



**COMMISSION'S ORDER**

**ON**

**TRUE- UP FOR THE FY 2013-14, ANNUAL (MID-YEAR) PERFORMANCE REVIEW  
FOR THE FY 2014-15, REVISED AGGREGATE REVENUE REQUIREMENT  
OF UHBVNL & DHBVNL & DISTRIBUTION & RETAIL SUPPLY TARIFF FOR THE  
FY 2015-16**

**CASE No's: HERC/PRO-62 of 2014 & HERC/PRO-63 of 2014**

**7<sup>th</sup> May, 2015**

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

**[www.herc.nic.in](http://www.herc.nic.in)**

---

## **IN THE MATTER OF**

Petition for True Up of the ARR for the FY 2013-14, Annual Performance Review for the FY 2014-15 and determination of Distribution and Retail supply tariff for the FY 2015-16 for Uttar Haryana Bijli Vitaran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVNL), under the provisions of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, read with section 45, 46, 47, 61, 62, 64 & 86 of the Electricity Act, 2003.

**Present:**                      **Shri Jagjeet Singh**                      **Chairman**  
   **Shri M.S. Puri**                                      **Member**

### **ORDER**

The Haryana Electricity Regulatory Commission (hereinafter referred to as 'the Commission'), in exercise of the 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 Truing-up of the ARR for the FY 2013-14 Annual (Mid-year) Performance Review for the FY 2014-15 and Aggregate Revenue Requirements / Tariffs of UHBVNL and DHBVNL for their Distribution and Retail Supply Business under MYT framework for the FY 2015-16 for the financial year 2015-16 in accordance with the provisions of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 (hereinafter referred to as MYT Regulations, 2012). The Commission, while passing this Order, has considered the True-up for the FY 2013-14, APR for the FY 2014-15 and revised ARR for the FY 2015-16 Petitions filed by UHBVNL and DHBVNL along with subsequent filings/additional data provided by them including filings made by the two Utilities in response to the various queries of the Commission, objections received from various organisations and individuals as well as the suggestions of the SAC Members in the meeting held on 26.02.2015.

## CONTENTS

<b>CHAPTER 1</b> .....	<b>7</b>
<b>INTRODUCTION</b> .....	<b>7</b>
1.1 BACKGROUND .....	7
1.2 APPLICATION OF THE PROVISIONS OF THE MYT REGULATIONS .....	7
<b>CHAPTER 2</b> .....	<b>10</b>
<b>PROCEDURAL ASPECTS OF THE ARR FILING</b> .....	<b>10</b>
2.1 FILING OF ARR PETITIONS BY UHBVNL & DHBVNL .....	10
2.2 SUMMARY OF THE PETITIONS FILED BY THE DISCOMS .....	10
2.3 PUBLIC PROCEEDINGS .....	20
2.4 OBJECTIONS FROM STAKEHOLDERS AND RESPONSE OF DISTRIBUTION LICENSEES .....	21
2.4.1 <i>Comments received from Dr. Kirit Somaiya, MP, Chairman, and Parliamentary Committee on Energy</i> 22	
2.4.2 <i>Objections filed by the Railways</i> .....	23
2.4.3 <i>Objections filed by DMRC</i> .....	36
2.4.4 <i>Objections received from Faridabad Industries Limited (UHBVNL true up)</i> .....	38
2.4.5 <i>Objections filed by M/s Jindal Stainless Limited, Hisar</i> .....	55
2.4.6 <i>Objections filed by Shri Sampat Singh and Shri Amit Verma, Hisar</i> .....	62
2.4.7 <i>Objections received from Balwant Singh, Ravinder Singh, Village Jawali District Kaithal, Haryana</i> ..	74
2.4.8 <i>Objections filed by Shri Balwant Singh and Shri Ravinder Singh, Village Jawali District Kaithal,</i> <i>Haryana</i> .....	77
2.4.9 <i>Objections file by Sh. R. S. Chaudhary, IAS (Retd.) National General Secretary, INLD</i> .....	84
2.4.10 <i>State Advisory Committee (SAC)</i> .....	91
<b>CHAPTER 3</b> .....	<b>97</b>
<b>ANALYSIS OF TRUE UP AND ARR FILINGS AND COMMISSION'S ORDER</b> .....	<b>97</b>
3.1 <i>True-up of the ARR for the FY 2013-14</i> .....	99
3.1.1 <i>O&amp;M Expenses</i> .....	100
3.1.1.1 <i>UHBVNL</i> .....	100
3.1.1.2 <i>DHBVNL</i> .....	101
3.1.2 <i>Terminal benefits</i> .....	102
3.1.3 <i>Depreciation</i> .....	102
3.1.4 <i>Interest on consumers security deposit</i> .....	102
3.1.5 <i>Interest on loan for capital expenditure</i> .....	103
3.1.5.1 <i>UHBVNL</i> .....	105

