held by the pension trust. The issue is of relevance to the distribution licensees because the HVPNL pension

trust manages the pension liabilities of the employees working in the erstwhile HSEB and who are now the employees of the two distribution licensees. The DISCOMS contribute their share of incremental liability as assessed by the actuary each year. In view of the discrepancies brought out by the Commission in the said order, the additional contribution to the pension trust fund in the past is also required to be reassessed.

However, the Commission allows the pension contribution as assessed by the Distribution licensees with a direction that the liability on account of allocated employees and employees recruited by the distribution licensees should be got assessed separately by the actuary and a full report of the assessment be submitted to the Commission before 30.9.2011. Secondly, the licensees should endeavour to get the liability and corresponding assets of individual licensees shown separately in the balance sheet of the HVPNL pension trust so as to bring clarity on the issue of incremental liability which shows great variance between the two DISCOMS.

Accordingly, the Commission allows Contribution towards pension trust and new pension scheme as assessed by UHBVNL Rs. 3255.90 million and Rs. 1134.30 million by DHBVNL (Rs. 1098.90 million and Rs. 35.40 million).

The Commission would adjust the allowed amount as per actual on receipt of audited accounts

D. Employees' Cost Capitalised

Employees cost relating to the construction division(s) is capitalized each year in proportion to the actual expenditure incurred in the construction divisions vis –à– vis total expenditure. The Commission has considered the ratio of capitalization as computed from the latest available audited accounts of UHBVNL and DHBVNL for FY 2009-10. Resultantly, the employees cost capitalized at the rate of 2.95% for UHBVNL works out to Rs. 122.13 million is allowed as against Rs. 108.8 million proposed by them. In the case of DHBVNL, capitalisation

@ 1.08% for works out to Rs. 36.19 million which is being allowed as against DHBVNL's proposal of Rs. 19.30 million.

The computational details of employees cost for FY 2011-12 approved by the Commission is presented in the following table.

Table 2.18 - Employees' cost approved for FY 2011-12 (Rs. million)

Employee Cost Components	Proposal of distribution licensees		HERC Approval	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
Basic Salary	2819.40	2256.10	2311.49	1881.19
D.A.	1550.70	1240.80	1271.32	1034.65
Other Allowances	551.50	289.30	551.50	423.20
Terminal benefits	3255.90	1142.50	3255.90	1134.30
Total	8177.60	5054.50	7390.21	4473.34
Less: Employee cost capitalised	108.80	19.30	122.13	36.19
Net Employee Cost	8068.80	5035.20	7268.09	4437.15

It is reiterated that provident fund subscription received from its employees shall not be diverted/appropriated by the licensees for any other purposes.

2.7.2 Repair and Maintenance expenses

Repair and maintenance (R&M) cost is incurred by the distribution licensees to maintain the distribution system in a perfect working condition. The Commission, in order to evolve a scientific basis for calculating R&M expenditure had directed the Licensee to prepare R&M norms for the equipments used in the distribution and retail supply business. As per report submitted to the Commission, the normative expenses worked out to 1.65% of GFA.

UHBVNL, in the ARR under consideration, has estimated R&M expenses @ 2% of GFA for FY 2011-12 amounting to Rs. 1121.30 million. However, no explanation has been provided for deviating from the normative cost of 1.65% of GFA as per their own report.

Also, as per the audited accounts for FY 2009-10, the actual R&M expenses are less than the normative ratio of 1.65% of the average

GFA during the year in the case of both the Distribution licensees. The Commission therefore allows 1.65% of average GFA for FY 2011-12 as R&M expenses on normative basis amounting to Rs. 885.91 million for FY 2011-12 in the case of UHBVNL.

DHBVNL in its filing has projected repair and maintenance expenses at the rate of 2% of average GFA for FY 2011-12 amounting to Rs. 925.90 million. The Commission, as per the methodology enunciated above, allows 1.65% of GFA for FY 2011-12 as R&M expenditure amounting to Rs. 700.19 million.

However the Commission observes that the allowed Repair and maintenance costs are based on the approved capital additions during FY 2010-11 and FY 2011-12. The actual additions to GFA, as seen in the past, fall much short of the projected additions and therefore the actual expenditure also falls much short of R & M expenses approved by the Commission on normative basis. This is a double loss to the consumer as, firstly, maintenance expenses of nonexistent infrastructure are recovered from them and secondly, they are not made available the required level of service.

The R&M expenses as projected by the licensees and as approved by the Commission are given in the Table 2.19 below: -

Table 2.19 - Repair & Maintenance Expenses approved for FY 2011-12

Particulars	Proposal of distribution licensees		HERC Approval	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
GFA at the beginning of the year	51531.43	42160	49563.49	39499.67
GFA at the end of the year	60594.43	50480.7	57819.53	45372.23
Average GFA during the year	56062.93	46320.35	53691.51	42435.95
Normative R& M expenses as % of average GFA	2.00%	2.00%	1.65%	1.65%
Repair and maintenance Expenses	1121.3	925.9	885.91	700.19

2.7.3 Administrative and General Expenses

UHBVNL has proposed Administrative and General Expenses (A&G) amounting to Rs. 588.40 million in FY 2011-12. The Commission finds the estimate reasonable and allows the same in the ARR.

DHBVNL has proposed A&G expenses at Rs. 1135.20 million assuming a 22% YOY increase over the estimated expenses for FY 2010-11. The Commission believes that A&G expenses do get impacted with the general level of prices in the economy. Thus considering the inflationary impact at 10% YOY, the Commission allows Rs. 995.83 million to be recovered in the ARR in FY 2011-12. However, the Commission notes with dismay that the administrative expenditure of DHBVNL is almost double that of UHBVNL and more than 50% of the proposed expenses are the charges for electricity in the offices of DHBVNL. The licensee should keep strict watch on the ballooning administrative costs.

Allocation of A&G expenses to capital works by way of capitalisation is in the same ratio as proposed by DHBVNL. The A & G expenses as projected and as approved by the Commission are given in the Table 2.20 below:

Table 2.20 - Administrative & General Expenses approved for FY 2011-12

Particulars	Proposal of distribution licensees		HERC Approval	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
A&G Expenses	588.4	1135.20	588.4	995.83
A&G expenses chargeable to capital works	21.4	19.60	21.4	17.18
Net A&G Expenses	567.00	1115.60	567.00	978.65

2.8 Interest Cost

2.8.1 Interest cost on Long Term Loans

UHBVNL has proposed to recover Rs. 3139.20 million as interest for capital works related borrowings in FY 2011-12. The Commission has reviewed the execution of approved capital works for FY 2010-11 and their funding requirements and has worked out that the licensee needs to borrow Rs. 3499 million to fund the capital expenditure and for FY

2011-12, the licensee needs to borrow Rs. 6960 million to fund the approved capital works. The repayment of loans for FY 2010-11 and for FY 2011-12 has been considered equal to the depreciation for the year. Based on this, the interest cost on approved borrowings has been worked out as Rs. 1977.91 million. Keeping in view the scheduled capitalisation of works, the commission has approved Rs. 492.19 million as Interest during Construction (IDC) which is to be reduced from the gross interest. **Accordingly, the interest cost, net of capitalisation, works out to Rs. 1485.72 million for FY 2011-12 and the same is approved in the case of UHBVNL.**

DHBVNL in their petition has proposed Rs. 1773.80 million towards interest cost of borrowing for capital works in FY 2011-12. The Commission restricts the borrowing for FY 2010-11 to Rs. 2761.70 million required to fund the estimated capital expenditure of Rs. 4646.40 million. Therefore, the borrowings for FY 2011-12 for the purpose of calculating interest to be allowed in the ARR are reduced accordingly. In FY 2011-12, the Commission estimates that the licensee will require borrowing of Rs. 4030 million to fund the approved capital expenditure plan. Accordingly, the interest cost on the allowed borrowing in FY 2011-12 works out to Rs. 1352.53 million. Keeping in view the scheduled capitalisation of works, the commission has approved Rs. 307.06 million as IDC which is to be reduced from the gross interest. **Consequently the net interest after capitalisation works out to Rs. 1045.47 million for FY 2011-12 and the same is approved by the Commission.**

The allowed interest on borrowings for capital works is dependent on the licensee adhering to the approved capital works. In case the DISCOMS are unable to achieve the planned additions to capital works, the Commission may be constrained to adjust the excess interest allowed in the ensuing ARR.

2.8.2 Interest on Working Capital and Borrowings to fund the revenue gap

The Commission has allowed interest on borrowings for working capital equivalent to one month of ARR in accordance with the orders of the

Hon'ble Appellate Tribunal for Electricity. For UHBVNL the working capital requirement is estimated as Rs. 5500 million. In addition, the licensee has been allowed to borrow Rs. 15532.46 million to fund the revenue gap for FY 2008-09, FY 2009-10 and FY 2010-11 as determined by the Commission in the instant order as per the details given in Table 4.1. The interest @ 12.25% on these borrowings amounts to Rs.687.50 million and Rs.1941.56 million respectively.

For DHBVNL, the working capital requirement is assessed at Rs. 6400 million. In addition, the licensee is allowed to borrow to Rs. 5576 million to fund the unaddressed revenue gap for FY 2008-09, FY 2009-10 and FY 2010-11 as approved by the Commission in the instant order as per detail given in Table 4.1. The interest @ 12.25% on these borrowings amounts to Rs.800 million and Rs.697 million respectively.

2.8.3 Interest on Consumers Security Deposits.

UHBVNL has proposed interest on consumer security deposit at Rs. 297.60 million. Commission has estimated a 10% YOY increase on the audited cost for FY 2009-10 and approves Rs. 240.12 million as interest on consumer security deposit for FY 2011-12.

DHBVNL has proposed interest cost on consumer security at Rs. 113.40 million. The Commission considers this estimate to be reasonable and approves the same. **The interest on consumer security deposit is allowed subject to compliance by the licensees of 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.**

The various components of interest cost as projected by the licensees & as approved by the Commission are given in the following Table 2.21.

Table 2.21 - Approved Interest Expenses for FY 2011-12 (Rs. million)

Interest on Loans	Proposal of distribution licensees		HERC Approval	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
Gross Interest on Capital Expenditure Loans	3139.20	1773.80	1977.91	1352.53
Less: Interest Capitalised	844.30	1387.40	492.19	307.06
Net Interest on Capital Expenditure Loans	2294.90	386.40	1485.73	1045.47
Interest on Working Capital Loans	9361.30	5314.50	687.50	800.00
Interest on consumers' security deposits	297.60	113.40	240.12	113.40
Interest on financing regulatory gap	3943.70	-	1941.56	697.00
Total	15897.50	5814.30	4354.91	2655.87

2.9 Depreciation

UHBVNL has claimed depreciation amounting to Rs. 1769.60 million on an opening balance of GFA of Rs. 51531.50 million which works out to 3.43% of GFA at the beginning of the year. After accounting for the depreciation on consumers contribution and grants (Rs. 347.30 million) the net depreciation for FY 2011-12 has been claimed as Rs. 1422.30 million. The Commission, based on the same depreciation rate of 3.43%, has approved Rs. 1700.03 million as depreciation on its estimation of opening balance of GFA for FY 2011-12. Depreciation on assets created out of government grants and consumer contribution Rs, 347.30 million as proposed by UHBVNL has been reduced from the approved total depreciation to arrive at the net depreciation of RS. 1352.73 million for UHBVNL for FY 2011-12.

DHBVNL has claimed Rs. 2137.50 million as depreciation for FY 2011-12 on the opening balance of GFA of Rs 42160 million which works out to an average of 5.07% of opening GFA. The rate of depreciation proposed by DHBVNL is much higher than the depreciation rate of 2.74% as per audited accounts for FY 2009-10. Therefore the

Commission has based its calculation for depreciation on the average rate of depreciation as per the last available audited accounts. The depreciation as per commission thus works out to Rs. 1081.93 million on the Commission's estimate of GFA of Rs.39499.67 million. The depreciation on consumer contribution i.e. Rs. 385.60 million is to be reduced from it leaving a net balance of Rs. 696.33 million to be included in the ARR of DHBVNL in FY 2011-12.

The Commission accordingly approves net depreciation for FY 2011-12 at Rs 1352.73 million and Rs 696.33 million for UHBVNL and DHBVNL respectively

The approved depreciation shall be utilized by the Licensees towards meeting the capital loans repayments during the year.

2.10 Special Appropriation

2.10.1 Difference in actuarial valuation of terminal benefits in previous years.

UHBVNL has proposed to recover Rs. 3602.90 million for 2008-09 and 2009-2010 and DHBVNL has proposed to recover Rs.4549 million for FY 2008-09, being the difference in actuarial valuation allowed by the Commission in the previous ARR orders and actual cost as per their audited accounts. The Commission allows the licensee to recover this amount through the ARR which is in line with the earlier orders of the Commission.

2.10.2 Arrears of salary on account of report of Vith Pay Commission

UHBVNL has proposed to recover Rs. 605.70 and Rs. 954.10 million as additional cost due to difference in the actual employee cost and the amount allowed as employee cost in FY 2008-09 and FY 2009-10 respectively. The cost claimed by DHBVNL on this account is Rs. 639.20 million and Rs. 1048.80 million in FY 2008-09 and FY 2009-10 respectively. The Commission has examined the claim and allows the same as a onetime measure as the licensees were not having sufficient data to accurately project the increased employee cost as a result of the

of 6th pay Commission report. However, the licensees are expected to make careful estimation in future so that such a situation does not arise.

