# COMMISSION'S ORDER

# ON

# AGGREGATE REVENUE REQUIREMENT OF UHBVNL & DHBVNL

# FOR THEIR DISTRIBUTION & RETAIL SUPPLY BUSINESS

# AND DISTRIBUTION AND RETAIL SUPPLY TARIFF

# FOR FY 2012-13

**CASE No. : HERC/PRO 29 of 2011 &**

**HERC / PRO 30 OF 2011**

**31st March, 2012**

**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-29 and HERC/PRO- 30 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 wheeling/distribution & retail supply tariff for wheeling/supply of electricity by UHBVNL and DHBVNL within the state of Haryana for the FY 2012-13.

## ORDER

**Present:**

| | |
|---|---|
| **Shri R. N. Prashar** | **Chairman** |
| **Shri Rohtash Dahiya** | **Member** |
| **Shri Ram Pal** | **Member** |

**DATE OF ORDER: 31st March, 2012**

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 Requirements and wheeling/distribution & retail supply tariff for wheeling/supply of electricity by UHBVNL and DHBVNL within the State of Haryana for the financial year 2012-13. 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 by UHBVNL/ DHBVNL in respect of these objections, various issues raised and the submissions made by UHBVNL and DHBVNL in the presentations made during the public hearings held on 14.02.2011 and 15.02.2011 respectively. 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.

**CONTENTS**

**LIST OF TABLES**

# 1 BACKGROUND AND BRIEF HISTORY

## 1.1 Background

Haryana was one of the first few states in India who endeavoured to implement comprehensive power sector reforms much before the enactment of the Electricity Act, 2003 by the Government of India. The Haryana Electricity Reform Bill was passed by the Haryana Legislative Assembly on 22.07.1997. After the presidential assent to the reform bill on 28th February, 1998, the gazette notification for the Haryana Electricity Reform Act, 1997 (HERA) was issued by Govt. of Haryana on 10.03.1998. The HERA came into force on 14th August, 1998 as per the State Govt. notification No. S.O.105/H.A.10/1998/S.1/1998 dated 13.08.1998. The Haryana Electricity Regulatory Commission (HERC) was established in August 1998 under the provisions of HERA to regulate power sector in the state of Haryana.

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 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 Sonepat 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. 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 through two statutory Transfer Schemes notified by the State Govt. under the provisions of HERA. Through the first Transfer Scheme, titled 'Haryana Electricity Reform (Transfer of undertakings, Assets, Liabilities, Proceedings and personnel) Scheme Rules, 1998', 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 'Haryana Electricity Reform (Transfer of Distribution Undertakings from Haryana Vidyut Prasaran Nigam Limited to Distribution Companies) Rules, 1999', the Transmission undertakings and business was separated from Distribution undertakings and business. While the transmission business 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 and South zones of Haryana respectively as stated above.

After restructuring of erstwhile HSEB, the Distribution and Retail Supply licence 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 4$^{th}$ 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 drawls / 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, were 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 2012-13 with respect to their Distribution & Retail Supply Business for approval of the Commission vide memo no. Ch – 20 / GM / RA / N / F – 25 / Vol. – 38 dated 30th November, 2011 and memo No. Ch. 65 / SE / RA - 424 dated 29th November, 2011 respectively under the provisions of Section 26 (5) of the Haryana Electricity Reform Act, 1997 read with HERC (Terms & Conditions for Determination of Distribution and Retail Supply Tariff) Regulations 2008, Section 62 and Section 64 of the

Electricity Act, 2003 and applicable provisions 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 Commission. Until FY 2009-10, the Commission had been issuing separate ARR/Tariff orders for UHBVNL & DHBVNL. However, as a departure from the past, the Commission issued a single ARR/Tariff order in respect of ARR/Tariff Petitions of both the distribution licensees in FY 2010-11 and again in FY 2011-12. Accordingly for FY 2012-13 also, the Commission is continuing with the same practice of issuing a single ARR and tariff order for UHBVNL and DHBVNL. 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.

## 1.2 Implementation of second generation regulatory reforms

### 1.2.1 Open Access Regulations

The Commission is continuing the process of introducing second generation regulatory reforms in Haryana. In pursuit thereof, the Commission has issued the amended open access regulations titled 'Haryana Electricity Regulatory Commission (Terms and Conditions for grant of connectivity and open access for intra-state transmission and distribution system) Regulations, 2012'. The Commission has attempted to align the amended open access regulations with the CERC regulations for short term open access notified in 2008 and long term open access & connectivity regulations notified in September, 2010.

These regulations 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 Captive Power Plants(CPPs) and renewable sources of energy generation, licensees etc. Connectivity to the transmission and or distribution system has been made a pre-requisite for availing open access and would be required to be sought before applying for long term, medium term or short term open access. The regulations provide in details the process of grant of connectivity and open access, the role and duties of the nodal agency, the applicable fees and charges as well as the time frame for processing of the applications for connectivity and open access.

These regulations, in line with the Electricity Act, 2003, provide for payment of transmission/wheeling charges, cross-subsidy surcharge and additional surcharge by the open access consumers. The cross subsidy and additional surcharge however shall not be leviable on a person who has established a captive generation plant and seeks open access

to carry the electricity to the destination of his own use. Further, the additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to stand or there is an unavoidable obligation and incidence to bear fixed costs consequent to grant of open access. The commission has directed the distribution licensees to submit to the Commission, on six monthly basis the details regarding the quantum of such stranded costs and the period over which these remained stranded and would be stranded. The Commission has already determined the transmission charges payable by open access consumers in FY 2011-12 in the ARR/Tariff Order for Transmission and SLDC business for FY 2011-12. The wheeling charges and cross-subsidy surcharge payable by open access consumers in FY 2012-13 has been determined by the Commission in the relevant chapter of the instant order. The Commission shall determine the additional surcharge as and when the requisite details are made available by the distribution licensees and the additional surcharge so determined shall be applicable to all consumers availing open access from the date of determination of the same by the Commission.

### 1.2.2 MYT Regulations

The MYT Regulations have almost been finalized and are likely to be notified shortly. The initial control period for implementation of MYT framework is being kept as three years. Earlier, objections were invited from public and various state holders including the power utilities through public notice on the initial draft MYT Regulations prepared with the help of consultants, appointed for this purpose, and in consultation with power utilities, sectoral experts and feedback from different stake holders. Thereafter public hearing was also held to seek the views of various stake holders and public. The final draft regulations have been evolved after considering comments/ views of various stake holders as also power utilities furnished in response to the public notice or given/expressed during the public hearing. The MYT framework is likely to be implemented w.e.f 01.04.2013.

Under the MYT framework, the generation company and the distribution licensees would be required to file, for approval of the Commission Capital Investment Plan and Business Plan for their respective businesses covering atleast the entire control period. The ARR/Tariff filing under the MYT framework by the utilities will be based on the approved capital investment plan and business plan. The Commission would, therefore, desire that the generation company and licensees should start preparing their capital investment plan and business plan immediately so that they are in a position to file applications with the

Commission for approval of their respective capital investment plan and business plan by the due date as and when MYT Regulations are notified.

### 1.2.3 Intra-State ABT Regulations

Initial draft Intra State Availability Based Tariff (ABT) regulations have been prepared. Objections/comments on the initial draft regulations from the public/stake holders have been obtained through public notice and public hearing has also been held. The Commission would shortly finalize the draft intrastate ABT regulations after considering comments/objections received from public and various stake holders.

To facilitate implementation of intrastate ABT, HVPNL would be required to undertake major technical and infrastructural development such as installing ABT compliant meters, scheduling on 15 minutes time blocks basis and maintaining energy and UI account for the State. In the draft regulations, the methods of imbalance/UI settlement have been aligned broadly with the principles specified by the Central Commission. Considering the various technical implementation requirements, the draft regulations provide a three months period for mock exercise from the date of notification of the regulations. This would help the power utilities and the Commission to indentify 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, would encourage the generators for maximising generation during peak hours and would introduce efficiency in power purchases 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 NRSE based generating stations.

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

# 2 PROCEDURAL ASPECTS OF THE ARR FILING

## 2.1 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, applicable provisions of EA, 2003 and D & RS license, a distribution licensee is required to file Aggregate Revenue Requirement (ARR) for the ensuing year for his Distribution & Retail Supply business, each year, by 30th November. Accordingly, UHBVNL filed its application/ petition for ARR for FY 2012-13 for its Distribution and Retail Supply business with the Commission vide Memo No. Ch-20/GM/RA/N/F-25/Vol-38 dated 30.11.2011. Similarly DHBVNL filed its application / petition for ARR for FY 2O12-13 vide Memo No. Ch-65/SE/RA-424 dated 29.11.2011.

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

## 2.2 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. 3063 / HERC dated 23th December, 2011 & to DHBVNL vide memo No. 3410 / HERC dated 6th January, 2012. Both the distribution licensees were directed to submit their replies to the deficiencies in the ARR as pointed out by the Commission by 24th January, 2012.

Replies to the objections were furnished by UHBVNL and DHBVNL vide memo No. Ch – 01 / GM / RA / N / F-25 / Vol – 40 dated 24th January, 2012 and Ch – 42 / SE / RA – 282 / Vol. – VI dated 6th February, 2012 respectively. The Commission reviewed the replies and sent rejoinders pointing out certain shortcomings in the filings and non compliance with some of the observations of the Commission which persisted despite replies received from UHBVNL/DHBVNL and also for obtaining certain additional data / information. Both UHBVNL and DHBVNL furnished replies to the rejoinders.

## 2.3 Summary of ARRs

UHBVNL has projected its total expenditure for FY 2012-13, inclusive of depreciation, at Rs. 11919.01 Crores. The ARR for FY 2012-13 after adding ROE of Rs. 242.08 Crore @ 14 % in line with Regulation 16 of the HERC Tariff Regulations as stated, has been projected at Rs.

12161.08 Crores. The Revenue from existing tariff & misc. charges corresponding to the projected energy sales has been worked out at Rs. 6635.24 Crores, This includes revenue of Rs. 2570.87 Crores for projected interstate sale of 7100 MUs and non-tariff income of Rs. 209.88. The Subsidy from the State Govt. has been assumed at Rs. 1998.78 Crores (excluding FSA subsidy). The total revenue receipts are thus projected at Rs. 8634.02 Crore. The net revenue gap for FY 2012-13 has been projected at Rs. 5096 Crores after accounting for; (i) special appropriations on account of true up of terminal benefits of Rs. (-)171.15 Crores for FY 2010-11,(ii) true up of employee cost (except terminal benefits) for 2010-11 of Rs. 122.58 Crores and (iii) true up of expenses for the FYs 2008-09, 2009-10 and 2010-11 amounting to Rs. 1617.50 Crores as per judgment of the Hon'ble APTEL in Appeal No. 204 of 2010.

DHBVNL has projected its total expenditure, inclusive of depreciation, at Rs. 11016.45 Crores. This includes Rs. 40.01 crore on account of true up of the employee cost (excluding terminal benefits) for 2010-11 and Rs. 361.47 crore on account of true up of the past expenses for FY 2008-09, 2009-10 & 2010-11 as per above mentioned judgement of Hon'ble APTEL. After adding ROE @ 14 % amounting to Rs. 215.15 Crores and netting for non-tariff income of Rs. 157.76 Crore, the ARR for FY 2012-13 has been projected at Rs. 11073.81 Crores. The revenue from existing tariff & misc. charges has been worked out at Rs. 6992.36 Crores & subsidy from the State Govt. has been taken as Rs. 1422.25 Crores, making the total revenue receipts as Rs. 8414.61 Crores. This does not include projected revenue of Rs. 474.19 crore from projected interstate sale of 1291.97 MUs. The DHBVNL has, however, projected the power purchase cost after netting revenue from interstate sales (Rs. 8735.10-Rs. 474.18= Rs. 8260.91 Crore). The revenue gap for FY 2012-13 has been depicted at Rs. 2659.23 Crores. The projected combined revenue gap of the two distribution licensees for FY 2012-13 works out to Rs. 7755.23 Crores.

The summaries of ARRs of UHBVNL & DHBVNL as projected in their petitions are reproduced in the Table 2.1 and Table 2.2.

**Table 2.1 – Summary of UHBVNL's ARR for FY 2010-11, FY 2011-12 & FY 2012-13**

**(Rs. in crores)**

| Particulars | FY 2010-11 Actual | FY 2011-12 Estimated | FY 2012-13 Projection |
|---|---|---|---|
| Power purchase (MU) | 15955 | 20366 | 25839 |
| Sale of power outside State (MU) | 701 | 3550 | 7100 |

| | | | |
|---|---|---|---|
| Sale of power Intra State (MU) | 11592 | 13116 | 14617 |
| Loss % (including Intra and Inter State transmission losses) | 24.00% | 22.00% | 22% |
| **1. Receipts** | | | |
| a) Revenue from tariff & Misc. Charges | 3335.83 | 4845.24 | 6635.24 |
| b) Revenue subsidy from Government | 1763.59 | 1998.78 | 1998.78 |
| c) Revenue against regulatory assets | 1979.12 | 0 | 0 |
| **Total Receipts** | **7078.54** | **6844.02** | **8634.02** |
| **2. Expenditure** | | | |
| a. Purchase of power | 5626.03 | 7015.61 | 9489.98 |
| c. Intra State Transmission Charges | 0 | 0 | 0 |
| d. R&M Expenses | 36.31 | 99.56 | 113.184 |
| e. Employee Expenses | 516.9 | 628.34 | 757.353 |
| f. A&G Expenses | 54.99 | 62.43 | 71.25 |
| g. Depreciation | 93 | 135.43 | 163.32 |
| h. Interest & finance Charges | 932.35 | 1568.14 | 1684.47 |
| i. Less: Interest & other expenses capitalised | -207.71 | -343.51 | -370.8 |
| j. Other Debits (incl. Prov. For Bad debts) | 16.72 | 9.9 | 10.25 |
| k. Other (Misc.) – net prior period credit / (charges) | 139.18 | 0 | 0 |
| l. Extraordinary Items | 0 | 0 | 0 |
| **Total** | **7207.77** | **9175.90** | **11919.01** |
| 3. Reasonable return | 0 | 223.64 | 242.08 |
| 4. Other Income | 0 | 0 | 0 |
| **5. Annual Revenue Requirement** | **7207.77** | **9399.54** | **12161.09** |
| **6. Revenue gap for the year** | **-129.23** | **-2555.52** | **-3527.07** |
| 7. Extraordinary items (True up of terminal benefits for FY 2010-11) | 0 | 0 | -171.15 |
| 8. True up of employee cost (except terminal benefits) for FY 2010-11 | 0 | 0 | 122.58 |
| **9. Surplus (+) / shortfall (-):before tariff revision** | **-129.23** | **-2555.52** | **-3478.50** |
| **10. Implementation of APTEL judgment in appeal 204 of 2010** | | | |
| True-up of expenses for 2008-09 | **0** | **0** | 673.21 |
| True-up of expenses for 2009-10 | **0** | **0** | 440.46 |
| True-up of expenses for 2010-11 | 0 | 0 | 503.83 |
| Total true up of expenses and revenue on account of APTEL judgment | 0 | 0 | 1617.50 |
| **11. Consolidated revenue gap at the end of FY 2012-13** | | | **-5096.00** |

**Table 2.2 – Summary of DHBVNL's ARR for FY 2010-11, FY 2011-12 & FY 2012-13**

**(Rs. in crores)**

| Particulars | FY 2010-11 Actual | FY 2011-12 Estimated | FY 2012-13 Projection |
|---|---|---|---|
| Power purchase (MU) | 16964.14 | 20365.52 | 25839.43 |
| Inter-state Sales (MU) | 810.94 | 1018.28 | 1291.97 |
| Energy available for Intra state sale (MU) | 16153.2 | 19347.24 | 24547.46 |
| Distribution Loss (%) | 22.95% | 23.00% | 23% |
| Total Sales (MU) | 12446.38 | 14897.38 | 18901.55 |
| | | 19.69% | 26.88% |
| 1. Receipts | | | |
| a) Revenue from tariff & Misc. Charges | 4433.92 | 5434.69 | 6992.36 |
| b) Revenue subsidy from Government | 1283.75 | 1422.25 | 1422.25 |
| **Total** | **5717.67** | **6856.94** | **8414.61** |
| 2. Expenditure | | | |
| a. Purchase of power | 4775.15 | 6075.8 | 8260.90 |
| c. Intra State Transmission Charges | 483.49 | 584.41 | 748.72 |
| d. R&M Expenses | 36.47 | 47.94 | 58.52 |
| e. Employee Expenses | 497.8 | 567.98 | 664.04 |
| f. A&G Expenses | 36.95 | 40.13 | 43.77 |
| g. Depreciation | 68.43 | 94.81 | 137.26 |
| h. Interest & finance Charges | 446.67 | 624.47 | 749.63 |
| i. Less: Interest & other expenses capitalised | -90.85 | -106.4 | -125.11 |
| j. Other Debits (incl. Prov. For Bad debts) | 66.22 | 71.29 | 77.21 |
| k. True up of employee cost | 0 | 0 | 40.01 |
| l. True up of other costs | 0 | 0 | 361.47 |
| m. Extraordinary Items | 0 | 0 | 0 |
| n. Other (Misc.) – net prior period credit / (charges) | -31.36 | 0 | 0 |
| n. Transfer to / from regulatory assets | 0 | 0 | 0 |
| **Total Expenditure** | **6288.97** | **8000.43** | **11016.42** |
| 3. Reasonable return | 176.47 | 196.92 | 215.15 |
| 4.Non- Tariff Income | 177.93 | 145.54 | 157.76 |
| **5. Annual Revenue Requirement (2+3-4)** | **6287.51** | **8051.81** | **11073.81** |
| **6. Surplus (+) / shortfall (-):Before tariff revision(1-5)** | **-569.84** | **-1194.87** | **-2659.23** |

UHBVNL subsequently made supplementary filing on 14.12.2011 wherein they revised the projected revenue gap for FY 2012-13 from Rs. 5096 crores to Rs. 7575.52 crore after accounting for total unaddressed revenue gap at the end of FY 2012-13, as worked out by them at Rs. 2479.52 crore. The UHBVNL requested that, as one-time regulatory treatment of

their past unaddressed revenue gap, Commission may include the entire sum in calculating consolidated revenue gap at the end of FY 2012-13.

The UHBVNL, in their supplementary filing, also requested the Commission to include unpaid subsidy of Rs. 948.61 crore upto FY 2012-13 in the estimate of subsidy for 2012-13.

The total projected revenue gap of UHBVNL and DHBVNL combined, after taking into account supplementary filing of UHBVNL, comes to Rs. 10234.75 crores.

### 2.4 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) & Dainik Tribune (Hindi)and Financial Word on 07.12.2011 and by DHBVNL in the Tribune (English), Jagat Kranti (English), Dainik Jagran (Hindi) and Dainik Bhaskar (Hindi) on 18.12.2011 inviting objections / suggestions / comments from the stakeholders. The ARR petitions were also posted by UHBVNL & DHBVNL on their respective websites i.e. www.uhbvn.com and www.dhbvn.com.

After receipt of the ARR petitions, the Commission also issued public notices in the Times of India (English) on 18th December, 2011 and Dainik Bhaskar (Hindi) on 19th December, 2011 inviting comments and objections from the stakeholders as per the following schedule:

| Last date of filing objections | Last date of filing reply to the objections | Last date of filing rejoinder to the reply |
|---|---|---|
| 10.01.2012 | 25.01.2012 | 10.02.2012 |

Public hearings were scheduled to be held on 14.02.2012 at 11.00 AM. in respect of UHBVNL and on 15.02.2012 at 11.00 AM in respect of DHBVNL in the court room of the Commission. Public notices for the information of the public and other stakeholders regarding schedule of hearings were issued by the commission in the Times of India (English) and Dainik Bhaskar (Hindi) on 20th January, 2012.

Public hearings were held as per the schedule i.e. on 14the February in respect of UHBVNL and on 15th February, 2012 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 also present in the hearing.

The distribution licensees i.e. UHBVNL and DHBVNL made detailed presentations of their respective ARR proposals in the hearings.

### 2.5 Presentation by MD UHBVNL

MD/UHBVNL in his presentation made a forceful plea for adequate increase in tariff. He stated that there has been no increase in the tariff in the last ten years except for 11% increase in 2010-11 and a marginal increase in 2011-12. This is despite the fact that the bulk power purchase rate of the utilities have increased from Rs. 1.70 / kWh to Rs. 3.35 / kWh. The revenue gap, he said, has increased to as high as 50% and it need to be met/addressed through a shock treatment failing which financial condition of the distribution utilities would further worsen. On distribution losses, he said, UHBVNL has been able to bring down AT&C losses from 37% in 2001-02 to 25% in 2010-11 though they have not been able to bring down the distribution losses to the target fixed by the Hon'ble Commission. Other points highlighted in his presentation were as under:

- HT:LT ratio improved from 0.51 in 2001-02 to 0.97 in 2011-12 (upto December) and Nigam is likely to achieve HT:LT ratio of 1 which is ideal HT:LT ratio as per CEA norms.
- Average power purchase rate brought down from Rs. 3.71/ kWh in 2009-10 to Rs. 3.35/ kWh in 2010-11 with judicious planning of short term purchases/UI.
- Increase in Remittance in Bank (RIB) from about Rs. 100 Crore in 2001-02 to Rs. 300 Crore (Monthly average excluding Govt. subsidy) in 2011-12. Monthly average RIB inclusive of Govt. subsidy presently is about of Rs. 470 crore which still falls short by Rs. 100 Crore even to meet the monthly average power purchase cost.
- All out efforts being made to prevent, detect and penalise theft of electricity. Penalty imposed has increased from Rs. 34.69 crore in 2009-10 to Rs. 52.11 crore in 2010-11.

On the issue of theft of electricity, Chairman observed that fiddling with meter & direct tapping should invite invocation of stringent punishment even if it requires amendment in relevant statutory provisions for which the utility if, required, may take up the matter with the State Govt. The Commission, he said, is with honest consumers and would support harshest measures against dishonest consumers. He further observed that, as a preventive measure, all electromechanical meters should be replaced with electronic meters at the earliest possible. To a query from the commission, MD UHBVNL informed that they had purchased 2.5 lac electronic meters last year and further require about 4 to 5 lac meters for 100% conversion. MD UHBVNL further pointed out that there has been spurt in the theft of small

transformers installed under HVDS for tube well consumers to which Chairman observed that the utility should ensure registration of FIR in each and every case and there is stringent and higher punishment for the culprits as it amounted to theft of state property. The utility may move the case with the Govt. for an amendment in the provision of IPC' if so required. MD/UHBVNL listed the steps taken to reduce AT &C losses as under:

- System Augmentation and Strengthening works. In FY 2011-12, 16 Nos. new substations have been commissioned, 17 Nos. Existing substations have been augmented and 84 Nos. Feeders have been bi/trifurcated (till December 2011)
- Replacement of energy meters of 17629 Nos. non domestic and industrial consumers with connected load above 20 kW with LT-CT meters.
- Replacement of electromechanical meters with electronic meters for LT industrial and NDS consumers with connected load below 20 kW
- Periodic Theft Detection and Vigilance Drives
- Replacement of bare conductor with Aerial Bunched Cables (ABC)
- Board level review of high loss industrial and independent feeders
- Installation of 3-phase Automatic Reactive Power Managers at substations to control reactive power
- GIS based consumer indexing and asset mapping under R-APDRP
- Recovery based PRM: if total revenue realized from the consumers on a particular feeder shows consistent improvement then the supply hours would be increased for that feeder
- Dedicated police stations to be functional at circle level to reduce theft of energy
- Automatic Meter Reading (AMR) project for 3743 Nos. HT industrial consumers which will help in remote energy meter reading of HT industrial consumers without any manual interference

### 2.6 Presentation by MD DHBVNL

MD /DHBVNL in his presentation presented the salient features of the ARR of DHBVNL. He stated that the average cost of supply (CoS) as per ARR petition filed by DHBVNL works out to Rs. 5.40/kWh and Rs. 5.86/ kWh for FY 2011-12 & FY 2012-13 respectively whereas the average revenue realisation at current tariff is only Rs. 4.45/kWh. He prayed that the Commission may allow to recover the entire deficit for FY 2011-12 & FY 2012-13 through appropriate tariff hike. Highlighting DHBVNL achievements, he said that DHBVNL has always been able to meet the distribution loss target given by the Commission except for FY

2009-10; their collection efficiency has been more than 100% except for slight fall in FY 2010-11 (97.68%), DT Damage rate has been brought down from 19% in 2004-05 to 10-11%; HT-LT ratio has been improved from 0.60 in 2003-04 to 0.92 in 2011-12 (upto September). On collection efficiency and DT damage rate, Chairman observed that fall in collection efficiency in 2010-11 need to be explained/analysed and DT damage rate need to be brought down further. MD DHBVNL further said that a number of measures to improve quality of consumer services has been taken, significant among these being establishing of Customer Care Centres, starting of a single point contact call centre for registering no supply complaints, SMS alert facility for energy billing, On-line bill payment in Rewari District and 17 subdivisions of Gurgaon, Faridabad and Hisar and implementation of Quality Management System according to ISO 9001:2008. Chairman observed that bill collection facility in rural areas need tremendous improvement; only one person goes to collect bills in 3-4 villages once in a month which is one of the reasons for low collection efficiency in rural domestic sector. MD DHBVNL also listed the distribution loss reduction measures undertaken by the utility as under:-

- Plans of installing 35 new 33 KV sub-stations and augmentation of 12 existing 33 KV sub-stations.
- Conversion of bare conductor LT system to shielded cable HVDS/LVDS system in the theft prone areas.
- Replacement of bare ACSR conductor with Aerial Bunched Cable.
- Replacement of 6 lac defective/electromechanical meters with electronic meters.
- Provision of Electronic LT-CT Meters on all new connections having load of 20 kW and above (except for AP consumers).
- Installation of 3-phase Automatic Reactive Power Managers at substations to control reactive power.
- Constitution of special dedicated teams for arrears recovery and theft detection.
- Regularization of Kundi connections in rural areas.
- Board level review of high loss making industrial and independent feeders.
- GIS based consumer indexing and asset mapping, AMR and SCADA System for data acquisition under R-APDRP.
- Advanced Metering Infrastructure (AMI) Project for consumers with connected load between 10-50 KW funded by World Bank.
- Automated meter reading (AMR) for HT consumers.

To a query from the Chairman whether the utility can give some target date for replacement of all electromechanical meters with electronic meters, MD/DHBVNL informed that they have decided to engage meter manufacturers for the job and tenders have already been floated.