3.1.5.2	DHBVNL .....	105
3.1.6	Interest on working capital loan.....	106
3.1.7	Interest on FRP borrowings .....	107
3.1.8	Cost of raising finance and bank charges.....	108
3.1.9	Other Debits .....	108
3.1.10	Prior period expenses.....	109
3.1.11	Return on Equity .....	110
3.1.12	Non-tariff Income .....	110
3.1.13	Power purchase cost.....	111
3.1.14	Revised ARR for FY 2013-14.....	111
3.1.15	Revenue from sale of Power for FY 2013-14.....	113
3.1.16	True up of Subsidy for supply to AP consumers for FY 2013-14.....	113
3.2	Revised ARR for FY 2015-16 based on Mid-year Performance Review.....	114
3.3	Commission's Estimate of Energy Sales for FY 2015-16.....	114
3.3.1	AP Consumption .....	114
3.3.2	AP consumption Calculations for FY 2011-12.....	115
3.3.3	AP consumption Calculations for the FY 2012-13.....	116
3.3.4	AP consumption Calculations for the FY 2013-14.....	117
3.3.5	AP Consumption estimated for the FY 2014-15 & FY 2015-16 .....	118
3.3.6	Metered Sales (Other than AP).....	119
3.4	Power Purchase volume .....	121
3.4.1	Projections by UHBVNL / DHBVNL.....	121
3.4.2	Commission's Estimate of power purchase Quantum .....	122
3.4.3	Availability of power from HPGCL .....	124
3.4.4	Availability of Power from Faridabad CCGT (FGPP-NTPC).....	124
3.4.5	Availability of power from shared projects of BBMB.....	124
3.4.6	Availability of power from NTPC Power Plants.....	125
3.4.7	Availability of power from NHPC power plants .....	126
3.4.8	Availability from NPCIL sources .....	126
3.4.9	Power Purchase through Short Term/bilateral/UI mechanism .....	127
3.4.10	Power Purchase from Other Sources .....	127
3.4.11	Total Approved Power Purchase Quantum.....	129
3.5	Power Purchase Cost.....	129
3.5.1	Tariff for power from CPSUs (NTPC, NHPC & NPC).....	130
3.5.2	Price for HPGCL power.....	130
3.5.3	Price of Shared utility power .....	131
3.5.4	Price of Power Purchased from Other Sources .....	131