2.11 Total Expenditure

On the basis of the item wise analysis and the views of the Commission presented in the preceding paragraphs the total expenditure approved by the Commission with respect to the Distribution and Retail Supply Business of UHBVNL in FY 2011-12 is Rs. 67276.36 million as against Rs. 100604 million proposed by the Licensee. While in the case of DHBVNL the same is estimated at Rs. 79813.47 million as against Rs. 89428.2 million proposed by them.

Item wise details are presented in the following table.

Table 2.22 - Approved Expenditure for FY 2011-12 (Rs. million)

Particulars	Proposal of distribution licensees		HERC Approval	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
Expenditure:				
Purchase of energy	59832.0	58334.1	43253.20	59725.09
Transmission charges	6258.7	7463.6	4367.91	4319.27
SLDC charges			63.92	63.92
Wages, salaries and related costs	8177.5	5035.1	7268.09	4437.15
R&M Expenses	1121.3	925.9	885.91	700.19
A&G Expenses	588.4	1115.7	567.00	978.65
Interest cost on borrowings	15897.5	5814.2	4354.91	2655.87
Depreciation	1422.5	1751.9	1352.73	696.33
Other expenditure		769.8		
Total Expenditure	93297.90	81210.30	62113.66	73576.47
Special Appropriations:				
Difference of actuarial valuation of previous years	3602.9	4549.0	3602.90	4549.00
Difference in employee cost of previous years	1559.8	1688.0	1559.80	1688.00
Total Special Appropriations	5162.70	6237.00	5162.70	6237.00
Total Expenditure (including special appropriation)	98460.60	87447.30	67276.36	79813.47

2.12 Capital Expenditure

2.12.1 Capital Works In Progress (CWIP)

UHBVNL

Assessment of capital expenditure made by the licensee during FY 2010-11 and Annual Investment Plan for FY 2011-12 has been made on the basis of revised submissions made by the licensee vide memos dated 04.04.2011 and 02.05.2011. The original ARR submissions of the licensee and all the information supplied in this regard from time to time have also been kept in view.

As per filing dated 2.05.2011, the expenditure for the completed FY 2010-11 has been reported as Rs. 535.58 crore against approved investment of Rs. 814.73 crore. While making assessment of the utilization, it has been observed that the licensee has exceeded the Commission's approved investment on the works 'Civil Work', 'Power Factor Improvement' and 'Release of BPL Connections' whereas it has under utilized funds on other works.

The Licensee in the ARR for FY 2011-12 proposed an Investment plan of Rs. 852.45 crore, but through its filing dated 04.04.2011, revised the same to Rs. 873.92 crore. The reason for this increase was mentioned as increase in number of new 33 KV substations and addition of the work 'DT metering'.

As complete details of the works considered in the capital investment plan were not provided by the licensee in the ARR for FY 2011-12, the licensee was directed to supply the required details, but the licensee failed to submit complete details. Further in spite of issuing various directives, the licensee did not submit the cost benefit analysis of each scheme it has taken in the capital investment plan.

Considering the past performance of UHBVNL, the Commission is of the view that it may not be 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 works since allotted & in progress. The investment which does not appear to be realistic has been curtailed. The amount allowed against each work of the proposed plan is indicated as under:-

Table 2.23 -Capital Investment Plan of UHBVNL

Sr. No.	Name of the work	Investment Approved for FY 2011-12 (Rs. crores)
	AT & C loss Reduction	
1	Metering	19.84
2	DT metering	29.52
3	AMR on HT Connections	05
4	HVDS on Segregated Agriculture Feeders	250
	Load Growth	
5	33 KV sub-stations / lines	75.85
6	Augmentation of 33 KV Sub Stations and lines	25.50
7	Bifurcation / Trifurcation of Feeders	10
8	Release of Tube well connections	60
	Reliability improvement	
9	Implementation of R-APDRP (Part – A)	35
10	Implementation of R-APDRP (Part – B)	150
	Infrastructure development	
11	Civil Works	50
	Total	710.71

DHBVNL

Assessment of capital expenditure made by the licensee during FY 2010-11 and Annual Investment Plan for FY 2011-12 has been made on the basis of revised submissions made by the licensee vide memos dated 28.01.2011 and 17.02.2011. The original ARR submissions of the licensee and all the information supplied in this regard from time to time have also been kept in view.

As per filing dated 17.02.2011, the expenditure for the completed FY 2010-11 has been assessed as Rs. 464.64 crore against approved investment of Rs. 771.30 crore. While making assessment of the utilization, it has been observed that the licensee has exceeded the Commission's approved investment on the work 'HVDS', whereas it has underutilized funds on other works.

The Licensee in the ARR for FY 2011-12 proposed a Capital Investment Plan of Rs. 850 Crore.

As complete details of the works considered in the capital investment plan were not provided by the licensee in the ARR for FY 2011-12, the licensee was directed to supply the required details, but the licensee failed to submit complete details. Further in spite of issuing various directives, the licensee did not submit the cost benefit analysis of each scheme it has taken in the capital investment plan.

Considering the past performance of DHBVNL, the Commission is of the view that it may not be 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 works since allotted & in progress. The investment which does not appear to be realistic has been curtailed. The amount allowed against each work of the proposed plan is indicated as under:-

Table 2.24 - Capital Investment Plan of DHBVNL

Sr. No.	Name of the work	Investment Approved for FY 2011-12 (Rs. crores)
1	Metering	80
2	HVDS	80
3	Power Factor improvement	20
4	33 KV substations / lines (New and augmentation)	100
5	11KV lines/cables/transformers (new, augmentation and bifurcation/trifurcation, RGGVY & Release of new connections etc.	111
6	Implementation of R-APDRP (Part-A)	50
7	Implementation of R-APDRP in Non APDRP area	15
8	Implementation of R-APDRP (Part – B)	50
9	Civil works	10
10	DSM (CFL/ Efficient Pump sets etc)	01
11	Sub Division Computerization	02
12	IBRD loan and IBRD equity	100
	Total	619

The distribution licensees are further directed as under:-

1. To make investment only in accordance with the approval granted by the Commission. Wherever, a deviation of utilization of funds is envisaged by the licensee, it should approach the Commission immediately for re-appropriation of funds from one work to another giving complete justification and such re-appropriation should be within overall investment funds as approved.
2. To quantify the improvements achieved as a result of capital investment made every year and enclose an analysis of the benefits accrued along with the investment proposals of the ensuing year.

2.13 Non-Tariff Income

The Commission approves Rs. 1810.70 million as non-tariff income as proposed by UHBVNL and Rs. 3200.40 million as non-tariff income as proposed by DHBVNL.

2.14 Return on Equity

The accumulated losses of the two distribution Licensees i.e. UHBVNL and DHBVNL have completely eroded their entire net worth. The Commission, on several occasions, has emphasized the need for recapitalization of the state owned distribution companies and infusion of fresh equity by the State Government over and above the equity component of the annual incremental capital expenditure to be undertaken by the distribution companies to modernize and augment the distribution system arising out of increasing load and consumer base of the power utilities as well as their obligations to meet the standard of performance specified by the Commission in order to better serve the electricity consumers in Haryana. However, no progress seems to have been made in this direction.

In view of the above facts, the Commission does not consider it appropriate to allow any return on equity in the FY 2011-12, as in the past, to the distribution licensees.

2.15 Aggregate Revenue Requirement

In light of the above analysis, the Commission approves Rs. 65465.66 million as the aggregate revenue requirement of the Distribution and Retail Supply business of UHBVNL and Rs. 76613.07 million for DHBVNL for FY 2011-12.

The computation of approved Aggregate Revenue Requirement for FY 2011-12 is presented in the Table 2.25 & 2.26 below.

Table 2.25 –Aggregate Revenue Requirement for UHBVNL for FY 2011-12 (Rs. million)

Description	UHBVNL Proposal	HERC Approval
Reasonable return/ Return on Equity	2254.10	0
Total expenditure	98349.85	67276.36
Minus: Non-tariff income	1810.70	1810.70
Total Aggregate Revenue Requirement	98793.25	65465.66

Table 2.26 –Aggregate Revenue Requirement for DHBVNL for FY 2011-12 (Rs. in million)

Description	DHBVNL Proposal	HERC Approval
Reasonable return/ Return on Equity	1980.80	0
Total expenditure	87447.30	79813.47
Minus: Non-tariff income	3200.40	3200.40
Total Aggregate Revenue Requirement	86227.70	76613.07

2.16 Revenue Gap

As per the analysis Capital Expenditures (CAPEX), Operating Expenditures (OPEX) and quality of supply (including losses) as well as non – tariff income; the Commission determines aggregate revenue requirement of the licensees as Rs. 65465.66 million for UHBVNL and Rs. 76613.07 million for DHBVNL in FY 2011-12. As per the consumer category wise sales projection and the current consumer category wise retail tariff(s) the estimated revenue for sale of power to the consumers in FY 2011-12 by the two Discoms works out to Rs. 98252.95 million (UHBVNL Rs. 36215.13 million and DHBVNL Rs. 62037.82 million), thereby leaving a revenue gap of Rs. 43825.78 million (UHBVNL Rs. 29250.53 million + DHBVNL Rs.14575.25 million) in FY 2011-12.

The Haryana Government in their annual budget for FY 2011-12 has made provision of Rs. 33176.30 million on account of subsidy support to the AP Tube – Well consumers including Fisheries and Horticulture which is inclusive of Rs. 3518.8 million deferred subsidy on account of FSA orders of the earlier years. Consequently, the Commission has apportioned the remaining amount of State Government subsidy amounting to Rs. 29657.50 million between UHBVNL and DHBVNL in proportion to the projected volume of sales to the AP consumers. Resultantly, Rs. 17327.78 million has been considered as subsidy in the case of UHBVNL as against the requirement of Rs. 19987.84 million. In the case of DHBVNL, the allocation of subsidy is Rs. 12329.72 million as against the requirement of Rs. 14222.50 million. Thus the shortfall in RE Subsidy vis-à-vis State Government budgeted subsidy is Rs. 2660.06 million in the case of UHBVNL and Rs. 1892.78 million in case of DHBVNL.

Besides the Agriculture deficit, there exists a revenue gap at current tariff of Rs. 9262.69 million (net of cross subsidy of Rs. 2636.96 million) at current rate after taking into consideration the surplus available from other category of consumers which remains to be addressed for UHBVNL. While in the case of DHBVNL, a revenue gap of Rs. 390.25 million remains after considering the surplus available from other categories of Rs. 7278.94 million.

In addition to the current revenue gap, the Commission in its order on ARRs of UHBVNL and DHBVNL for Distribution and Retail Supply Business for FY 2008-09 and FY 2009-10 had, in the absence of sufficient data or any proposal to deal with the revenue gap from the UHBVNL, left an uncovered revenue gap of Rs. 7324.47 million against which additional borrowings and financing cost thereto (to the extent required) were allowed.

In the tariff order for FY 2010-11, the Commission had determined a revenue gap of Rs. 18633.26 million which was partly proposed to be covered with additional tariff applicable from October 1, 2010. Based on the projected sales data, the Commission had expected that revised tariff would yield Rs. 12000 million if applied for full year. However, as

per the information provided by the DISCOMS in the ARR, the additional revenue generated by the revised tariff is only Rs. 1781.14 million by UHBVNL and Rs. 3068.13 million by DHBVNL. The remaining revenue gap for FY 2010-11 is therefore quantified as Rs. 21108.46 million. **Consequently, the details of total revenue gap that needs to be addressed is as given in the following table:**

Table 2.27 - Total Revenue Gap for FY 2011-12

		UHBVNL	DHBVNL	Total
1	Revenue requirement Rs. Million	65465.66	76613.07	142078.73
2	Revenue at current tariffs Rs. Million	36215.13	62037.82	98252.95
3	Gap Rs. Million	29250.53	14575.25	43825.78
	Agriculture deficit			
4	Metered	8661.35	8990.24	17651.60
5	Unmetered	11307.52	5232.26	16539.78
6	Fisheries and Horticulture	18.97	0.00	18.97
7	Subsidy Req'd from the State Government	19987.84	14222.50	34210.34
8	Subsidy allowed by the State Govt.	17327.78	12329.72	29657.50
9	A. Additional subsidy required	2660.06	1892.78	4552.84
	B. Other Consumers			
10	Deficit other categories	11899.66	7669.19	19568.85
11	Surplus other categories	2636.96	7278.94	9915.90
12	Net Surplus/ (deficit) other categories	(9262.69)	(390.25)	(9652.95)
13	Gap previous year	(15532.46)	(5576.00)	(21108.46)
14	Total Revenue Gap	(24795.15)	(5966.25)	(30761.41)

The distribution licensees i.e. UHBVNL and DHBVNL have not proposed any mechanism to bridge the revenue gap either by way of retail tariff rationalisation, efficiency gains or subventions from the State Government in the capacity of the owners of these companies. Consequently, the Commission has addressed this issue in Chapter – 4 of the instant order.