### 2.7 Objections raised by interveners

The stake holders and objectors, who were present in the hearings, were also provided an opportunity to make their oral submissions. Representatives of various industries' associations such as Haryana Chamber of Commerce & Industry, Bahadurgarh Chamber of Commerce & Industry, Haryana Cold Storage Association, Faridabad Industries Association, Hisar Industries Association as also of Delhi Metro, Northern Railways besides some individual objectors spoke at length on various issues relating to ARR filings of the UHBVNL/DHBVNL for FY 2012-13. Most of the objectors had earlier submitted their written objections which are discussed in subsequent paragraphs. Some of the issues raised/points made are as under:

i) There should not be any increase in tariff for industry as the rate is already as high as Rs. 6.50/kWh (inclusive of all duties, FSA)

ii) Generation plants are running at much below the installed capacity. There is no justification of recovery of full fixed charges by HPGCL.

iii) Distribution network is in bad shape. Distributions transformers are repaired at the cost of consumers.

iv) Power Supply position is very bad. There is no justification of recovery of fixed charges from the consumers with six hours PRM almost daily. There should be pro-rata reduction.

v) Back log of revenue gap for past ten years should not be cleared in one year.

vi) Damage rate of distribution transformers is very high, should be brought down.

vii) Distribution loss target has been kept at same level at 22% by the utilities for FY 2012-13.

viii) Employee/Establishment cost is very high & is increasing every year.

ix) Existing LT consumers with connected load between 50 kW to 70kW should not be forced to convert to HT Supply.

x) AP subsidy for FY 2012-13 has been shown at the level of last year. Need to be appropriately increased.

xi) Why UHBVNL/DHBVNL are selling power outside the state when the state itself is deficit in power. They should purchase only that much power which they require.

xii) There should be a Central Control Room/Information System for making inquiries about power cut instructions.

xiii) Interest on borrowings for subsidy not given/delayed by the Govt. should not be allowed or it should not be passed on to the consumers.

xiv) Working capital should not include two months receivables as HPGCL give UH/DH one month credit i.e. 30 days for payment of power purchase bills.

xv) Cross subsidy surcharge should be reduced. Govt. is giving subsidy for AP category. All other categories should pay cost of supply.

xvi) Electricity arrears of the two utilities are increasing by 25 to 30% every year. Commission should give due directions to the utilities for making efforts for recovery of the arrears.

xvii) Consumers of DHBVNL have to pay for Revenue gap of UHBVNL as well.

xviii) Investment in capital works should be linked to performance.

xix) Depiction of ACD and interest payable in the bill on the pattern of Delhi.

xx) No engagement of additional staff be allowed. The ARR shows addition of 1100 employees on contract.

On the issue of employee cost, MD/UHBVNL intervened to say that their employee cost works out to 35 P/unit as against 25P/Unit of NDPL. Chairman observed that there was room for improvement. He further said that there will be no exemption for recruitment. The issue of conversion of existing LT consumers with connected load from 50 kW to 70 kW from LT to HT supply was raised by almost all industries' representatives. It was stated that these industries are located in congested areas; there is no space for installing transformers and further it involves expenditure of Rs. 20-25 lacs and requisite funds are not available with these small industries.

Representative of Northern Railways stated that they are a public utility service, are receiving supply at 66/132/220 kV, distribution losses are minimal, they have their own feeders but still the tariff for railway is very high (Rs. 4.71 per unit). He submitted that the tariff for railways should be reduced as it will help electrification. He further requested that fixed charges should be reduced and there should not be any load violation charges in case they exceed their contract demand at one supply point to feed load of some other supply point where supply has failed. MD/UHBVNL intervened to say that their rates were lower than in Punjab and some other states. The representative of Delhi Metro said that they do not contribute to any distribution losses as their supply is at 66 kV or above and as such their tariff should be worked out without considering distribution losses. MD/DHBVNL assured to

revert back in writing. The representative of farmers said that they should be given supply for at least 8 Hrs during the day time on alternate days.

Representative of HPGCL and HVPNL also attended the hearings. HPGCL submitted that UHBVNL/DHBVNL some time ask them to back down generation but at the same time they draw UI. On a query from the Commission, both MD/UHBVNL and MD/DHBVNL during their respective hearing said that Nigam has no reservation against allowing third party sale to HPGCL in case generation plant is backed down on the asking of the Nigam. It was further said that Nigam won't object paying fixed charges in case they draw UI during the period of backing down. HVPNL requested the commission to direct UHBVNL/DHBVNL to liquidate outstanding arrears which have risen to above Rs. 900 crore.

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, as already stated, are discussed at the relevant places in this order and the same have been duly considered while passing this order.

### 2.8 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 objectors, who filed objections on the ARR filings of the UHBVNL and DHBVNL for FY 2012-13 are listed below:

i. Shri Kuldip Bhargwa,President Hisar Industries Association, resident of 3, IDC, OP Jindal Marg, Hisar. (on ARRs of UHBVNL and DHBVNL)
ii. Shri Vijay Kumr Gupta, House No. 11 – A / 1, Near Gym, Fateh chand Arya Colony, Balsmand Road, Hisar. (On the ARR of DHBVNL)
iii. Delhi Metro Rail Corporation Limited, Metro Bhawan, Fire Brigade Lane, New Delhi - 110001
iv. Shri A. L. Aggarwal, General Secretary, Haryana Chamber of Commerce & Industry, C/O M/S Techman Enterprises, 73, Industrial Area – II Panchkula. (on ARRs of UHBVNL and DHBVNL)
v. Shri Mandeep Singh Sidhu, House No. 714, Sector -1, HUDA, Shahabad Markanda – 136135. (on ARRs of UHBVNL and DHBVNL)
vi. Shri Vipin Bajaj, President, Bahadurgarh Chamber of Commerce and Industry
vii. Col S. Kapoor, Secretary Faridabad Industries Association, FIA House, Bata Chowk, Faridabad(On ARR of DHBVNL)

viii. Shri R. K. Atoliya, Chief Electrical Distribution Engineer, Northern Railway, Headquarters Office, Baroda House, New Delhi (On ARRs of UHBVNL and DHBVNL)

ix. Shri Krishan Kumar Lohia, President, Hisar Small Industries Welfare Association, 9, Industrial Development Colony, Delhi Road, Hisar - 125005 (On ARR of DHBVNL)

x. Shri Sampat Singh, MLA, S/o Shri Ram Chander, Flat No. 23, MLA Flats, Sector-3, Chandigarh (on ARRs of UHBVNL and DHBVNL)

xi. Shri Mahesh Kumar, S/O Shri Om Parkash Singh, village Aghiar, PO Pathera, Distt. Mahindergarh. (On ARR of DHBVNL)

xii. Shri Baljit Singh, Rohtak. (on ARRs of UHBVNL and DHBVNL)

The stakeholders/objectors have raised issues / objections on different components of ARR and also on the performance of the two distribution utilities. 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 in the order. The issues raised by the objectors / stakeholders on the ARRs/performance of both the distribution licensees are common in nature and, therefore, all these issues have been dealt with collectively. A brief summary of the objections as well as the replies given by UHBVNL and DHBVNL is presented below:

### 2.8.1 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 and thereby making the sales estimation exercise of the Commission futile. The energy sales figures for 2011-12 and 2012-13 have been substantially enhanced whereas the system is not capable of catering to higher power availability.

#### Reply by distribution licensees

Sales approved by the Commission are estimates whereas the sales reported by the utilities at the yearend are actual sales. 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. Utilities

have achieved greater power availability due to their efforts at securing a more reliable and plentiful power supply to all consumers. Delhi Electricity Regulatory Commission has also observed that electricity sales cannot be made a controllable variable. 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 hours is fallacious. Moreover, the sales projections are made on the basis of historical trend and any surplus power which may be available in the coming years is planned to be sold outside the state through trading.

### 2.8.2 Power supplied to metered and un-metered agriculture tube wells

## Objection

The Commission has approved 11121.43 lakh units for un-metered tube wells in its order for 2010-11; however the DHBVNL has booked 19883.32 lac units which is around 80% extra booking. Similarly for the 1$^{st}$ quarter of 2011-12 DHBVNL has booked 5444.2 lakh units against 2803.51 lakh units approved by the Commission. UHBVNL and DHBVNL have assumed number of operating hours as 7.08 and 4.96 respectively against approved running hours of 3.96 which should not be allowed. Actual consumption for agriculture purposes is very less. There are many crops which need only 2-3 hours irrigation but the famers keep the pump sets on for the entire period of power supply. Those agriculturists who don't have their own pump sets have to take water from others who have pump sets and pay them in the shape of 1/4$^{th}$ of the crop watered. The hours of power supply presently allowed for irrigation can irrigate fields of 13-14 acres whereas most of the farmers having pump sets have 2-4 acres of land. Despite repeated directions of the Commission to submit actual consumption figures of agriculture consumers from the 11 kV segregated feeders and good number of distribution transformers, which have electronic meters, the distribution licensees have not submitted the same. During rainy seasons tube wells are not run. Those who do not have tube well may be allowed irrigation facility at domestic tariff.

## Reply of the distribution licensees

Agriculture sale have been projected on the basis of average load factor and it is impossible to achieve the actual sales on the basis of the projections made by the Commission because energy consumption is an uncontrollable variable. The utilities have also submitted the data on the basis of segregated feeders readings from time to time. DHBVNL has submitted that AP sales have been estimated on the methodology adopted by the Commission. The

Commission has been requested to assess the level of subsidy and communicate the same to the GoH for approval.

### 2.8.3 Distribution losses and receivables

## Objection

Distribution licensees have under stated the distribution losses at least by 5-8%. Similarly AT&C losses are very high for which the consumers who are not paying bills should not remain connected. The line losses of 11.5% as per CEA norms are bearable but losses above this need to be looked into. In DHBVNL the number of feeders where line losses are upto 25% is 1460 (March 2010), the number of feeders having line losses from 25-50% is 698 and hundreds of feeders are there where line losses are above 50% Even quite a good number of feeders are having line losses above 85%. The effect of increase in cost of supply due to such losses has to be borne by honest consumers. Instead of increasing tariff, line losses should be reduced. Even the Hon'ble APTEL has upheld the orders of the Commission for reducing losses while observing that every 1% reduction in loss has the impact of about Rs 100 Crores. The collection efficiency of DHBVNL has reduced from previous 90% to 85%. There is line loss of about 80% in rural and remote areas of DHBVNL and the 20% billed amount is not being recovered and goes to bad debt. Position of sundry debtors is very bad in DHBVNL and if not checked in time it will become uncontrollable. Despite massive investments in HVDS, bifurcation of overloaded transformers, segregation of 11 kV AP feeders and investments for loss reduction under RGGVY and APDRP, DHBVNL has sought Rs. 72 Crores and UHBVNL has sought Rs. 358.53 Crores for AT&C loss reduction etc. The main cause of losses is theft, pilferage, defective meters which do not need any capital investment. For curbing distribution losses, HT: LT sales ratio need to be improved. Presently the LT sales in UHBVNL are 82% and in DHBVNL the same are 71%. If positions of receivables is improved the need for working capital and interest thereon shall come down considerably. Another cause of losses is waiver schemes of the State Government. Rural people do not pay bills with the hope that State Government will waive off their arrears. This has resulted in loans of Rs 16000-17000 crores on both the utilities. Free electricity to employees by the utilities running in losses is not justified. Meters should be shifted to streets, there should be main meters to assess theft etc., harsh penalty should be levied on those involved in theft; recovery of arrears should be done as arrears of land revenue.

### Reply of the distribution licensees

There has been consistent improvement in terms of reduced AT&C losses which have come down from 35.58% in 2000-01 to 22.82% in 2011.12 (upto November, 2011). Distribution licensees are taking effective steps in this direction which include implementation of HVDS, replacement of ACSR with ABC, meter relocation, bifurcation / trifurcation of feeders, planning of implementation of advanced metering infrastructure, reduction in theft of electricity, construction / augmentation of sub-stations, DT metering etc. Distribution licensees also plan to make adequate capital expenditure in this direction. Theft curbing measures are being taken by the utilities. High loss making feeders are being given due attention by the distribution licensees and efforts are being made to reduce losses on these feeders. However, due to socio-political reasons it becomes difficult to take action against defaulters. 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. DHBVNL has also submitted that number of feeders having losses between 25%-50% have reduced and now fall in the category of less than 25% losses. Number of feeders making 25% losses is more because the total number of feeders has also increased by 14%. The amount of sundry debtors in DHBVNL has been projected assuming 99% collection efficiency. DHBVNL has submitted that there is no mention of line losses of 11.5% in CEA guidelines. The CEA guidelines do not set minimum tolerable limit for AT&C losses. It becomes difficult to reduce percentage of losses with increase in demand as well as supply. It is further difficult to reduce losses @ 1% per year from the base level of 23-25% as compared to higher level of losses. The HT:LT ratio has increased from 0.57% in 2006-07 to 0.97% in 2011-12.

#### 2.8.4 Computation of cost of service to the consumers:

### Objection

Despite repeated directions from the Commission, the distribution licensees are not submitting data to substantiate the actual cost of service to various consumer categories. Commission has to assume CoS on old pattern which becomes the basis for future tariff and cross subsidy surcharge determination.

### Reply of the distribution licensees

The work is underway to get a CoS study conducted through consultants. Tenders have been opened and the study will be got conducted within 5-8 months from the date of award of the contract.

### 2.8.5 O&M Cost, power purchase cost and other expenditure

## Objection

Major expenditure on O&M is due to employee cost. DHBVNL has escalated employee cost from Rs 498 Crores in 2010-11 to Rs 664 Crores in 2012-13 whereas UHBVNL has increased it from Rs 517 Crores to Rs 757 Crores. Similarly both the utilities have also sought sharp increase in R&M expenses. The Commission may call data on actual utilisation and improvement achieved. In case of Punjab the Hon'ble APTEL has held the decision of the PSERC for capping of employee cost on the previous level till the efficiency of the employees is not improved. In other States further recruitment of employees has been frozen. The actual R&M figures of DHBVNL have been quite low as compared to the amount allowed by the Commission. Increase should be allowed only after truing up the R&M costs for the past years. A&G expenses of UHBVNL have gone up drastically which should not be allowed.

## Reply of the distribution licensees

Higher employee cost is due to implementation of sixth pay commission recommendations, recruitment of new employees to replace retiring employees, liabilities towards terminal benefits etc. Due to steep increase in GFA, the R&M expenses have increased. It may sometimes happen that the amount spent is less than the amount allowed by the Commission but despite that there is significant improvement in the system's reliability indices. The Commission allows O&M expenses after taking into account the data provided by the distribution licensees and after exercising prudency checks.

### 2.8.6 Capital expenditure plan

## Objection

While allowing capital expenditure by the Commission, it should be linked to physical targets and improvement in performance. Any capital expenditure should show direct quantifiable results. Diversion of capital funds also needs to be curbed. DHBVNL has shown substantial increase in the value of GFA which in turn has increased capital base, interest costs, depreciation and ROE on capital base. The utilities have not been incurring expenditure even to the tune of approved capex. DHBVNL should provide details of assets added.

## Reply of the distribution licensees

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.

### 2.8.7 Return on Equity

#### Objection

Seeking return on equity by utility incurring continuous losses, completely eroded equity and net worth, is not justified. It would add further burden on ultimate consumer.

#### Reply of the distribution licensees

The distribution licensees have submitted that return on equity is being claimed in accordance with the HERC regulations.

### 2.8.8 Continued poor performance of the distribution licensees

#### Objection

Distribution licensees have failed on all fronts like the reliability of power supply, release of new connections, 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 licensees. The distribution licensees should act as commercial entities instead of as State Government arms for fulfilling its social and political obligations. The State Government should think of privatization of the distribution business to improve consumer satisfaction. Relative achievements of private distribution companies in the Delhi may be compared with.

#### Reply of the distribution licensees

Continuous efforts are being made to improve performance. There is increase in number of 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 being given due importance by establishing Bijli Suvidha Kendras, Customer Care Centres and Grievance Redressal Forums. There are many performance improvement schemes in pipeline some of which are dedicated police stations., recovery of outstanding dues for Government offices, AMR for HT consumers, AMI for consumers having CL 10 kW-50 kW, GIS, relocation of meters, DT metering, installation of 3-phase automatic reactive power managers at substations etc.

### 2.8.9 Introduction of two part tariff in Haryana

## Objection

The Commission has introduced two part tariff without corresponding relief in energy charges. The industrial consumers are the worst hit. There is no improvement in quality of power, consumers are not getting uninterrupted power supply and they have to face unannounced / un scheduled power cuts which badly affect production. The small industries are the worst hit. On the one hand the MMC has been increased for small industries and on the other hand fixed charges decreased for HT industries.

## Reply of the distribution licensees

The distribution licensees have submitted that introduction of two part tariff is a progressive step in line with most other SERCs. Through fixed charges part of the expenses incurred by the utility for providing electricity to the consumers are recovered. Fixed charges become nominal with better load factor and appear to be higher for those who have poor load factor. The utility is in a continuous endeavour for providing quality power supply for longer hours. The running hours of supply for industry have increased from 19.30 Hrs in 2005-06 to 21.17 Hrs. in 2010-11. The utility is also making improvements in quality of supply by shifting to ABC conductor, augmentation of old substations and bifurcation / trifurcation of overloaded feeders, proper earthing of transformers etc. The SCADA system and implementation of R-APDRP would help in reducing interruptions on distribution network.

### 2.8.10 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 peak load surcharge in Maharashtra and AP is quite low as compared to Rs 2 – 4 per unit in Haryana. These states also provide rebate for consumption during off peak period which may be considered by the Commission. DHBVNL staff is not levying PLEC charges on industrial consumers. This may be looked into and recoveries got affected either from the consumers or the concerned employees. Withdrawal of morning peak by DHBVNL is not justified but the cut is being imposed on small industries. The HT consumers are having dispensation from 20% to 100% which is the major cause of loss to DHBVNL. There is no criteria for fixing the %age of dispensation. The Peak Load Exemption Charges(PLEC) need to be increased in proportion to increase in tariff. During peak hours for industrial supply, no power is given even to the domestic and nondomestic consumers in the industrial area.

### Reply of the distribution licensees

Peak load restrictions are imposed on industrial consumer keeping in view demand supply position during peak load hours and an attempt is made to flatten the load curve. PLEC is an optional facility and is being charged to only those consumers who wish to consume electricity during peak load hours. It is not viable to provide rebate during off peak hours because all categories of consumers are provided electricity during such hours. Rs. 2 per unit are charged upto 50% of contract demand instead of 10% of contract demand. The utility has the discretionary power to allow special dispensation from 20% to 100% to HT industry which is decided by the top management and not at the will of the officers of the utility.

#### 2.8.11 Non compliance of the directives given by the Commission

### Objection

There are directives pending over successive ARRs. 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

Directives of the Commission are being complied with and proper reply in respect of each of the directives issued by the Commission is being given which can be seen in the ARR filings. There are some directives in the nature of major systemic changes and may take some time to show results.

#### 2.8.12 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 area specific system improvement schemes.

### Reply of the distribution licensees

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

### 2.8.13 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.

### 2.8.14 Grant of RE subsidy by the State Government

## Objection

Claim of DHBVNL for borrowing Rs 209.63 Crores against State Government Subsidy is violation of section 65 of the Act.

### 2.8.15 Difference between power purchase cost and revenue from sale of power

## Objection

Financial losses in the DHBVNL are increasing year after year. The difference between power purchase cost and sale of power has been shown as Rs 341.23 Crores for FY 2010-11, Rs 641.11 Crores for FY 2011-12 and Rs 1268.54 Crores for FY Rs 2012-13. The difference in total revenue income and power purchase has come down from Rs 1120.45 crores in 2010-11 to Rs 311.47 Crores in 2012-13. The revenue is decreasing and the expenditures are increasing which are not a good sign for a commercial organisation.

## Reply of the distribution licensees

DHBVNL has submitted that the detail of financial losses as given in the ARR which may be referred to by the objector. There is no correlation between the power purchase cost and total revenue. The cost of power purchase is increasing due to the increase in power generation tariff whereas distribution tariff has been increased only once in a period of 10 years and that too was not sufficient to meet the revenue gap.

### 2.8.16 Loan funds, interest expenses and current assets / liabilities

## Objection

Only those loans taken for capex should be allowed after prudence check. Loans for making up inefficient operations should not be allowed. Costly loans of DHBVNL should be got refinanced. Interest and finance charges of DHBVNL have increased by 250% from 2008-09 and by 167% over the FY 2010-11. The loans have been provided for creation of assets but have actually been used for funding inefficiencies. The interest on working capital of Rs 557.46 Crores as claimed by DHBVNL is much higher than the interest of Rs 179.02 Crores on long term loans. Increasing working capital of DHBVNL is on account of inefficiencies which should not be passed on to consumers.

## Reply of the distribution licensees

In absence of tariff hike, the utilities are compelled to borrow short term loans in order to meet basic minimum expenses. The working capital borrowings projected for 2011-12 and 2012-13 are high due to the fact that the Commission has directed the utilities to give comprehensive proposal for covering the revenue gap. Further, due to disallowance of interest on working capital by the Commission, the utilities have to make short term borrowings.

### 2.8.17 Guaranteed standards of performance

## Objection

Despite being in force since 2004, neither the DHBVNL has implemented the guaranteed standards of performance nor the Commission has taken any action against DHBVNL on this account. The matter of violation of these regulations was brought to the notice of the Commission to which the Commission advised the consumer to approach Consumer Forum.

## Reply of the distribution licensee

The utility is following SoP regulations and no consumer has ever approached claiming compensation and in case someone comes with such pleas the same will be duly considered.

### 2.8.18 Depreciation

## Objection

DHBVNL has claimed depreciation on the assets which have not actually been put to use. Details of assets capitalised but not put to use be obtained and depreciation on such assets

should not be allowed. In case, the appreciation in the value of land and machinery is taken into account, then there is no loss on account of depreciation of other assets.

### 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.

#### 2.8.19 Traction tariff

### Objection

Northern Railways have pointed out the following:

**a)** The cost of supply to railways is the lowest amongst all the consumer categories. Whereas the cross subsidy being levied is very high. Cross subsidy should not be more than ± 20% of the cost of supply.

**b)** As per National Tariff Policy, MYT should be adopted and cross subsidy for railway traction be reduced to reduce railway traction tariff as per Govt. Policy.

**c)** Railways should be exempted from payment of penalty charges on over drawl of power because this happens only due to failure of supply from supplying authorities, accidents, agitations etc. which are beyond its control.

**d)** Revision of contract demand should be made effective from the date of application.

**e)** To minimise line losses, the meter should be provided at Railways traction substation instead of grid substation of distribution licensee

**f)** Railways should be allowed for payment of ACD / consumption security in the shape of bank guarantee.

**g)** Disparity between Railway tariff and DMRC tariff should be removed and the tariff made at par.

**h)** Haryana should also allow high voltage rebate to Railways.

**i)** The instances of maximum demand exceeding contract demand are due to feed extension of Ballabgarh / TSS in the feeding zone of adjacent failed TSS of other discom and vice versa which should be ignored and the Railways may be exempted from payment of load violation charges.

**j)** Since Railways maintain total infrastructure of substations, distribution network and individual metering, billing, collection and distribution losses etc. 15% rebate be given over total energy bill towards maintenance and operation as provided by NDPL, BSES, JVVNL etc..

**k)** Contract demand / maximum demand as actual should be used to levy MMC instead of installed capacity.

**l)** Minimum time should be fixed for replacement of defective meters and release / enhancement of the connections. No meter testing charges should be levied for new connections / enhancement of the load.

**m)** Consolidated bill should be issued incorporating the consumption of all the connections under one XEN.

**n)** Tariff for general supply may be kept as in 2011-12.

### Reply of the distribution licensees

**a)** The average cost of service for FY 2012-13 is Rs. 8.32 per unit and according to National Tariff Policy maximum tariff can be fixed at Rs. 9.98 / unit and minimum tariff at Rs. 6.66 / unit. The revised effective tariff for railways comes to Rs. 4.83 / unit which is below the limit of ± 20%. DHBVNL has submitted that CoS for the FY works out to Rs. 5.38 per unit and maximum tariff can be fixed at Rs. 6.99 per unit whereas the minimum tariff at Rs. 4.66 per unit, therefore, the traction tariff at Rs. 4.68 per unit is below the average CoS

**b)** Distribution licensee is sensitive to the social obligations of the Railways and ensures quality and uninterrupted supply by giving priority to railways over other consumers.

**c)** MYT framework has to be finalised by the Commission only after that the distribution licensee can file ARR under MYT framework.

**d)** Distribution losses and AT&C losses have drastically come down over years and the distribution licensee is always and continuously making efforts for bringing these losses down to possible extent for which substantial capital investments are being made. Some other steps like recovery of dues, detection of theft etc. are also being taken.

**e)** The traction tariff is below the ± 20% of the average cost of supply and the traction tariff is much lower than some other states like Gujarat, Bihar and Punjab.

**f)** The proposal for payment of ACD etc. through bank guarantee is not admissible because the same is for a limited period and has to be roled over. It is also very difficult to get it encashed. Therefore, the present system would continue.

**g)** Demand charges represent the costs associated with the total peak capacity the consumer has actually used and his actual contribution to the system peak demand. The utility is not charging any associated cost in respect of the capital investment by the railways.

**h)** The traction tariff is voltage graded which gets reduced as the voltage level increases. Regarding rebate for supply at higher voltage is concerned the same is within the purview of the Commission, however the same is opposed.

**i)** 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 as a deterrent to the consumer and levied only when over drawl of power takes place. The utility being separate entity from other utilities, is not responsible for power failure of other discom.

**j)** The utility agrees to formulate a time bound schedule considering the 30 days limit because after receipt of application, assessment of feasibility and other related jobs have to be carried out.

**k)** There is no system of providing incentive / rebate for timely payment. Moreover this will increase financial burden of the distribution licensee.

**l)** 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.

**m)** The Commission has fixed bulk supply tariff after taking into account all the relevant points. It is the duty of bulk supply consumer to maintain its system beyond the point of connection. Therefore, the request for grant of 15% rebate is not agreed to.

**n)** The basis for levy of MMC is to be decided by the Commission.

**o)** Regarding time limit of repair and installation of meters, issue of consolidated bill etc. the utility would try to consider in due course of time. Regarding minimum time for release / enhancement of connections, the Commission has already set a time limit for the same. Meter testing charges are levied only if the meter is owned by the consumer and not otherwise.

**p)** Revision of demand can be made effective from the date of approval and not from the date of application.

### 2.8.20 Introduction of Emergency Supply Tariff for Captive Power Plant (CPP) owners

**Objection:**

Due to poor quality and reliability of power supply from the State owned distribution licensees, the industrialists are planning to establish CPPs for which the Commission is requested to consider introducing ‘emergency Supply Tariff’ as has been done by Orissa. This supply will be required during non-availability of power from CPP due to annual maintenance / breakdowns etc.

### Reply of the distribution licensees

Introduction of 'Emergency Supply Tariff' is within the jurisdiction of the Commission. However, the consumers may opt for open access power. The proposal is financially un-viable because for providing unscheduled power at unspecified times of the year the utilities would have to create unproductive infrastructure. Further the utilities may not have sufficient power available at the time it is demanded, therefore, the proposal is not supported.

#### 2.8.21 Compliance to the directions of the Hon'ble APTEL

### Objection

In its judgment in appeal No. 204 of 2010 the Hon'ble APTEL has given relief to the consumers and not to put extra burden by asking to carry out prudent check on the expenditure of the distribution licensee. The UHBVNL has claimed additional revenue of Rs 1617.40 Crores where as DHBVNL has claimed Rs 367.41 Crores on this account. Every penny spent by the distribution licensees need to be properly accounted for and linked up with corresponding improvement in the functioning of the utility. The figures relating to true up of costs as claimed by DHBVNL need to be got clarified as they appear to be different at different places in the executive summary.