3.5.5	Price of Short term Power purchase/bilateral arrangements .....	131
3.5.6	Details of volume, rate & cost of power purchase from various sources .....	131
3.6	Transmission Losses .....	134
3.7	Inter-State sale of Power and Power purchase cost for Distribution licensees .....	134
3.8	Renewable Purchase Obligation (RPO) .....	135
3.9	Interstate transmission charges .....	138
3.10	Intrastate Transmission Charges & SLDC Charges .....	138
3.11	Employee Cost / A&G Expenses .....	138
3.12	Repair & Maintenance .....	140
3.13	Terminal Benefits .....	141
3.14	O & M Expenses .....	141
3.15	Depreciation .....	142
3.16	Interest on Term Loan .....	143
3.17	Interest on Consumer Security Deposits .....	143
3.18	Interest on Working Capital .....	144
3.19	Interest on FRP Borrowings .....	145
3.20	Total Expenditure .....	145
3.21	Non-Tariff Income .....	145
3.22	Total Revised ARR of UHBVNL & DHBVNL for the FY 2015-16 .....	145
3.23	True-up for FY 2013-14 including holding cost .....	147
3.24	Total revenue requirement for the FY 2015-16 .....	147
3.25	Capital Expenditure .....	148
3.25.1	True up of Capital Expenditure for FY 2013-14 .....	148
3.25.1.1	UHBVNL .....	148
3.25.1.2	DHBVNL .....	150
3.25.2	Review of Capital Investment Plan for the FY 2014-15 .....	152
3.25.2.1	UHBVNL .....	153
3.25.2.2	DHBVNL .....	155
3.25.3	Review of capital investment plan for FY 2015-16 .....	158
3.25.3.1	UHBVNL .....	158
3.25.3.2	DHBVNL .....	158
3.26	Quality and Reliability of supply .....	158
3.27	Distribution Losses .....	159
3.28	Loss trajectory .....	160
3.29	Distribution Transformers (DTs) failure rate .....	163
3.30	Non replacement of defective energy meters by the distribution licensees .....	165
3.31	Manpower training .....	167

<b>CHAPTER 4 .....</b>	<b>168</b>
4.1 TARIFF PROPOSAL FILED BY THE UHBVNL & DHBVNL (DISCOMS).....	168
4.2 RECOVERY OF GAP .....	168
4.3 DOMESTIC SUPPLY CONSUMERS (DS) .....	176
4.4 NON DOMESTIC SUPPLY (NDS).....	178
4.5 HT INDUSTRY (LOAD ABOVE 50 KW) .....	179
4.6 LT INDUSTRY UP TO 50 KW .....	181
4.7 AGRICULTURE PUMP SET SUPPLY (AP SUPPLY).....	182
4.8 PUBLIC WATER WORKS, LIFT IRRIGATION, MITC & STREET LIGHT SUPPLY.....	184
4.9 RAILWAYS TRACTION TARIFF .....	185
4.10 METRO (DMRC) TARIFF .....	187
4.11 BULK SUPPLY TARIFF.....	187
4.12 INDEPENDENT HOARDINGS / DECORATIVE LIGHTING.....	188
4.13 TEMPORARY METERED SUPPLY .....	188
4.14 OTHER CONDITIONS.....	193
4.15 REVENUE GAP AT REVISED TARIFF FOR FY 2015-16.....	194
<b>CHAPTER 5 .....</b>	<b>195</b>
<b>WHEELING CHARGES, CROSS-SUBSIDY SURCHARGE &amp; ADDITIONAL SURCHARGE .....</b>	<b>196</b>
5.1 WHEELING CHARGES .....	196
5.2 CROSS-SUBSIDY SURCHARGE .....	197
5.3 ADDITIONAL SURCHARGE .....	202
<b>CONCLUSION .....</b>	<b>204</b>

## CHAPTER 1

### INTRODUCTION

#### 1.1 Background

The Commission, on 5<sup>th</sup> December 2012, had notified the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012. Regulation 4.2 of the MYT Regulations, 2012 provides that **“the Commission shall adopt Multi Year Tariff (MYT) framework for determination of ARR / tariff for each year of the Control Period from FY 2014-15. However, there shall be annual determination of ARR/tariff for the utilities for FY 2013-14 for their respective businesses as per these regulations”**. Accordingly, the first Order of the Commission under the provisions of the MYT Regulations was issued on 29<sup>th</sup> May, 2014. In the said Order the Commission had determined ARR of UHBVNL and DHBVNL for the FY 2014-15, FY 2015-16 and FY 2016-17 and distribution and retail supply tariff for the FY 2014-15. Thus, in the present Order, the Commission has carried out true-up for the FY 2013-14 ARR and the eligible trued-up amount has been added to the revised ARR for the FY 2015-16 for the purpose of determining tariff(s) for the FY 2015-16. Additionally, the Commission, in accordance with the MYT Regulations, 2012 shall also be carrying out Annual (Mid-year) Performance Review of the Distribution and Retail Supply businesses of the two Distribution Licensees i.e. Uttar Haryana Bijli Vitran Nigam (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam (DHBVNL).