2.17 Distribution System Performance

The Commission has reviewed the performance of Distribution System of UHBVNL and DHBVNL based on the details of Technical performance Parameters for FY 2009-10 and FY 2010-11 (upto December) and other relevant data furnished by the two distribution licensees. The observations of the Commission with regard to their performance in respect of system operation and consumers' satisfaction are as under:-

2.17.1 Failure of Distribution Transformers (DTs)

The year-wise position of damage rate of distribution transformers as per the information / data provided by UHBVNL and DHBVNL in the past and in the filing for 2011-12 is given in the table below:-

Table 2.28 - Failure Rate of Distribution Transformers

Sr. No.	Year	DHBVNL		UHBVNL	
		Failure Rate including transformers damaged within warranty period (%)	Failure Rate excluding transformers damaged within warranty period (%)	Failure Rate including transformers damaged within warranty period (%)	Failure Rate excluding transformers damaged within warranty period (%)
1	2001-02	17.90	15.90	19.68	16.59
2	2002-03	18.70	15.93	19.11	15.50
3	2003-04	18.60	15.49	22.32	15.68
4	2004-05	19.40	15.30	25.98	16.74
5	2005-06	17.60	13.92	24.77	15.02
6	2006-07	13.13	11.83	22.80	14.59
7	2007-08	11.49	9.14	17.65	11.58
8	2008-09	11.65	9.28	17.05	11.73
9	2009-10	11.74	8.81	15.06	10.30
10	2010-11 (up to Dec.)	9.56	7.49	8.62	6.11

The Commission observes that the overall Distribution Transformers damage rate (DT damage rate) in case of DHBVNL has consistently declined from 19.40 % in 2004-05 to 11.49 % in 2007-08. DT damage rate of DHBVNL remained almost at the same level in 2008-09 and 2009-10 at 11.65% and 11.74% respectively, which cannot be said to be a good performance. In case of UHBVNL the DT Damage rate has consistently declined from 25.98% in 2004-05 to 15.06% in 2009-10, but their failure rate is still very high.

UHBVNL and DHBVNL were directed by the Commission in its previous ARRs /Tariff orders to work out the failure rate of distribution transformers damaged outside and within warranty period separately taking into account the respective number of such transformers. However, it has been worked out by them on the total number of the Distribution Transformers. They were also directed to compile and report the failure rate of distribution transformers separately for rural

and urban areas. As per provisions of HERC (Standards of Performance for Distribution Licensee) Regulations 2004, the distribution transformer failure rate for urban area should not exceed 5% and for rural area should not exceed 10%.

In compliance of the directive of the Commission, both the licensees have submitted circle -wise data in respect of DT failure rate separately for Urban and Rural areas for 2008-09, 2009-10 and 2010-11 (upto Dec.).

A scrutiny of the data of DHBVNL for FY 2010-11 (upto December, 2010) indicates that failure rate of DTs in urban areas is above 5% in respect of Faridabad, Bhiwani & Hisar circles and in rural areas is above 10% in respect of Faridabad, Gurgaon, Narnaul and Bhiwani Circles. Overall damage rate of the licensee in urban area is 5.97% and in rural area is 10.01%, which is above the standards fixed.

In respect of UHBVNL, based on data for FY 2010-11 (upto December, 2010), failure rate of DTs in urban area is above 5% in all the circles and in rural area is above 10% in all the circles except Kurukshetra, Kaithal & Karnal circles. Their overall damage rate is 9.19% in urban area and 8.57% in rural area. The damage rate in urban area is much higher than the standards fixed.

The distribution licensees should endeavour to bring down the distribution transformer damage rate below the prescribed limits and to exercise proper quality checks to ensure least damage rate within the warranty period.

2.17.2 Distribution Losses

The year- wise position of distribution losses as per the information provided by UHBVNL and DHBVNL is presented in the table below:

Table 2.29 - Year wise Distribution Losses (%)

Year	UHBVNL	DHBVNL
2001-2002	31.74	29.33
2002-2003	35.02	35.02
2003-2004	32.36	33.34
2004-2005	30.65	32.72
2005-2006	31.04	30.90
2006-2007	28.67	29.65
2007-2008	28.56	27.54
2008-2009	27.02	25.19
2009-2010	25.92	26.97
2010-2011	24.11 (upto Nov.2010)	23.17(upto Dec. 2010)

The Commission observes with serious concern that despite claims of the Distribution Licensees that they are making huge capital investments to reduce distribution losses, the position has not improved much from the inception of these companies. In a span of eight years i.e. 2001 -02 to 2009-10, the losses have reduced only by 5.82% in case of UHBVNL and only by 2.36% in case of DHBVNL which reflects very poor on the working of the Licensees.

The data on feeder loss of UHBVNL upto November, 2011 shows that there are 18 feeders (14 in Rohtak circle and 4 in Sonapat circle) on which the loss is more than 75%. There are 109 feeders (43 in Rohtak circle, 44 in Jhajjar circle, 14 in Sonapat circle, 7 in Jind circle and 1 in Ambala circle) on which the loss level is between 50 & 75 %. There are 423 feeders on which the loss level is between 25 & 50 %.

Similar data of DHBVNL upto September, 2010 shows that there are 31 feeders (6 in Bhiwani Circle, 7 in Faridabad circle, 2 in Gurgaon circle and 16 in Hisar circle) on which loss level is above 70 % and there are 191 feeders (28 in Bhiwani Circle, 33 in Faridabad circle, 19 in Gurgaon circle, 79 in Hisar circle and 32 in Narnual circle) on which loss level is between 50 & 70 % .

During public hearing as well as in their written objections, consumers and other stakeholders have also expressed their concern about high T & D loss levels in UHBVNL and DHBVNL. They pointed out again and again that cost of service is higher due to unreasonably high distribution losses and it would be extremely difficult for the licensees to remain

financially viable unless immediate effective steps are taken to control the same.

The Commission after deliberation with the officers of the licensees issued detailed instructions on 27.12.2010 asking the licensees to submit load reduction plans fixing time bound targets, but the licensees did not respond. The licensees are directed to submit within one month from the date of this order the loss reduction plans fixing time bound targets in respect of feeders which have loss level above 50 %.

What to talk of Rural Domestic feeders, even the losses of many urban feeders are extremely high which is a matter of great concern. These can be easily brought down if sincere efforts are made. Licensees are directed to bring down the loss level of such feeders to a reasonable level.

2.17.3 Accidents in Distribution System

The information relating to number of fatal and non-fatal accidents involving human beings and animals as reported by UHBVNL and DHBVNL is as follows.

Table 2.30 - Fatal and non-Fatal Accidents in UHBVNL

	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11 *
Category											
Fatal											
Human Beings	56	39	41	58	40	61	51	71	87	67	66
Animals	182	155	107	106	125	213	94	87	139	134	94
Total	238	194	148	164	165	274	145	158	226	201	160
Non-Fatal											
Human Beings	86	64	81	60	51	117	55	79	107	64	74
Animals	-	-	-	-	-	-	-	-	2	-	-
Total Fatal and non fatal	324	258	229	224	216	391	200	237	335	265	234

*(Upto Dec 10)

Table 2.31 - Fatal and non Fatal Accidents in DHBVNL

	04-05	05-06	06-07	07-08 (upto Dec. 07)	08-09	09-10	10-11 (up to Sept. 10)
Category							
Fatal							
Human Beings	30	52	42	24	46	57	29
Animals	103	73	87	55	87	71	49
Total	133	125	129	79	133	128	78
Non-Fatal							
Human Beings	51	57	35	59	53	82	36
Animals	0	4	-	-	-	-	-
Total Fatal and non fatal	184	186	164	138	186	210	114

On analysis of the information of DHBVNL, the Commission observes that the fatal as well as non-fatal accidents are on increase since the year 2006-07. Similar is the situation of UHBVNL. The number of accidents both fatal and non-fatal are on increase since 2006-07. Their number of accidents is more than that of DHBVNL. This indicates that the licensees have hardly taken measures to reduce accidents. High incidence of the accidents not only results in loss of human and animal lives but also causes financial loss to the utility in the shape of avoidable compensation payable to the victims and legal expenses. It also adversely affects the moral and confidence of the workmen. Accidents of employees can be avoided by imparting training on safety measures and by providing proper safety kits. Accidents of private persons can be avoided by strengthening and properly maintaining the distribution system and by maintaining the clearances as per the CEA Regulations on 'Provision relating to Safety and Electricity supply'.

2.17.4 Power Supply Position including power regulatory measures

UHBVNL has reported approximately 2.33 lakh trippings and 39371 breakdowns on its system during 2010-11 (upto December, 2011) which are higher than corresponding period of previous year. The number of trippings and breakdowns should have come down with the implementation of various investment schemes and reliability of power supply improved but the same is not discernible from the data. Further

average time for attending breakdowns ranges from 2-6 hours in circles other than Kurukshetra, Karnal and Kaithal where the time taken for attending breakdowns is in the range of 6-10 hours. Similar observations were made in the previous orders of the Commission but no improvement has been reported by the licensee. In addition, long duration of outages have been reported in Yamuynagar, Karnal and Panipat Circles on 11 KV system due to system constraints. For FY 2009-10 voltage has been observed below norms for long periods of time on 33 kV level in Karnal, Panipat and Rohtak circles (9.49% to 54.21%). The licensee has neither supplied any information regarding upto date figures of units consumed in rural, urban and industrial sector nor the figures of average daily supply under these heads for FY 2010-11.

As per information submitted by DHBVN there is no improvement in interruption of supply due to fault on 11 KV and 33 KV lines. In 2010-11 (upto September, 2010) there has been 156198 interruptions on 11 KV lines and 3260 interruptions on 33 KV lines which are higher than the corresponding period of last year. Maximum interruptions are in Gurgaon circle (34157) followed by Narnual circle (31607). The percentage of period of voltage remaining below 9% at some sub stations of Bhiwani & Sirsa circles of DHBVN has been reported to be 8% to 17%. For improving voltage profile in these areas the licensee is required to strengthen its system.

DHBVN has intimated that power supply to Urban sector has increased from 21.43 hours per day during 2009-10 to 22.18 hours per day during 2010-11 (upto December, 2010). Supply to Industrial sector has also increased from 19.21 hours per day in 2009-10 to 20.32 hours per day in FY 2010-11 (upto December, 2010). Power supply to Rural sector has however decreased from 11.00 hours per day in 2009-10 to 9.09 hours per day in 2010-11 (upto December, 2010). It has been observed that there is still some amount of two phase supply being released in Rural sector where as the same should have been phased out by now.

UHBVNL & DHBVNL have not supplied any feedback regarding the improvement in consumer satisfaction as a result of setting up of

consumer care centres and Bijli Suvidha Kendras for handling supply related complaints and for providing prompt service in attending to the same on out sourcing basis. As per the complaints received in the Commission and feedback from different sources, it appears that consumers have to make strenuous efforts to get even their minor grievances redressed. The licensees are directed to ensure compliance of Standard of Performance notified by the Commission and submit requisite reports on schedule.

2.17.5 Energy Meters

The performance of the licensees towards metering has been very dismal. The licensees have not been able to arrange sufficient number of new energy meters resulting in high loss level and consumer dissatisfaction.

As reported by DHBVN in their ARR for FY 2011-12, about 1.4 lakh defective energy meters were awaiting replacement ending September, 2010 besides about 6 lakh working electromechanical meters still in place. The licensee plans to replace about 6 lakh electromechanical meters during the FY 2011-12 and 2012-13 through turnkey contracts.

Similar is the situation of UHBVN. As per ARR of UHBVN for FY 2011-12, about 1.38 lakh defective energy meters were awaiting replacement ending September, 2010. The licensee has not reported number of working electromechanical meters still existing in the system. The licensee plans to replace only about 71000 electromechanical meters and defective electronic meters with electronic meters during the FY 2011-12.

All the defective as well as working electromechanical meters should have been replaced with static energy meters by now as per CEA (Installation and Operation of Meters) Regulations, 2006 and Section 55 of the Electricity Act, 2003. In view of large number of defective energy meters and electromechanical meters still existing in the system, there is pilferage of power and under assessment of energy adding to the loss level and loss of revenue. The Commission has noted that the licensees have not been able to arrange sufficient number of static energy meters

since last 4 years resulting into harassment to the valued consumers. As per Section-55 of the Electricity Act, 2003, the licensee has to provide the energy meter to the consumer unless the consumer elects to purchase his own, but the consumers are being forced to purchase their own meters reflecting adversely on the working of the licensees.

Further a large number of domestic consumers in rural area are using unfair means and abstracting power direct from the mains as the licensees have not made sincere efforts to convince the people in the rural area to obtain electricity connection. The licensees are directed to identify the villages where there are mass thefts and arrange camps at such villages to release connections on the spot. For this sufficient number of tested energy meters may be arranged in advance. These camps be arranged in the months of June & July 2011 and action taken report should be sent to the Commission in the first week of August, 2011.

3. WHEELING CHARGES, CROSS SUBSIDY SURCHARGE & ADDITIONAL SURCHARGE

The Commission In its previous ARR / Tariff order(s) of the distribution licensee(s) directed them to submit along with the next ARR filing the segregated accounts including voltage wise assets and losses for the distribution and retail supply business which are a pre –requisite for determination of wheeling charges, cross subsidy surcharge and additional surcharge. However, the distribution licensees again failed to supply the requisite information and data which they are under statutory obligation to provide to enable the Commission for working out wheeling charges as per regulation 24 of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff) Regulations, 2008. In absence of requisite information / data the Commission is left with no other alternative except to continue to adopt the same approach for determination of wheeling charges, cross subsidy surcharge and additional surcharge for FY 2010 -11, as it did in its previous tariff / ARR orders of the distribution licensees for FY 2008-09 and FY 2009-10. The computational details are presented in the following table:

A. Wheeling charges

Table 3.1 - Calculation of wheeling charges

1 Network expenses per kWh)		
a.	Network establishment and operation cost (8% of the net ARR of the Discoms i.e. Rs. 142078.73 Mln, net of other income (UH = 65465.66 + DH = 76613.07)	11366
b.	Allowed gross volume of power purchase by the distribution licensees	36076
c.	Expenses per kWh(paise / unit) (a/b)	32
2. Cost of losses in the system		
a.	%age distribution system losses (technical)	6.00%
b.	Losses (MU) (1bx2a)	2165
c.	HERC approved average cost of power purchase (Rs. /unit)	2.85
d.	Total cost of losses (2bx2c)	6169
e.	Cost per unit of losses (paise / unit) (2d/1b)	17
3. Wheeling charges (Paise / unit) (1c+2e)		49

B. Cross subsidy surcharge

Regulations 33 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff) Regulations, 2008, provides that the cross subsidy surcharge shall be payable by all intra-state open access consumers except those persons who have established captive generating station and are availing open access for carrying the electricity to a destination for their own use.