### Reply of the distribution licensees

The expenditure which is being claimed through true-up is duly and prudently checked by the Commission which was allowed as regulatory assets in 2009-10 to 2011-12. This expenditure is prudently incurred by the utilities and is being claimed as per the judgment of the Hon'ble APTEL. The Commission has in its tariff order for FY 2010-11 observed that the revenue gap has accumulated over the years due to no tariff increase since 2001. Several courts and Hon'ble APTEL has observed that approval of expenses by the State Commission cannot be made contingent upon efficiency levels or performance standards. However, the need for prudence check of expenses before the same are allowed is appreciated. DHBVNL has submitted that detailed explanation regarding true-up of expenditure has been provided in the said document and have also given detailed calculation in its reply. It has also submitted that amount of true up has been claimed strictly in accordance the Hon'ble APTEL's orders.

### 2.8.22 Introduction of measures to increase consumer efficiency

**Suggestions**

Some progressive States like UP, MP and Delhi have introduced schemes for improving service to the consumers and their efficiency. Consumer having higher load factor are given rebate in energy charges in UP and MP. Delhi has introduced different tariff for two parts of the year where energy charges are reduced by 10% during the months of April – September

**Reply of the distribution licensees**

Distribution licensees favour tariff design that helps improve operational efficiency and assists in DSM such as ToD tariff, rewards for higher load factor etc.. Regarding giving rebate to consumers with high load factor the distribution licensees have submitted that it is inherent in two part tariff. The consumers with better load factor end up paying less fixed charges (in terms of per unit charge) as compared to those who have poor load factor. Delhi has already withdrawn seasonal tariff system.

### 2.8.23 Increasing of connected load of consumers without their consent

**Objection**

DHBVNL has increased connected load of all consumers to 1 kW at the instance of higher authorities without issuing any order and without taking consent of the consumers. Even the fact that whether the concerned consumer has the consumption capacity of 1 kW or not has also not been taken care of. The consumers were charged as per increased connected load.

**Reply of the distribution licensee**

The action was taken to increase the load by 1 kW as the load as per ledgers was unrealistic. The consumers bills were modified accordingly as such there is no question for keeping consumers in dark. The consumer was given option to get his load verified and reduced on the basis of test report. The utility is a commercial organisation and has powers to run it in commercially viable manner, therefore, the objection is baseless.

### 2.8.24 Widespread corruption in DHBVNL

The reason of losses in DHBVNL is not low tariffs but widespread corruption in purchases. Even the consumers involved in theft of electricity are being forgiven by the officers. DHBVNL officers do not implement the sale circulars and cause harassment to consumers.

The moveable and immoveable property of the JEs to Chief Engineers of the utilities should be investigated.

### 2.8.25 Energy conservation

DHBVNL issued circulars for use of CFL and conservation of electricity. But instead of giving incentive to such consumers who conserved electricity the Commission levied MMC. Now even if a domestic consumer consumes electricity less than 40 units in a month will have to pay bill for 40 units. Similar is the case in respect of other consumer categories. Levy of MMC and energy conservation are contradictory to each other particularly in a scenario where utilities don't have sufficient power to supply. As per information obtained through RTI, the difference between energy supplied by DHBVNL from 2006-07 to 2010-11 and the energy required was to the tune of 20%.

### 2.8.26 Power purchase cost

Utilities are buying electricity at ₹ 10 per unit during peak load hours and supply the same to industrial units at cheaper rates of about ₹ 5 per unit. The Commission is allowing all the power purchase related cost either through tariff or through FSA. Other costs are controllable in nature and need to be allowed only upon prudence check.

### 2.8.27 Defective meters and unmetered consumers

#### Objection

In DHBVNL meters of more than 6 lakh consumers are defective whom electricity is being given on average rates which might be causing loss to the utility. If a consumer with a defective meter consumes 100 units per month above the average units billed then the total annual loss of revenue to DHBVNL on this account works out to Rs 360 Crores. In DHBVNL 20% of its total sales are unmetered and if it is added to 24.47% loss of DHBVNL then the total unmetered electricity works out to 45%. Directives given by the Commission and Hon'ble APTEL for 100% metering are not being complied with by the utilities. Therefore, there should not be any increase in the tariff.

#### Reply of the distribution licensee

The utility has already floated tender for replacement and relocation of meters and the technical evaluation is underway.

### 2.8.28 Tariff for DMRC

#### Objection

DHBVNL has not proposed any tariff but has requested for suitable tariff hike to allow it to recover the deficit for FY 2012-13. As per agreement between DMRC and Government of

Haryana entered into on 17.11.2006, the State Government shall provide electricity on cost from Transco, under open access system. DMRC shall pay wheeling charges as decided by HERC from time to time. However, despite DHBVNL proposal for a lower tariff in 2009-10 the Commission allowed higher tariff. FSA is also being charged in addition to tariff. As per ARR filings of DHBVNL for 2011-12 and 2012-13 the cost of power purchase is Rs 3.44 and Rs 3.67 per unit. Further in ARR for 2012-13 DMRC supply is shown at 132 kV whereas the same is at 66 kV. The unit rate considered as Rs 3.80 against Rs 3.95.

### Reply of the distribution licensee

The utility is charging tariff as determined by the Commission. The CoS for FY 2012-13 works out to Rs. 5.83 per unit and the tariff of DMRC is much lower than the average CoS.

#### 2.8.29 Voltage wise loss adjustment:

### Objection

DHBVNL is not providing voltage wise cost of supply which is being reiterated by the Commission and even by the Hon'ble APTEL. The tariff ought to be determined voltage wise as also desired by Hon'ble APTEL in many cases. Tariff of industrial consumers need to be lower as they take supply at higher voltage where losses are less. Cross subsidy should also be calculated accordingly.

### Reply of the distribution licensee

The utility is in the process of awarding contract to determine CoS through consultants. The technical validation is under process and the study will be completed within 5-8 months from the date of award of contract.

## 2.9 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 23rd February, 2012 in the office chamber of the Chairman, HERC 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. 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 levying of fixed charges and MMC was also discussed in detail. The Members of the SAC expressed concern about levy of these charges despite huge demand supply gap of electricity. The Members were of the

view that such charges are justified only in a situation where electricity is available round the clock irrespective of demand. 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 issue regarding curbing the theft of energy was deliberated at length and the Members were agreeable for fixing very harsh penalty on the employees of the distribution licensees who are found delinquent in their duties particularly in those cases where theft of electricity is found to be taking place in connivance with the staff. Disconnection of power supply of the neighbour, if such neighbour is found giving power supply from his connection to a person whose power supply has been disconnected due to his involvement in theft of electricity, was also consented. The Commission has duly considered the views of the Members of SAC while finalizing the instant Tariff order.

# 3 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.

## 3.1 Commission's Estimate of Energy Sales

### 3.1.1 AP Consumption

The consumer category wise sales projected by the Discoms for FY 2012-13 have been perused by the Commission. It is observed from the sales projections that 42% of the total projected sale of 14617 MUs in FY 2012 – 13 in UHBVNL is to the Agriculture Power (AP) consumers i.e. about the same as in the previous year. In the case of DHBVNL the same has declined to 19.15% from 21.58% in the previous year. The Commission observes that projected connected load of AP Consumers in the case of UHBVNL when compared to the projected AP Sales gives a highly distorted picture in terms of the resulting load factor and number of hours per pump per day. While in the case of DHBVNL the same is more or less within the acceptable range.

The licensees i.e. UHBVNL and DHBVNL have now submitted energy data of the segregated AP feeders for FY 2010-11 and FY 2011-12 up to December 2011 and January 2012 respectively .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 2012 -13, 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. The Commission has retained the same methodology for projecting AP Sales as done in the previous order.

In line with the above discussions, the Commission has based AP sales projections on the actual sales data of segregated AP feeders provided by UHBVNL for FY 2010-11 and for the period April, 2011 to December 2011 after adjusting a loss factor of 16%. The details are provided in the table below:

**Table 3.1 - AP consumption data for UHBVNL**

| Sr.No | Description | Actual AP sales for the period 04/2010 to 12/2010 (MU) | Actual AP sales for the period 04/2011 to 12/2011 (MU) | |
|---|---|---|---|---|
| 1. | Units as recorded on segregated AP feeders | 3442.11 | 3854.32 | |
| 2. | Losses @ 16% on 1 above. | 550.74 | 616.70 | |
| 3. | Net AP Consumption (1-2) | 2891.37 | 3237.62 | |
| 4. | AP Units on other feeders | 184.36 | 115.70 | |
| 5. | Total AP Consumption for 9 months (3+4) | 3075.73 | 3353.32 | |
| 6. | Total AP Consumption of FY 2010-11 (MU) | - | - | 3606.00 |
| 7. | %age AP Consumption during the period 04/2010 to 12/2010 to that of total AP Consumption during FY 2010-11 (3075.73/3606 x 100) | - | - | 85.30 |
| 8. | Estimated AP Consumption for FY 2011-12 (3353.32/0.853) (MU) | - | - | 3931.21 |
| 9. | Projected AP Consumption in FY 2012-13 based on 5% load growth (MU) | | | 4127 |

The Commission observes that the AP Sales estimates of UHBVNL for FY 2012-13 are exaggerated and not supported by the AP Sales as per metered data of segregated feeders provided by them for FY 2010-11 and FY 2011-12 (up to December, 2011). Consequently, based on the load growth due to addition of proposed new tube-well connections during the year 2012-13, the Commission has considered an increase of 5% in the AP consumption and accordingly allows AP consumption at 4127 MU.

Similarly the Commission has analysed the actual data of segregated AP feeders submitted by DHBVNL for FY 2010-11 and for the period April, 2011 to January 2012. On the basis of analysis of the actual data submitted by DHBVNL the Commission has arrived at the projected AP Sales for FY 2012-13. The details are presented in the table below:-

**Table 3.2 AP consumption data for DHBVNL**

| Sr.No. | Description | Actual AP sales for the period 04/2010 to 01/2011 (MU) | Actual AP sales for the period 04/2011 to 01/2012(MU) | |
|---|---|---|---|---|
| 1. | Units as recorded on segregated AP feeders | 2784.90 | 3194.22 | |
| 2. | Losses @ 16% on 1 above | 445.58 | 511.08 | |
| 3. | Net AP Consumption (1-2) | 2339.32 | 2683.14 | |
| 4. | AP Units on other feeders | 92.92 | 88.40 | |
| 5. | Consumption of other category consumers on segregated AP feeders | 94.21 | 153.85 | |
| 6. | Total AP Consumption for 10 months (3+4-5) | 2338.03 | 2617.69 | |
| 7. | Total AP Consumption of FY 2010-11 (MU) | - | - | 2884 |
| 8. | %age of AP Consumption during the period 04/2010 to 01/2011 to that of total AP Consumption during FY 2010-11(2338.03/2884 x 100) | - | - | 81 |
| 9. | Estimated AP Consumption for FY 2011-12 (2617.69 / 0.81) (MU) | | | 3231.72 |
| 10. | Projected AP Consumption in FY 2012-13 based on 5% load growth (MU) | | | 3393 |

Accordingly, the Commission allows 3393 MU as AP Sales in FY 2012 - 13 as against 3620 MU projected by DHBVNL, considering 5% growth in consumption on account of proposed addition of new AP tube-well connections during the FY 2012-13.

### 3.1.2 Metered Sales (Other than AP)

In order to project the consumer category wise sales for FY 2012-13 the Commission, in line with the methodology adopted in its previous orders, has relied on CAGR of previous three years data provided by the Discoms for connected load, number of consumers, sales and the resulting consumer category wise load factor. Thus after applying the projected load factor to the projected consumer category wise connected load the consumer category wise sales for FY 2012-13 has been arrived at. However, till FY 2010-11 there existed substantial unmet demand in Haryana as was evident from power regulatory measures adopted by the distribution companies, the Commission is of the view that with substantial augmentation in power availability in FY 2012-13 the CAGR of past data may not truly reflect the consumer category wise in FY 2012-13. Hence, except for consumer category such as Agriculture, Railways (Traction), DMRC, Lift Irrigation etc. the Commission, in line with the enhanced power availability in Haryana has assumed additional 10% sales over and above those arrived at after applying CAGR of the past data.

**Table 3.3- Approved Sales FY 2012 -13 (Million Units)**

| Consumer Categories | UHBVNL | | DHBVNL | |
|---|---|---|---|---|
| | UHBVNL proposal | HERC Approval | DHBVNL proposal | HERC Approval |
| Domestic | 3015 | 2995 | 4423 | 3840 |
| Non Domestic | 1057 | 965 | 3259 | 2751 |
| HT Industry | 2560 | 2646 | 4978 | 4477 |
| LT industry | 791 | 804 | 1195 | 815 |
| Agriculture metered | 2796 | 1810 | 2434 | 2281 |
| Agriculture Unmetered | 3353 | 2317 | 1186 | 1112 |
| MITC | 7 | 8 | 0 | 0 |
| Lift irrigation | 104 | 98 | 191 | 160 |
| railway traction | 118 | 120 | 134 | 135 |
| Bulk supply | 299 | 309 | 339 | 344 |
| street lighting | 42 | 40 | 49 | 48 |
| PWW | 475 | 486 | 503 | 447 |
| Metro | 0 | 0 | 210 | 210 |
| | | | | |
| Total | 14617 | 12598 | 18902 | 16620 |

**3.2 The Commission observes that given the power availability scenario there may not any need to purchase short term expensive power. However, in case such purchase is necessitated the purchase rate should not exceed the average power purchase rate of Rs. 3.19/kWh. The Commission would like to add that for all the subsidized / cross – subsidized consumer categories the sales as approved above shall be construed as the ceiling sales volume.**

### 3.3 Power Purchase:

#### 3.3.1 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 drawls/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 total power availability in FY 2012-13 from external and internal sources i.e. NTPC, NHPC, NPCIL, HPGCL, BBMB, IPPs, Co-generation, renewable energy generation etc. has been projected at 53,854.07 MU at a cost of Rs. 12,8526.8 million. The average cost being Rs. 3.24 / kWh.

### 3.3.2 Commission's Estimate of power purchase:-

As per the submissions of the distribution companies and the fact that they have projected surplus energy to be available for inter – state sale, the Commission believes that there may not be any need to rely on expensive short term sources or drawl under UI mechanism in a low grid frequency condition. Consequently in a surplus situation the Discoms / trading company should explore the possibilities of actively participating in bids for procurement of power floated by energy deficit states / distribution companies outside the state. This, the Commission believes, would go a long way in reducing the average cost of power available for sale to the electricity consumers of Haryana. Otherwise the Discoms may get stranded with surplus capacity and in the absence of matching demand end up paying the fixed charges even if power stations are backed down on merit order or inject power in the grid and get meagre return as UI under high grid frequency.

The Commission, in the past, has been relying on the Generation targets from the CPSUs 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 powerstations. As the generation targets for FY 2012 -13 have not been, so far, finalized by the CEA, the Commission, in order to estimate the power availability in Haryana has considered the following:-

(a) CEA's generation target for FY 2011-12.

(b) Actual generation available from April 2011 to January 2012.

(c) Past trend of actual generation achieved vis –a – vis CEA's generation targets.

(d) HPGCL's generation targets as approved by the Commission for FY 2012-13 except in the case of DCR TPS Unit – 2.

(e) Expected generation targets from new generating stations as proposed by the Discoms.

The volume of power purchase from each source approved by the Commission for FY 2012 -13 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.

### 3.3.3 Availability of power from HPGCL:-

The Commission has considered power availability at the bus bar from HPGCL sources as per its order dated 29.03.2012 in Case No. HERC/PRO-31 of 2011 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariffs for FY 2012-13. However, for the purpose of availability, as DCR TPS unit – 2 is under forced outage and hence will only be available for part year, the PLF has been considered at 60%. The details are presented in the table 3.4.

**Table 3.4- Power purchase volume from HPGCL (MUs)**

| Particulars | Power Purchase in FY 2011-12 | Discoms Proposal for FY 2012-13 | HERC Approval for FY 2012-13 |
|---|---|---|---|
| HPGCL | 21688.91 | 21688.91 | **20854** |

### 3.3.4 Availability from NTPC Faridabad CCGT (FGPP)

The 432 MW Faridabad gas based power station of NTPC is a dedicated station for Haryana. As per CEA's generation target the power station was expected to generate 2758.68 MUs in FY 2011-12. However, as per Discoms filing 2768.86 MUs was available to Haryana in FY 2011-12. In view of the fact that actual availability was fairly close to the generation target for FY 2011-12 the Commission, for the purpose of projecting availability, has retained the generation target of the previous year. The generation target determined by CEA for FY 2011-12 was 2844 MUs and after reducing auxiliary power consumption from gross generation target the Commission allows 2758 MUs from this source in FY 2012-13. The Commission's approved volume from FGPP is as per the table below.

**Table 3.5- Power purchase volume from FGPP (MUs)**

| Particulars | Power purchase in FY 2011-12 | Discoms proposal for FY 2012-13 | HERC Approval for FY 201213 |
|---|---|---|---|
| Faridabad CCGT | 2768.86 | 2833.76 | **2758** |

### 3.3.5 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 observes that as per Discoms petition 3204.45 MUs were available from BBMB power stations in FY 2010-11 and 2946.43 MUs in FY 2011-12. As against this the

projected availability from this source in FY 2012-13 is 2546.96 MUs. Discoms have projected lower availability from this source as compared to the previous two years without assigning any specific reasons for doing so. In the absence of any other methodology the Commission, for the purpose of projecting availability of power from BBMB sources, has retained CEA's generation targets for FY 2011-12 as generation from this hydel sources may not be much different from the previous year.

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

**Table 3.6 - Power Purchase Volume from Shared Utilities (MUs)**

| Particulars | Power purchase in FY 2011-12 | Discoms proposal for FY 2012-13 | HERC Approval for FY 2012-13 |
|---|---|---|---|
| BBMB | 2946.43 | 2546.96 | 2730 |
| IPGCL | 0 | 0 | 0 |
| **Total** | **2946.43** | **2546.96** | **2730** |

**Consequently, the total volume of power projected to be available to the Discoms from the shared utilities during FY 2012-13 is 2730 million units.**

### 3.3.6 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 auxiliary energy consumption and actual availability reported up to January 2012.

The details of power availability during FY 2011-12, Discom's proposal for FY 2012-13 and Commission's approval of power purchase volume from NTPC stations for FY 2012-13 are presented in the table below.

**Table 3.7 - Power purchase volume from NTPC (MUs)**

| Particulars | Power purchase in FY 2011-12 | Discoms proposal for FY 2012-13 | HERC Approval for FY 2012-13 |
|---|---|---|---|
| Singrauli | 1523.71 | 1711.56 | 1824 |
| Rihand I | 670.92 | 634.42 | 657 |
| Rihand II | 475.34 | 588.52 | 610 |
| Unchahar I | 72.49 | 98.57 | 101 |
| Unchahar II | 182.48 | 227.55 | 234 |
| Unchahar III | 114.14 | 115.67 | 119 |
| Anta Gas | 209.01 | 198.73 | 219.4 |
| Auraiya Gas | 301.44 | 291.82 | 319 |
| Dadri Gas | 323.14 | 303.52 | 329.1 |
| Farakka STPS | 64.87 | 69.67 | 68 |
| Kahelgaon I | 147.83 | 130.74 | 141 |
| Kahelgaon II | 354.51 | 361.38 | 364 |
| NCTPS (Dadri II) | 161.30 | 161.30 | 161 |
| **Total** | **4601.18** | **4893.45** | **5146.50** |

### 3.3.7 Availability of power from NHPC sources

The Commission's approval of availability from NHPC sources for FY 2012-13 is based on the CEA's generation targets for FY 2011-12 adjusted for auxiliary consumption, home state's share and actual availability reported up to January 2012. The Commission's approval of volume of power purchase volume from NHPC generating stations is presented in the table 3.8:-

**Table 3.8 - Power purchase volume from NHPC (MUs)**

| Particulars | Power Purchase in FY 2011-12 | Discoms proposal for FY 2012-13 | HERC Approval for FY 2012-13 |
|---|---|---|---|
| Bairasiul | 221.66 | 197.57 | 217 |
| Salal | 510.24 | 470.50 | 396 |
| Tanakpur | 28.69 | 31.38 | 25 |
| Chamera I | 443.72 | 381.25 | 412 |
| Chamera II | 133.09 | 122.17 | 127 |
| Uri | 145.44 | 133.52 | 129 |
| Dulhasti | 174.56 | 160.10 | 172 |
| Dhauli Ganga | 99.98 | 89.83 | 95 |
| Sewa II | 50.43 | 34.06 | 39 |
| **Total** | **1807.81** | **1620.38** | **1612.00** |

### 3.3.8 Availability from NPCIL 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 adjusted for actual availability up to January, 2012. The Commission's approval of power purchase volume from NPC source is presented in the table 3.9.

**Table 3.9 - Power purchase volume from NPC (MUs)**

| Particulars | Power purchase in FY 2011-12) | Discoms proposal for FY 2012-13 | HERC approval for FY 2012-13 |
|---|---|---|---|
| NAPP | 235.05 | 141.62 | 139 |
| RAPP | 805.22 | 538.49 | 447 |
| **Total** | **1040.27** | **680.11** | **586.00** |

### 3.3.9 Power purchase through short term/bilateral/UI mechanism

The Discoms in their FY 2012 -13 ARR petiton petition have not proposed any drawl of power under short - term / bilateral & UI mechanism.

The Commission in the previous years has been allowing short term purchases based on agreements entered into for the purpose. However, given the fact that power availability in Haryana has increased to an extent that there may not be any need for short term drawls. On the contrary Haryana would have surplus power as evident from the proposed inter – state sale by the Discoms. Given the scenario the Discoms must strengthen its power trading function and take proactive measures to maximize revenue from inter – state sale of power in order to reduce its average cost of power purchase. The Discoms must create a robust data base so that at all times they are aware of their marginal cost of power and trade accordingly.

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 2012-13. 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.

### 3.3.10 Power Purchase from Other Sources

**a)** Power Procurement from a few other sources proposed by the distribution companies includes Mundra UMPP, Pragati Gas, APCL, DVC – Raghunathpur, Rihand III, Sasan UMPP, Mundra (Adani), DVC – Mejia –B, Koteshwar, Chamera III, Koldam, Teesta III, Uri – II, Parbati III, MGSTPS (CLSP), Koderma etc.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. In case neither CEA's generation target nor past generation data is available, the

Commission has adopted power purchase volume as proposed by the Discoms in FY 2012-13.

**Table 3.10 - Power Purchase from Other Sources (MUs)**

| Particulars | Power purchase in FY 2011-12 | Discoms proposal for FY 2012-13 | HERC Approval for FY 2012-13 |
|---|---|---|---|
| Mundra UMPP | 89.11 | 1666.30 | 1663 |
| Pragati Gas Bawana | 123.44 | 990.22 | 990 |
| APCL | 278.46 | 1693.97 | 1694 |
| DVC – Raghunathpur | 0 | 112.31 | 112 |
| Rihand III | 0 | 112.16 | 112 |
| Mundra Adani | 0 | 2797.72 | 2798 |
| DVC – Mejia B | 111.38 | 677.59 | 678 |
| Koteshwar | 1.66 | 35.76 | 36 |
| Chamera III | 5.30 | 62.44 | 62 |
| Koldam HEP | 14.25 | 167.81 | 168 |
| Teesta III | 130.44 | 780.52 | 781 |
| Uri II | 0 | 7.37 | 7 |
| Parbati III | 0 | 44.17 | 44 |
| MGSTPS (CLP) | 832.54 | 7718.91 | 7718 |
| Koderma | 0 | 254.33 | 254 |
| Mejia - 6 | 0 | 99.61 | 100 |
| SJVNL | 481.46 | 416.14 | 446 |
| THDC Tehri | 252.72 | 242.26 | 215 |
| THDC Koteshwar | 22.59 | 22.59 | 23 |
| **Total** | **2343.35** | **17902.18** | **17901** |

**b) Availability of Power from Independent Power Producers/PTC**

In addition to the power availability from Central Sector, State Sector and Shared Utilities, the distribution licensees have projected availability of power from PTC Tala, PTC J&K, and Lanco Amarkantak. The Commission allows volume of power purchase as proposed by the Discoms in FY 2012-13. The details are as under:-

**Table 3.11 - Availability of Power from Independent Power Producers/PTC**

| | Power purchase in FY 2011-12 (MU) | Discoms proposal for FY 2012-13 (MU) | HERC Approval for FY 2012-13 (MU) |
|---|---|---|---|
| PTC - Tala | 51.71 | 57.37 | 57 |
| PTC J&K | 318.55 | 318.56 | 319 |
| PTC–Lanco Amarkantak | 610.49 | 610.49 | 610 |
| **Total** | **980.75** | **986.42** | **986** |

**c) Availability of Power from Renewable Energy Sources**

The Commission is committed to encourage cogeneration and non-conventional fuel based generation including solar generation projects under JNNSM scheme 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 3.12 - Approved power purchase volume from renewable energy sources**

| | Power purchase in FY 2011-12 (MU) | Discoms proposal for FY 2012-13 (MU) | HERC Approval for FY 2012-13 (MU) |
|---|---|---|---|
| P&R Gogripur | 3.54 | 3.54 | 3.54 |
| Bhoruka Power | 5.90 | 5.90 | 5.90 |
| Puri Oil Mills | 2.91 | 2.91 | 2.91 |
| Co-Gen (Shahbad Sugar Mills) | 30 | 30 | 30 |
| C&S (JNNSM) | 0.55 | 0.73 | 0.73 |
| Solar (Others under JNNSM) | 2.91 | 11.68 | 11.68 |
| **Total** | **45.81** | **54.76** | **54.76** |

### 3.3.11 Total approved power purchase volume:

**Based on the source wise approvals as presented above, the Commission determines gross power availability of 52,629 in FY 2012-13 as per details given in Table 3.13.**

### 3.3.12 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 53854.07 MUs in FY 2012-13 for both UHBVNL and DHBVNL together have been assessed at Rs. 174701.9 Million in the ARR petitions of the Disocms.

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 elaborated the principles of projecting power purchase cost in their ARR petitions for FY 2012-13. 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 2011-12 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 January 2012 with appropriate adjustments 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.

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

The tariffs for power purchase from central sources have been considered at the average rate of power purchase in FY 2011-12 (up to January 2012).

### 3.3.14 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 29.03.2012 (Case No HERC/PRO – 31 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.

### 3.3.15 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 allows tariff for power from BBMB as proposed by the Discoms for FY 2011-12 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.

### 3.3.16 Price of Power Purchased from Other Sources

The Commission has relied upon the average power purchase rate as per the FY 2011-12 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.