#### 1.2 Application of the provisions of the MYT Regulations

The MYT Regulations, 2012 provides that the first control period for determination of ARR/Tariff under MYT framework shall be of three years i.e. from 1<sup>st</sup> April, 2014 to 31<sup>st</sup> March, 2017. The regulations 4.4 to 4.8 of the MYT Regulations, 2012 is reproduced below:-

*4.4 Tariff during the control period: The Commission shall determine the ARR for each year of the control period and tariff for the first year of the control*

*period separately for Generation Company (ies), transmission licensee(s) and distribution licensee(s).*

4.5 *The tariff applicable to each business in each of the remaining years of the control period shall be notified by the Commission through a separate order after taking into consideration the following:*

*a) Mid-year performance review;*

*b) Specified performance targets;*

*c) True-up of uncontrollable items as defined in regulation 8.3.*

4.6 *There will be no true-up of the controllable items except on account of Force Majeure events or on account of variations attributable to uncontrollable items. The variations in the controllable items, as defined in regulation 8.3, over and above the norms specified will be governed by incentive and penalty framework specified in these regulations.*

4.7 *The tariff determined by the Commission and the directions given in the MYT order shall be the quid pro quo and mutually inclusive. The tariff determined shall, within the time period specified in the order, be subject to the compliance of the directions by the generating company and the licensees to the satisfaction of the Commission. Non-compliance of the directions shall lead to such amendment, revocation, variations and alterations in the tariff, as may be ordered by the Commission. Further non-compliance of directions given in the tariff order may also lead to invocation of the provisions of section 142 of the Act.*

4.8 *The tariff determined by the Commission shall continue to operate till it is modified or revised by the Commission.*

The regulation 71.9 of the MYT Regulations, 2012 provides as under:-

**71.9 Filing for Mid-year performance review, True-up and determination of tariff for ensuing year**



*The generating company and the licensees shall file their application for mid-year performance review of the current year, true-up of the previous year and tariff for the ensuing year along with requisite fee by 30<sup>th</sup> November of each year of the control period as per the details mentioned in the regulation 11 & 13 for the Commission's review, true-up of uncontrollable / controllable items in accordance with regulation 8.3 and approval of tariff for the ensuing year.*

In compliance to the above provision of the MYT Regulations, 2012, UHBVNL and DHBVNL filed the Petitions no. PRO 62 of 2014 and PRO-63 of 2014 for APR of 2014-15, revised ARR for FY 2015-16 and true-up of ARR for FY 2013-14 on 1.12.2014 and 30.11.2014 respectively. There has been delay of just one day in filing of the True-up for the FY 2013-14, Annual (Mid-year) Performance Review for the FY 2014-15 and the revised ARR for the FY 2015-16 Petition by UHBVNL. The Commission has condoned the delay and has proceeded to examine the said Petitions on merit and in accordance with the MYT Regulations, 2012.

Further, as per past practice, the Commission has considered it appropriate to issue a single Order in respect of the present Petitions of UHBVNL and DHBVNL under consideration of the Commission. Accordingly, in the present Order, the common issues of the two Discoms have been dealt with together while the issues specific to UHBVNL and DHBVNL has been dealt with separately.

The Commission, in the present Order, has examined the APRs for the FY 2014-15, revised the ARRs for the FY 2015-16 and Trued-up of the ARRs for the FY 2013-14 of UHBVNL and DHBVNL for their Distribution and Retail Supply business and has determined the Distribution and Retail Supply tariff that shall be applicable for the FY 2015-16.