Accordingly, the difference between the average cost of supply and current tariffs in respect of the categories of consumers who are paying cross subsidy was ordered to be the cross subsidy surcharge for FYs 2008-09 and 2009-10. However, in the absence of an authentic and updated CoS and the fact that the State Government had waived of levy of cross subsidy surcharge for 2010-11, the Commission did not

determine / quantify consumer category wise cross – subsidy surcharge in the ARR / Tariff order for FY 2010-11. But after withdrawal of waiver to levy cross subsidy surcharge by Government of Haryana and on the request of distribution licensees, the Commission allowed levy of cross subsidy surcharge at the rates as determined by it in the tariff and ARR order for 2009-10 from the date from which the State Government withdrew the waiver.

According to provisions of section 42 of the Electricity Act, 2003 surcharge and cross subsidies shall be progressively reduced. The National Tariff Policy provides that:

.....the computation of cross subsidy surcharge needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access..... Accordingly, when open access is allowed the surcharge for the purpose of sections 38, 39, 40 and sub-section 2 of section 42 would be computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable.

The National Tariff Policy further provides that the cross subsidy surcharge should be brought down progressively and, as far as possible, at a linear rate to a maximum of 20% of its opening level by the 2010-11.

The cross subsidy surcharge approved by the Commission for FY 2009-10 and subsequently made applicable for the FY 2010-11 from the date of withdrawal of waiver by the State Government is presented in the table below:

Table 3.2-Cross Subsidy Surcharge applicable for FY 2009-10 and part of FY 2010-11

Sr. No.	Consumer Category	Average cost of supply in respect of DHBVN and UHBVN(Paise / unit)	Current tariff (Paise / Unit)	Cross subsidy (Paise / Unit)
1	HT industry	337	409	72
2	Street Lighting	378	415	37
3	Railway Traction	310	385	75
4	Bulk supply	311	409	98

The cross subsidy surcharge for the financial year 2011-12 has been determined by the Commission in accordance with the provisions of the National Tariff Policy that the cross subsidy surcharge should be brought down progressively and, as far as possible, at a linear rate to a maximum of 20% of its opening level by the 2010-11. The Commission observes that the revenue from cross subsidy surcharge started flowing to the distribution licensees only during 2010-11 because prior to that cross subsidy surcharge was waived by the State Government, therefore the opening level cross subsidy surcharge has been taken as applicable in 2010-11.

The Commission orders that rates of the cross subsidy surcharge shall be reduced @ 20% every year from the opening level and accordingly the cross subsidy surcharge for FY 2011-12 shall be as given in the table below:

Table 3.3 - Cross subsidy surcharge for FY 2011-12

Sr. No.	Consumer Category	Cross subsidy surcharge for 2010-11 (Paise / Unit)	Cross subsidy surcharge for 2011-12 (Paise / Unit)
1	HT industry	72	58
2	Street Lighting	37	30
3	Railway Traction	75	60
4	Bulk supply	98	78

C. Additional Surcharge

Sub regulation (3) of regulation 33 of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff) Regulations, 2008 provides as under:

“Where ‘open access’ is availed by a consumer to receive supply of electricity from a person other than the distribution licensee of his area of supply, in addition to cross subsidy surcharge, the Commission may determine ‘additional surcharge’, payable by such consumers on the charges of wheeling to meet the fixed cost of the distribution licensee (s) arising out of his obligation to supply.

Provided that if the Commission is satisfied that the capacity released on account of a consumer changing from the distribution licensee (s) of his area to another person is productively utilised, and hence no stranded costs are involved, additional surcharge shall not be applicable.”

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 2010-11.

In line with its earlier directives given in the ARR / Tariff 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 in accordance with the provisions of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff) Regulations, 2008 along with the next ARR. As these charges have been determined in absence of detailed data, the Commission provides another opportunity to the stake holders and again 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.

4. DISTRIBUTION & RETAIL SUPPLY TARIFF ORDER FOR FY 2011-12

The ARR(s) filed by UHBVNL and DHBVNL for approval of the Commission are considered as per the provisions of the Electricity Act, 2003 and the regulations framed by the Commission there under. Neither UHBVNL nor DHBVNL proposed any mechanism to deal with the revenue gap in their respective ARRs despite the fact that the proposed ARR of UHBVNL for FY 2011-12 after taking into account Subsidy of Rs. 22318 million by them showed a revenue gap of Rs. 38922.3 Million. Similarly in the case of DHBVNL the total ARR gap after considering RE Subsidy of Rs. 15419.5 million was Rs. 23438.7 Million. Therefore, the Commission was left with no other alternative but to proceed further in view of the provisions of Regulation 6(3) of the Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff (Regulation No.HERC/21/2008 notified on 19h December,2008), which provides that, " If the Commission is satisfied that the expected revenue of a distribution licensee (s) differs significantly from the revenue it is permitted to recover, it may order the distribution licensee(s) to file an application within the time specified by the Commission to amend its tariff appropriately failing which the Commission shall suo moto start the proceedings for determination of tariff."

At approved Aggregate Revenue Requirement for FY 2011-12 in the case of UHBVNL and DHBVNL and the expected revenue from current tariff and charges, UHBVNL and DHBVNL will have a revenue deficit of Rs. 29250.53 million and Rs. 14575.25 million respectively making a total revenue gap of Rs. 43825.78 million. Traditionally, the deficit in the AP consumer category including Fisheries and Horticulture amounting to Rs. 34210.35 million in FY 2011-12 is met by way of RE Subsidy committed by the State Government. A reference to the State Government seeking their commitment for the subsidy required in FY 2011-12 to retain the AP consumer tariff at the existing level has already been made by the Commission vide its Memo No. 465/HERC dated 11/05/2011. In the reference made to the State Government the

Commission has stated that to maintain the Agriculture tube – well consumer's tariff (including fisheries and horticulture) at the existing level, the State subsidy is likely to be around Rs. 3420.2 Crore. The Commission, as per budget estimates of the State Government for FY 2011-12, has taken into account a sum of Rs. 2965.75 Crore as RE Subsidy after reducing the budget estimate by Rs. 351.88 Crore on account of deferred subsidy for FSA thereby leaving a subsidy shortfall of Rs. 455.284 Crore

Consequently the State Government has been requested to intimate its commitment to additional RE subsidy of Rs. 455.284 Crore over and above the budget estimates net of deferred subsidy of Rs. 2965.75 Crore in FY 2011-12 to bridge the deficit in order to maintain the tariff at existing level for AP consumers. Additionally the State Government has been requested to let the Commission know their view as to whether it would like to provide subsidy support to other deficit categories as well apart from agriculture tube well consumers. The reply of the State Government is still awaited. **In case no commitment for payment of RE Subsidy as estimated by the Commission and communicated to the State Government is received within a reasonable time period or there is a shortfall in RE Subsidy committed by the State Government vis – a – vis that estimated by the Commission then the AP tariff will be suitably realigned.**

Hence the Commission, at this stage, is seized with the issue of addressing the revenue deficit in consumer categories other than AP consumers.

The details of the ARR approved by the Commission for FY 2011-12 and the revenue gap is presented in the table below:-

Table 4.1 - REVENUE GAP FY 2011-12

		UHBVNL	DHBVNL	Total (UHBVNL + DHBVNL)
1	Revenue requirement (Rs. million)	65465.66	76613.07	143702.28
2	Expected Revenue at Current Tariff	36215.13	62037.82	98120.39
3	Revenue Gap (1-2) Rs. million	29250.53	14575.25	43825.78
	Out of the Above Agriculture			
4	Agriculture Defiict (Rs. million)	19968.87	14222.5	34191.37
5	Fisheries & Horticulture (Rs. million)	18.97	0	18.97
6	Subsidy Required (4+5) Rs. million	19987.84	14366.74	34210.34
7	Subsidy Available (Budget Est) Rs million	17327.78	12329.72	29657.50
8	Additional Subsidy Required (6-7) Rs million	2660.06	1892.78	4552.84
	Other Categories			
9	Deficit other Consumer Categories (Rs. million)	11899.66	7669.19	19568.85
10	Less Surplus Available (Rs. million)	2636.96	7278.94	9915.90
11	Net Deficit (09-10) Rs. million	9262.69	390.25	9652.95
	Previous Year Adjustments			
12	Revenue Gap Carried Forward (Rs. million)	15532.46	5576	21108.46
13	Total Revenue Gap (11+12) Rs. million	24795.15	5966.25	30761.41

It is evident from the above that as against ARR gap of Rs. 62361 million proposed by the distribution licensees in FY 2011-12 the same as per Commission's estimates works out to Rs. 43825.78 million. However, after accounting for the RE Subsidy as per budget estimates of the State Government and surplus available from a few other categories of consumers to the extent of Rs. 9915.90 Million the net ARR gap in FY 2011-12 is estimated as Rs. 9652.95 Million which remains to be addressed by taking suitable measures including tariff realignment.

The approved ARRs of UHBVNL and DHBVNL for FY 2011-12 shows a deficit of Rs.9652.95 million and the revenue gap carried forward from the previous years as Rs.21108.46 million. Accordingly upto FY 2011-12, the accumulated revenue gap works out to Rs. 30761.41 million. Keeping in view that the Discoms ought to be provided with sufficient liquidity to the extent estimated by the Commission to be able to provide efficient service to the electricity consumers both in terms of quality and quantity, the Commission would like to provide ways and means to the Discoms to meet the approved ARRs. To meet this objective the Commission in the last year vide its order dated 13th September, 2010 adjusted the distribution and retail supply tariff to infuse additional about Rs. 12000

million into the distribution business. As the revised tariff was applicable from 1st October, 2010, the Discoms had only six months to recover the amount from the realigned tariff. The full year impact of the new tariff, depending on the actual consumer category wise sales, will be known only at the end of FY 2011-12.

After accounting for the additional revenue due to tariff adjustments in the previous year on the projected consumer category wise sales in FY 2011-12, the Commission finds that 9652.95 million deficits in the ARR still remains to be accounted for. The Commission, as explained earlier, does not intend to comprehensively revisit the tariff which was adjusted only recently until full year impact of introduction of two part tariff design, new rate slabs and adjustments carried out in energy charges and MMC are known. Hence, keeping in view the tariff model, apportionment of FY 2011-12 cost and revenue to different consumer categories and the objections / suggestions received from different stakeholders, **the Commission has marginally re-adjusted the tariffs to generate about Rs. 383.86 million additional revenue in the current year which would translate to about 0.4% increase in tariff. Given the rate of annual inflation of about 7% the nominal increase of about 0.4% would appear quite insignificant.**

For the balance deficit, which the Commission feels cannot be recovered in a single year without burdening the electricity consumers beyond a reasonable limit, the Commission considers it appropriate to allow the Distribution companies borrowings from approved institutions to the extent required but not exceeding the uncovered revenue deficit as estimated by the Commission in the instant order. The interest cost on such borrowings shall be a pass through in the next ARR review period subject to submission of appropriate accounting records by the Discoms.

Having provided as above, the Commission would like to add that entire calculation of ARR in FY 2011-12 is based on distribution loss level of 22%. The Commission observes that as per Discoms audited accounts for FY 2009-10 the distribution loss level is around 23% to 24%.

However, the same is based on estimated / assumed sales to the unmetered AP Consumers. Now with the availability of more accurate sales data from the meters installed at 11 KV sub – stations of the segregated agriculture feeders, the volume of sales to the agriculture consumers works out to be on the lower side than what had been projected by the Discoms. Consequently, the excess sales so far being booked as AP sales are in fact distribution losses including the losses in other consumer category. The Commission, however, at this stage is not revisiting / restating the distribution loss level till more data spanning over a longer time period is available so as to avoid any inherent error in estimation which would impact revenue assessment in all other categories of consumers as well as CoS estimation. **The Commission directs the Discoms to analyze full year data of agriculture sales based on the input energy recorded by the meters installed at 11 KV AP segregated feeders, work out the losses between such feeders and the load points and submit their assessment report of AP sales including AP sales on feeders other than AP segregated feeders to the Commission within three months from the date of this order. On receipt of the report the Commission, after hearing the views of the stakeholders including the State Government shall pass a separate order on the actual quantum of losses that the Discoms are suffering while distributing power to the electricity consumers in the State and suggest ways and means to bridge the same.**

The details of consumer category wise tariff realignment in FY 2011-12 are presented below.

The Commission has explored different alternatives for bridging the revenue gap of the utilities for the year 2011-2012. In this context the tariff rationalisation exercise carried out last year was also revisited not only with the intention of raising additional revenue but also to address various issues and objections that have been noticed while implementing the new order issued last year.

After the tariff revision was made effective from 1st October, 2010, a large number of representations were received from different groups of

consumers pointing out the likely hardship they were going to face as a result of the revision. A few appeals have also been filed in the court of Hon'ble APTEL against the tariff order for FY 2010-11 which are still pending.