### 3.3.17 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 2012-13 the cost of the same has not been considered.

### 3.3.18 Unitary Charge

In its order on the ARR for transmission licensee, the Commission has allowed HVPNL to recover the unitary charge arising out of transmission project commissioned through Public Private Partnership (PPP) between HVPNL and M/s Jhajjar KT Transco Private Limited by raising a separate bill on the beneficiaries in ratio of their usage from the date of commissioning of the line for which a separate transmission license has been granted by the Commission. The TSA including monthly unitary charge already stands approved by the

Commission. Estimated cost on account of the Unitary Charge Rs. 546.22 million for FY 2012-13 is now being allowed as part of power purchase cost of the Distribution licensees.

### 3.3.19 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 along with approved volume (million units), from various sources for FY 2012-13 are presented in Table 3.13.

**Table 3.13 - Approved Volume, Rate & Cost of Power Purchase for FY 2012-13**

| Project | Units (MU) | Rate (Rs / Unit) | Power Purchase Cost (Rs. Millions) |
|---|---|---|---|
| **NTPC** | | | |
| Anta CCGT | 219.40 | 4.16 | 912 |
| Auriya CCGT | 319.00 | 4.38 | 1397 |
| Dadri CCGT | 329.10 | 4.05 | 1333 |
| Faridabad CCGT | 2758.00 | 3.77 | 10385 |
| Farakka STPS | 68.00 | 4.25 | 289 |
| KHTPS1 | 141.00 | 3.85 | 543 |
| KHTPS2 | 364.00 | 4.02 | 1463 |
| NCTPS (DADRI-II) | 161.00 | 4.21 | 678 |
| RHTPS-1 | 657.00 | 2.37 | 1557 |
| RHTPS-2 | 610.00 | 2.49 | 1519 |
| FGUTPP - 1 | 101.00 | 3.23 | 326 |
| FGUTPP - 2 | 234.00 | 3.23 | 756 |
| FGUTPP - 3 | 119.00 | 3.62 | 431 |
| SSTPS | 1824.00 | 1.87 | 3405 |
| **TOTAL NTPC LTD (A)** | **7905** | **3.16** | **24995** |
| **NHPC** | | | |
| BAIRASUIL | 217 | 1.63 | 353.71 |
| SALAL | 396 | 0.86 | 340.56 |
| TANAKPUR | 25 | 2.12 | 53 |
| Chamera I | 412 | 1.33 | 547.96 |
| URI | 129 | 1.62 | 208.98 |
| CHAMERA-II | 127 | 2.56 | 325.12 |
| DHAULIGANGA | 95 | 2.64 | 250.8 |
| DHULHASTI | 172 | 5.15 | 885.8 |
| SEWA-II | 39 | 4.11 | 160.29 |
| **TOTAL NHPC LTD (B)** | **1612** | **1.94** | **3126.22** |
| **Other (Hydel)** | | | |
| SJVNL | 446.00 | 2.38 | 1061.48 |
| THDC Tehri | 215.00 | 4.27 | 918.05 |
| THDC KOTESHWAR | 23.00 | 5.17 | 118.91 |
| BBMB | 2730 | 0.29 | 791.7 |

| | | | |
|---|---|---|---|
| **TOTAL Other (Hydel) (C)** | **3414** | 0.85 | 2890.14 |
| **NPCIL** | | | |
| RAPS | 447 | 2.06 | 920.82 |
| NAPS | 139 | 2.04 | 283.56 |
| **TOTAL NPCIL (D)** | **586** | 2.06 | 1204.38 |
| **Other Stations** | | | |
| PTC TALA | 57 | 1.86 | 106.7082 |
| PTC J&K | 319 | 3.74 | 1191.4144 |
| PTC ( LANCO AMARKANTAK) | 610 | 3.52 | 2148.9248 |
| **TOTAL Other Stn (E)** | **986** | 3.49 | 3447.05 |
| **HPGCL** | | | |
| **TOTAL HPGCL (F)** | **20854** | 3.31820 | 69197.74 |
| **NEW Stations** | | | |
| Mundra Ultra Mega | 1663 | 2.26 | 3758.38 |
| Pragati Gas Bawana | 990 | 4.20 | 4158.924 |
| APCL | 1694 | 5.91 | 10011.3627 |
| DVC Raghhunathpur | 112 | 4.50 | 505.395 |
| Rihand III | 112 | 3.92 | 439.6672 |
| Mundra Adani | 2798 | 2.94 | 8226.12 |
| DVC Mejia B | 678 | 5.30 | 3591.227 |
| Koteshwar | 36 | 4.00 | 143.04 |
| Chamera III | 62 | 4.00 | 249.76 |
| Koldam HEP | 168 | 4.00 | 671.24 |
| Teesta III | 781 | 4.00 | 3122.08 |
| Uri II | 7 | 4.00 | 29.48 |
| Parbati III | 44 | 4.00 | 176.68 |
| MGSTPS CLP Jhajjar | 7718 | 3.40 | 26241.846 |
| Koderma | 254 | 4.50 | 1144.485 |
| Mejia Unit - 6 | 100 | 3.71 | 369.5531 |
| **TOTAL New Power Stations (G)** | **17217** | 3.65 | 62839.24 |
| **Green Power** | | | |
| C&S Solar | 0.73 | 5.91 | 4.3143 |
| Solar Projects (JNNSM) | 11.68 | 5.91 | 69.0288 |
| P&R GOGRIPUR | 3.54 | 3.90 | 13.806 |
| Bhoruka Power Corps. Ltd. | 5.90 | 3.17 | 18.703 |
| SHAHBAD SUGAR MILL | 30.00 | 4.05 | 121.5 |
| Puri Oil Mill | 2.91 | 3.90 | 11.349 |
| **TOTAL Green Energy (H)** | **54.76** | | 238.70 |
| **TOTAL (A+B+C+D+E+F+G+H)** | **52629** | **3.1910** | **167938** |
| **Unitary Charge** | | | **546** |
| **Total Power purchase cost including unitary charge** | | | **168484** |

**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 2012-13 works out to 52,629 MUs at a cost of Rs. 168484 million. The average rate of power purchase allowed by the Commission in FY 2012-13 works out to Rs. 3.20 / kWh without accounting for inter- state and intra-state transmission losses.**

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

### 3.4 Transmission Losses

For the purpose of calculating the available energy for sale by the Distribution licensees for FY 2012-13, the Commission has relied on the latest available figures for inter-state and intra-state transmission losses as given in its order on Aggregate Revenue Requirement for Transmission Business & SLDC for FY 2012-13 dated 29.03.2012 (Case No. HERC/PRO – 34 of 2011), which are 2.18% and 2.63% respectively. Resultantly, the net energy available for sale to the Discoms works out to 50889 million units. The details are presented in the table below.

**Table 3.14 - Energy available for sale by distribution business (FY 2012-13)**

| | Description | Computation | HERC Approval |
|---|---|---|---|
| 1 | Gross Energy Procured from out of state sources (MU) | 1 | 16752 |
| 2 | Interstate transmission loss % | 2 | 2.18 |
| 3 | Interstate transmission loss (MU) | 3= 1*2 | 365 |
| 4 | Net Energy available from out of state sources (MU) | 4 = 1-3 | 16387 |
| 5 | Add energy generated within the State (MU) | 5 | 35877 |
| 6 | Net Energy available for use in Haryana | 6=4+5 | 52264 |
| 7 | Intra - state transmission loss (%) | 7 | 2.63 |
| 8 | Intra - state transmission loss (MU) | 8=6*7 | 1375 |
| 9 | Energy available for sale by distribution licensee | 9= 6-8 | 50889 |
| | Less interstate sale | | |
| 10 | UHBVNL | | 10132 |
| 11 | DHBVNL | | 1844 |
| 12 | Net energy available for intra state sale | 13=9-10-11 | 38913 |

### 3.5 Intra-State Transmission Charges & SLDC Charges

The Commission, vide its order on Transmission Tariff and SLDC charges dated 29.3.2012, has approved Rs 6305.99 million as Transmission charges and Rs. 113.73 million as SLDC

charges for FY 2012-13. For UHBVNL, the transmission charges @ Rs. 266.22 million per month translate into an annual cost of Rs. 3194.61 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.56.86 million for FY 2012-13.

For DHBVNL, the intra-state transmission charges are Rs 259.28 million per month and this translates into annual transmission cost of Rs. 3111.38 million for the full year. The share of SLDC charges for DHBVNL is Rs. 56.86 million for FY 2012-13.

### 3.6 Interstate sale

The distribution licensees have proposed a sale of 8392 MU (UHBVNL 7100MU + DHBVNL 1292 MU) at the bulk supply rate outside the state being the difference in the proposed sale and the estimated availability of power from different sources in FY 2012-13. The difference between availability of power and projected sales as estimated by the Commission is 11976 MU. Sale of 11976 MUs at bulk supply rate outside the State as estimated by the Commission is expected to generate Rs. 41197.44 million @ Rs. 3.44 per unit which is reduced from the gross power purchase cost. The balance power purchase cost is then allocated between the two distribution licensees in the proportion of their requirement after considering the distribution losses allowed to them for FY 2012-13.

**Table 3.15: Interstate sale and bulk power purchase cost (Rs. million)**

| Power purchase cost for distribution licensees | Volume | cost |
|---|---|---|
| Total power purchase | 52629 | 168484.22 |
| Transmission charges | | 6305.99 |
| SLDC charges | | 113.73 |
| Transmission loss | (1740) | 0.00 |
| Power Purchase Net of Loss (MUs) | 50889 | - |
| Total bulk supply cost | | 174903.94 |
| Bulk supply Cost per unit | | 3.44 |
| Interstate sale (MUs) | 11976 | |
| Revenue from Interstate Sales | | 41197.44 |

### 3.7 Power purchase cost for Distribution licensees

The revenue from interstate sale of power as calculated above is reduced from the total cost of power allowed by the Commission as per para 3.2.19 to arrive at net cost of power to be incurred by the two distribution licensees for FY 2012-13. The cost of power is allocation based on the distribution losses estimated for each distribution licensees. The calculation of power purchase cost is as given below:

**Table 3.16 - Power purchase cost for Distribution licensees (Rs. million)**

| | | UHBVNL | DHBVNL | Total |
|---|---|---|---|---|
| Units sold by discoms | MU | 12598 | 16620 | 29217 |
| Distribution loss | % | 29.00% | 21.50% | 24.92% |
| Distribution loss | MU | 5145 | 4551 | 9695 |
| Bulk units purchased | MU | 17742 | 21171 | 38913 |
| Transmission loss | % | 3.31% | 3.31% | 3.31% |
| Transmission loss | MU | 607 | 724 | 1330 |
| Unit purchased | MU | 18349 | 21894 | 40243 |
| | | | | |
| Total power purchase cost | | | | 168484.22 |
| Less revenue from interstate sale | | | | 41197.44 |
| Net power purchase cost for DISCOMS | | 18349 | 21894 | 127286.78 |
| Rate per unit | | | | 3.163 |
| Cost | | 58037.41 | 69251.81 | 127289.23 |

## 3.8 Renewable Purchase Obligation (RPO)

In accordance with the provisions of section 86 (1) (e) of the Electricity Act, 2003 which 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, and as per provisions of regulation 64 of HERC (Terms and Conditions for determination of Tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable energy Certificate) Regulations, 2010 the Commission determined RPO for FYs 2010-11 and 2011-12 as under:

**Table 3.17 - 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) (3+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 |

As per data provided by the State Agency for FY 2010 -11 and the data obtained from the distribution licensees for FY 2011-12 (upto January, 2012) the shortfall in meeting the RPO for the aforesaid years has been worked out as under:

**Table 3.18 - Shortfall in meeting RPO (MUs)**

| Type of RE Source | 2010-11 | 2011-12 |
|---|---|---|
| Solar | 1 | 0.00 |
| Non solar | 186 | 184 |
| Total | 187 | 184 |

Regulations 64 (1) and (2) of the HERC (Terms and conditions for determination of tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2010 (2nd Amendment) Regulations, 2011 provides, as under:

"64 (1) Every obligated entity in Haryana shall purchase from renewable energy sources under the Renewable Purchase Obligation (RPO) not less than 1.5% of its consumption of energy during each of FY 2010-11 and 2011-12, 2% for the FY 2012-13 and 3% for the FY 2013-14."

"64 (2) Solar power purchase obligation of every obligated entity shall be 0.05% and 0.10% of its energy consumption for the financial years 2012-13 and 2013-14 respectively. "

In accordance with the provisions of the aforesaid regulations the RPO for the FY 2012-13 is determined as under:

**Table 3.19 - Renewable Purchase Obligation for FY 2012-13**

| Energy available for sales with the discoms for 2012-13 (MU) | %age of Non solar RPO of energy sales | Non solar RPO (MU) (1x2) | solar RPO as %age of energy sales | solar RPO (MU) (1x4) | Total renewable energy required to be purchased (MU) (3+5) |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 39425 say 40000 | 2.00% | 800 | 0.05% | 20 | 820 |

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 year 2012-13, therefore, the volume of renewable energy purchase as approved by the Commission in Table 3.19 shall be adjusted against the total RPO of the distribution licensees. Further, RPO of 820 MUs shall be part of total power purchase volume approved by the Commission for FY 2012-13 and set off against the costliest power in the merit order.

Treatment to the shortfall in meeting the RPO for the FYs 2010-11 and 2011-12 as per details given the above table shall be in accordance with the provisions of regulation 65, 66 and 67 of the aforesaid regulations of the Commission. The amount to be set aside for this purpose shall be decided separately.

The Commission again reiterates that 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.

**Table 3.20 – HERC renewable energy regulation format**

| Name of distribution licensee | Other than Solar RPO (MUs) | Solar RPO (MUs) | Name of renewable energy source | Capacity | Generation during the financial year (MU) | Quantum of energy procured by distribution licensee (MU) | Difference (MUs) (2+3-6) |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | | | | | |
| | | | | | | | |

Note: Details of Solar RPO and Other RPO and compliance to be reported separately.

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.

### 3.9 Operation and Maintenance expenditure

The operation and maintenance expenditure of the UHBVNL and DHBVNL comprises of 'Employees Cost', 'Repair & Maintenance expenses' and 'Administration & General expenses'. These expenses are analyzed under this sub-head. The actual audited expenses for FY 2010-11, expenses approved by the Commission for 2011-12 and expenses projected by the distribution licensees in their ARR petitions for FY 2012-13 under each of these heads of expenditure are given in the Tables 3.21 & 3.22.

**Table 3.21 - UHBVNL Proposal for O&M expenses (Rs. million)**

| Particulars | Audited Actual for FY 2010-11 | HERC Order for FY 2011-12 | UHBVNL Proposal -for FY 2012-13 |
|---|---|---|---|
| Wages, salaries and related costs | 5064.17 | 7268.06 | 7420.20 |
| R&M expenses | 363.07 | 885.91 | 1131.80 |
| A&G expenses | 532.30 | 567.00 | 689.60 |
| Total O&M Expenditure | 5959.54 | 8720.97 | 9241.40 |

**Table 3.22 - DHBVNL Proposal for O&M expenses (Rs. million)**

| Particulars | Audited Actual for FY 2010-11 | HERC Order for FY 2011-12 | DHBVNL Proposal -for FY 2012-13 |
|---|---|---|---|
| Wages, salaries and related costs | 4977.98 | 4437.15 | 6640.40 |
| R&M expenses | 364.73 | 700.19 | 585.20 |
| A&G expenses | 369.49 | 978.65 | 437.70 |
| Total O&M Expenditure | 5712.20 | 6115.99 | 7663.30 |

UHBVNL and DHBVNL in their ARRs under consideration have projected their respective expenditures on the basis of audited accounts for FY 2010-11. This being their 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 2012-13 for the distribution and retail supply business.

### 3.9.1 Employees' cost

The 'Employees cost' includes the cost incurred by the distribution licensees on their employees who are presently working as well as for their retired employees. The cost of working employees includes salary, dearness allowance and other allowances such as HRA, CEA, LTC, medical reimbursement etc. However, in the case of retired employees and those who would retire during the year, the distribution licensees have to discharge financial liabilities towards pension, gratuity, leave encashment benefit etc. as such the same has been taken into account while estimating employees cost for FY 2012-13.

**A. Basic Salary & Dearness Allowance (DA)**

In their ARR petition for FY 2012-13, UHBVNL has proposed expenditure on account of salaries at Rs. 3754.30 million. Expenditure on DA @ 57% has been proposed at Rs. 2139.90 million. The Commission has based its calculations on *per employee average cost* as per the audited accounts of UHBVNL for FY 2010-11. Thus the Commission allows Rs. 2232.24 million as basic pay and Rs. 1607.21 million as DA @ 72% for FY 2012-13.

DHBVNL in their ARR for FY 2012-13 has proposed basic salary amounting to Rs. 2369.10 million and DA @ 72% amounting to Rs. 1705.80 million. Following the methodology enunciated above the Commission allows expenditure on account of basic salary at Rs. 2126.19 million and DA @ 72% of Rs. 1530.85 million in the case of DHBVNL.

While working out expenditure under this head, the Commission has not allowed expenditure on account of new recruitments as proposed by the distribution licensees for FY 2012-13.

**The distribution licensees are directed to seek prior approval of the Commission, giving detailed justification, before making recruitments in future. The Commission is of the opinion that it is important to bring down the employee cost and improve efficiency in the working of the organisation. The distribution licensees should endeavour to outsource additional services and link the rewards to efficiency parameters so that both the targets are met**.

**B. Other allowances**

The 'other allowances' as part of employees cost proposed by UHBVNL is Rs. 670.10 million and by DHBVNL Rs. 618.80 million. The Commission approves Rs. 488.50 million in respect of UHBVNL and Rs 555.34 million in respect of DHBVNL for FY 2012-13 again based on per employee cost.

**C. Terminal benefits**

In its ARR under consideration UHBVNL has proposed Rs. 1009.20 million as contribution towards pension trust on account of terminal benefits, including contribution for employees covered under the new pension scheme, for FY 2012-13. DHBVNL has proposed Rs. 1397.30 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 2012-13 filed by HVPNL had 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 distribution licensees 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.

The Commission is in the process of analysing the data provided by the distribution licensees to arrive at reasons behind the burgeoning of the previous liability. In the meanwhile, the Commission allows Contribution towards pension trust and new pension scheme as proposed by UHBVNL at Rs. 1009.20 million and DHBVNL at Rs. 1397.30 million contribution towards pension trust and Rs. 26.50 million towards new pension scheme.

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

**D. Expenditure on contract employees**

In addition to the cost on regular employees, DHBVNL has proposed an expenditure of Rs. 603.40 million as cost to be incurred on employees on contract. The Commission allows the same subject to true up based on actual. DHBVNL must file a detail of number and category of employees on contract so that the Commission is able to take an informed view on the cost

**E. 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 –a–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 2010-11. Resultantly, the employees cost capitalized for UHBVNL works out to Rs. 109.01million at the rate of 2.52% which is allowed as against Rs. 153.60 million proposed by them. In the case of DHBVNL, capitalisation @ 1.11% works out to Rs. 53.67 million which is being allowed as against DHBVNL's proposal of Rs. 53.90 million.

The computational details of employees cost for FY 2012-13 approved by the Commission is presented in the following table.

**Table 3.23 - Employees' cost approved for FY 2012-13 (Rs. million)**

| Employee Cost Components | Proposal of distribution licensees | | HERC Approval | |
|---|---|---|---|---|
| | UHBVNL | UHBVNL | UHBVNL | DHBVNL |
| Basic Salary | 3754.30 | 2369.10 | 2232.24 | 2126.19 |
| D.A. | 2139.90 | 1705.80 | 1607.21 | 1530.85 |
| Other Allowances | 670.10 | 618.80 | 488.50 | 555.34 |
| Expenditure on Contract employees | | 603.40 | | 603.40 |
| Terminal benefits | 1009.20 | 1432.27 | 1009.20 | 1423.80 |
| Total | 7573.50 | 6125.97 | 5337.15 | 6239.58 |
| Less: Employee cost capitalised | 153.60 | 53.90 | 109.01 | 53.67 |
| Net Employee Cost | 7419.90 | 6072.07 | 5228.14 | 6185.91 |

The Commission reiterates that distribution licensees should not divert / appropriate the provident fund subscription received from their employees for any other purposes.

### 3.9.2 Repair and Maintenance expenses

For maintaining the distribution system in a perfect working condition Repair and maintenance (R&M) cost is incurred by the distribution licensees. The Commission, in order to evolve a scientific basis for calculating R&M expenditure had directed the distribution licensees 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 its ARR under consideration, has estimated R&M expenses amounting to Rs. 1131.80 million @ 1.94% of GFA for FY 2012-13. However, the Commission finds that as per the audited accounts of the both the distribution licensees for FY 2010-11, their actual R&M expenses are less than the normative ratio of 1.65% of the average GFA during the year. The Commission, therefore, allows R&M expenses on normative ratio of 1.65% of average GFA for FY 2012-13 amounting to Rs. 928.85 million in the case of UHBVNL.

DHBVNL in its filing has projected repair and maintenance expenses at the rate of 1.17% of average GFA for FY 2012-13 amounting to Rs. 585.20 million. As the amount proposed by DHBVNL is within the normative limit of 1.65% of GFA, the Commission allows the amount proposed by DHBVNL.

However the Commission observes that the allowed repair and maintenance costs are based on the approved capital additions during FY 2011-12 and FY 2012-13. 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 3.24 below: -

**Table 3.24-Repair & Maintenance Expenses approved for FY 2012-13 (Rs. million)**

| Particulars | Proposal of distribution licensees | | HERC Approval | |
|---|---|---|---|---|
| | UHBVNL | DHBVNL | UHBVNL | DHBVNL |
| GFA at the beginning of the year | 55201.00 | 46981.60 | 55201.39 | 46664.45 |
| GFA at the end of the year | 61415.00 | 53141.20 | 57387.06 | 51657.36 |
| Average GFA during the year | 58308.00 | 50061.40 | 56294.23 | 49160.91 |
| Normative R& M expenses as % of average GFA | 1.94% | 1.17% | 1.65% | 1.19% |
| Repair and maintenance Expenses | 1131.80 | 585.20 | 928.85 | 585.20 |

### 3.9.3 Administrative and General Expenses

UHBVNL and DHBVNL have proposed Administrative and General Expenses (A&G) amounting to Rs. 689.60 million and Rs. 437.7 million respectively for FY 2012-13. The Commission finds the estimate reasonable and allows the same in the ARR.

## 3.10 Interest Cost

### 3.10.1 Interest cost on Long Term Loans

UHBVNL has proposed to recover Rs. 2204.36 million as interest for capital works related borrowings in FY 2012-13. The Commission has reviewed the execution of approved capital works for FY 2012-13 and their funding requirement and observes that the licensee needs to borrow Rs. 1081 million to fund the expenditure. For FY 2012-13, the licensee needs to borrow Rs. 1175.80 million to fund the approved capital works. The repayment of loans for FY 2011-12 and for FY 2012-13 is considered equivalent to depreciation for the year. Considering this, the interest cost on approved borrowings allowed by the Commission amount to Rs. 2233.65 million. Keeping in view the scheduled capitalisation of works, the commission approved Rs. 114.19 million as Interest during Construction (IDC) which is to be reduced from the gross interest. Consequently the interest cost, net of capitalisation, works out to Rs. 2119.47 million for FY 2012-13 and the same is allowed in the case of UHBVNL.

DHBVNL in their petition has proposed Rs. 1790.20 million towards interest cost of borrowing for capital works in FY 2012-13. In FY 2012-13, the Commission estimates that the licensee will require borrowing of Rs. 2831.30 million to fund the approved capital expenditure plan. Accordingly, the interest cost on the allowed borrowing in FY 2012-13 is Rs. 1713.03 million. Keeping in view the scheduled capitalisation of works, the commission approved Rs. 242.23 million as IDC which is to be reduced from the gross interest. Consequently the net interest after capitalisation works out to Rs. 1470.80 million for FY 2012-13. 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.

### 3.10.2 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 this amount is estimated as Rs. 6180 million. In addition, the licensee has been allowed to borrow Rs. 24795.15 million to fund the accumulated revenue gap from FY 2008-09 to FY 2011-12. The interest @ 12% on these borrowings amounts to Rs. 741.60 million and Rs. 2975.42 million respectively.

For DHBVNL, the working capital requirement is assessed at Rs. 7033 million. In addition, the licensee is allowed to borrow to Rs. 6642.47 million to fund the accumulated revenue gap from FY 2008-09 to FY 2011-12. The interest @ 12% on these borrowings amounts to Rs. 843.96 million and Rs. 797.10 million respectively.

### 3.10.3 Interest on Consumers Security Deposits.

UHBVNL has not separately provided details of interest on consumer security deposit. Commission has estimated the projected consumer security deposit as at the beginning of FY 2012-13 and calculated interest at 6% on the resultant amount to arrive at the allowed interest of Rs. 297.94 million on consumer security deposit.

DHBVNL has proposed interest cost on consumer security at Rs. 131.60 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 computational details are presented in the following table.

**Table 3.25- Approved Interest Expenses for FY 2012-13 (Rs. million)**

| Interest on Loans | Proposal of distribution licensees | | HERC Approval | |
|---|---|---|---|---|
| | UHBVNL | DHBVNL | UHBVNL | DHBVNL |
| Gross Interest on Capital Expenditure Loans | | 1790.20 | 2233.65 | 1713.03 |
| Less: Interest Capitalised | | 1251.10 | 114.19 | 242.23 |

| | | | | |
|---|---|---|---|---|
| Net Interest on Capital Expenditure Loans | | 539.10 | 2119.47 | 1470.80 |
| Interest on Working Capital Loans | | 5574.60 | 741.60 | 843.96 |
| Interest on consumers' security deposits | | 131.60 | 297.94 | 131.60 |
| Interest on financing regulatory gap | | | 2975.42 | 797.10 |
| Total | 13136.70 | 6245.20 | 6134.43 | 3243.45 |

### 3.11 Depreciation

UHBVNL has claimed depreciation amounting to Rs. 1908.30 million on an opening balance of GFA of Rs. 55201 million which works out to 3.46% of GFA at the beginning of the year. After accounting for the depreciation on consumers contribution and grants (Rs. 275.10 million) the net depreciation for FY 2012-13 has been claimed as Rs. 1633.20 million. The Commission, based on the depreciation rate of 3.45% as per audited accounts for FY 2010-11, has approved Rs. 1905.54 million as depreciation on its estimation of opening balance of GFA for FY 2012-13. Depreciation on assets created out of government grants and consumer contribution i.e. Rs 275.10 million as proposed by UHBVNL has been reduced from the approved total depreciation to arrive at the net depreciation of Rs. 1630.44 million for FY 2012-13.

DHBVNL has claimed Rs. 1731 million as depreciation for FY 2012-13 on the opening balance of GFA of Rs 46981.60 million which works out to an average of 3.68% of opening GFA. The Commission has based its calculation for depreciation on the average rate of depreciation (3.58%) as per the last available audited accounts. The depreciation as per commission thus works out to Rs. 1670.23 million on the Commission's estimate of GFA of Rs.46664.45 million The depreciation on consumer contribution i.e. Rs. 358.40 million is to be reduced from it leaving a net balance of Rs. 1311.83 million to be included in the ARR of DHBVNL in FY 2012-13.