## CHAPTER 2

### PROCEDURAL ASPECTS OF THE ARR FILING

#### 2.1 Filing of ARR Petitions by UHBVNL & DHBVNL

UHBVNL filed its APR/ARR/True-up Petition (HERC/PRO-62 of 2014) for the FY 2015-16 of the control period FY 2014-15 to FY2016-17 for its distribution and retail supply business with the Commission vide Memo No. Ch- 20/GM/RA/N/F-25/Vol.-54 dated 1.12.2014. Similarly DHBVNL filed its APR/ARR/True-up Petition (HERC/PRO-62 of 2014) for FY 2015-16 of the control period FY 2014-15 to FY2016-17 for its distribution and retail supply business with the Commission vide Memo No. Ch-15/SE/RA-500 dated 30.11.2014.

The Petitions filed by UHBVNL and DHBVNL were scrutinised and preliminary observations were communicated to the licensees vide Memo No. 4816 / HERC/ Tariff dated 15.01.2014, Replies in respect of various observations and deficiencies in the ARR petitions communicated to the Discoms were furnished by UHBVNL vide memo No. Ch-40/GM/RA/N/F-25/Vol-51 dated 21.03.2014 and vide memo no. Ch-99/SE/RA-441 dated 21.03.2014 by DHBVNL. The Commission reviewed the replies submitted by the Discoms and sought further information including non-compliance with some of the observations / directions of the Commission.

#### 2.2 Summary of the Petitions filed by the Discoms

##### ARR of UHBVNL

The Petitioners has requested the Commission to approve the net revenue (gap) of Rs.2081.60 Crore on account of truing-up of the ARR along with suitable carrying/holding cost for the FY 2013-14 to be recovered through distribution and retail supply tariffs for the FY 2015-16.

Regarding the Annual Performance Review (APR), the Petitioner has submitted that the Commission had approved a Capex Plan of Rs.1037.85 Crore for the FY 2014-15. However, against the same, the estimated Capex to undertaken is of Rs. 517.75 Crores based on the available half yearly details of capital expenditure

already undertaken. UHBVNL has submitted that the funding of capital expenditure in the FY 2014-15 is being arranged by debt from REC, PFC and supported further from equity and consumer contribution. The CWIP and Gross Fixed Assets have been accordingly re-estimated based on the proposed Capex and Capitalisation schedule.

UHBVNL has further submitted that for sales projections of the FY 2014-15, the sales for the FY 2014-15 have been arrived at by projecting the sales of FY 2013-14 based on CAGR for the last four years after reducing the sales of Jind circle from the sales of UHBVNL for the past four years. Similarly, the sales for the FY 2015-16 have been projected by applying the same CAGR over the estimated sales for the FY 2014-15. For agriculture, 5% growth has been considered in line with the methodology adopted by the Commission. Accordingly, energy sales for the FY 2014-15 and the FY 2015-16 have been projected as 12,621.18 MUs and 13,686.19 MUs respectively.

The Petitioner has submitted that the energy availability For FY 2014-15, has been projected by taking into consideration actual power received from all power stations from April, 2014 to September, 2014, i.e. the first six months of the current financial year, as received from HPPC. The actual data for April, 2014 to September, 2014 was available from the HPPC. The annual power purchase for the FY 2014-15 has been projected based on this actual data as well as the MYT trajectory. The projections were done month wise and plant wise for the FY 2014-15. The ratio of power received from each station in the first six months of the current financial year i.e. percentage of units purchased with respect to total long term power purchase for first half of the FY 2014-15 from each generating station has been considered for plant wise projections in the FY 2014-15. The short-term power purchase has been retained at the same quantum as already purchased in the current year till September, 2014. Further, the power purchase quantum for UHBVNL and DHBVNL has been divided in the same proportion as per the approved MYT tariff Order.

The rate for power purchase from each power plant have been assumed to be equal to the average rate of power purchased during first half of the FY 2014-15 as received from the HPPC. The Intra-State transmission charges have been taken as approved by the Commission vide the MYT tariff Order dated 29<sup>th</sup> May, 2014. The Inter-

State transmission charges of Rs. 805 Crores have been approved in the MYT tariff Order dated 29th May 2014; and the same have been bifurcated in UHBVNL and DHBVNL in the ratio of the respective Inter-State power purchases of the two Utilities in FY 2014-15.