The Commission has carefully examined the representation against the revised tariff order. In course of public hearing of the stakeholders these objections were further elaborated and explained by the different consumer groups. Briefly the objections were of the following kinds:-

- (i) The fixed charges were too high.
- (ii) Fixed demand charges has been recovered in addition to MMC in many instances by the utilities.
- (iii) The tariff hike after accounting for the fixed charges has proved to be a tariff shock for the consumers.

The following were the objectives for the new tariff structure which was put into effect from 1st October, 2010 after a gap of nearly a decade during which there was no upward revision of tariff despite price increase on all fronts.

- Avoidance of tariff shock and to keep in mind the paying capacity of various consumer categories.
- Simple tariff design which can be easily comprehended & fitted into the existing billing system.
- Rationalization of MMC.
- Progressive rationalization of tariff structure with reference to Cost of Service (CoS).
- Generating adequate revenue to sustain the operations of the distribution licensees.
- Encourage a better HT:LT ratio by providing voltage differentiated tariff.

- Reduce distribution losses including theft and pilferage.
- Promote energy conservation.

Before going into the details of the tariff design, it would be relevant to mention here that Section 61(g) of the Electricity Act 2003 prescribes that the tariff should progressively reflect Cost of Supply of Electricity and contains a directive for gradually reducing the cross subsidy within a period to be specified by the SERCs. Thus the manner in which the cross – subsidy has to be gradually reduced within +/- 20% of the average cost of supply has to be specified by the State Commission. Along with this the paying capacity of different consumer groups was also to be kept in mind in the absence of which no tariff order in the State could be implemented in reality. The very fact that the element of cross subsidy was retained in the tariff design further strengthens the point that the financial background of the consumer mix cannot be lost sight of.

Cost of Supply

In a cost plus tariff design approach availability of consumer category wise cost of supply (CoS) for the relevant year in which the existing tariff is to be realigned is of utmost importance. The Commission, in the past, has been directing the distribution licensee to submit CoS along with their ARR & Tariff petition so that the Commission may take a view on the existing consumer category wise tariff vis – a – vis their respective cost of supply. The distribution licensees did make a presentation on CoS about two years back which was not accepted by the Commission as the same did not take in to consideration power flow to the AP consumers based on 11 KV AP segregated feeders thereby distorting the energy cost and losses to AP category accounting for over 30% of energy sales of the Discoms. Hence the Commission was of the view that no benchmarks can be set on the basis of CoS filed by the Discoms and directed them to file an updated CoS which the utilities have not done so far.

In order to redesign the existing tariff structure in the State the Commission took considerable time to have a close look at the

consumer category wise CoS. In the current year i.e. FY 2011-12 with availability of the requisite data the Commission is in a much better position to estimate CoS in the absence of any updated CoS filed by the Discoms. **The fresh and more accurate data from the agriculture sector now made available to us reinforces the claim of the Commission that our calculation of AP sales and CoS based on the annual load factor (ALF) in the earlier years was more accurate and closure to reality than what were submitted by the utilities.**

The starting point of classification of costs into demand, energy and customer related costs is the approved revenue requirement and approved energy sales. The demand related cost has been worked out on the basis of consumer category wise projected connected load, the energy related cost has been worked out on the basis of projected energy input to the distribution system after accounting for transmission and distribution losses allowed by the Commission while the customer related costs which includes metering, billing, general and miscellaneous service charges etc have been estimated on the basis of projected number of consumers in each category. On the basis of the data submitted by the Utilities consumer category wise CoS was estimated by the Commission separately for UHBVNL & DHBVNL. Accordingly, in the case of UHBVNL out of the fully allocated cost in FY 2011-12 of Rs. 65466 Million the demand related cost worked out to Rs. 13531 million (20.67%), energy related cost worked out to Rs. 45,094 Million (68.88%) and consumer related cost was estimated at Rs. 6841 Million (10.45%). Similarly in the case of DHBVNL out of the fully allocated cost in FY 2011-12 of Rs. 76613.07 Million the demand related cost worked out to Rs. 10803 Million (14.10%), energy related cost worked out to Rs. 60,923 Million (79.52%) and consumer related cost was estimated at Rs. 4888 Million (6.38%).

In the light of the CoS model as explained above **the average cost of supply as per Commission's estimates in the case of UHBVNL is estimated at Rs. 5.54 / kWh.** In view of National Tariff policy the +/- 20% the upper and lower limits of tariff for UHBVNL worked out to Rs. 6.65/kWh and 4.43/kWh respectively. Similarly, **the average cost of supply in the case of DHBVNL in FY 2011-12 is estimated at Rs.**

4.69/kWh. Accordingly, the upper and lower limit of tariff in the case of DHBVNL works out to Rs. 5.63 /kWh and Rs. 3.75/kWh respectively. In the light of the tariff limits based on the NTP the Commission observes that despite the rationalisation of tariff by the Commission in FY 2010-11 the current tariff of all categories of consumers vis – a – vis the average cost of service is well within the limit.

It is evident from the above that due to inherent difference in the load profiles the CoS of UHBVNL and DHBVNL are also different. However, in view of the fact that Haryana is a comparatively small state, the power purchase for both state owned Discoms i.e. UHBVNL and DHBVNL is managed by a common agency i.e. HPPC, commensurate with the inherent differences in the consumer mix and load profile of the two distribution licensees there is no differentiation in the bulk supply rate and as of now there is no intra – discom imbalance settlement rules / intra – state ABT. **The Commission accordingly decided to continue with a uniform electricity tariff structure for the entire state.** Thus on a combined basis the average cost of supply as estimated by the Commission worked out to Rs. 5.05 i.e. the upper and lower limits to reckon with cross – subsidy limits as per NTP worked out to Rs. 6.06 / kWh (rounded off) and Rs. 4.04 / kWh (rounded off) respectively.

Two Part Tariff:

In the public hearing on ARR & Tariff for FY 2011-12 HT consumers raised the issue that the Commission introduced two part tariff for the first time in the State of Haryana in FY 2010-11 and the manner in which it has been implemented appeared to be arbitrary.

The Commission wishes to clarify in this context that two part tariff has been in vogue in Haryana since the first tariff order of the Commission issued in December, 2000. However, the same was confined to Railway Traction tariff only which was subsequently extended to other categories of consumers in FY 2010-11. Two part electricity tariff structure is nationally as well as internationally considered as the most appropriate tariff design which is also recommended for large

consumers in the NTP framed by the Central Government under the enabling provision(s) of the Electricity Act, 2003. **As far as appropriateness and implementation is concerned the Commission is of the view that as per the CoS model adopted by the Commission about 28% of the cost to be recovered through tariff is of fixed nature which ought to be recovered through a fixed charge under two part tariff.** The Commission is well aware of the fact that the entire revenue gap in FY 2010-11 and FY 2011-12 cannot be passed onto the consumers in one go keeping in view that the ground reality of the limited paying capacity of small / marginal electricity consumers in the State realigned the tariff to garner an additional amount of only Rs. 12000 Million in FY 2010-11 out of the total revenue gap of Rs. 21108.46 Million. The Commission in order to avoid tariff shock to the electricity consumers from sudden increase in tariff decided to pass on only a part of the overall revenue deficit. For the balance deficit the consumers had to bear the interest cost of borrowings allowed by the Commission to the licensees to bridge the uncovered revenue gap so as to carry on their day to day business. Moreover, based on the estimated revenue from the fixed charge introduced by the Commission the incidence of fixed charge was about 8% as against about 28% as explained above. Given the huge revenue gap introduction of fixed charge was essential so as to provide some stability to the revenue accruing to the distribution companies as in the case of single part energy based tariff in case the consumption dropped suddenly in a particular billing cycle the revenue of the utilities get adversely affected.

In the light of the fact that the existing tariff is still not cost reflective the Commission feels that suitable steps are required to re-align the tariff in line with the average cost to supply for FY 2011-12 as well as to gradually reduce the cross – subsidy in line with the National Tariff Policy.

The Commission while designing the tariff structure has kept in mind the requirements of the Act as well as Intra – State ABT and introduced two part tariff in some categories involving large consumers i.e. a separate fixed charge in addition to the energy charge levied on the actual

energy consumption was introduced. In some of the categories the Commission retained MMC to be levied only in case where the consumption of a consumer happens to be less than the threshold consumption levels and where fixed charge is not applicable.

MMC

A lot of confusion came to the notice of the Commission in implementation of Fixed Charge and MMC by the Discoms. As against the objective of the Commission the utilities seems to be charging, in some cases, both fixed charge as well as MMC.

In this context the Commission would like to clarify that **MMC is not an additional charge i.e. in addition to fixed charge and energy charge but a charge to ensure that the power utilities are able to realise some revenue where energy consumption of a consumer is significantly lower with reference to their connected load / sanctioned load. In order to further remove the confusion the Commission decides that MMC is not to be levied for the Consumer Categories where fixed charge is applicable Further FSA, if any, is to be levied on the actual energy consumed by the consumers as per the meter reading in cases where the consumer has been billed on MMC basis.**

The Commission while reckoning with the tariff structure in FY 2011-12 has kept in view the feedback received from various sections of consumers in the light of the financial impact on small and marginal consumers of the tariff structure evident from the electricity bills issued after the revised tariff which came into effect since 1st October, 2010. The Commission therefore considers appropriate to revisit the tariff of some of the categories that was revised in FY 2010-11.

The commission while determining the category wise tariff has given due consideration to the views expressed by various consumers / consumers' organizations, individuals and other organizations during the public hearings held at Karnal and Gurgaon, views expressed by members of the State Advisory Committee in the meeting held on

29.03.2011 and the submissions made by UHBVNL and DHBVNL at various forums.

Domestic Supply Tariff (DS)

The DS consumers, as per the current tariff, pay about 60% of the cost of service. Unlike AP tube – well consumers whose revenue deficit, is met out of RE Subsidy provided by the State Government, there is no subsidy support available for the DS consumers. Traditionally, the Commission has been cross – subsidising the DS consumers from the surplus available from a few other categories of consumers. However, in the last few years due to rise in cost of delivered power and the restrictions imposed on the extent of the cross – subsidy by the National Tariff Policy (NTP) the available cross – subsidy has dwindled to the extent that only a part of DS deficit is taken care of thereby leaving a major portion un covered.

Given the fact that the DS tariff has comparatively much wider ramifications as, firstly it affects majority of electricity consumers in the state and secondly this category comprises of income wise widely dispersed house holds' groups i.e. from life line / BPL households, marginal and middle class households to affluent households, the Commission has attempted to strike a balance between the provision of the Act i.e. tariff should be cost reflective and avoiding a major tariff shock to the DS consumers specially the small and marginal consumers.

Prior to the issue of Tariff Order of 2010-11, the slab structure of DS category was as under:

1st slab	0-40 units / month
2nd slab	41-300 units / month
3rd slab	301 and above units / month

During the course of processing of ARR/Tariff Petition of UHBVNL/DHBVNL for FY 2010-11 the Commission, after careful consideration decided to restructure the slab system as under:-

1st slab	0-40 Units / month
2nd slab	41-300 Units / month
3rd slab	301 -500 Units / month
4th slab	501 and above Units/month

While determining the DS tariff, the Commission considered the DS consumers under two categories i.e. category-1 comprising of consumers with consumption upto 40 units per month and category-2, comprising of consumers with consumption in excess of 40 units. In case of category-1, the Commission felt that the consumers falling under this category have normally connected load less than 1KW, their consumption requirements are limited to bare minimum lighting and at the most a fan & that their paying capacity, after meeting the expenses for basic necessities, is extremely low. Consequently the Commission kept the tariff of this category i.e. the DS consumers with consumption up to 40 units/month, unchanged at the same level.

For the DS consumer falling under category-2 i.e. in the 2nd to 4th slabs, the Commission after detailed deliberations on their paying capacities, prevalent intra- category cross subsidy and further considering that bulk of DS consumers under this category fall in the second slab (41-300 units/month), decided to marginally increase the applicable tariff in this slab by only 5 p/unit. Further in case of consumers falling within the consumption slabs of above 300 units/month, the Commission observed that they comprise of comparatively affluent section of society and that consumers with consumption 501 units & above / month are more affluent and have still better paying capacities. The Commission, accordingly, in order to bridge the revenue deficit to the extent possible and to bring the tariff of these consumers nearer to CoS, decided to increase the tariff of the consumers falling under the 3rd & 4th slabs by 10 P/unit and 9 P/unit respectively in FY 2011-12.

while fixing Monthly Minimum Charges (MMC) the Commission noted that the increase in MMC in FY 2010-11 from Rs. 60/- /Rs. 40/- per KW

to Rs. 80/- per KW has been vehemently resented. It was stated that higher MMC charges prompt the consumers to go for unwanted consumption just to cover the MMC charges which go against the concept / principles of energy conservation. The Commission has accordingly given some relief in MMC charges to the consumers with connected load more than 2 KW i.e the same has been reduced from Rs. 80/kW/Month to Rs. 70/kW/Month.

The existing tariff and the tariff approved by the Commission for DS category for FY 2011-12 is given in the Table below:-

Table 4.2 - Existing tariff and the tariff approved by the Commission for DS category for FY 2011-12

Category	Existing Tariff Paisa/unit	Revised Tariff Paisa/unit
Domestic Supply		
0-40 units/month	263	263
41-300 units/month	375	380
301-500 units/month	455	465
501 units & above	490	499
Monthly Minimum Charges	Rs.80/KW or part thereof	Rs.80/KW or part there of connected load upto 2 KW and Rs. 70/KW or part thereof for connected load above 2 KW

The DS tariff as determined above for FY 2011 - 12 is telescopic in nature. Hence the consumers in higher tariff slabs would get automatically the benefit of lower tariff slabs as well. Thus the impact of adjustments in tariff could not have major adverse impact on the energy bills of the DS consumers.