**The Commission accordingly approves net depreciation for FY 2012-13 at Rs 1630.44 million and Rs 1311.83 million for UHBVNL and DHBVNL respectively**

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

## 3.12 Special Appropriation

### 3.12.1 Difference in actuarial valuation of terminal benefits in previous years.

UHBVNL has proposed to adjust Rs. 1711.50 million excess projected for FY 2010-11 as compared to the amount as per audited accounts which the Commission allows in order to reduce the ARR for FY 2012-13.

### 3.12.2 Truing up of expenses in consequence to the order of the Hon'ble Appellate Tribunal for Electricity in case number 204 of 2010

UHBVNL has proposed to recover Rs. 16175 million and DHBVNL proposes to recover Rs. 3614.70 million on account of true up of various expenses incurred in FY 2008-09, FY 2009-10 and FY 2010-11. The Commission has examined each head of expenditure that has been in variance with the amount allowed in the ARR. Commission finds that a large number of expenses in the ARR are based on norms and the Commission finds no reason to change the basis of calculation. The expenses claimed by the licensees and amounts allowed by the Commission are as given below:

**Table 3.26- UHBVNL Approved vs Actual Expenses for FY 2008-09 (Rs. Crores)**

| Particulars<br><br>(Rs. Crores) | Approved | Actual | Difference between approved and actual | True up allowed by the Commission |
|---|---|---|---|---|
| A&G Expenses | 27.74 | 37.85 | 10.12 | 10.12 |
| R&M Expenses | 65.14 | 35.40 | -29.74 | -29.74 |
| Interest cost on borrowings | 79.39 | 342.38 | 256.35 | - |
| interest on CAPEX borrowing | 40.087 | 39.58 | - | -0.51 |
| Interest on working capital borrowings | 28.665 | 285.51 | - | - |
| Interest on security deposit | 10.65 | 17.294 | 6.64 | 6.64 |
| Depreciation | 139.14 | 78.4 | -60.74 | -60.74 |
| Other Expenditure | 0 | 400.76 | 400.76 | 0 |
| **Total expenditure** | **311.41** | **894.79** | **583.38** | **-74.23** |
| Special appropriations: | | | | |
| Prior period expenses | 21.15 | 110.84 | 89.69 | 0 |
| Income Tax / FBT provisions | 0.49 | 0.64 | 0.15 | 0.15 |
| Contribution to contingency reserve | 0 | - | 0 | 0 |
| **Total expenditure including special appropriation** | **333.05** | **1006.27** | **673.22** | **-74.08** |

**Table 3.27 - UHBVNL Approved vs Actual expenses for FY 2009-10 (Rs. Crores)**

| Particulars (Rs. Crores) | Approved | Actual | Difference claimed by UHBVNL | True up allowed by the Commission |
|---|---|---|---|---|
| A&G Expenses | 37.99 | 43.21 | 5.22 | 5.22 |
| R&M Expenses | 48.65 | 46.04 | -2.6 | -2.60 |
| Interest cost on borrowings | 105.24 | 524.5 | 419.26 | - |
| interest on CAPEX borrowing | 37.641 | 87.94 | - | 50.30 |
| Interst on working capital borrowings | 44.625 | - | - | 0.00 |
| Interst on security deposit | 22.978 | 19.844 | - | -3.13 |
| Depreciation | 128.1 | 109.74 | -18.35 | -18.35 |
| Other expenditure | 0 | 9.5 | 9.5 | 0.80 |
| **Total expenditure** | **319.97** | **733** | **413.02** | **32.24** |
| Income Tax / FBT provisions | 0.64 | 0 | -0.64 | -0.64 |
| **Total expenditure including taxes** | **320.61** | **733** | **412.38** | **31.60** |

**Table 3.28 - UHBVNL Approved vs Actual expenses for FY 2010-11 (Rs. Crores)**

| Particulars (Rs. Crores) | Approved | Actual | Difference between approved and actual | True up allowed by the Commission |
|---|---|---|---|---|
| A&G Expenses | 45.8 | 53.23 | 7.43 | 7.43 |
| R&M Expenses | 63.49 | 36.31 | -27.18 | -27.18 |
| Interest cost on borrowings | 192.37 | 736.88 | 544.51 | - |
| interest on CAPEX borrowing | 37.218 | 185.45 | - | 148.24 |
| Interst on working capital borrowings | 133.465 | - | - | 0 |
| Interst on security deposit | 21.683 | 23.372 | - | 1.69 |
| Depreciation | 159.83 | 93 | -66.83 | -66.83 |
| Other expenditure | 0 | 16.72 | 16.72 | 8.32 |
| **Total expenditure** | **461.49** | **936.13** | **474.65** | **71.67** |
| Net prior period expenses | 0 | 139.18 | 139.18 | 0 |
| **Total expenditure including prior period expenses** | **1097.4** | **936.13** | **474.65** | **71.67** |

**Table 3.29 - DHBVNL Approved vs Actual expenses (Rs. crore)**

| Particulars | Approved Expenditure | Actual Expenditure | Difference to be true up | True up allowed by the Commission |
|---|---|---|---|---|
| **2008-09** | | | | |
| R&M Expenses | 59.38 | 33.39 | -25.99 | -25.99 |
| A&G Expenses | 34.00 | 60.33 | 26.33 | 26.33 |
| Interest cost on borrowings | 77.95 | 179.74 | 101.80 | 0.00 |
| Depreciation | 88.33 | 97.01 | 8.68 | 8.68 |
| Other Expenditure | 0.00 | 44.63 | 44.63 | 0.00 |
| Income Tax / FBT provisions | 0.32 | 0.44 | 0.12 | 0.12 |
| Net Prior Period Expenses | 20.75 | -0.42 | -21.17 | 0.00 |
| **Total** | **280.73** | **415.12** | **134.40** | **9.14** |
| **2009-10** | | | | |
| R&M Expenses | 46.63 | 39.71 | -6.92 | -6.92 |
| A&G Expenses | 66.36 | 80.88 | 14.52 | 14.52 |
| Interest cost on borrowings | 144.51 | 251.57 | 107.06 | 0.00 |
| Depreciation | 90.97 | 41.75 | -49.22 | -49.22 |
| Other Expenditure | 0.00 | 63.69 | 63.69 | 0.00 |
| Income Tax / FBT provisions | 0.44 | 0.00 | -0.44 | -0.44 |
| Net Prior Period Expenses | 0.00 | -0.42 | -0.42 | -0.42 |
| **Total** | **348.91** | **477.18** | **128.27** | **-42.48** |
| **2010-11** | | | | |
| R&M Expenses | 58.70 | 36.47 | -22.22 | -22.22 |
| A&G Expenses | 73.53 | 36.95 | -36.58 | -36.58 |
| Interest cost on borrowings | 169.95 | 355.82 | 185.88 | 0.00 |
| Depreciation | 102.47 | 68.43 | -34.04 | -34.04 |
| Other Expenditure | 0.00 | 37.13 | 37.13 | 0.00 |
| Income Tax / FBT provisions | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Prior Period Expenses | 0.00 | -31.37 | -31.37 | -31.37 |
| **Total** | **404.65** | **503.43** | **98.80** | **-124.21** |

The basis for allowing/ disallowing expenditure on true up is as follows:

1. The interest on working capital is allowed on normative basis in the ARR and Commission has no reason to revise the norm. Therefore no additional interest on working capital is to be allowed on account of truing up.

2. Interest on Capital expenditure has been trued up based on actual capital expenditure incurred, borrowings to fund the capital additions, rate of interest and IDC.

3. Other expenditure comprises mainly of provisions for bad and doubtful debts. The Commission has allowed the licensees to claim actual write off of receivable only when it has been demonstrated by them that adequate efforts were made by them to recover the dues. No provisional assessment for bad debts is to be allowed. However, expenditure on account for compensation for accidents has been allowed.

4. Prior period expenses comprise mainly of power purchase cost which is allowed to be trued up as part of FSA and therefore cannot form part of truing up at this stage.

5. Prior period expenses for DHBVNL for FY 2008-09 were allowed on actual basis as per prior period audited accounts. Therefore these are not to be trued up now.

In addition to above, UHBVNL has also claimed Rs. 1225.80 million on account of true up of employee cost for FY 2010-11 as below:

**Table 3.30 - UHBVNL True up of Employee cost for FY 2010-11**

| **Particulars** | **FY 2010-11** | | | **True up to be allowed** |
|---|---|---|---|---|
| (Rs. million) | **Approved** | **Actual** | **True up** | |
| Basic Salary + DP | 2595.90 | 3647.20 | 1051.30 | 601.30 |
| Add: Arrears | 450.00 | 0.00 | 0.00 | |
| Other Allowances | 333.80 | 512.80 | 179.10 | 179.00 |
| **Total (without terminal benefits)** | 3379.70 | 4160.00 | 1230.40 | 780.30 |
| Less: Employee cost capitalized | 100.20 | 104.80 | 4.50 | 4.60 |
| **Net Employee Cost** | 3279.50 | 4055.20 | 1225.80 | 775.70 |

The estimation by UHBVNL is incorrect. The Commission allows Rs. 775.75 million as true up of employee cost for FY 2010-11 based on the audited accounts.

DHBVNL has claimed Rs. 400.1 million as true up of employee cost for FY 2010-11 based on the audited accounts. The Commission finds the estimation correct and allows the same.

### 3.13 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 2012-13 is Rs. 74994.34 million as against Rs. 134879.30 million proposed by the Licensee. While in the case of DHBVNL the same is estimated at Rs. 84425.62 million as against Rs. 110164.20 million proposed by them. Item wise details are presented in the following table.

**Table 3.31 - Approved Expenditure for FY 2012-13 (Rs. million)**

| Particulars | Proposal of distribution licensees | | HERC Approval | |
|---|---|---|---|---|
| | **UHBVNL** | **DHBVNL** | **UHBVNL** | **DHBVNL** |
| Expenditure: | | | | |
| Purchase of energy | 94899.90 | 82609.00 | 58037.89 | 69250.72 |
| Transmission charges | - | 7487.20 | 3194.61 | 3111.38 |
| SLDC charges | - | - | 56.86 | 56.86 |
| Wages, salaries and related costs | 7573.50 | 6640.40 | 5228.14 | 6185.91 |
| R&M Expenses | 1131.80 | 585.20 | 928.85 | 585.20 |
| A&G Expenses | 712.50 | 437.70 | 689.60 | 437.70 |
| Interest cost on borrowings | 13136.70 | 6245.20 | 6134.43 | 3243.45 |
| Depreciation | 1633.20 | 1372.60 | 1630.44 | 1311.83 |
| Bad Debts including provisions | 102.50 | - | 0.00 | - |
| Other expenditure | - | 772.10 | - | 0.00 |
| **Total Expenditure** | **119190.00** | **106149.40** | **75900.82** | **84183.07** |
| **Special Appropriations:** | | | | |
| Difference of actuarial valuation of previous years | -1711.50 | - | -1711.50 | - |
| Difference in employee cost of previous years | 1225.80 | 400.10 | 775.82 | 400.10 |
| True up of Expenses of previous years | 16175.00 | 3614.70 | 29.19 | -157.55 |
| Total Special Appropriations | 15689.30 | 4014.80 | -906.49 | 242.55 |
| **Total Expenditure (including special appropriation)** | **134879.30** | **110164.20** | **74994.34** | **84425.62** |

## 3.14 Capital Expenditure

### 3.14.1 UHBVNL

Assessment of capital expenditure likely to be made by the licensee during FY 2011-12 and Capital Expenditure Plan for FY 2012-13 has been made on the basis of revised submissions made by the licensee vide memo dated 25.01.2012. The original ARR submissions of the licensee and all the information supplied in this regard thereafter have also been kept in view.

The Commission had approved a capital expenditure plan of Rs. 710.71 crores for UHBVNL for the year 2011-12. A scrutiny of the capital expenditure incurred and physical achievements reported by the licensee for FY 2011-12 (up to September 2011) indicated that against approved out lay of Rs. 710.71 crores, the expenditure incurred was only Rs. 43.14 crores which was 6% of the approved out lay. The licensee further proposes to spend Rs. 315.68 crores during the period October, 2011 to March, 2012. The likely expenditure thus intimated for FY 2011-12 is Rs. 358.82 crores which would be just 50% of the approved out lay and indicates a dismal performance.

The likely expenditure intimated for FY 2011-12 indicates that for the works Metering, DT metering, Bifurcation / Trifurcation of feeders and release of Tube well connections, full outlay as approved would be utilized. However in respect of the work AMR on HT connections, the expenditure would be Rs. 7.43 crores against approved outlay of Rs. 5 crores and for the work 33 KV substations / lines (new as well as augmentation), the likely expenditure intimated is Rs. 119.22 crores against approved outlay of Rs. 101.35 crores. For the works HVDS on segregated agriculture feeders, Implementation of R-APDRP, part A & B and civil works the expenditure would be much less than that approved.

**Despite having been directed by the Commission in the ARR order for FY 2011-12, the licensee has not quantified the improvements achieved as a result of Capital Investment made and also has not submitted an analysis of the benefits accrued.**

The licensee in their ARR for FY 2012-13 proposed a Capital Expenditure Plan of Rs. 439.04 crore, but through its filing dated 25.01.2012, revised the same to Rs. 548.29 crore. The reason for this increase was mentioned as preparation of the investment plan for 12th five year plan period (2012-17) after submission of the ARR and matching the Capital Expenditure Plan to the investment plan for 12th five year plan period.

Considering the past performance of UHBVNL and works likely to be carried out during FY 2011-12, 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 for FY 2012-13. As such, approval of funds against each work has been allowed based on the performance of the licensee in the execution of Capital Expenditure Plans during the previous years and status of NITs / award of contracts for the works proposed to be carried out during FY 2012-13. The investment which does not appear to be realistic has been curtailed. The Commission, therefore, allows the following capital expenditure for FY 2012-13:-

**Table 3.32 - Capital Expenditure Plan of UHBVNL for FY 2012-13**

| Sr. No. | Name of the work | Investment approved for FY 2012-13 ( Rs.crores) |
|---|---|---|
| 1 | Creation of new 33 KV sub-stations | 67.85 |
| 2 | Augmentation of existing 33 KV Sub Stations | 22.00 |
| 3 | Erection of new 33 KV lines | 11.04 |
| 4 | Erection of new 11 KV lines | 4.60 |
| 5 | Augmentation of existing of 33 KV lines | 8.80 |
| 6 | Bifurcation / Trifurcation of 11 KV feeders | 20.00 |
| 7 | Release of new connections, procurement of transformers, cables, conductor etc. | 100.00 |

| | | |
|---|---|---|
| 8 | Release of Tube well connections | 75.00 |
| 9 | Implementation of R-APDRP (Part – A) | 10.00 |
| 10 | Implementation of R-APDRP (Part – B) | 25.00 |
| 11 | Pilot projects | 5.00 |
| 12 | Civil Works | 5.00 |
| | **Total** | **354.29** |

### 3.14.2 DHBVNL

Assessment of capital expenditure likely to be made by the licensee during FY 2011-12 and Capital Expenditure Plan for FY 2012-13 has been made on the basis of the original ARR submissions of the licensee and submissions made by the licensee vide their letter dated 06.01.2012.

The Commission had approved a capital expenditure plan of Rs. 619 crores for DHBVNL for the year 2011-12. A scrutiny of the capital expenditure incurred and physical achievements reported by the licensee for FY 2011-12 (up to September 2011) indicated that against approved out lay of Rs. 619 crores, the expenditure incurred was only Rs. 112.96 crores which is 18% of the approved out lay. The licensee further proposes to spend Rs. 421.24 crores during the period October, 2011 to March, 2012. The likely expenditure thus intimated for FY 2011-12 is Rs. 534.20 crores which would be about 86% of the approved out lay.

The likely expenditure intimated for FY 2011-12 indicates that for the works Power factor improvement & 33 KV substation / Lines (New and augmentation), full outlay as approved would be utilized. However in respect of the work 11 KV lines / Cables /Transformers (new, augmentation and bifurcation / trifurcation, RGGVY & Release of new connections etc), the likely expenditure would be Rs. 227.25 crores against approved outlay of Rs. 111 crores. For the works Implementation of R-APDRP, part A & B, DSM (CFL / Efficient Pump sets etc.) and Sub Division computerization it has been intimated that expenditure would be nil. For release of tube well connections an expenditure of Rs. 56.75 crores is likely to be incurred for which no outlay had been proposed by the licensee and approved by the Commission.

**In spite of having been directed by the Commision in the ARR order for FY 2011-12, the licensee has not quantified the improvements achieved as a result of Capital Investment made and also has not submitted an analysis of the benefits accrued.**

The licensee in the ARR for FY 2012-13 proposed a Capital Expenditure Plan of Rs. 651 crore. Considering the past performance of DHBVNL and works likely to be carried out during FY 2011-12, 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 for FY 2012-13. As such, approval of funds against each work has been allowed based on the performance of the licensee in the execution of Capital Expenditure Plans during the previous years and status of NITs / award of contracts for the works proposed to be carried out during FY 2012-13. The investment which does not appear to be realistic has been curtailed. The Commission, therefore, allows the following capital expenditure for FY 2012-13:-

**Table 3.33- Capital Expenditure Plan of DHBVNL for FY 2012-13**

| Sr. No. | Name of the work | Investment approved for FY 2012-13 (Rs. in Crores) |
|---|---|---|
| 1 | Metering | 40 |
| 2 | HVDS | 05 |
| 3 | Power Factor improvement | 12 |
| 4 | 33 KV substations / lines (New and augmentation ) | 75 |
| 5 | Procurement of material | 100 |
| 6 | Release of BPL connections under RGGVY | 17.33 |
| 7 | Release of tube well connection on turnkey basis | 70 |
| 8 | Bifurcation of feeders, augmentation of conductor and shifting of connections from AP feeders to DS feeders. | 25 |
| 9 | Implementation of R-APDRP (Part-A) | 20 |
| 10 | Implementation of R-APDRP (Part – B) | 10 |
| 11 | Civil works | 10 |
| 12 | System strengthening under IBRD loan and IBRD equity | 100 |
| | **Total** | **484.33** |

**The licensees are again directed 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.**

### 3.15 Non-Tariff Income

The Commission approves Rs. 2053.81 million as non-tariff income for UHBVNL as proposed by the licensee after reducing the expected revenue to be earned from discount availed on timely payment of power purchase bills as the interest on working capital is allowed to the licensee on normative basis. For DHBVNL, the Commission allows Rs. 1577.60 million as non-tariff income for DHBVNL as proposed by them.

### 3.16 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 to meet the 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 2012-13, as in the past, to the distribution licensees.

### 3.17 Aggregate Revenue Requirement

In light of the above analysis, the Commission approves Rs. 72940.53 million as the aggregate revenue requirement of the Distribution and Retail Supply business of UHBVNL and Rs. 82848.02 million for DHBVNL for FY 2012-13.

The computation of approved Aggregate Revenue Requirement for FY 2012-13 is presented in the Table 3.34 & 3.35 below.

**Table 3.34 - Aggregate Revenue Requirement for UHBVNL for FY 2012-13 (Rs. million)**

| Description | UHBVNL Proposal | HERC Approval |
|---|---|---|
| Reasonable return/ Return on Equity | 2420.80 | 0 |
| Total expenditure | 134879.30 | 74994.34 |
| Minus: Non-tariff income | -2092.50 | -2053.81 |
| **Total Aggregate Revenue Requirement** | **135207.60** | **72940.53** |

**Table 3.35 - Aggregate Revenue Requirement for DHBVNL for FY 2012-13 (Rs. in million)**

| Description | DHBVNL Proposal | HERC Approval |
|---|---|---|
| Reasonable return/ Return on Equity | 2151.50 | 0 |
| Total expenditure | 110164.50 | 84425.62 |
| Minus: Non-tariff income | -1577.60 | -1577.60 |
| Total Aggregate Revenue Requirement | **110738.30** | **82848.02** |

### 3.18 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 2010-11 and FY 2011-12 (upto September) and other relevant data furnished by them. The observations of the Commission with regard to their performance in respect of system operation and consumers' satisfaction are as under:-

#### 3.18.1 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 3.36 - 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 | 24.00 | 22.95 |
| 2011-12 (upto September, 2011) | 22.57 | - |

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 nine years i.e. from FY 2001- 02 to FY 2010-11, the losses have reduced only by 7.74% in case of UHBVNL and only by 6.38% in case of DHBVNL, which reflects very poor on the working of the Licensees.

An examination of the data of 11 KV feeders under UHBVNL made available for the period April, 2011 to December 2011 shows that out of total 3340 feeders, there are 658 feeders on which the losses are between 25% & 50%. There are 173 feeders ( 53 in Rohtak circle, 44 in Jhajjar circle, 27 in Sonepat circle, 22 in Jind circle, 19 in Karnal circle and 8 in Ambala circle on which the losses are between 50% & 75%. There are 14 feeders ( 11 in Rohtak circle, 1 in Jhajjar circle, 1 in Jind circle & 1 in Sonepat circle) on which the losses are above 75%.

Similar data of DHBVNL for the period April, 2011 to September, 2011 shows that out of total 2958 number 11 KV feeders, there are 680 feeders on which the losses are between 25% &

50%. There are 278 feeders (52 in Bhiwani Circle, 48 in Faridabad circle, 22 in Gurgaon circle, 117 in Hisar circle & 39 in Narnual circle) on which loss level is above 50 %. This includes four feeders (1 in Gurgaon circle, 2 in Hisar circle and 1 in Narnual circle) on which loss level is above 80%.

During public hearing as well as in their written objections, consumers and other stakeholders expressed their concern about high T & D loss levels in UHBVNL and DHBVNL. They pointed out that cost of service has increased 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 prepare load reduction plans fixing time bound targets especially for feeders having losses above 50%, but the licensees have not taken any concrete steps in this direction. As detailed above there are feeders, both urban and rural on which the losses are consistently above 80%, but the licensees have not bothered to get energy audit of such feeders done and take suitable measures to curtail the same. The Commission views this lapse on the part of licensees very seriously. **The licensees are again directed to bring down the loss level of such feeders which have losses above 50% to a reasonable level by 31st March, 2013.**

### 3.18.2 Failure of Distribution Transformers (DTs):

The year-wise position of damage rate of distribution transformers as per the information provided by UHBVNL and DHBVNL in the past and in the filing for 2012-13 is given in the table below:-

**Table 3.37 - 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 | Urban | 5.79 | 4.58 | 8.95 | 6.56 |
| | | Rural | 12.52 | 9.36 | 15.84 | 10.78 |
| | | **Overall** | **11.74** | **8.81** | **15.06** | **10.30** |
| 10 | 2010-11 | Urban | 7.21 | 6.09 | 13.38 | 9.14 |
| | | Rural | 12.36 | 9.46 | 10.01 | 6.75 |
| | | **Overall** | **11.81** | **9.09** | **10.29** | **6.95** |
| 11 | 2011-12 (upto 09/2011) | Urban | 4.89 | 3.83 | 7.25 | 5.42 |
| | | Rural | 6.04 | 4.71 | 6.56 | 4.60 |
| | | **Overall** | **5.92** | **4.62** | **6.61** | **4.66** |

The DT damage rate is to be analyzed on the basis of total number of DTs damaged, irrespective of the fact whether the transformer damaged was within warranty period or not as all these DTs were part of the system.

The HERC vide its Regulation **(Standards of Performance for Distribution Licensee) Regulations 2004,** has fixed the failure rate of distribution transformers as maximum 5% for urban area DTs and maximum 10% for rural area DTs. Previously the licensees had not been submitting the DT failure rate separately for urban & rural DTs, but in compliance of this Regulation, they started doing so later on.

The Commission observes that the overall Distribution Transformer damage rate (DT damage rate) in case of DHBVNL had consistently declined from 19.40 % in 2004-05 to 11.49 % in 2007-08, but thereafter it is increasing marginally every year. In 2008-09 it was 11.65%, in 2009-10 it was 11.74% & in 2010-11 it was 11.81%, which cannot be said to be a good performance.

A scrutiny of the data of DHBVNL for FY 2010-11 indicates that overall failure rate of DTs, both in urban & rural areas is above the prescribed norms. Circle wise figures indicate that the DT damage rate in urban areas is above 5% in all the circles except Gurgaon circle. In

Bhiwani circle the figure is very alarming at 14.86%. In rural areas it is above 10% in Faridabad, Gurgaon, Narnual & Bhiwani circles. In Gurgaon circle the damage rate is 22.37% followed by Faridabad as 21.86%.

A scrutiny of the data of DHBVNL for FY 2011-12 (upto September) indicates that the damage rate of DTs in urban areas of Faridabad, Bhiwani & Sirsa circle is above 5%. The damage rate of DTs in rural areas above 10% is only in Faridabad circle which is 12.96%.

A scrutiny of the data of UHBVNL for FY 2010-11 indicates that overall failure rate of DTs in urban areas is 13.38% which is much above the prescribed limit of 5%. In rural areas the damage rate is 10.01% which is just meeting the norm. The circle wise data has not been supplied.

A scrutiny of the data of UHBVNL for FY 2011-12 (upto September) indicates that the overall damage rate of DTs in urban areas is 7.25% against prescribed norm of 5%. It is above 5% in all the circles except Kurukshetra, Rohtak & Jhajjar circles. The maximum damage rate of 13.93% is in Kaithal circle. As regards to rural areas, the damage rate is above 10% in respect of Ambala, Yamunanagar, Panipat & Sonipat circles. The maximum damage rate of 14.39% is in Panipat circle.

**The distribution licensees should examine the cause of damage of DTs in the areas where it is above the norms and endeavour to bring down the distribution transformer damage rate below the prescribed limits and also to exercise proper quality checks on new procurement to ensure least damage rate within the warranty period.**

### 3.18.3 Accidents

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 3.38 - Fatal and non Fatal Accidents in DHBVNL**

| **Year →** | **04-05** | **05-06** | **06-07** | **07-08 ( upto Dec. 07)** | **08-09** | **09-10** | **10-11** | **11-12 (upto 09/2011)** |
|---|---|---|---|---|---|---|---|---|
| Category | | | | | | | | |
| **Fatal** | | | | | | | | |
| Nigam Employees | | | 25 | | | 19 | 17 | 6 |
| Private Persons | | | 17 | | | 38 | 33 | 33 |
| Total | 30 | 52 | 42 | 24 | 46 | 57 | 50 | 39 |
| Animals | 103 | 73 | 87 | 55 | 87 | 71 | 77 | 47 |
| **Total Fatal** | **133** | **125** | **129** | **79** | **133** | **128** | **127** | **86** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Non-Fatal** | | | | | | | | |
| Nigam Employees | | | 28 | | | 51 | 31 | 25 |
| Private Persons | | | 7 | | | 31 | 23 | 18 |
| Total | 51 | 57 | 35 | 59 | 53 | 82 | 54 | 43 |
| Animals | 0 | 4 | - | - | - | - | - | - |
| **Total Non Fatal** | **51** | **61** | **35** | **59** | **53** | **82** | **54** | **43** |
| **Total Fatal and non Fatal** | **184** | **186** | **164** | **138** | **186** | **210** | **181** | **129** |

**Table 3.39 - Fatal and non-Fatal Accidents in UHBVNL**

| **Year** | **02-03** | **03-04** | **04-05** | **05-06** | **06-07** | **07-08** | **08-09** | **09-10** | **10-11** |
|---|---|---|---|---|---|---|---|---|---|
| Category | | | | | | | | | |
| **Fatal** | | | | | | | | | |
| Human Beings | 41 | 58 | 40 | 61 | 51 | 71 | 87 | 67 | 75 |
| Animals | 107 | 106 | 125 | 213 | 94 | 87 | 139 | 134 | 97 |
| **Total** | **148** | **164** | **165** | **274** | **145** | **158** | **226** | **201** | **172** |
| **Non-Fatal** | | | | | | | | | |
| Human Beings | 81 | 60 | 51 | 117 | 55 | 79 | 107 | 64 | 80 |
| Animals | - | - | - | - | - | - | 2 | - | - |
| **Total Fatal and non Fatal** | **229** | **224** | **216** | **391** | **200** | **237** | **335** | **265** | **252** |

The Commission notes with concern that the number of fatal and non-fatal accidents are on increase in respect of both the licensees.