RAILWAYS TRACTION & DMRC TARIFFS:

The Commission while revising the tariff applicable to the Railways for their traction requirement in the previous year had kept in mind the overall revenue deficit of the licensees prior to the revision, the average cost of supply to the retail consumers as estimated by the Commission and the provisions of the National Tariff Policy with regard to the extent of cross – subsidy. Accordingly the Commission vide order dated 13th September, 2010 w.e.f 1st October, 2010 revised the fixed charge

determined over a decade back from Rs. 60/kVA/Month to Rs.125/kVA/Month. While energy charges for supply at 11 kV were revised from Rs. 4.09/kVA to Rs. 4.55/kVA. On the energy charges the Commission allowed discount of 3%, 5% and 7% for availing supply at higher voltage i.e. 33 kV, 66/132 kV and 220 kV respectively.

Railways traction tariff in a few neighbouring states is as under:-

	Fixed Charge	Energy Charge	MMC
Delhi (Railway Traction Supply)	Rs. 150/kVA/Month	3.60/Unit 15% rebate on notified tariff and additional 2.5% rebate for supply at 33/66 kV and 4% rebate for supply at 220 kV.	0
Delhi (DMRC)	Rs 75/kVA/Month	Rs3.0/Unit	0
Punjab	0	5.41/Unit	Rs. 224/kVA
Uttar Pradesh	Rs. 180/kVA for supply above 132 KV and Rs. 200 / kVA for supply below 132 kV	Rs. 3.75/Unit (above 132 kV) Rs. 3.85/Unit (below 132 kV)	Rs. 425/kVA/Month
Madhya Pradesh	Rs. 200/kVA/Month	Rs. 4.50/Unit	0
Haryana (Railways)	Rs. 125/kVA/Month	Rs. 4.55/Unit at 11 KV Rs. 4.43/Unit at 33 kV Rs. 4.31/Unit at 66/132KV Rs. 4.23/Unit at 220 KV	0
Haryana (DMRC)	Rs. 125/kVA/Month	Rs. 3.95/Unit at 66 KV Rs. 3.80/Unit at 132 KV	0

It is observed from the above table that the prevailing fixed charge for traction supply in Haryana i.e. Rs. 125/kVA/Month is substantially lower than that prevailing in Delhi, Uttar Pradesh and Madhya Pradesh. Further as in Punjab and Uttar Pradesh there is no MMC in Haryana. As far as energy charge is concerned the traction tariff in Haryana for supply at 33 kV and above is lower than that of Punjab and Madhya Pradesh.

It is clear from the above that Railway traction tariff in Haryana compares favorably with those prevailing in a few other neighboring states and

within the permissible limits of cross – subsidy as specified in the National Tariff Policy. It needs to be noted that Railways draw power at 66 kV and above i.e at 132 kV / 220 kV because of which the quality of supply to them is much better than the industrial and other Bulk supply consumers. **The breakdowns are rare and they are not subjected to any peak load restrictions, weekly off days and scheduled or unscheduled power cuts.** Thus the Railways get continuous supply which amply justifies higher tariff for Railways as compared to other HT or Bulk Supply consumers.

While comparing price of electricity sold to Railways viz-a-viz the price of electricity sold to other HT/Bulk Supply consumers, it needs to be kept in mind that in addition to the tariff of electricity charged from other HT/Bulk supply consumers they are also levied **Electricity Duty and Municipal Tax, which is not levied on electricity, sold to the Railways.**

Further, the Railways are given supply as per their system requirement at 132/220 KV. The load of the Railways being 2- phase causes unbalancing in the system and also **prohibits full utilization of the capacity of Transmission lines** of the utility. Besides, load of Railway Traction is also highly fluctuating as trains are often bunched up during peak traffic hours. Additionally, there is a spike in load as a train passes through a particular station / segment. All these factors lead to generation of Harmonics which are detrimental to the power system and affect quality of supply to other consumers. **It needs to be noted that in the case of Arc/Induction Furnace consumers getting supply at 11 KV, a surcharge of 15 Paisa / Unit is levied on account of the reasons that arc/Induction Furnace load is highly fluctuating and it subjects the power transformers at 66 KV grid sub-stations to acute electrical stresses.**

The Railways have quoted Circulars and Guidelines of Ministry of Power, Government of India issued around 1991 in their written objections and oral submissions in support of their case for lower tariff. It is clarified that with the enactment of Electricity Act, 2003 and introduction of Tariff Regulatory mechanism by establishment of Central Electricity Regulatory

Commission and State Electricity Regulatory Commissions, the **tariff determination is no longer governed by guidelines of Ministry of Power**, Government of India. Section 86 of Electricity Act, 2003 does provides that in discharge of its functions, the Commission shall also be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy.

However neither the Act nor the policies, so far, framed under it, provides that the tariff for the Railways should be lower or at par with other HT or Bulk Supply consumers or that the Commissions will also keep in view various guideline other than those notified in pursuance of the Electricity Act, 2003, of Ministry of Power, Government of India in the process of tariff determination. Thus, reliance of Railways on various Circulars and Guidelines of Ministry of Power, Government of India, quoted by them, is misplaced.

Railways raised the issue of lower tariff approved by the Commission for DMRC and sought that the traction tariff in their case too should be at par with the tariff allowed by the Commission to Delhi Metro operating in Gurgaon segment. The Commission while approving DMRC tariff had observed that DMRC will be providing state – of- the art services to a large number of passengers' commuting between Gurgaon and the National Capital Territory of Delhi. The Commission also notes that **DMRC will not be catering to any freight movements** which may augment its revenue and hence make – up for the shortfall, if any, from earnings from the passenger fare. DMRC is expected to emerge as the preferred means of travel which will greatly contribute to de-congestion of road traffic thereby not only would save precious time of public but also help in reducing environmental pollution from vehicular emissions. Consequently, for DMRC the Commission determined two part tariff wherein the Fixed Charge was kept at par with the fixed charge applicable in the case of Railways while, keeping in view of the above the energy charges were kept at a comparatively lower level.

In view of the details given in the preceding paras, the Commission orders that **the tariff for Railway (Traction) and DMRC in FY 2011-12**

shall remain un-changed. As traditionally the Railways maintain a good power factor it would entitle them to get power factor linked rebate which would effectively reduce their energy bill to that extent.

The Railways have on more than one occasion raised the issue of being allowed Domestic Tariff / Bulk Domestic Tariff for electricity supplied to them for purposes other than traction. After careful consideration the Commission is of the view that the electricity supplied to the Railways for their staff quarters used for residential purposes ought not to be discriminated against vis – a – vis other domestic consumers. **Hence, subject to technical feasibility and fulfillment of other pre – conditions the facility of domestic tariff is extended to the residential colonies of the railway establishments / stations.**

HT Industry:

In the public hearings a number of HT Consumers objected to the introduction of fixed charges and submitted that the levy of fixed charges has put a heavy financial burden on the Industries thereby making them uncompetitive. It was further stated that the levy of fixed charges in the absence of round the clock electricity supply is not justified. The Commission observes that the current HT Industry Tariff is well within cross – subsidy limits of the National Tariff Policy. Hence, going by the standard practice of recovering cost of fixed nature through a fixed charge the Commission thought it appropriate to introduce two part tariff comprising of a fixed charge linked to the sanctioned load / contract demand of the consumer and an energy charge linked to the actual quantum of energy consumed by them. In the absence of a fixed charge the expenditure incurred by the distribution licensees on creating necessary infrastructure to cater electricity demand of the consumers would not be fully recovered even if energy charges were to be increased to cover up the fixed cost, as a dip in electricity consumed by a consumer for one reason or the other would destabilise and add uncertainty to the revenue flow of the distribution licensees.

In view of the above the Commission finds no merit in the contention that fixed charge needs to be reviewed. Thus the applicable tariff and charges currently applicable to the HT Industrial consumers shall remain unchanged as determined by the Commission vide its order dated 13/09/2010.

Peak Load Exemption Charges:

The Commission would have preferred to introduce time of day (ToD) tariff in Haryana beginning with all consumers taking supply at HT voltage. The system load curve in Haryana distinctly shows two periods of day when the system demand is at the peak i.e. in the morning for about two hours and in the evening for about four hour duration.

However, in the absence of consumer category wise load curve and inability of the utilities in estimation of the extent of load shifting that will take place due to use of differential tariff the Commission is constrained to device a full – fledged TOD tariff structure. Hence in place of TOD tariff the Commission considers it appropriate to continue with the existing Peak Load Exemption Charges (PLEC) with the following conditions:

- Peak Load Hours shall be determined by the distribution licensees from time to time with prior concurrence of the Commission.
- HT Industrial consumers with Electronic Tri – Vector Meter for recording consumption during the peak load hours shall be eligible to avail power during peak load hours.
- All the eligible HT Consumers as mentioned above can avail 20% of average daily consumption of the billing period immediately preceding the month during peak load hours and shall be billed at extra charge of Rs. 2/ kWh over and above the normal tariff. If the consumption of a consumer during peak load hours in a month exceeds 20%, such consumption in excess of 20% shall be charged at Rs. 4/kWh extra over and above the normal tariff.

- All the eligible HT Consumers who intend to avail power more than 20% during peak load hours, need to exercise their option for availing special dispensation. Those consumers who submit their option for availing power beyond 20% shall be allowed exemption / permission subject to the satisfaction of power utilities and technical feasibility. They will be charged Rs. 2/ kWh extra over and above the normal tariff for the energy drawn during peak load hours including FSA and any other charges that may be in vogue. If the consumption of a consumer exceeds the permitted limit during the peak load hours then he shall be charged Rs. 4/ kWh extra over and above the normal tariff including FSA and other charges for the quantum of power drawn by him in excess of special dispensation allowed to him.

In addition to the above the Commission is of the view that more power needs to be delegated to the field officers for expediting grant of dispensation sought by the consumers during peak load hours. The Discoms should examine the feasibility of extending peak load exemption to the consumers other than HT Industry and subject to technical feasibility may allow them to draw power in the peak load hours subject to payment of charges as determined above.

Non Domestic Supply Tariff

In the public hearing quite a few consumers had objected to levy of fixed charge and the increase in the Monthly Minimum Charges (MMC) in the Non- Domestic Supply (NDS) category. The Commission observes that this category comprises of business houses, cinemas, clubs, public offices, schools, hospitals, hotels etc. Their capacity to absorb the impact of any rise in input cost including electricity is comparatively better than DS consumers as they have the ability to pass on such costs to some extent to their beneficiaries / users of their services. Consequently, the non – domestic category of consumers ought to be cross – subsidising other consumer's categories like DS

where there could be some compulsion to cushion them especially at the lower end, from an abrupt increase in tariff for some more time. However, the Commission observes that NDS consumers, at the current tariff, are paying about 72% (UHBVNL) and 93% (DHBVNL) of the cost caused by them on the system and in the absence of any subsidy support from the State Government or cross – subsidy available from a few other categories are major contributors to the revenue gap. Hence their tariff is not cost reflective.

Hence the Commission has tried to ensure that the average cost recovery from NDS category of consumers improves closer to the cost caused by them. **Consequently, the energy charges is revised from Rs. 4.40/kWh to 4.50/kWh in the case of consumers with a connected load up to 20 KW and from Rs. 4.60 / kWh to Rs. 4.70 / kWh in the case of consumers with connected load above 20 KW.**

The Commission while reckoning with the Fixed Charge has taken into consideration the submissions of the NDS and LT Industry consumers in the public hearing that the fixed charge ought to be and also forms the basis of computation of load factor or on the basis of maximum demand recorded during the month. The Commission feels that due to operational constraints including possibility of manipulation in recording maximum demand it would not be possible to concede their request. However in this context, the Commission would like to make a distinction specially for the NDS category of consumers especially those with connected load up to 20 KW and given the seasonal nature of operation of some of them as well as the fact that market for their products are often subjected to up downswings thereby leading to drop in their energy requirement and hence low load factor vis – a – vis their contracted / sectioned load, and hence thought it appropriate to re-examine their tariff. Hence, **in order to provide them some relief the Commission, at this stage, is reducing fixed charge from Rs. 130 /KW / Month of the connected load to Rs. 115 / KW/Month on the consumers having connected load above 20KW. The Commission expects that the loss of revenue on account of reduction in fixed charge would**

be offset by increase in energy charge billed on actual consumption thereby keeping the tariff structure revenue neutral.

The MMC shall be reduced from Rs. 240 / KW per month to Rs. 180 per kW / Month for the consumers having a load upto 5 KW and Rs. 160 / KW / Month for the consumers with connected load above 5 KW and upto 20 KW.

The Commission finds that the NDS category also comprises of Charitable Institutions / welfare bodies functional in the areas of health, education and welfare of less privileged people of the society. The Commission, in principle, feels that they ought to be extended some support by way of concessional electricity tariff. Hence all such Institutions registered under Central / State Authority may submit their case with all the supporting documents for some relief in the existing tariff for consideration of the Commission. The Commission shall review the same and pass order separately after hearing all the stakeholders.

In the public hearings the telecom consumers which fall in the NDS category submitted to the Commission that they are amongst big consumers of the electricity of the distribution companies in Haryana namely UHBVNL and DHBVNL. The per month average revenue generated by the Nigams from the sale of power to them for use at their communication towers is in excess of Rs. 1.5 Crore per month and additionally they are also constructing various infrastructures for connectivity and supply of electricity by the Nigams at their own cost involving huge capital expenditure. Hence, it was proposed that the burden of cross subsidy should not be imposed on them in view of the fact that they are public utility companies, and a separate concessional tariff may be charged from them instead of the current commercial (Non Domestic) rates. The Commission after careful consideration of their submission is of the view that the telecom service providers despite the fact that they provide useful services, are not by any means comes under the category of a public utility. More so, as informed by the representative of the telecom consumer even the Financial Institutions (FI) treat them at par with commercial undertakings and not public

utilities while extending loans to them. Thus, the commission does not deem appropriate at the stage to introduce any separate concessional tariff for the telecom sector.

The representative of Hotels, Malls etc. submitted that they are categorized as Non domestic / commercial consumers. Despite the fact that they maintain near unity power factor they are not given rebate for maintaining higher power factor. They objected to the sudden imposition of Rs. 130 / KW / Month as fixed charge and submitted that such a steep levy is making their functioning commercially unviable.

The Commission has considered the above submissions and is of the view that the objective of categorising NDS into two categories i.e. up to 20 kW and above 20 kW connected load and then deciding a differential tariff was to give some relief to the small NDS consumers whose ability to absorb rising input cost is limited. However, in the case of larger consumers given their clientele, it is felt that they should be able to bear the rising cost of electricity and has the ability to pass on the same to their clients. Hence any cross – subsidy to them would defy all established norms of cost allocations for tariff determination in the regulated electricity business. Nonetheless, the reduced fixed charge in FY 2011-12 would provide them some relief.

Independent Hoardings / Decorative Lighting:

In view of the non – essential nature of supply and the fact that in FY 20011-12 the Commission, given the power availability and rapidly growing demand for electricity in Haryana, expects the base load shortage likely to continue for some time leading to dispatch of comparatively expensive generating stations or procurement of short term expensive power. **The Commission has considered it appropriate to revise the tariff in this category from Rs. 5.95/kWh to Rs. 6.50/kWh. Additionally, a fixed charge of Rs. 120 / KW / Month is also introduced irrespective of the connected load** to take care of the fixed cost component of the cost to supply. The Commission notes that despite the fact that this category was introduced in FY 2010-

11 no sales or connected load or revenue has been reported by the distribution companies under this category. Hence the Commission directs UHBVNL and DHBVNL to carry out a load survey in their respective areas to identify use of electricity for commercial hoardings / decorative lighting etc. and shift such supply through separate metering arrangements and bill as per the approved tariff for use of electricity for such purposes.

LT Industry (up to 50 KW):

The LT Industry consumers had submitted that small scale and cottage industry are the backbone of any economy which in Haryana has been subjected to steep tariff rates as well as MMC from last year. It was suggested that the Commission may consider introduction of separate category of concessional tariff for small scale / cottage industry.

The Commission finds weight in the argument that small scale / cottage industry contribute in a major way to the State Gross Domestic Product and employment generation in the State and have limited ability to absorb any hike in input cost including electricity. At the same time the Commission cannot lose sight of the fact that the Electricity Act, 2003 mandates that the electricity business has to operate within the rigours of a market economy and hence ought to pay in accordance with the cost causation principles.

In its previous tariff order the Commission noted with concern the low load factor of the consumers in this category which could be due to the fact that the energy consumption is not commensurate with the connected load of the consumers thereby a significant portion of the load contracted / sanctioned remains unutilised. Consequently, as pointed out by the consumers falling under this category the fixed charge introduced by the Commission has become burdensome in some cases. The Commission is of the considered view that the LT Consumers need to take stock of their connected load / sanctioned load and rationalise the same on a realistic basis specially in a situation when the Commission, in line with the Act and the policies framed under it, has introduced two part tariff. In a single part tariff regime

when just the energy consumption based tariff existed 'hoarding of load' not in sync with the energy requirement was not penalised despite the fact the revenue of the distribution licensees suffered and the cost incurred by them in creating and maintaining the infrastructure planned in accordance with the sanctioned load remained largely uncovered.

In view of the hardships faced by the LT Industry consumers and till the reality and impact of fixed charge commensurate with the connected load is understood and appreciated and the LT Industry consumers are able to adjust to the resulting financial impact, **the Commission considers it appropriate to reduce the fixed charge from Rs. 100/KW to Rs. 75/KW for consumers having connected load more than 20 KW. This reduction is expected to nullify the impact of fixed charges being levied on the basis of connected load instead of contract demand / maximum monthly demand.** The Commission expects that this would provide the desired relief to the consumers till they adjust their connected load in a realistic manner. However, given the fact that this category of consumers are paying only about 87% of the cost caused by them and hence is a revenue deficit category which is not compensated by way of subsidy or cross – subsidy from any quarters, the Commission in order to cushion the negative fallout of the reduction in the fixed charge to a certain extent **marginally revises the energy charges from Rs 4.30/kWh to Rs. 4.40/kWh for all LT Industry consumers irrespective of connected load. The Commission expects that the loss of revenue on account of reduction in fixed charge would be offset by increase in energy charge billed on actual consumption thereby keeping the tariff structure revenue neutral.**

Additionally, the Commission observes that a large number of consumers in the LT Industry category are billed on MMC basis. Which again is an indicator that the connected load / contracted load which is a deemed demand on the system is not commensurate with the actual energy consumed. Thus there is a need for the LT Industry consumers to align their connected load in line with their energy requirements and diversity factor. Consequently, **the Commission determines MMC**

applicable for the consumers with a connected load up to 20 KW, where there is no fixed charge at Rs. 150 / KW/Month or part thereof.

Public Water Works, Lift Irrigation & MITC:

The Commission would have preferred some feedback from the consumers of this category which largely comprises of Government Departments and Municipal Corporation. However, no representations verbal or written have ever been received from them. Hence, the Commission, in line with the cost causation principle revises the tariff for these categories of consumers. In the case of Public Water Works the revised tariff shall be Rs. 4.25/kWh; the tariff applicable to Lift Irrigation and MITC shall be Rs. 4.30/kWh while the Fixed Charge in all the above mentioned category shall remain unchanged.

Agriculture Tariff (AP):

The AP consumers in Haryana are either metered consumers paying energy charges as per their meter readings or flat rate un – metered consumers billed on the basis of their respective BHP of the tube – wells. The AP consumers are paying just about 6% of the cost caused by them and the balance is met by way of RE Subsidy from the State Government. A reference to the State Government seeking their commitment for the subsidy required in FY 2011-12 to retain the AP consumer tariff has already been made by the Commission vide its Memo No. 465/HERC dated 11/05/2011. The reply of the State Government is awaited **Since the State Government has been traditionally providing the subsidy required at the current tariff as estimated by the Commission on a yearly basis, the Commission considers it appropriate to leave the tariff of AP consumers unchanged at the same level.**

The Commission is perturbed by the prevailing low tariff for the AP consumers. The NTP at Para 8.3 provides, **“It has been widely recognised that rational economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of**

ground water resources". The Commission is of the considered view that in a State like Haryana where in about 60% of the area the ground water has been over exploited and the water table is receding at a rapid rate, the principle enunciated in the National Tariff Policy is of extreme relevance. A more **economic pricing of power would send appropriate price signals to the single largest category of consumers in terms of volume of sales to conserve energy as well as check depletion of ground water which has much larger social cost.**

Tariff for all other categories of Consumers:

The tariff and charges applicable to all other categories of consumers including Bulk Supply, Street Lighting, Bulk Domestic Supply and Temporary Supply shall remain unchanged i.e. as per Commission's tariff order dated 13th September, 2010 in Case No. HERC/PRO 3 of 2010 and HERC / PRO 4 of 2010.

All other terms and conditions other than those explicitly dealt with in the instant order shall remain unchanged and applicable.

The details of existing tariff and the revised tariff as approved by the Commission for various categories of consumers are summarised in the Table 4.3

Table 4.3 – Distribution and Retail Supply Tariff approved by the Commission for FY 2011-12

Approved Distribution & Retail Supply Tariff for FY 2011-12									
Sr. No.	Category of consumers	Tariff for 2010-11				Tariff for 2011-12			
		Energy Charges (Paise / kWh)	Fixed Charge (Rs. per KW per month of the connected load / per kVA of sanctioned contract demand in case of HT)	FSA (Paise / kWh)	MMC (Rs. per KW per month of the connect ed load)	Energy Charges (Paise / kWh)	Fixed Charge (Rs. per KW per month of the connected load / per kVA of sanctione d contract demand in case supply is at HT)	FSA (Paise / kWh)	MMC (Rs. per KW per month of the connect ed load)
1	Domestic (LT)								
	Upto 40 units per month	263	Nil	15	80	263	Nil	15	Rs. 80 upto 2 KW and Rs. 70 above 2 KW
	41 - to 300 units per month	375		29		380		29	
	301 to 500 units per month	455		37		465		37	
	501 and above units per month	490		37		499		37	
2	Non Domestic								
	Up to 20 kW	440	Nil	31	240	450	Nil	31	Rs. 180 upto 5 KW and Rs. 160 above 5 KW to 20 kW
	Above 20 kW	460	Rs. 130	31		470		115	
3	Independent Hoarding / Decorative Lightning	595	Nil	31	240	650	130	31	Nil
4	HT Industry(above 50 kW)								
	Supply at 11 KV	415	Rs. 120	31		415	Rs. 120	31	Nil
	Supply at 33 KV	403		31		403		31	
	Supply at 66 KV or 132 KV	391		31		391		31	
	Supply at 220 KV	383		31		383		31	

	Arc / Steel furnace (at any voltage level +15 Paise surcharge if supply is at 11 KV)	415		31		415		31	
5	LT Industry - upto 50 kW								
	Up to 20 kW	430	Nil	32	120	440		32	150
	Above 20 kW	430	Rs. 100	32		440	75	32	Nil
6	Agriculture								
	Metered	25	Nil		Rs. 200 / BHP per year	25	Nil	Nil	Rs. 200 / BHP per year
	Un-metered (Per BPH/Month)	Nil	Rs. 35		Nil	Rs. 35	Nil	Nil	Nil
7	Public Water Works	410	Rs. 145	30	Nil	425	Rs. 145	30	Nil
8	Lift Irrigation	419	Rs. 120	30	Nil	430	Rs. 120	30	Nil
9	MITC	419	Rs. 120	30	Nil	430	Rs. 120	30	Nil
10	Railway Traction								
	Supply at 11 KV	455	Rs. 125	30	Nil	455	Rs. 125	30	Nil
	Supply at 33 KV	443		30	Nil	443		30	Nil
	Supply at 66 KV or 132 KV	431		30	Nil	431		30	Nil
	Supply at 220 KV	423		30	Nil	423		30	Nil
11	Bulk Supply								
	Supply at LT	440	Rs. 130	31	Nil	440	Rs. 130	31	Nil
	Supply at 11 kv	430		31	Nil	430		31	Nil
	Supply at 33 KV	418		31	Nil	418		31	Nil
	Supply at 66 KV or 132 KV	406		31	Nil	406		31	Nil
	Supply at 220 KV	398		31	Nil	398		31	Nil
12	Bulk Supply Domestic (70 KW and above at 11 KV or above voltage)	360	Rs. 50	31	Nil	360	Rs. 50 per KW of the recorde d maximu m demand per month	31	Nil
13	Street Lighting	415		31	150	415	Nil	31	150
14	DMRC								
	Supply at 66 KV	395	Rs. 125	30		395	Rs. 125	30	
	Supply at 132 KV	380		30		380		30	
15	Temporary Metered (1.5 times the tariff of relevant category for which temporary supply has been sought)								

**The revised Tariff for Distribution & Retail Supply of electricity in
Haryana by the distribution licensee(s) i.e. UHBVNL & DHBVNL
shall be applicable from 1st June, 2011 and shall remain effective**

till they are revised / amended by the Commission. The distribution licensees are directed to complete all the procedural formalities before implementing the revised distribution and retail supply tariff.

5. CONCLUSION

The Government of Haryana initiated reforms in the power sector over a decade back with expectations to rationalize consumption and improve allocation of financial and energy resources of the State. The impact of the reform process is yet to be fully quantified. However, Commission wants to capture very briefly some of the short comings noticed over the years.

The Commission, on more than one occasion, brought the deteriorating financial position of the distribution companies i.e. **UHBVNL and DHBVNL, to the management of these companies as well as the State Government** (being the sole owners) imploring them to intervene in the matter by conducting diagnostic studies and accordingly taking appropriate corrective measures. More recently the Commission vide its D.O. No. 3553/Sr.P.S. / Chairman dated 4/02/2011 on the basis of scrutiny of their financial statement for FY 2009-10 brought to the notice of the State Government the following facts, which need prompt follow up action to prevent further deterioration in the financial health of the Discoms.

Since creation of the two distribution companies i.e. UHBVNL and DHBVNL in 1999, they have accumulated huge financial losses. The accumulated losses of UHBVNL and DHBVNL as on 31/03/2010 was Rs. 3690.63 Crore and Rs. 1894.1 Crore respectively i.e. more than 50% of net worth in the case of UHBVNL and more than 100% of the net worth in the case of DHBVNL. Thus there is an urgent need to recapitalize these companies by way of infusion of fresh equity. The total net borrowings (secured + unsecured loans) of these companies stand on 31st March, 2010 at Rs. 7981.12 Crore for UHBVNL and Rs.7287.5 Crore for DHBVNL. Despite the fact that due to the accumulated losses the entire net worth of these companies are eroded still they are able to carry on the electricity distribution and retail supply business in Haryana only because the commercial banks and financial institutions continue to fund them. At some point of time the banks / financial institutions in order to safeguard their own financial health may

lose appetite for such high risk lending. Thus the impending crisis in the power distribution sector in Haryana is very much obvious and requires long term strategy as huge accumulated losses cannot be wiped out in one go.