An analysis of the information of DHBVNL, indicates that though the total number of fatal as well as non-fatal accidents have almost remained at the same level since the year 2004-05 but there is almost twofold increase in the number of fatal accidents to human beings.

The situation of UHBVNL is worse than DHBVNL. Their number of accidents is more than that of DHBVNL. The number of accidents both fatal and non-fatal is on increase since the year 2002-03.

The above position indicates that the licensees have hardly taken steps 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. **In the order on ARRs of the licensees for the year 2011-12 it was suggested that accidents to their employees can be avoided by imparting them training on safety measures and by providing proper safety kits. Further accidents to 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'. The licensees have to follow these suggestions seriously.**

### 3.18.4 Energy Recording / Accounting

The Commission observes with serious concern that a large number of defective and electromechanical meters, as detailed below, still existed in the system of both the distribution licensees, resulting into under assessment and pilferage of energy vis-a-vis Revenue.

**Table 3.40 - Status of defective / electromechanical meters ending 09/2011**

| Particulars | UHBVNL | DHBVNL |
|---|---|---|
| **a) Defective meters** | | |
| **i) Single phase** | 37,836 | 1,12,276 |
| **ii) Three phase** | 7,284 | 26,543 |
| **Total (a)** | 45,120 | 1,38,819 |
| **b) Electromechanical meters** | 6,54,962 | 6,00000 |

In the order on ARRs of the licensees for FY 2011-12, the licensees were informed that as **per CEA (Installation and Operation of Meters) Regulations, 2006**, all interface meters, consumer meters and energy accounting and audit meters shall be of static type and further that as per **Section-55 of the Electricity Act, 2003,** no licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority. As such, since the Authority (CEA) issued the ibid Regulations in March 2006, the licensees should have replaced all the electromechanical meters existing in their system by March, 2008, but both the licensees have failed miserably on this front as more than 6 lac electromechanical meters are still existing in the system of each licensee. Further as detailed above, a large number of defective energy meters are awaiting replacement.

On account 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 also notes that the licensees have not been able to arrange sufficient number of static energy meters since last many years, resulting into harassment to the valued consumers. It would not be out of place to mention here that 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.

**Both the licensees are directed to arrange for replacement of all the defective and electromechanical meters within two years from the issue of this order.**

### 3.18.5 Kundi connections

In the order on ARRs of the licensees for FY 2011-12, the licensees were informed that a large number of domestic consumers in rural area were using unfair means and abstracting power direct from the mains as the licensees had not made sincere efforts to convince the people in the rural area to obtain electricity connection. The licensees were directed to identify the villages where there were mass thefts and arrange camps at such villages to release connections on the spot. The licensees were further directed that 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.

The licensees however, did not take any follow up action on the above direction and were reminded of the matter. The DHBVNL then issued instructions in December, 2011 & the UHBVNL in January, 2012 directing their field offices to launch special campaigns for regularization of kundi connections and that task should be completed by 31 March, 2012. **The licensees are directed to submit action taken report in the matter to the Commission by 30$^{th}$ April, 2012.**

### 3.18.6 Power Supply Position:

UHBVNL has reported following outages due to trippings.

**Table 3.41 - Detail of trippings of UHBVNL System**

| Sr. No. | FY 2010-11 | | FY 2011-12 (upto September) | |
|---|---|---|---|---|
| | Number Of trippings | Time lost (Minutes) | Number Of trippings | Time lost (Minutes) |
| On 33 KV feeders | 9390 | 156288 | 6294 | 134540 |
| On 11 KV feeders | 339437 | 6555082 | 254224 | 3177575 |
| On DTs | 131816 | 6952678 | 140536 | 3786060 |
| Total | 480643 | 13664048 | 401054 | 7098175 |

Similarly the DHBVNL has reported following trippings.

**Table 3.42 -Detail of trippings of DHBVNL System**

| Sr. No. | FY 2010-11 | | FY 2011-12 (upto September) | |
|---|---|---|---|---|
| | Number Of trippings | Time lost (Minutes) | Number Of trippings | Time lost (Minutes) |
| On 33 KV feeders | 4593 | 221638 | 2993 | 141794 |
| On 11 KV feeders | 175697 | 10598967 | 135267 | 3590258 |
| On DTs | 44079 | 5320320 | 44667 | 4485600 |
| Total | 224369 | 16140925 | 182927 | 8217652 |

The above information of DHBVNL is however not complete, as the licensee has not reported number of trippings on 11 KV feeders and on DTs in respect of Hisar, Bhiwani and Gurgaon circles.

The licensees have not submitted other details with regard to average time taken in attending to the breakdowns and voltage profile, duration for which supply was made available to various category of consumers.

The licensees also have not supplied any feedback regarding the improvement in consumer satisfaction as a result of setting up of consumer care centres, Bijli Suvidha Kendras and facility of online filing of complaints, for handling power supply related complaints and other grievances of the consumers. 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 Standards of Performance notified by the Commission and submit requisite reports on schedule.

# 4 DISTRIBUTION & RETAIL SUPPLY TARIFF FOR FY 2012-13

## 4.1 Revenue Gap at current tariff

As per the analysis of Capital Expenditures (CAPEX), Operating Expenditures (OPEX) and quality of supply (including losses) as well as non – tariff income; the Commission in chapter 3 of this order has determined aggregate revenue requirement of the licensees as Rs. 72940.53 million for UHBVNL and Rs. 82848.02 million for DHBVNL in FY 2012-13. As per the consumer category wise sales projection and the existing consumer category wise retail tariff(s) the estimated revenue for sale of power to the consumers in FY 2012-13 by the two Discoms works out to Rs. 99379.84 million (UHBVNL Rs. 38254.54 million and DHBVNL Rs. 61125.31 million), thereby leaving a revenue gap of Rs. 56408.71 million (UHBVNL Rs. 34686.00 million + DHBVNL Rs. 21722.71 million) in FY 2012-13.

The deficit on account of supply to the AP Tube – Well consumers including Fisheries and Horticulture has been estimated by the Commission at Rs. 39740.64 million for FY 2012-13 ( UHBVNL Rs. 21731.47 million and DHBVNL Rs. 18009.17 million) against which the Haryana Government in their annual budget for FY 2012-13 has made provision of Rs. 38729.5 million. The budgeted subsidy therefore falls short of the required amount by Rs. 1011.14 million.

After determination of the revenue gap arising out of supply to the AP Tube – Well consumers including Fisheries and Horticulture as above and after adjustment of the cross subsidy generated, the Commission finds that the revenue for FY 2012-13 at current tariff falls short of the revenue requirement by Rs. 16668.06 million as given below:

**Table 4.1 Calculation of revenue gap at existing tariff for FY 2012-13 (Rs. million)**

| | UHBVNL | DHBVNL | Total |
|---|---|---|---|
| Revenue requirement | 72940.53 | 82848.02 | 155788.54 |
| Revenue at current tariffs | 38254.53 | 61125.31 | 99379.84 |
| Revenue Gap | 34686.00 | 21722.71 | 56408.70 |
| Agriculture deficit/ subsidy | 21731.47 | 18009.17 | 39740.64 |
| Uncovered revenue gap for FY 2012-13 | 12954.53 | 3713.54 | 16668.06 |

In addition to the current revenue gap of Rs. 16668.06 million, the Commission in its earlier orders on ARRs of UHBVNL and DHBVNL for Distribution and Retail Supply Business has determined the uncovered revenue gap of Rs. 25338.18 million for previous years as given below:

**Table 4.2 - Total uncovered Revenue Gap ( Rs. million)**

| | UHBVNL | DHBVNL | Total |
|---|---|---|---|
| Revenue gap for FY 2009-10 | 5870.16 | 1454.31 | 7324.47 |
| Revenue gap for FY 2010-11 | 11443.44 | 7866.04 | 19309.48 |
| Total | 17313.60 | 9320.35 | 26633.95 |
| Less Revenue from interstate sale of power | 2840.22 | 2722.00 | 5562.22 |
| Less Additional revenue from revised tariff( as per audited accounts) | 2043.49 | 3343.00 | 5386.49 |
| Net revenue gap upto FY 2010-11 | 12429.90 | 3255.34 | 15685.24 |
| Revenue gap for FY 2011-12 | 9262.69 | 390.25 | 9652.94 |
| Total revenue gap for previous years | 21692.59 | 3645.59 | 25338.18 |
| Uncovered revenue gap for FY 2012-13 | 12954.53 | 3713.54 | 16668.06 |
| Total uncovered revenue gap | 34647.11 | 7359.13 | 42006.24 |

**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. The Commission has dealt / addressed this issue in the following paragraphs by way of realignment / revision of tariff and other different options available.**

### 4.2 Revision of Tariff for various consumer categories for FY 2012-13.

**4.2.1** In the absence of any proposal from the Discoms, the Commission has suo – motu explored different options available for bridging the revenue gap of the power utilities for the year 2012-13 including the revenue gap left uncovered in the previous years for which funding was allowed by the Commission. Further the tariff rationalisation exercise carried out last year has also been revisited not only with the intention of garnering additional revenue but also to address certain implementation issues which have been brought to the notice of the Commission by various stakeholders including the Discoms for clarifications. Additionally the Commission has also kept in mind the various judgments passed by the Hon'ble APTEL in the appeals preferred by the Discoms as well as by the consumers against the previous tariff orders of the Commission.

**4.2.2** The Commission, while realigning the distribution and retail supply tariff for FY 2012-13 has taken into consideration the provisions of Section 61 and Section 64 of the Electricity Act, 2003 and the policies i.e. National Electricity Policy and the National Tariff Policy notified by the Ministry of Power, Government of India under Section 3 of the Act as well as the Tariff Regulations, 2008 notified by the Commission.

In addition to the above the Commission has also attempted to address some of the field issues brought before the Commission by various sections of the electricity consumers as well as the Discoms in the public hearings as well as various representations submitted to the Commission from time to time by the stakeholders. The Commission, in line with the basic principles of the Act, has attempted to ensure that the distribution and retail supply tariff in Haryana progressively moves towards reflecting the cost of supply of electricity to different categories of the consumers and thereby infuse additional liquidity, to the extent possible, in the distribution and retail supply business which at the existing tariff is not even able to meet its operating costs i.e. costs before depreciation and interest. The Commission firmly believes that no business can sustain itself if it is not able to recoup its operating expenses and hence incurs cash losses from its day to day operations.

Having taken the above view, the Commission has also not lost sight of the paying capacity of different categories of electricity consumers in the State. Consequently, an attempt has been made to pass on least financial burden to the vulnerable electricity consumers including domestic consumers as well as small NDS and LT consumers.

**4.2.3** Despite the fact that the Discoms stated in their ARR petition for FY 2012-13 that they would be submitting an updated consumer category wise cost of service as well as tariff proposal to bridge the projected revenue gap of Rs.10,234.72 crores at the existing tariff, they failed to do so. However, in order to take the process forward, the Commission has relied on its own cost of service estimates as in the past as the benchmark for taking a view on the distribution and retail supply tariff for FY 2012-13 as well as wheeling charges and cross – subsidy surcharge. **The Discoms are directed to update their cost of service data and submit the same along with the next ARR & Tariff petition**.

**4.2.4** The following broad objectives have been kept in mind by the Commission while re-aligning the distribution and retail supply tariff in FY 2012-13.

- The guidelines of the National Tariff Policy that the tariff for any category should be within plus / minus 20% of the average cost of supply for FY 2012-13.

- Avoidance of tariff shock by keeping in view the paying capacities of the small and marginal electricity consumers.

- Mostly two part tariff design i.e. besides energy charges based on actual energy consumption, there are load / demand based fixed charges, so that revenue of the Discoms are protected to a certain extent as fixed cost is incurred by the power utilities irrespective of the actual quantum of energy consumed.

- Generating additional revenue to the extent possible to sustain the operations of the distribution licensees.

- Promote energy conservation.

- Reduce distribution losses including theft and pilferage.

**4.2.5** In the above context 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 State Commission is required to draw and follow the trajectory to reduce the cross – subsidy within +/- 20% of the average cost of supply. Besides, the paying capacity of different consumer groups was also required to be kept in view by the Commission 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 is still retained in the tariff design further strengthens the point that the financial background of the consumer mix cannot be lost sight of.

The retail supply tariff in Haryana despite the fact that the consumer mix, their load profile and distribution losses are different for the two distribution licensees in the State, have traditionally been the same for both the Discoms. The Commission, at this stage, is not inclined to introduce differential tariff for the two Discoms. Consequently consumer category wise cost of supply (CoS) has been computed for the entire distribution system in Haryana.

As per Commission's estimates, in the absence of CoS study filed by the Discoms for FY 2012-13, the combined average CoS is estimated at Rs. 5.33 / kWh. Thus as per the National Tariff Policy cross subsidy limits of +/- 20%, the upper band of retail supply tariff works out to Rs. 6.40/kWh and the lower band to Rs. 4.26/kWh.

The exiting retail supply tariff in Haryana inclusive of the fixed charges wherever applicable, with the exception of temporary supply tariff is well below the average CoS estimated by the

Commission based on the approved ARR for FY 2012-13. Thus excluding AP Subsidy for AP consumers provided by the State Government the existing tariff covers only about 64% of the CoS. Thus there exists a considerable gap in the cost coverage of the existing retail supply tariff. It is further observed that even consumer categories that have traditionally been paying cross – subsidy vis – a – vis CoS i.e. HT Industry, Railways (Traction), Bulk Supply etc. their existing tariff is also below the average cost of supply for FY 2012-13.

**4.2.6** The Commission has retained two part tariff with a fixed cost element in most of the consumer categories. Two part electricity tariff structure is nationally as well as internationally considered as the most efficient tariff design which is also a statutory requirement under the Electricity Act, 2003 and the various policies framed by the Central Government under the enabling provision(s) of the Act itself. The combined fully allocated cost of both the Discoms as per the approved ARR of FY 2012-13 works out to Rs. 15, 5789 million. Out of this the demand related cost to be recovered through a demand / fixed charge, estimated on the basis of the connected load an indication of demand imposed by the consumers on the distribution system, which forms the basis of system planning and power procurement, is estimated at Rs. 20,181 million while the balance cost is energy related cost and consumer related cost estimated on the basis of consumer category wise sales and number of consumers in each category. Accordingly energy related cost is estimated at Rs. 132,099 million. The consumer related cost estimated on the basis of projected number of consumers in each consumer category works out to Rs. 3509 million. As both demand related cost and consumer related cost are independent of the energy consumption, they are of fixed nature. In other words out of fully allocated cost of Rs. 155789 million, 23,690 million cost relating to demand cost and consumer related cost are of fixed nature i.e about 15% cost is of fixed nature. As against the fixed cost percentage of about 15%, only about 11.5% is being recovered by way of a demand / fixed charge. Ideally the entire cost of fixed nature ought to be recovered through a fixed / demand charge. Hence the Commission in the tariff order of FY 2012-13 has attempted to rationalise the fixed charges as well. The Commission is conscious of the fact that adjusting the entire revenue gap including the uncovered gap of the previous years amounting to Rs. 42006.2 million in FY 2012-13 would tantamount to increasing the tariff on an average by about 42% thereby unduly burdening the consumers at one go and has accordingly taken a realistic view to adjust only a part of the total revenue gap through tariff adjustments in FY 2012-13. The Commission in the instant tariff order has attempted to adjust about Rs. 17950 million by effecting 10-15% increase in average retail tariff across – consumer categories except AP Tube- well consumers, through realignment of retail supply tariff thereby leaving an uncovered revenue gap of past years of Rs. 24056.2 million.

The existing tariff structure in Haryana despite the rationalisation in FY 2010-11 to the extent of about 13% and marginal adjustments in FY 2011-12 reveals that the tariffs are below the average cost of supply for almost all categories of consumers as already stated. This year the Commission is in a better position to address the issue of CoS as the Commission can have more realistic estimate of AP consumption on account of having received the details of supply of power to AP consumers from the AP segregated feeders in the rural areas. As per the Commission's estimates on the basis of data made available, the average cost of supply has gone up primarily because of increase in cost of generation and cost of transmission i.e. the average cost of energy delivered into the distribution system has increased from Rs. 2.85 / kWh in FY 2011-12 to Rs. 3.44 / kWh in FY 2012-13 without taking into account, in both the cases, the incidence of Fuel Surcharge Adjustment (FSA) which is a pass through cost arising out of the difference in cost of power approved by the Commission on projected basis and the actual cost of power purchase evaluated on the basis of FSA formula approved by the Commission.

The classification of total cost into demand, energy and customer related costs is based on the approved revenue requirement and energy sales approved by the Commission. 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 consumer 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. Classification of total Cost/ARR into Demand, Energy and Consumer related costs and allocation among various consumer categories for FY 2012-13 are given in the Table 4.3 below:

**Table No. 4.3 Classification of Fully Allocated Cost / Category wise Allocation.**

| Consumer Category | Energy Sales (MU) | Demand Related Cost (Rs. million) | Energy Related Cost (Rs. million) | Customer Related Cost (Rs. million) | Fully Allocated Cost (Rs. Million) | Average Cost of Service (CoS) Paise / kWh | Cost Recovery to Average Cost of Supply at existing Tariff % |
|---|---|---|---|---|---|---|---|
| **DS** | 6835 | 5983 | 32583 | 2669 | 41236 | 603 | 68.62 |
| **NDS** | 3716 | 1242 | 17713 | 370 | 19324 | 520 | 89.10 |
| **LT Industry** | 1619 | 1611 | 7718 | 55 | 9838 | 580 | 87.97 |
| **AP Metered** | 4091 | 3232 | 19503 | 223 | 22958 | 561 | 4.69 |
| **AP Un Metered & Fishetries & Horticulture** | 3429 | 2703 | 16343 | 171 | 19278 | 562 | 8.05 |
| **MITC** | 8 | 1 | 37 | - | 37 | 487 | 80.66 |
| **Lift Irrigation** | 258 | 108 | 1228 | - | 1336 | 519 | 91.34 |
| **StreetLight Supply** | 88 | 17 | 419 | 1 | 438 | 497 | 77.83 |
| **Public Water Works** | 933 | 282 | 4446 | 11 | 4740 | 508 | 89.03 |
| **HT Industry** | 7123 | 4239 | 27750 | 7 | 31996 | 449 | 91.74 |
| **Railway Traction** | 255 | 120 | 994 | - | 1114 | 437 | 91.90 |
| **Bulk Supply** | 653 | 541 | 2546 | 1 | 3088 | 473 | 103.19 |
| **Metro (DMRC)** | 210 | 42 | 818 | - | 860 | 410 | 76.63 |
| **TOTAL** | 29,217 | 20,181 | 132,099 | 3,509 | 155789 | 533 | 63.79 |

It is evident from the above that the per unit revenue realisation at the current tariff for almost all categories of consumers, except Bulk Supply, is below the average cost of supply. Hence the average cost coverage at the existing tariff is only 63.79%. In case the retail supply tariff is not aligned to reflect the cost caused by the consumers it would become increasingly difficult for the power utilities to sustain their operations for any longer. Thus the Commission has considered it appropriate to revisit the retail supply tariff of all categories of consumers in FY 2012-13

**4.2.7** In view of the above position the Commission felt that suitable steps are required to be taken to align the tariff in line with the average cost to supply for FY 2012-13 as well as with the limits of cross – subsidy as spelt out in the National Tariff Policy. At the same time it was felt that there is an urgent need for recovering the cost of supply from the consumers paying below the respective cost caused by them to ensure financial sustainability of the distribution licensees i.e. UHBVNL & DHBVNL whose accumulated losses have almost eroded their net worth. However, while doing so, the Commission took extra care to ensure that the process of tariff adjustments does not result in tariff shock to any category of electricity consumers.

**4.2.8** The Commission, in some of the consumer categories, has retained the MMC. The MMC, however, shall be levied only in cases where the consumption of a consumer happens to be less than the threshold consumption and as a result thereof the fixed charges plus energy charges work out to the lower than MMC. It is clarified again that MMC is not an additional charge i.e. in addition to fixed charge and energy charges 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 his connected load/sanctioned load. In cases where consumers are issued energy bills on the basis of MMC then no fixed charges are to be levied. **However, FSA, as approved by the commission from time to time, is to be levied on the actual energy consumed by the consumers as per the meter reading even in cases where the consumer has been billed on MMC basis**. The Commission has also retained the fixed charges introduced in FY 2010-11 because it is essential to provide stability to the revenue accruing to the distribution companies as in the case of single part energy linked tariff if the consumption dropped suddenly in a particular billing cycle the revenue gets adversely affected. Moreover the introduction and levy of fixed charges as per the feedback available with the Commission has been by and large accepted by the Consumers.

The Commission while reckoning with the tariff structure in FY 2012-13 has kept in mind feedback received from various sections of consumers in the light of the financial impact on small and marginal consumers of the previously revised tariff structure.

### 4.3 Tariff Determination for different consumers categories for FY 2012-13:-

(i) The commission while determining the category wise tariff has kept in view the views expressed by various consumers / consumers' organizations, individuals and other organizations during the public hearings held at Panchkula, views expressed by members of the State Advisory Committee in the meeting held on 23.02.2012 and the submissions made by UHBVNL/DHBVNL at various forums.

(ii) As a further refinement to the tariff design the Commission has changed the basis of energy charges for HT Industrial consumers from kWh to kVAh basis. The Commission observes that one of the basic objectives of tariff design is to bring improvement in efficiency. Much of the HT and LT machinery load of the Industrial consumers requires matching generation of reactive energy unless compensated by installing capacitors at the load end itself. Unless fully compensated the reactive load reduces the power factor and increases the current for the given load thereby power lost and dissipated in the form of heat add to the losses of the distribution system as well as results into under utilisation of the generating capacity and low voltage problem. Keeping in view the above discussions the Commission considered it appropriate to introduce kVAh based energy charges for HT Industrial consumers as well as existing LT Industrial consumers with connected load above 50 KW up to 70 KW who have not so far converted to HT supply. The Commission observes that load of majority of HT/LT categories is reactive in nature and even in the Domestic consumer category the washing machines, domestic water pumps, vacuum cleaners, dish washers, air conditioners etc. too draw reactive energy, hence the Discoms may examine the feasibility of introducing kVAh based energy charges in some other consumer categories as well and may make appropriate proposals in the ARR petition for FY 2013-14.

### 4.4 The consumer category wise determination of tariff for FY 2012-13

#### 4.4.1 Domestic Supply Tariff (DS):-

The DS consumers, as per the current tariff are paying just about 60.65 % of their cost of supply and about 68.62% of the average cost of supply. Thus at the existing tariff and approved sales volume of DS consumers for FY 2012-13, the expected revenue at current

tariff is about Rs. 25,010 million against the estimated cost of supply of Rs.41,236 million thereby leaving an uncovered revenue gap of Rs.16,226 million.

Unlike AP tube – well consumers whose revenue deficit is bridged by the subsidy provided by the State Government, there is no subsidy support available to 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 supply and the restrictions imposed on the extent of the cross – subsidy by the National tariff Policy, the earlier available cross – subsidy from a few other consumer categories i.e. HT Industry, Railways (Traction) and Bulk Supply have dwindled to the extent that only a part of DS deficit can be taken care of. Thus a major portion of the DS deficit remains uncovered i.e only about Rs.3488 million is available in all for FY 2012-13 as cross – subsidy against a total revenue deficit of Rs. 59,897 million.

Given the fact that the DS tariff has universal ramifications i.e. firstly it affects all the 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. Hence Commission has attempted to strike a balance between the provision of the Act i.e. tariff should be cost reflective and at the same time avoiding a major tariff shock to the DS consumers specially the small/marginal and middle class consumers.

While rationalising the DS tariff, the Commission considered the DS consumers under two categories i.e. category-1 comprising of consumers with consumption up to 40 units per month & category-2, comprising of consumers with consumption in excess of 40 units per month. In case of category-1, the Commission observed 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. With this consideration and keeping in view the social aspect of tariff determination, the Commission has considered it appropriate to pass on minimum financial burden to these vulnerable DS Consumers. Thus the hike in tariff for this category of consumers has been kept at only 7 paise/unit.

For the DS consumer falling under category-2 i.e. in the 2nd to 3$^{rd}$ slabs of the existing tariff structure, the Commission after detailed deliberations on the paying capacities of the consumers and consumption pattern as evident from the changing lifestyle and rising income

levels has decided to make some adjustments in the existing slabs while retaining the telescopic nature of DS tariff and has accordingly considered about 15% increase in the tariff rates. Given the telescopic nature of DS tariff i.e. the benefits of the lower slab rates would also be available to consumers falling in the higher consumption slab, the Commission expects that the net impact of the revised tariff would be much less on the electricity bills of the domestic consumers.

In order to give some relief to the DS consumers, who at times do not consume the threshold limits of electricity corresponding to their connected load for one reason or the other, the commission has reduced the MMC of DS consumers with connected load of above 2 KW from Rs. 70 to Rs. 50 per month per kW of the connected load or part thereof. A lot of consumers have raised the issue of the Discoms on their own raising the sanctioned connected load by 1 KW. After due deliberations on the issue, the Commission is of the view that with changing life style and rising disposable income there could be a mismatch between the historical connected load as declared by the consumers while applying for electricity connections and their current load requirement as reflected in their current energy consumption vis – a- vis the historical connected load. Thus, the Commission, at this stage, is not interfering with the decision of the Discoms. However, in case some DS consumers are genuinely aggrieved, they may approach the Discoms for spot checking of their load and get their connected load revised / corrected. The Commission advises the Discoms that in the long run they should add additional feature to the electronic metres installed at consumer's premises capable of recording and storing the maximum load of the consumers from month to month. This would generate authentic data not only with respect of the load pattern of the consumers vis – a- vis system peak load but enable them to automatically revise the connected load of the consumers for the purpose of billing and distribution system planning.