A look at the cash losses (Revenue – Expenditure before depreciation, interest and taxes) of the distribution companies, which reflects the ability of these companies to manage their day to day business, also presents a grim reality. The cash losses of UHBVNL for the year ending 31st March, 2010 was Rs. 774.48 Crore while the same in the case of DHBVNL was Rs.736.85 Crore. The cash losses are despite the fact that huge amount of RE Subsidy for AP consumers is being paid by the State Government every year. Additionally, the Commission, since FY 2005-06, has been allowing at periodical intervals recovery of the deviations between the power purchase cost approved by it on a projected basis and the actual reported by the power utilities at the yearend as Fuel Surcharge Adjustment (FSA). With such huge cash losses no company can sustain its business for long.

The un-realized book debt as on 31st March, 2010 in the case of UHBVNL was Rs. 2094.4 Crore while in the case of DHBVNL the same was 1902.2 Crore. A major percentage of this would be more than six months old. Hence, in order to improve the cash cycle and to reduce the need for expensive short term borrowings there is an urgent need to improve the cash turn around cycle by way of introducing efficient revenue collection measures. The distribution licensees should launch a sustained campaign for speedy recovery of old dues including those from the Government departments. **In consultation with the State Government the power utilities should install pre – paid meters at all major Government installation / departments in order to stop future non payments of electricity dues.**

The peak power shortage in Haryana is around 12%, despite the recent augmentations in power availability. It is likely to continue given the rapidly growing demand for electricity and existing unmet demand in the State. In the last three years the Discoms bought substantial quantity of

power from expensive short term sources while the windows available to them for procurement of long term power through Case – 1 & Case – 2 competitive bidding processes have not been fully exploited after the initial tie – ups.

Given the above scenario, it would become impossible for the distribution companies to function in an efficient manner. The Commission feels that the matter requires urgent attention and intervention at Government level after carrying out a detailed diagnostic study and identifying the measures to turn around the distribution companies. **Thus the Commission feels that given the lukewarm response of the private capital there is a need to increase the level of public fund in the power sector to help in its development. Additionally, there is a need to create an environment that will attract private players, promote power market expansion to facilitate investments. Simultaneously the distribution companies need to drastically improve their work culture to bring about a financial turnaround. The Utilities cannot expect bailout package from the Government all the time. They have to improve their performance for survival.**

Another area that has engaged the attention of the Commission for quite sometimes now is the quantum of RE Subsidy. As per the Commission's estimate the same has shot up from about Rs. 1102.5 Crore in FY 2004-05 to Rs. 3422.137 Crore in FY 2010-11. Thus the Commission is concerned about the sustainability of such high levels of State Subsidy. The quantum of RE Subsidy has increased manifolds due to increase in the number of tube – well consumers as well as their connected load over the years as well rising cost of power. The AP tube –well tariff has not kept pace with it as there has been no effort over the years to partly absorb the escalating cost. Further, in the initial years some amount of Cross – subsidy generated from a few other consumer category after bridging the revenue gap of the Domestic Category was available to reduce the revenue gap in the AP tube – well categories. However, in the last five years or so the available cross – subsidy is not adequate to compensate the revenue gap in the Domestic Category

thus no amount is left to reduce the revenue gap in the AP tube –well category. **The concern of the Commission in the recent past has been to accurately quantify the flow of power to the highly subsidized AP consumers. This is extremely important as an exaggerated AP sale leads to under estimation of losses and impacts adversely assessment of RE Subsidy.** The Distribution companies have now submitted the requisite data on the total consumption of AP feeders recorded by the energy meters installed on 11 KV feeders and the corresponding connected load in FY 2010-11. The Commission, for the purpose of estimating agriculture sales and RE Subsidy for FY 2011-12 has relied upon the data emanating from the segregated 11 KV AP feeders which has led to more accurate results as far as AP sales and subsidy is concerned. **The Commission is of the view that the reduction in RE Subsidy with some adjustments in tariff in line with the National Tariff Policy will decrease the burden on the State finances and free resources for public investments. However, as the power utilities have no internal accruals of their own, no free reserves or depreciation reserves to draw down to fund their investment activities, the State Government may step up support to the transmission and distribution companies on the plan side. The PPP mode successfully implemented on the transmission side needs to be explored further as both the transmission and distribution system needs to be augmented / expanded to reduce shortages, facilitate competition and respond to growth in demand from both the embedded consumers as well as the open access consumers. The PPP mode is essential to improve the entrepreneurial efficiency and financial leverage of the State owned power utilities.**

The Commission, from time to time, has been advising the distribution licensees to concentrate upon the heavy loss making circles / feeders instead of making investments in comparatively lower loss making areas in order to optimize the benefits of investment directed at reduction of distribution losses. Technical loss reduction is a capital / time intensive activity which should be carried out as planned but the first priority of the distribution licensees should be to check commercial

losses and that too be started from the heaviest loss making circle / feeder. The Commission in its previous order directed UHBVNL and DHBVNL to submit detailed loss reduction plan by 30th July, 2010 and start submitting quarterly progress reports. The quarterly report for the previous quarter should reach Commission by 25th of first month of next quarter positively. The quarterly report for the quarter June-August, 2010 should be submitted by 25th September, 2010. However, the same has not been complied in letter and spirit. The Commission is perturbed to note that out of a total number of 2737 outgoing 11 KV feeders in the 'OP' circles of DHBVNL there are 33.21% feeders reporting line losses of above 25%, out of these 25.10% feeders are having line losses in the range of 25 to 50% and 8.11% are having line losses of more than 50%. Despite Commission's directive UHBVNL has not provided the requisite feeder wise loss data. **Even where data have been submitted, they have been treated in a routine manner without any detail analysis of the reasons for high losses in many feeders and follow up action being taken by the utilities to reduce them within the acceptable limit. This is a clear violation of the Commission's order on the subject.** This is viewed seriously by the Commission. It is reiterated that any non – compliance of Commission's directives / orders attracts provisions of section 142 and 146 of the Electricity Act, 2003.

From the past data the Commission believes that the feeders wise losses position in the 'OP' circles of UHBVNL are much worse than that reported by DHBVNL. Hence given such high line losses at 11 KV feeders the distribution losses, which would include theft, pilferage, energy billed but revenue not collected etc. are bound to be on the higher side. This is a major pitfall as high AT&C loss jacks up the cost of delivered power in the State. Almost all the interveners in their written objections as well during public hearing before the Commission repeatedly raised this issue. Such huge loss will have a direct bearing on the tariff design and no wonder the consumers are worried about it. The Commission has from time to time impressed upon the distribution licensees to reduce AT&C losses in a time bound manner. The Commission has been

allowing large amounts of capital expenditure to the licensees. Although the licensees have reportedly carried out segregation of AP feeders from rural feeders, HVDS for AP consumers in selected areas, bifurcation and trifurcation of overloaded feeders as well as augmentation of distribution transformers yet desired reduction in AT&C losses has not been witnessed so far when the situation is viewed in comparison with the fresh data emanating from the segregated 11 KV feeders exclusively for AP consumers, the picture becomes all the more grim. On the basis of the data so far made available, the Commission finds that the tube well running hours are lower than what was thought to be and claimed by the distribution utilities all these years. Consequently, there is every reason to believe that a large quantum of distribution losses in other category of consumers were being booked to agriculture sale thereby understating the distribution losses and inflating the RE Subsidy payable by the State Government

An important component of the ARR is the Capital Expenditure (Capex) proposed by the distribution companies. The Commission observes that Capex, in a dynamic environment in the State power sector, where customer base is increasing, demand is growing; availability of power is increasing at a rapid rate including power brought in by the open access customers thereby putting additional pressure on the state transmission as well as distribution system, is an important tool to carry forward the objectives set forth in the future growth strategy of the organization. **The Commission feels that both Capex planning and executing the plan is a weak link and needs to be brought into sharp focus.** Additionally, details of each capital work approved by the Commission including location, cost and date on which the same is transferred to the Fixed Asset Register (FAR) along with cost benefit analysis needs to be monitored and submitted to the Commission. **In order to streamline the entire gamut of Capex the Commission decides to get a study conducted through a reputed third party for all the capital works under Capex undertaken during the last three years including any deviation from those approved by the Commission, cost and time overrun. This will help the Commission to cross check the facts**

submitted by the utilities and also closely monitor the future development including identifying the deficiencies in the system and rationalize allocation of resources.

Energy conservation is also an area which requires a concerted effort. The Commission feels that in order to achieve the objectives of Energy Conservation Act, the Government agencies as well as the power utilities ought to set examples for other consumers. There should be independent audit of the power consumption in public offices including offices and installations of the power utilities in Haryana. Such social audit, if undertaken, will go a long distance in curbing the indiscriminate use of power. Additionally, usage of solar lamp and CFL bulbs of appropriate power factor needs to be encouraged on a much larger scale. The farmers should be encouraged to install efficient pump sets as well as install capacitors on the pump sets. **Thus involving domestic consumers as well as the farmers can provide the desired impetus to energy conservation / demand side management in Haryana.**

A key component of the power sector reforms is the role of the Electricity Regulatory Commission in **promoting consumer participation in the regulatory decision making process and ensuring balancing of their interest vis – a – vis other stakeholders.** In order to achieve this objective the Commission has notified key regulations under the Electricity Act, 2003 i.e. Standard of Performance, Supply Code, Consumer Grievances Redressal Mechanism etc. The Consumer Grievances Redressal Forum (CGRF) have been constituted and are functional in each Discom. Also Ombudsman has been appointed as an Appellate Authority. The Commission follows the practice of inviting consumers to participate in the regulatory proceedings. On the basis of such interactions with the consumers the Commission feels that **they are facing problems in regard to meter related issues i.e. poor redressal of metering and billing related complaints and un – satisfactory meter testing procedures as well as release of new connections. Thus as per the feedback received in the Commission the overall consumer**

satisfaction amongst the electricity consumers in Haryana regarding quality of service and complaint redressal is low despite the fact that the Commission has notified all the necessary regulations as mandated under the Act to ensure improved quality of supply and service.

In Haryana the distribution licensees as well as the transmission licensee HVPNL and intra – state generating company HPGCL are owned by the State Government. The Commission observes that due to the mounting financial losses of the distribution companies including inadequate cash flow and huge amount of unrealized revenue from the consumers the cash cycle of HPGCL as well as HVPNL also gets affected. Thus the Commission would like to impress upon the State Government to periodically monitor the financial performance of the distribution companies vis – a- vis their ability to meet their financial liabilities including their ability to pay for the cost of power purchase from different sources including HPGCL and repayment / servicing of debt. Any inefficiency in meeting financial liabilities adds on to the costs which cannot be passed on the electricity consumers of the State.

The Commission expresses its satisfaction with regard to additional generation capacity created within the State with two power plants of 300 MW each at Yamuna Nagar stabilizing and giving steady generation and two power plants of 600 MW each at Khedar in Hisar likely to generate to their capacity in near future. Additionally the NTPC plant at Jhajjar in which 50% share is of Haryana, which has partly started generation in the month of October, 2010, is also going to complete commissioning of its second plant of 500 MW capacity, in the current year. The first unit of 660 MW capacity of the only generation plant under Case-2 category at Jhajjar (1320 MW) is also likely to be commissioned this year. All these plants put together, auger-well for the future of the state. This is over and above the power to be made available from HPGCL's power plants at Panipat where there are quite a few units of different vintages and capacity. Considering the augmentation of the generation capacity within the State, the Commission does not visualize the necessity to purchase power in near future on short term basis which is generally expensive

except in extreme situation. However, one critical factor that may give setback to the generation prospect is the supply of coal since all the power plants in Haryana are coal based thermal plants and situated far away from the coal pit-heads. Behavior of monsoon would also be another crucial factor which will be watched with considerable interest.

The Commission is satisfied with the performance on the transmission front with the augmentation of transmission capacity and launching of transmission scheme under PPP mode for evacuation of power from the newly commissioned power plants.

Summing up, the Commission's worry is mostly centered around the functioning of the distribution utilities where the increasing distribution losses (AT & C losses is also very alarming) is eroding not only the net worth of the companies but pushing them at a very brink of financial bankruptcy. Unless the utilities reduce the Distribution Losses which are both due to technical deficiencies and theft, the future distribution scenario in the State does not look to be very bright. . Our finding with regard to flow of power to the Agriculture sector on the basis of the latest data available from the segregated feeders further confirms our suspicion that the distribution losses in other consumer categories are being clubbed with that of AP consumers to claim more Government Subsidy. In case such excess energy is added to the losses of the consumers, the distribution losses would get re – stated to near about the level assessed by the Commission almost at the beginning of the reform process in the first few years of the present century. Hence a time has come when the entire gamut of distribution losses has to be examined afresh for accurate quantification so that a fresh loss reduction trajectory could be determined for the survival and efficient functioning of the utilities. The distribution companies must improve their performance at the cutting edge level by bringing in more professional expertise and making their staff / officials effective and efficient so that the optimum benefit of the reforms process and increasing power

generation is fully reaped and appreciated by the electricity consumers of Haryana.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 27th May, 2011.

**Date: 27/ 05 / 2011
Place: Panchkula.**

(Ram Pal)

Member

(Rohtash Dahiya)

Member

(Bhaskar Chatterjee)

Chairman