The existing tariff and the tariff approved by the Commission for DS category for FY 2012-13 is given in Table 4.4 :-

**Table No. 4.4: Domestic Supply Tariff (DS)**

| EXISTING TARIFF | | | | REVISED TARIFF | | | |
|---|---|---|---|---|---|---|---|
| Slabs | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kW per Month of the connected load / per kVA of sanctioned contract demand in case of HT | MMC (Rs / kW of the connected load or part there of | Slabs | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kW per Month of the connected load / per kVA of sanctioned contract demand in case of HT | MMC (Rs / kW of the connected load or part thereof |
| Upto 40 units per month | 263 | Nil | Rs 80 up to 2 kW and Rs. 70 above 2 kW | Upto 40 units per month | 270 | Nil | Rs 80 up to 2 kW and Rs. 50 above 2 kW |
| 41 - to 300 units per month | 380 | | | 41 - to 250 units per month | 450 | | |
| 301 to 500 units per month | 465 | | | 251 to 400 units per month | 525 | | |
| 501 and above units per month | 499 | | | 401 and above units per month | 560 | | |

### 4.4.2 NON Domestic Supply Tariff (NDS)

The Commission observes that this category comprises of business houses, cinemas, clubs, public offices, schools, hospitals, hotels etc. Hence in their case the points of incidence and impact of any rise in input cost including electricity is different i.e. their ability to pass on such costs to their beneficiaries / users of their services is fairly high. Consequently, the non – domestic category of consumers ought to be cross – subsidising consumer's category 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 this category of consumers, at the current tariff, are paying about 89% of the average combined cost of supply and about 91% of their cost of supply. Thus the existing tariff is not cost reflective as there exists about Rs. 1671 million revenue gap in this category too which

the Commission considered appropriate to address while realigning the tariff of the NDS category of consumers for FY 2012-13. In view of the above the Commission has attempted to garner additional revenue from this category of consumers by moving the tariff closer to the CoS so that the NDS tariff becomes progressively cost reflective.

The Commission has introduced a separate category of tariff for the existing NDS consumers with load above 50 kW up to 70 kW who have not so far converted to HT supply. The Commission vide its order dated 24.10.2011 had given additional time for conversion to HT supply till the issue of instant order i.e. the tariff order for FY 2012-13. With the introduction of this new sub-category in the NDS supply tariff, these consumers will have the option to remain on LT supply or to convert to HT supply at their will.

The existing tariff and the tariff approved by the Commission for NDS category for FY 2012-13 is given in the Table No. 4.5 below:-

**Table No.4.5: Non- Domestic Tariff**

| **Non Domestic** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kW per Month of the connected load | MMC (Rs / kW of the connected load or part there of | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kW per Month of the connected load | MMC (Rs / kW of the connected load or part thereof |
| Upto 5 kW (LT) | 450 | Nil | Rs. 180 upto 5 kW and Rs. 160 above 5 kW upto 20 kW | 525 | Nil | Rs. 180 upto 5 kW and Rs. 160 above 5 kW upto 20 kW |
| Above 5 kW and Up to 20 kW (LT) | 450 | Nil | | 550 | Nil | |
| Above 20 kW upto 50 kW (LT) | 470 | 115 | Nil | 550 | 130 | Nil |
| Existing consumers above 50 kW upto 70 kW (LT) | 470 | 115 | Nil | 575 | 150 | Nil |
| Consumers above 50 kW (HT) | 470 | 115 | Nil | 525 | 130 | Nil |

### 4.4.3 HT Industry (Load above 50 KW)

The current energy charge for the HT Industry consumers taking supply at 11 kV is 415 Paisa / kWh and at higher voltages i.e. 33 KV, 66 KV, 132 KV and 220 KV about 3%, 6%, and 8% discount is available to the consumers with respect to 11 KV supply tariff. As per Commission's estimates the CoS for HT Industry consumer category in FY 2012-13 is 449 Paisa / kWh as against average revenue realisation at existing tariff of 489 Paisa / kWh. Thus this consumer category has been traditionally subsidising consumer categories (other than AP whose entire revenue deficit is met by way of AP Subsidy from the State Government) who are paying tariff below their cost of supply. However, due to rise in cost of power as well as cost of transmission, the CoS of HT Industry consumers has increased from 280 Paisa / kWh in FY 2000-01 to 449 Paisa / kWh in FY 2012-13. As the tariff since FY 2001 was only adjusted once in FY 2010-11 to the extent of 13 % only, the amount of cross – subsidy available has dwindled over the years.

Due to rising CoS and the fact that the average cost coverage by HT Industrial consumers at existing tariff as compared to the average cost of supply of the Discoms is about 92% and as compared to its own cost of supply the cost coverage is 109% and additionally, given the huge revenue deficit in most of the consumer categories, it is not feasible to eliminate the cross – subsidy entirely as this would require a very high increase in the tariffs of the cross – subsidised consumer categories. Hence HT industrial consumer category will have to continue contributing cross– subsidy for other cross – subsidised consumer categories for some more time.

Keeping in view the above and the fact that as per NTP the tariff could be within a range of +/- 20% of the average cost of supply, the Commission has rationalised the tariff including introduction of kVAh based energy charges applicable for HT Industrial consumers as well as the Electric Arc Furnaces / Steel Rolling Mills. The Commission expects that the realigned tariff would garner some additional revenue to balance a part of the overall revenue deficit of the Discoms in FY 2012-13.

The existing tariff and the tariff approved by the Commission for HT Industrial consumer category for FY 2012-13 is given in the Table 4.6:-

**Table No. 4.6 HT Industry ( above 50 kW) Tariff**

| HT Industry ( above 50 kW) | EXISTING TARIFF | | | REVISED TARIFF | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of sanctioned contract demand | MMC (Rs / kW of the connected load | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of sanctioned contract demand) | MMC (Rs / kW of the connected load |
| Supply at 11 KV | 415 | 120 | Nil | 470/kVAh | 130 /kVA | Nil |
| Supply at 33 KV | 403 | 120 | Nil | 460/kVAh | 130 /kVA | Nil |
| Supply at 66 KV or 132 KV | 391 | 120 | Nil | 450/kVAh | 130 /kVA | Nil |
| Supply at 220 KV | 383 | 120 | Nil | 440/kVAh | 130 /kVA | Nil |
| Supply at 400 kV | - | - | - | 435/kVAh | 130/kVA | Nil |
| Arc furnaces/Steel Rolling Mills | 415+15 | 120 | Nil | 470+18 Paise per kVAh if supply is at 11 kV | 130 /kVA | Nil |

### 4.4.4 LT Industry up to 50 kW

The LT Industry consumer category is currently paying 88% of the average cost of supply of the Discoms and about 81% of their own cost of supply. Thus the LT industry category would also be requiring cross – subsidy in order to bridge the revenue gap at the existing tariff. The Commission believes that the LT Industry consumers too have a high propensity to pass on any increase in input cost including electricity charges to its customers. Hence the Commission, while rationalising the LT Industry tariff has attempted to align the tariff to the cost of supply for this category to the extent possible.

The LT Industry consumers are supplied power at lower voltage than the HT Industry consumers and hence in their case the incidence of technical as well as commercial losses is significantly higher thereby increasing the CoS of LT Industry. Hence the tariff in this case has been kept comparatively higher than the HT Industry tariff.

In the public hearing a number of representatives of industry associations highlighted the problems of space constraints for installing transformers etc. and high investment involved in switching over from LT to HT supply due to change in eligibility for HT supply from 70 kW to

50 kW. Keeping in the view the inconvenience that some of them may be genuinely facing specially in the supply area of UHBVNL, the Commission has introduced a separate category of tariff for the existing LT industry consumers above 50 kW up to 70 kW who have not so far converted to HT supply. These consumers at present were required to pay a LT surcharge of 25% though the Commission vide its order dated 24.10.2011 had deferred the levy of surcharge and given additional time for conversion to HT supply till the issue of instant order i.e. the tariff order for FY 2012-13. With the introduction of this new sub-category in the LT industrial supply tariff, these consumers will not be liable to pay any LT surcharge. The energy charges for such consumers, however, will be on per kVAh basis in line with HT consumers.

The Commission in pursuance of Hon'ble APTEL's decision, in its order dated 7.12.2011 decided that the fixed charges shall be levied on the connected load rather than on sanctioned contract demand as petitioned by LT industry consumers and 80% of the connected load shall be considered for the purpose of levying fixed charges. This benefit has been retained in the instant order.

The existing tariff and the tariff approved by the Commission for LT industry category for FY 2012-13 is given in the Table No. 4.7 below:-

**Table No. 4.7: LT Industry Tariff**

| **LT Industry** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kW of the connected load per month | MMC (Rs / kW of the connected load per month | Energy Charges (Paisa/kWh/kVAh) | Fixed Charges Rs / kW of connected load per Month | MMC (Rs / kW of the connected load per month |
| Up to 20 kW | 440 | Nil | 150 | 535/kWh | Nil | Rs. 150 |
| Above 20 kW upto 50 kW | 440 | 75 | Nil | 510/kWh | 150* | Nil |
| Existing consumers Above 50 kW up to 70 kW (LT) | 440 | 75 | Nil | 498 /kVAh | 150* | Nil |

***on 80% of the connected load.

### 4.4.5 Agriculture Pump Set Supply (AP Supply)

The tariff applicable for AP consumers in Haryana is currently under two categories i.e. AP metered consumers billed on energy consumption basis and AP un – metered consumers who are currently paying a flat rate per BHP per month. As per CoS estimates of the Commission the AP consumers are paying just about 6% of the CoS. The Commission considers it appropriate to mention here that the entire revenue gap in the AP consumer category is bridged by way of AP Subsidy from the State Government and no consumer category is cross – subsidizing the AP consumers.

DHBVNL on behalf of both the Discoms, vide memo no. Ch.04/SE/RA-428 dated 29/02/2012 filed an additional affidavit seeking introduction of concessional tariff for AP consumers based on the capacity of the motors above and below 15 BHP. As per their submission the petition has been filed by the Discom in reference and continuation to the approval of Government of Haryana allowing concessional tariff for AP consumers based on the capacity of motors used by them for agriculture purposes.

In support of the above proposal which also has the approval of the State Government the Discoms have submitted the following arguments:-

i) The depth of water table varies in different regions of Haryana and there are certain regions where water table has gone down significantly. Thus such consumers in order to draw water from larger depths have to install motors of higher capacity and thus bear more charges as compared to their counterparts in other regions of the State. Thus such discrimination ought to be removed. Additionally, it has been brought to the notice of the Commission that prior to August, 2004 a system of concessional tariff for AP consumers based on the depth of tube wells existed. At that time the survey carried out by the agriculture department, Government of Haryana, was questioned and also led to several litigations. Ultimately the depth wise AP tariff was withdrawn.

ii) In view of the past experience as well as keeping in mind the implementation issues, the Discoms have proposed tariff for AP consumers based on the capacity of motors used by them for agriculture purposes.

iii) While proposing the concessional tariff based on size of the motor the Discoms have quoted section 108 of the Electricity Act and Section 8.2.1 (3) of the National Tariff Policy.

iv) The Discoms have attached approval dated 13th February, 2012 accorded by the State Government.

v) Additionally it has been submitted by the Discoms that the State Government has also approved to provide the additional subsidy on account of extra burden on Nigam due to the proposed concessional tariff.

vi) It has been further submitted that the metered AP consumers shall be charged tariff per unit of power provided that the meter installed is maintained in a working order. Else, the tariff applicable to unmetered AP consumer shall be leviable.

The Commission has carefully considered the AP concessional tariff proposed by the Discoms and the stand of the State Government on the same and observes that the proposal of the Discoms for introducing concessional AP tariff based on size of the motor and meeting the additional subsidy requirements, has been approved by the State Government. Accordingly DHBVNL, on behalf of both the Discoms, filed the petition dated 29/02/2012, alongwith the approval of the State Govt. to the above proposal for the consideration of the Commission. The Commission, however, does not consider this as a directive issued by the State Government to the Commission under section 108 of the Electricity Act, 2003 as mentioned in the petition.

The Commission believes that there is no substitute to 100% metering of all AP consumers so that they pay as per their consumption. Section 55 (1) of the Electricity Act, 2003 provides as under:-

**" No licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority".**

Thus the Discoms ought not to lose sight of the fact that installing an accurate functional meter is a statutory obligation and they should do so in a time bound manner. The 'Authority' i.e. Central Electricity Authority (CEA) has already notified the requisite regulations i.e. Central Electricity Authority (Installation and Operations of Meters) Regulations, 2006.

Having observed as above, the Commission has perused the provisions of the National Tariff Policy relied upon by the Discoms. Section 8.2.1(3) cited by the Discoms is reproduced below:-

"…….to ensure implementation of the provision of the law, the State Commission should determine the tariffs initially, without considering the subsidy commitment by the State Government and subsidized tariff shall be arrived at thereafter considering the subsidy by the State Government for the respective categories of consumers".

In line with the above and the fact that except for AP consumers including floriculture and horticulture the State Government has not committed any subsidy support while giving its concurrence to the concessional tariff proposed by the Disocms, the Commission, therefore, in pursuance of provision of National Tariff Policy cited above, determines the following tariff which is equal to the CoS for the AP consumers for FY 2012-13 in respect of the AP consumers:-

| | |
|---|---|
| A.P. unmetered | Rs. 5.62/kWh |
| A.P.Metered | Rs. 5.61/kWh |

However as the State Government, as per the documents attached by the Discoms with their petition dated 29/02/2012, has committed to provide the required subsidy to bridge the gap between concessional tariff and the tariff approved by the Commission above, the Commission has decided to accept the concessional tariff as proposed by the Discoms.

The existing tariff and the tariff approved by the Commission for AP consumers category for FY 2012-13 taking into account the subsidy by Sate Govt. shall therefore be as given in the Table No. 4.8 below:-

**Table No. 4.8 Agriculture Pumpset Supply Concessional Tariff**

| **Agriculture** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs. per BHP per month) | MMC | Energy Charges (Paisa/kWh) | Fixed Charges (Rs. per BHP per month) | MMC |
| **Metered: (i) with motor upto 15 BHP** | 25 | Nil | Rs. 200 /BHP per year | 25 | Nil | Rs. 200 / BHP per year |

| | | | | | | |
|---|---|---|---|---|---|---|
| **(ii) with motor above 15 BHP** | 25 | Nil | | 20 | Nil | |
| **Un-metered (i) with motor upto 15 BHP** | Nil | 35 | Nil | Nil | 35 | Nil |
| **(ii) with motor above 15 BHP** | Nil | 35 | Nil | Nil | 30 | Nil |

As a consequence of adopting the above tariff the subsidy payable by the State Government calculated as the difference between the revenue at approved tariff for the AP consumers for FY 2012-13 and the revenue that is expected from introduction of subsidized tariff, works out to Rs. 39741 million and the same shall be borne by the State Government as subsidy support to the AP consumers and shall be payable to discoms in accordance with Section 65 of the Electricity Act, 2003.

### 4.4.6 Public Water Works, Lift Irrigation, MITC & Street Light Supply

These categories of consumers comprise largely of Government Departments and Municipal Corporation etc. However, since the beginning of power sector reforms in Haryana the Commission has not received any representations / objections or feedback from these categories of consumers. Hence, the Commission has revised the tariff for these categories of consumers in line with the cost causation principle.

The details of the existing tariff(s) and the revised tariff approved by the Commission for FY 2012-13 are presented in the Table No. 4.9 below:-

**Table No. 4.9 Public Water Works, Lift Irrigation, MITC & Street Light Supply Tariff**

| **Categories of consumers** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges Rs /kW/BHP of the connected load per month | MMC Rs. /kW of the connected load per month | Energy Charges (Paisa/kWh) | Fixed Charges Rs /kW/BHP of the connected load per month | MMC Rs. per month per kW of the connected load |
| **Public Water Works** | 425 | 145/kW | Nil | 510 | 150 /kW | Nil |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Lift Irrigation** | 430 | 120/BHP | Nil | 510 | 150 /BHP | Nil |
| **MITC** | 430 | 120/BHP | Nil | 510 | 150 /BHP | Nil |
| **Street Lighting** | 415 | Nil | 150 | 495 | Nil | 150 |

### 4.4.7 RAILWAYS TRACTION TARIFF

The representative of the Northern Railways in their objections / comments on the Traction tariff submitted that the cost of supply to railways is the lowest amongst all the consumer categories, whereas the cross subsidy being levied is very high and cross subsidy should not be more than ± 20% of the cost of supply. As per National Tariff Policy, MYT should be adopted and cross subsidy for railway traction be reduced to reduce railway traction tariff as per Govt. Policy.

The Commission while reviewing the tariff applicable to the Railways for their traction requirement in the light of the above objections filed by the Railways, observes that the current traction tariff vis – a – vis average CoS of the Discoms is about 103% i.e. the Railways are paying about 3% more than the average CoS as against cross subsidy limits of +/- 20% as per the NTP.

Further, the Railways are given supply as per their system requirement at 132/220 KV. The load of the Railways 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 in the system which are detrimental to the system and affect quality of supply to other consumers. This is another factor which justifies fixation of higher tariff for Railways.

The Railways have again quoted certain circulars and guidelines of Ministry of Power, Government of India issued in 1991 or so in support of their case for lower tariff. As stated in the last tariff order, It is felt 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 quoted by Railways for fixation of lower tariff. Section

86 of Electricity Act, 2003 only provides that in discharge of its functions, the Commission shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy.

With the above observations, and the fact that the cross – subsidy has to continue for some more time and CoS has gone up, the Commission is of the considered view that the prevailing energy charges for Railways Traction which was left un-changed in the tariff order for FY 2011-12 needs some realignment . Accordingly the energy charges have been revised while leaving the demand charges unchanged at the existing level.

The details of the existing tariff(s) and the revised tariff approved by the Commission for FY 2012-13 are presented in the Table No. 4.10 below:-

**Table No. 4.10 Railways Traction Tariff**

| Railway Traction | EXISTING TARIFF | | | REVISED TARIFF | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of the billable demand) | MMC | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of the billable demand) | MMC |
| Supply at 11 KV | 455 | 125 | Nil | 530 | 125 | Nil |
| Supply at 33 KV | 443 | 125 | Nil | 520 | 125 | Nil |
| Supply at 66 or 132 kV | 431 | 125 | Nil | 510 | 125 | Nil |
| Supply at 220 kV | 423 | 125 | Nil | 500 | 125 | Nil |

### 4.4.8 Metro (DMRC) TARIFF

While objecting to the ARR and tariff proposals for FY 2012-13 the representative of DMRC submitted that DHBVNL has not proposed any tariff but has requested for suitable tariff hike to allow it to recover the deficit for FY 2012-13. DMRC further submitted that as per agreement between DMRC and Government of Haryana entered into on 17.11.2006, the State Government shall provide electricity on cost from Transco, under open access system.

In the light of the above objections the Commission observes that as per approved ARR of FY 2012 -13, DMRC is paying about 75% of the average cost of supply and about 99.72% of their own cost of supply. As per NTP guidelines the tariff has to be reckoned with the average CoS of the Discoms. Hence the Commission has realigned the energy charges applicable to DMRC while keeping the fixed charges unchanged. The Commission is well aware of the fact 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 energy charges have been kept at a lower level i.e. at the cost imposed by them on the distribution system of the Discoms as compared to the Railway traction supply tariff which has some degree of cross – subsidy in line with the NTP limits.

The details of the existing DMRC tariff and the revised tariff are presented in the Table No. 4.11 below:-

**Table No. 4.11 DMRC Tariff**

| **DMRC** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of the billable demand) | MMC | Energy Charges (Paisa/kWh) | Fixed Charges (Rs / kVA of the billable demand) | MMC |
| Supply at 66 kV | 395 | 125 | Nil | 450 | 125 | Nil |
| Supply at 132 kV | 380 | 125 | | 450 | 125 | Nil |

### 4.4.9 Bulk Supply Tariff

The Bulk Supply consumers had expressed their resentment against huge financial impact of the fixed charge introduced by the Commission for the first time in FY 2010-11. The Commission had determined the fixed charge at Rs. 130 / KW/Month of the connected load in FY 2011-12. Given the fact that this category of consumers are paying the highest cross – subsidy i.e. the cost coverage of the current tariff to average CoS of the Discoms is about 103% and the same with reference to their own CoS is about 116%, the Commission considers it appropriate to leave the fixed charges for this category of consumers unchanged while

energy charges have been realigned to reflect the increase in CoS in FY 2012-13. Hence the effective tariff for the Bulk Supply consumers is kept within the NTP limits of cross - subsidy.

### 4.4.10 Bulk Supply (Domestic) Tariff

Further to encourage group housing societies/residential colonies having their bounded/gated premises to opt for single point bulk supply domestic connection on HT and to manage metering/billing and collection of energy bills on their own without any interference of the utility staff, the Commission has intentionally kept the tariff under this category lower than DS category and has only marginally increased the same in the instant order.

The details of the existing tariff(s) and the revised tariff approved by the Commission for FY 2012-13 for bulk supply consumers are presented in the Table No. 4.12 below:-

**Table No. 4.12 Bulk Supply Tariff**

| **Bulk Supply** | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges Rs/kW per month of the connected load | MMC | Energy Charges (Paisa/kWh) | Fixed Charges Rs. /kW of connected load per month | MMC |
| Supply at LT | 440 | 130 | Nil | 525 | 130 | Nil |
| Supply at 11 kV | 430 | 130 | Nil | 515 | 130 | Nil |
| Supply at 33 kV | 418 | 130 | Nil | 505 | 130 | Nil |
| Supply at 66 or 132 kV | 406 | 130 | Nil | 500 | 130 | Nil |
| Supply at 220 kV | 398 | 130 | Nil | 495 | 130 | Nil |
| Bulk Supply Domestic (70 kW and above at 11 kV or above voltage) | 360 | 50 / kW of the recorded demand per month | Nil | 390 | 50 / kW of the recorded demand | Nil |

### 4.4.11 Independent Hoardings / Decorative Lighting

In view of the non – essential nature of supply and the rising average cost of supply the Commission has considered it appropriate to revise the energy charges in this category from Rs. 6.50/kWh to Rs. 6.95/kWh. Additionally, the fixed charge of Rs. 120 / KW introduced in FY 2011-12 is revised to Rs. 150/kW of the connected load to take care of the increase in fixed cost component of the cost to supply.

### 4.4.12 Temporary Metered Supply

The energy charges for the temporary metered supply tariff shall be 1.5 times of the energy charges of the relevant category for which temporary supply has been sought. The fixed charges/ MMC shall be at the normal rate of the relevant consumer category.

The details of the existing tariff(s) and the revised tariff approved by the Commission for FY 2012-13 for above categories of consumers are presented in the Table No. 4.13 below:-

**Table No. 4.13 Independent Hoardings / Decorative Lighting and Temporary Metered Supply Tariff**

| | **EXISTING TARIFF** | | | **REVISED TARIFF** | | |
|---|---|---|---|---|---|---|
| | Energy Charges (Paisa/kWh) | Fixed Charges Rs/kW per month of the connected load | MMC per month of the connected load | Energy Charges (Paisa/kWh) | Fixed Charges Rs./month/kW of the connected load | MMC per month of the connected load |
| **Independent Hoarding / Decorative Lightning** | 650 | 120 | Nil | 695 | 150 | Nil |
| **Temporary Metered supply** | Energy charges 1.5 times the energy charges of relevant category for which temporary supply has been sought plus fixed charges/ MMC at normal rates of relevant consumer category | | | | | |

### 4.4.13 Other conditions

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

## 4.5 The summary of existing tariff and the revised tariff as approved by the Commission for FY 2012-13 for various categories of consumers.

The details of existing tariff and the revised tariff as approved by the Commission for FY 2012-13 for various categories of consumers are summarized in the Table No. 4.14 below:-

**Table 4.14 - Distribution & Retail Supply Tariff approved by the Commission for the FY 2012-13**

| Sr. No. | Category of consumers | Tariff for 2011-12 | | | | Tariff for 2012-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy Charges (Paise / kWh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand in case supply is on HT) | FSA (Paise / kW) | MMC (Rs per kW per month of the connected load or part thereof )) | Energy Charges (Paise / kWh or/ kVAh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | FSA (Paise / kWh) | MMC (Rs per kW per month of the connected load or part thereof ) |
| 1 | **Domestic (LT)** | | | | | | | | |
| | Upto 40 units per month | 263 | Nil | 20 | Rs 80 upto 2 kW and Rs 70 above 2 kW | 270 / kWh | Nil | 20 | Rs 80 upto 2 kW and Rs 50 above 2 kW |
| | 41 - to 250 units per month | 380 | Nil | 34 | | 450/ kWh | Nil | 34 | |
| | 251 to 400 units per month | 380(for units 251-300) 465(for units 301-400) | Nil | 34 Paise for 251 to 300 units and 44 Paise for 301 units and above | | 525/ kWh | Nil | 34 Paise for 251 to 300 units and 44 Paise for 301 units and above | |
| | 401 and above units per month | 465(for units 401-500) 499 (above 500) | Nil | 44 | | 560/ kWh | Nil | 44 | |

| Sr. No. | Category of consumers | Tariff for 2011-12 | | | | Tariff for 2012-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy Charges (Paise / kWh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand in case supply is on HT) | FSA (Paise / kW) | MMC (Rs per kW per month of the connected load or part thereof ) | Energy Charges (Paise / kWh or/ kVAh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | FSA (Paise / kWh) | MMC (Rs per kW per month of the connected load or part thereof ) |
| 2 | **Non Domestic** | | | | | | | | |
| | Upto 5 kW (LT) | 450 | Nil | 38 | Rs. 180 upto 5 kW and Rs. 160 above 5 kW upto 20 kW | 525 / kWh | Nil | 38 | Rs 180 upto 5 kW and Rs 160 above 5 kW upto 20 kW |
| | Above 5 kW and Up to 20 kW (LT) | 450 | Nil | 38 | | 550 / kWh | Nil | 38 | |
| | Above 20 kW upto 50 kW (LT) | 470 | 115 | 38 | Nil | 550 / kWh | 130 /kW | 38 | Nil |
| | Existing consumers above 50 kW upto 70 kW (LT) | 470 | 115 | 38 | Nil | 575 / kWh | 150 /kW | 38 | Nil |
| | Consumers above 50 kW (HT) | 470 | 115 | 38 | Nil | 525 / kWh | 130 /kW | 38 | Nil |
| 3 | **HT Industry( above 50 kW)** | | | | | | | | |
| | Supply at 11 KV | 415 | 120 | 38 | Nil | 470/ kVAh | 130 / kVA | 38 | Nil |
| | Supply at 33 KV | 403 | 120 | 38 | Nil | 460/ kVAh | 130 / kVA | 38 | Nil |
| | Supply at 66 KV or 132 KV | 391 | 120 | 38 | Nil | 450/ kVAh | 130 / kVA | 38 | Nil |
| | Supply at 220 KV | 383 | 120 | 38 | Nil | 440/ kVAh | 130 / kVA | 38 | Nil |
| | Supply at 400 kV | --- | --- | --- | --- | 435/ kVAh | 130 / kVA | 38 | Nil |
| | Arc furnaces/Steel Rolling Mills if supply is at 11 kV | 415+15 | 120 | 38 | Nil | 470+18 Paise per kVAh | 130 /kVA | 38 | Nil |

| Sr. No. | Category of consumers | Tariff for 2011-12 | | | | Tariff for 2012-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy Charges (Paise / kWh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand in case supply is on HT) | FSA (Paise / kW) | MMC (Rs. per kW per month of the connected load or part thereof ) | Energy Charges (Paise / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | FSA (Paise / kWh) | MMC (Rs. per kW per month of the connected load or part thereof) |
| 4 | **LT Industry (upto 50 kW)** | | | | | | | | |
| | Up to 20 kW | 440 | Nil | 39 | 150 | 535/ kWh | Nil | 39 | 150 /kW |
| | Above 20 kW upto 50 kW | 440 | 75 | 39 | Nil | 510/ kWh | 150 /kW | 39 | Nil |
| | Existing consumers Above 50 kW upto 70 kW (LT) | 440 | 75 | 39 | Nil | 498 / kVAh | 150 /kW | 39 | Nil |
| 5 | **Agriculture** | | | | | | | | |
| | **Metered: (i) with motor upto 15 BHP** | 25 | Nil | Nil | 200 / BHP per year | 25 / kWh | Nil | Nil | 200 / BHP per year |
| | **(ii) with motor above 15 BHP** | 25 | Nil | Nil | | 20 / kWh | Nil | Nil | |
| | **Un-metered (₹ / Per BHP / Month): (i) with motor upto 15 BHP** | Nil | 35 | Nil | Nil | Nil | 35 | Nil | Nil |
| | **(ii) with motor above** | Nil | 35 | Nil | Nil | Nil | 30 | Nil | Nil |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **15 BHP** | | | | | | | | |
| 6 | **Public Water Works** | 425 | 145 | 37 | Nil | 510 / kWh | 150 /kW | 37 | Nil |
| 7 | **Lift Irrigation** | 430 | 120 | 37 | Nil | 510 / kWh | 150 / BHP | 37 | Nil |

| Sr. No. | Category of consumers | Tariff for 2011-12 | | | | Tariff for 2012-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy Charges (Paise / kWh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand in case supply is on HT) | FSA (Paise / kW) | MMC (Rs per kW per month of the connected load or part thereof ) | Energy Charges (Paise / kWh or/ kVAh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | FSA (Paise / kWh) | MMC (Rs per kW per month of the connected load or part thereof) |
| 8 | **MITC** | 430 | 120 | 37 | Nil | 510 / kWh | 150 /BHP | 37 | Nil |
| 9 | **Railway Traction** | | | | | | | | |
| | Supply at 11 KV | 455 | 125 | 37 | Nil | 530 / kWh | 125 /kVA | 37 | Nil |
| | Supply at 33 KV | 443 | 125 | 37 | Nil | 520 /kWh | 125 /kVA | 37 | Nil |
| | Supply at 66 or 132 kV | 431 | 125 | 37 | Nil | 510 / kWh | 125 /kVA | 37 | Nil |
| | Supply at 220 kV | 423 | 125 | 37 | Nil | 500 / kWh | 125 /kVA | 37 | Nil |
| 10 | **DMRC** | | | | | | | | |
| | Supply at 66 kV | 395 | 125 | 37 | Nil | 450 / kWh | 125 /kVA | 37 | Nil |
| | Supply at 132 kV | 380 | 125 | 37 | | 450 /kWh | 125 /kVA | 37 | Nil |
| 11 | **Bulk Supply** | | | | | | | | |
| | Supply at LT | 440 | 130 | 38 | Nil | 525 / kWh | 130 /kW | 38 | Nil |
| | Supply at 11 kV | 430 | 130 | 38 | Nil | 515 / kWh | 130 /kW | 38 | Nil |
| | Supply at 33 kV | 418 | 130 | 38 | Nil | 505 / kWh | 130 /kW | 38 | Nil |
| | Supply at 66 or 132 kV | 406 | 130 | 38 | Nil | 500 / kWh | 130 /kW | 38 | Nil |
| | Supply at 220 kV | 398 | 130 | 38 | Nil | 495 / kWh | 130 /kW | 38 | Nil |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | Bulk Supply Domestic (70 kW and above at 11 kV or above voltage) | 360 | 50 /KW of recorded demand | 38 | Nil | 390 / kWh | 50 /kW of recorded demand | 38 | Nil |
| 13 | **Street Lighting** | 415 | Nil | 38 | 150 | 495 / kWh | Nil | 38 | 150 /kW |

| Sr. No. | Category of consumers | Tariff for 2011-12 | | | | Tariff for 2012-13 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy Charges (Paise / kWh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand in case supply is on HT) | FSA (Paise / kW) | MMC (Rs per kW per month of the connected load or part thereof) | Energy Charges (Paise / kWh or/ kVAh) | Fixed Charge (Rs per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | FSA (Paise / kWh) | MMC (Rs per kW per month of the connected load or part thereof) |
| 14 | **Independent Hoarding / Decorative Lightning** | 650 | 120 | 38 | Nil | 695 / kWh | 150 /kW | 38 | Nil |
| 15 | **Temporary Metered supply** | 1.5 times the energy charges of relevant category for which temporary supply has been sought. MMC and fixed charges, wherever applicable, shall be leviable at the same rates as in case of regular connection. | | | | | | | |

**Notes:**

1. 80% of the connected load shall be taken into account for levying fixed charges where leviable in case of LT industrial Supply
2. Energy charges for HT industrial and existing LT industrial consumer categories having load above 50 kW to 70 kW are in Paise / kVAh
3. Fixed charges for unmetered AP consumers, MITC and lift irrigation category are in Rs. / per BHP / Month.
4. Fixed charges for HT industrial supply category are in Rs / kVA of Contract Demand. For Railways and DMRC, the fixed charges are in Rs / kVA of the billable demand. For all other consumer categories (except Bulk Supply Domestic), the fixed charges are in Rs. / kW of the connected load or part thereof per month.
5. Fixed charges for Bulk Supply Domestic are in Rs. / kW of the recorded demand.
6. Supply charges in case of Domestic consumer category are telescopic in nature.
7. The above tariff does not include electricity duty and municipal tax.

### 4.6 Uncovered revenue gap

The revenue gap for FY 2012-13 at existing tariff has been determined at Rs. 16668.06 million as per details given in Para 4.1 against Rs. 77552 million projected by the UHBVNL/DHBVNL and after taking into account the revenue gap of Rs. 25338.18 million of the previous years, as determined by the Commission, the total revenue gap required to be met through tariff hike works out to Rs. 42006.24 million. The revenue from revised tariff approved by the Commission for FY 2012-13 on the approved sales is expected to generate revenue of Rs 117950.54 million for the distribution licensees (UHBVNL Rs. 44681.20 million and DHBVNL Rs. 73269.34 million). The revised tariff is, therefore, expected to generate an additional revenue of Rs. 18570.70 million which would not only completely address the revenue gap of Rs. 16668.06 million for FY 2012-13 but in addition would also provide a revenue of Rs. 1902.64 million to reduce the accumulated revenue gap of earlier years.

The details are given in Table 4.15 below.

**Table 4.15 Uncovered revenue gap (Rs. million)**

| | | UHBVNL | DHBVNL | TOTAL |
|---|---|---|---|---|
| 1 | Aggregate Revenue Requirement for FY 2012-13 | 72940.53 | 82848.02 | 155788.54 |
| 2 | Revenue at revised tariffs | 44681.20 | 73269.34 | 117950.54 |
| 3 | Revenue gap (2-1) | 28259.32 | 9578.68 | 37838.00 |
| 4 | Allocation of subsidy in the ratio of revenue gap | 29680.31 | 10060.33 | 39740.64 |
| 5 | Surplus Revenue from tariff for FY 2012-13 to be utilised for reduction of the uncovered revenue gap of the previous years (4-3) | 1420.99 | 481.65 | 1902.64 |
| 6 | Uncovered revenue gap of previous years | 21692.59 | 3645.59 | 25338.18 |
| 7 | Total balance revenue gap left uncovered (6-5) | 20271.60 | 3163.94 | 23435.54 |

It would be seen from the above table that inspite of generating additional revenue of Rs.18570.70 million through increase in the tariff(s) of various consumer categories, there stiil

exists a revenue gap of about Rs. 23435.54 million uncovered. The Commission would like the two utilities to reduce their AT&C losses, improve efficiency in their operations through innovative models and economise on expenses under various heads to reduce the uncovered revenue gap as much as possible. The Discoms may submit the interest cost as incurred by them for funding the revenue gap (to the extent actually done) left uncovered in the instant tariff order along with the next ARR/tariff petition for the consideration of the Commission.

# 5 WHEELING CHARGES, CROSS SUBSIDY SURCHARGE & ADDITIONAL SURCHARGE

Segregated accounts including voltage wise assets and losses for the distribution and retail supply business are a pre –requisite for determination of wheeling charges, cross subsidy surcharge and additional surcharge. The Commission in its previous ARR / Tariff order(s) of the distribution licensee(s) directed them to submit along with their next ARR filing, the requisite data, so as to enable the Commission to determine wheeling charges, cross subsidy surcharge and additional charge, if any. As per regulation 24 of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Distribution & Retail Supply Tariff) Regulations, 2008, the distribution licensees are under statutory obligation to provide requisite information and data to enable the Commission for working out wheeling charges but they have again failed to supply the same for the FY 2012-13. In absence of requisite information / data the Commission is constrained to continue to adopt the same approach as adopted by it for determination of wheeling charges, cross subsidy surcharge and additional surcharge in its immediate previous ARR / Tariff orders of distribution licensees. The computational details of wheeling charges for the FY 2012-13 are presented in the following table:

## 5.1 Wheeling charges

**Table 5.1 - Calculation of wheeling charges for the FY 2012-13**

| | | |
|---|---|---|
| 1 Network expenses per kWh) | | |
| a. | Network establishment and operation cost (8% of the net ARR of the distribution licensees i.e. Rs.155788 millions, net of other income (UH = 72940.53+ DH = 82848) Rs. million | 12463 |
| b. | Allowed gross volume of power purchase by the distribution licensees MU | 39423 |
| c. | Expenses (Rs / kWh) (a/b) | 0.32 |
| 2. Cost of losses in the system | | |
| a. | %age distribution system losses (technical) | 6.00% |
| b. | Losses (MU) (1bx2a) | 2365 |
| c. | HERC approved average cost of power purchase (Rs. / kWh) | 3.16 |
| d. | Total cost of losses (2bx2c) Rs. million | 7473 |
| e. | Cost per unit of losses (Rs. / unit) (2d/1b) | 0.19 |
| 3. Wheeling charges (Rs. / kWh) (1c+2e) | | 0.51 |

## 5.2 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 existing 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 'Cost of Service' (CoS) 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 for FY 2010-11 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.

Section 42 of the Electricity Act, 2003 provides that the 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....."

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.

Keeping in view the above provisions the Commission ordered in its ARR / Tariff order of distribution licensees for FY 2011-12 that rates of the cross subsidy surcharge shall be reduced @ 20% every year from the opening level i.e. rates of cross subsidy approved for FY 2010-11 and accordingly the cross subsidy surcharge for FY 2011-12 was determined. However, neither the tariffs nor the cost of service to the relevant category are constant over the years. In view of the substantial change in the cost of supply in FY 2012-13 as compared to FY 2010-11 and the average revenue in view of the revision in tariff in the last three years, the Commission observes that the cross subsidy generated by different categories has undergone a change. The Commission, However, has to take into consideration the relevant

provisions of the Electricity Act, 2003 which mandates that the cross subsidy surcharge shall be progressively reduced. Therefore continuing with the principle of reduction of cross subsidy surcharge by 20% each year beginning from FY 2010-11, the Commission has limited the cross subsidy surcharge to 60% of the cross subsidy generated by the relevant consumer category for FY 2012-13. The details of the surcharge approved for 2012-13 are as given in the table below:

**Table 5.2 - Cross subsidy surcharge for FY 2012-13( paise/kWh)**

| | | Average revenue | COS | cross susidy generated | Cross subsidy surcharge limited to 60% of cross subsidy |
|---|---|---|---|---|---|
| | | 1 | 2 | 3=1-2 | 3*60% |
| 1 | HT industry | 602 | 449 | 153 | 92 |
| 2 | NDS HT | 566 | 433 | 133 | 80 |
| 3 | Bulk Supply other than domestic | 626 | 473 | 153 | 92 |
| 4 | Railways | 567 | 437 | 130 | 78 |

## 5.3 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 2012-13.

**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 within a period of three months from the date of this order failing which the Commission will be constrained to initiate action under section 142 of the Act.**

# 6 IMPORTANT STEPS TO BE TAKEN BY THE DISTRIBTUION LICENSEES

With a view to reducing line losses, improving operational efficiency and economizing on expenses under various heads, **the Commission directs the Discoms to take following measures:-**

## 1) Dismantlement of idle lines

The Commission has observed that a large number of idle distribution lines, both HT as well as LT, are existing in their system especially in rural area. These lines had become redundant mainly as a result of permanent disconnection of connections on account of defaulting amount against them and also on account of up gradation of the system. These idle lines are a source of abstraction of power through unauthorized tapings (kundis) by the unscrupulous elements.

The licensees are directed to identify these idle lines and get the same dismantled by 31st August, 2012. An undertaking that all the idle lines have been dismantled and that dismantled material has properly been accounted for, shall be submitted by the licensees to the Commission.

## 2) Disconnection of permanent defaulters

As per the standing instruction of the licensees, any consumer who does not make payment of his current bill within a stipulated period, his connection shall be disconnected. The Commission understands that there is a large number of defaulters in each operation division who have not been disconnected and the concerned officials are not affecting disconnection of such consumers thereby resulting into accumulation of huge amount of arrears. The licensees should direct all SDOs (Operation) in whose areas such defaulters (barring cases which are in litigation) still exist to disconnect such connections within a period of one month failing which they should be held personally responsible and suitable disciplinary action be taken against them. A bimonthly report of the action taken in the matter and the progress made shall be sent to the Commission regularly by the licensees.

## 3) Reduction of line losses

**(i)** A report on the feeder wise losses submitted by UHBVNL for the period October & November, 2011 indicates that there are as many as 112 urban feeders on which the losses are above 25%. These are 12 in Ambala circle, 03 in Yamuna Nagar circle, 03 in Karnal circle, 30 in Panipat circle, 15 in Sonipat circle, 16 in Rohtak circle, 18 in Jhajjar circle and 15 in Jind circle. These include five feeders on which the loss level is above 50%. These are NIF & Baghpur feeders under Jhajjar circle, Kachhwa feeder under Karnal circle, Samta and Thana Kalan feeders under Sonipat circle.

Similar report of DHBVNL for the period April, 2011 to September, 2011 indicates that there are 177 urban feeders on which the losses are above 25%. These are 64 in Faridabad circle, 11 in Gurgaon circle, 22 in Narnaul circle, 31 in Bhiwani circle, 45 in Hisar circle and 04 in Sirsa circle. These include 24 feeders on which the loss level is above 50%. These are HUDA Sector–2 Palwal, Hathin, Grandura, Sector-15 A Faridabad & Mohan Nagar Palwal under Faridabad circle, Pingwan, Punhana & Nagina under Gurgaon circle, Housing Board Dharuhera under Narnaul circle, Ghikara Road Dadri, Dadri Urban, Hanuman Gate Dadri, Lajpat Nagar Dadri, Gujrani Dadri, Haluwas & Rawaldhi under Bhiwani circle, City - 1 Uklana, City-2 Uklana, City – 1 Tohana, Arya Nagar Tohana, City-2 Tohana, City-3 Tohana, Bhattu Mandi & City-4 Tohana under Hisar circle.

The licensees are directed to immediately prepare and implement action plan with a target to bring down line losses on such feeders below 25% in a time bound manner. The plan formulated should be sent to the Commission within a month's time and thereafter the Commission should be apprised of the progress in the matter on bimonthly basis. The Commission will review the progress made, from time to time.

**(ii)** On the basis of reassessment of AP consumption based on segregated feeders data for FY 2010-11, the distribution losses of UHBVNL for FY 2010-11 have worked out to be 33% as against 24% projected by them in their ARR filing for FY 2010-11. Considering 2% loss reduction per annum, loss level for the year 2012-13 has been fixed at 29%. The licensee is directed to prepare loss reduction trajectory with a target to bring down line losses below 20% within a period of 3 years. The licensee shall submit an action plan in this regard to the Commission by 30$^{th}$ June, 2012.

### 4) Replacement of bare conductor with aerial bunched cable

The Commission further notes that there are pockets in urban areas where the line losses are very high. This is due to direct theft of electricity on mass scale in such areas because of existence of bare conductor. In such areas the bare conductor needs to be replaced with LT Aerial Bunched Cable / insulated conductor. The licensees shall report on action taken / being taken and progress made in this direction on quarterly basis.

### 5) Release of pending industrial/seasonal industries connections

It has been noted that a large number of industrial and seasonal industries applicants are awaiting release of connections. The licensees shall take necessary action to release such pending connections at the earliest so as to improve the consumer mix and resultantly the revenue.

### 6) Reduction in DT damage rate

**(i)** Most of the distribution transformers get damaged on account of overloading or unbalancing of load. The problem of unbalanced load can be sorted out by balancing load on all the 3 phases of the transformer. The distribution transformers feeding AP tube well load are generally overloaded but the overloading does not appear on record since AP consumers try to conceal the BHP of their tube well motors. Except in four Districts namely Karnal, Kurukshetra, Kaithal and Rohtak where HVDS system has been provided, capacities of tube well motors are required to be checked and regularized and distribution transformers capacity suitably augmented. A major portion of the O&M estimates of the utilities is spent on the replacement of damaged distribution transformers. This step will go a long way to reduce damage rate of distribution transformers.

**(ii)** It has been further noted that another major reason for damage of distribution transformers is that these do not have LV bushings placed inside sealed metallic enclosures and also do not have the provision of automatically switching off of the load when it exceeds beyond the rated capacity. Because of bare bushings the supply is easily tapped from the bushing terminals. The technical specifications of the licensees for procurement of distribution transformers of the capacity 25 KVA to 100 KVA provide that the LV bushings and thermal based MCCBs shall be housed within the metallic enclosure with sealing arrangement so as to avoid any possibility of tapping of supply from the bushing terminals. The technical specifications for procurement of distribution transformers of the capacity 200 KVA and above however does not contain such provision. The licensees are directed to

provide similar provision in the technical specifications of the distribution transformers of capacity 200 KVA and above and ensure that distribution transformers of all the capacities are procured with a provision of LV bushings and thermal based MCCBs to be housed within the metallic enclosure with sealing arrangement. Besides this all the existing distribution transformers in their system which do not have LV bushings and thermal based MCCBs placed inside metallic enclosures be provided with this arrangement within a period of six months.

## 7) Safety measures to minimize accidents

(i) The Commission notes with concern that the number of fatal and non-fatal accidents involving human beings (Nigam employees & private persons) and animals are on increase in respect of both the companies. It appears that they have hardly taken steps to reduce accidents. The licensees are directed that they should provide proper training to their employees regularly on the equipment being handled by them and on various safety measures to be followed while working on the equipment. All the technical employees who are handling the equipment should be provided with proper safety kits. The distribution system should also be maintained and protected properly in line with the provisions of CEA Regulations on 'Provision relating to Safety and Electricity supply'.

(ii) Instructions were issued to the licensees vide Secretary, HERC Memo No. 2657-58/HERC/T-169 dated 03.11.2011 to ensure that cut outs / LT fuse units provided on various poles / structures are mounted at appropriate height so that these are inaccessible and further that these cut outs / LT fuse units should conform to specification of the BIS or International Electro Technical Commission. The licensees were also directed to take required corrective measures in respect of all the existing cut out / LT fuse unit installations and to report compliance within three months. However no report was received from any of the licensees in this regard. The licensees shall report to the Commission on the action taken / being taken and progress made in this direction by 31st May, 2012.

## 8) Provision of terminal cover plates / seals on meters

As reported, about 6 lac electromechanical meters are existing in the area of each licensee. Most of these meters are without terminal cover plates and seals thus making it very easy for the unscrupulous consumers to bypass the energy meter and to steal power. The licensee shall ensure that such meters are provided with terminal cover plates and seals within a period of three months.

## 9) Special drive for regularization of unauthorized connections

In the order on ARRs of the licensees for FY 2011-12, it was brought out that a large number of domestic consumers in rural areas were using unfair means and abstracting power direct through kundi connections as the licensees had not made sincere efforts to convince the people in the rural area to obtain electricity connections. The licensees were directed to identify the villages where there were mass thefts and arrange camps at such villages to release connections on the spot.

The licensees are again directed to launch special campaigns for regularization of kundi connections by holding camps and submit action taken report in the matter to the Commission by 30th April, 2012.

# 7 CONCLUSION

1. The Commission has, on a number of occasions, brought to the notice of the State Government as well as the Power Utilities the un-sustainability of the Distribution and Retail Supply business of the Discoms that require immediate attention of the government, lest losses of the Discoms leading to loan default, non payments of dues to HVPNL (transmission charges) and HPGCL (generation company) undermine the power sector reforms initiated in Haryana.

2. The distribution licensees i.e. UHBVNL and DHBVNL were created on 30.6.1999. At that time there were no losses in their books and adequate provision were made against their receivables. Since then the ARRs approved by the Commission have been fully balanced without any unmet revenue gap. Funding for the occasional revenue gap left uncovered by the Commission was allowed to the extent of actual borrowings availed for the purpose. Consequently, Discoms should have had no accumulated losses had they operated within the efficiency parameters defined by the Commission in its orders and regulations. However, a review of the audited accounts reveals that the total accumulated losses of UHBVNL as on 31.3.2011 stand at 3819 crore as against the share capital of 1424.4 crore. Similarly the accumulated losses of DHBVNL as on 31.3.2011 are 2686 Crore as against their share capital of Rs. 1260 crore. Therefore, losses of both the utilities have exceeded their share capital many times over. The entire equity support and loans guaranteed/ provided by the State Government has been eaten away by the accumulated losses rendering their networth negative. Thus, it is evident that the massive support given by the State Government to these utilities and additional liquidity infused into the system by way of regular FSA as well as tariff adjustments has not had the desired result due to lack of strategic medium to long term business plans of the two Discoms. In case the working of the licensees is not improved immediately, all the hard work done in this area will go waste and it may be impossible to financially turn them around leaving very few options open i.e. subvention from the State Government by way of infusion of fresh equity capital to the extent of accumulated losses of the Discoms or bringing in private capital by adopting alternative business models in terms of joint ventures, franchises, outsourcing in a major way or privatising the retail supply part of the distribution & retail supply business. To ensure the successful implementation of these models it is imperative that the permanent staff strength of the companies is not increased beyond the existing level and normal attrition would provide additional cushion for

these models. Therefore, no fresh recruitment of regular nature should be undertaken.

3. The Commission notes with concern that the total receivable in the case of UHBVNL amounts to Rs. 2043 crore as on 31/09/2011. This includes Rs. 60 Crore from government agencies, Rs. 100 crore from Agriculture Tube Well Consumers, Rs. 123 Crore from Industrial Consumers, Rs. 149 Crore from Urban Domestic Consumers, Rs. 1488 crore from Domestic Rural Consumers and Rs. 122 crore from Commercial consumers. Even if we choose to turn a blind eye towards our Agriculture and Rural Consumers it is not understood why UHBVNL has not been able to realize payments from Industrial, Commercial, Urban Domestic and Government connections. Similarly in the case of DHBVNL the revenue not collected for sale of power amounts to Rs. 1914.4 crore as on 31/03/2011. The Commission firmly believes that unless the dues for sale of power is timely and efficiently collected it would become increasingly difficult for the Discoms to manage their day to day affairs.

4. In addition to the above a perusal on the Annual Report of UHBVNL and DHBVNL as on 31/03/2011 reveals that in the case of UHBVNL the State Government has not paid them RE Subsidy amounting to Rs.1048.83 crore. While the same in the case of DHBVNL is Rs. 593.6 Crore.

5. In view of the above the entire billing and collection of payments needs to be reviewed so that the cash flow cycle improves and some liquidity is infused in the system. A look at the monthly cash flow of the Discoms reveal that they are not even in a position to run their day to day operation i.e. pay for power purchase or service the loan taken by them without resorting to further borrowings. This is clearly not sustainable as the banks, given the credit risk, may not be willing to lend unending support to the Discoms.

6. Further on the one hand equity which forms the basis of negotiating loans stands completely eroded, on the other hand the total borrowings as on 31/03/2011 (secured as well as unsecured loans) of UHBVNL stands at Rs. 10194.41 crore and the same in the case of DHBVNL amounts to Rs. 4821.76 crore. Thus the total borrowings of the Discoms stands at Rs. 15016.17 crore. Given the negative networth and negative operating margin (profit before interest, depreciation and taxes) it may not be possible for the Discoms to sustain the distribution and retail supply business for long.

7. The licensees have since segregated all the AP feeders and the power flow to the AP consumers as recorded by the meters installed at the segregated feeders are available. Thus the Commission has assessed the AP consumption for FY 2010-11, FY 2011-12 and FY 2012-13 on the basis of data of AP segregated feeders submitted by the Utilities. Resultantly, the difference between the energy input into the distribution system and the metered sales / consumption of all other categories of consumers plus AP sales / consumption arrived at on the basis of AP segregated feeder data are the distribution losses.

8. On the above basis and audited data furnished by the Discoms for FY 2010-11, the Commission has worked out actual distribution losses at 33% and 24% for FY 2010-11 as against 24% and 22.95% reflected in the audited accounts of UHBVNL and DHBVNL respectively. Considering a loss reduction of 2% per annum for UHBVNL and 1.5% for DHBVNL the Commission has fixed the loss level at 29% and 21.5% for FY 2012-13 as against 22% and 23% projected by UHBVNL and DHBVNL respectively in their ARRs for FY 2012-13 and this has formed the basis for arriving at energy availability for sale to the Discoms.

9. The Commission has reviewed the feeder wise losses as well. In the case of UHBVNL it is observed that in FY 2011-12 (up to Dec, 2011) out of total 3340 feeders, there were 658 feeders with losses between 25% and 50%, 173 feeders with losses between 50% to 75% and 14 feeders with losses above 75%. The status has continued for quite a few years without any improvement. In the area of supply of DHBVNL the situation is no better. As on Sept, 2011 out of 2958 number of 11 KV feeders there were 680 feeders with losses between 25 – 50%, over 280 feeders reporting losses in the range of 50% to 75% and over 4 feeders with losses in excess of 75%.

10. A further analysis of the above establishes the rot that has plagued the Discoms as what to speak of losses on rural feeders, 289 urban feeders comprising independent feeders, Industrial feeders and domestic feeders are reporting losses in excess of 25% which is clearly not acceptable by any standards.

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 April, 2012 and shall remain effective till they are revised / amended by the Commission.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on March 31st, 2012.

**Date: 31st March, 2012**
**Place: Panchkula.**

| **(Ram Pal)** | **(Rohtash Dahiya)** | **(R.N.Prasher)** |
|---|---|---|
| Member | Member | Chairman |