For the FY 2015-16, the approved quantum for power purchase from various stations has been considered subject to variations in case of upcoming stations that are given below:-

- Parbati II, HEP (H.P.)
- Koldam HEP NTPC (H.P.)
- Barh, Stage II, ER (NTPC)
- Uri II, HEP (J&K)
- Raghunathpur TPP Phase I (DVC) (West Bengal)
- Koderma TPP (DVC) (West Bengal) (in Unit II)
- Parbati III HEP (H.P.) (Haryana share 5.38%)

For the above mentioned power plants, the power purchase has been considered 50% of the quantum that was approved vide MYT order dated 29.5.2014, assuming that they shall start power generation by mid of FY 2015-16. November 2014.

Additionally for the FY 2015-16, the power purchase quantum and rate for the following stations have been taken as equal to that projected for the FY 2014-15; as they are expected to provide power congruently in the FY 2015-16 as well. Consequently, the extra power purchase from HPGCL has been reduced as the power from the following stations is comparatively cheaper.

- PTC GMR KAMALANGA
- PTC KARCHAMWANGTOO

UHBVNL has submitted that the purchase of solar power from SECI that would be available to the extent of 80 MW from the FY 2015-16 onwards has also been considered for estimating power availability.

The rate for power purchase from each station has been calculated by increasing the actual rate of power purchase from each station (projected in estimations for the FY 2014-15) in the same proportion as per the increase in approved power purchase cost of FY 2015-16 w.r.t. the FY 2014-15 vide MYT Order dated 29.5.2014.

The intra state transmission charges have been considered by the Petitioner as approved by the Commission vide MYT tariff Order dated 29<sup>th</sup> May, 2014. The interstate transmission charges of Rs. 805 Crores, as approved by the Commission in the MYT tariff Order dated 29<sup>th</sup> May 2014, has been bifurcated in UHBVNL and DHBVN in the ratio of respective inter-state power purchases of the two utilities in the FY 2015-16. The intra-State transmission losses and Inter-State transmission losses have been considered as 2.50% and 3.82% respectively.

Based on the above methodology, UHBVNL has projected power availability to them in the FY 2015-16 as 23507.25 MUs at a cost of Rs.10, 4346.5 million i.e. at an average rate of Rs.4.44/kWh inclusive of interstate and intrastate transmission charges.

The Petitioner, for the FY 2014-15 and the FY 2015-16, has proposed distribution losses of 28.58% and 24.79% respectively, based on the AT&C losses notified by the Ministry of Power, Government of India for the State of Haryana, considering approved collection efficiency of 98.5%. Thus the bulk power supply cost, in the case of UHBVNL, has been worked out as Rs.4.05/kWh for the FY 2014-15 and Rs.4.34/kWh for the FY 2015-16.

Interest and Finance charges have been estimated by UHBVNL In line with the MYT Regulations, 2012 and taking into account the impact of the Financial Restructuring Plan. UHBVNL has submitted that the restructuring scheme under FRP has already been approved by the Commission as well as by the Government of Haryana and Ministry of Power, Government of India. The UHBVNL has estimated interest and finance charges inclusive of repayment of working capital loans, net of capitalisation, at Rs.16687.5 million and Rs. 20191.6 million respectively for the FY 2014-15 and the FY 2015-16.

For the FY 2014-15 and the FY 2015-16, UHBVNL has estimated depreciation charges based on the estimated additions in GFA as per the capital investment plan for

the FY 2014-15. The transfer of total Capex to fixed asset has been considered as 70%. Based on the Capex done from April, 2014 to September, 2014, the Capex is estimated at Rs.517 Crores in the FY 2014-15. The Capex during the FY 2015-16 has been considered by UHBVNL as approved by the Commission in the MYT Order dated 29<sup>th</sup> May, 2014. For the purpose of projecting depreciation charges for the FY 2014-15, the Petitioner has considered the category-wise actual depreciation rates (as a percentage of opening balance of asset-class-wise GFA for that year). Accordingly, UHBVNL has claimed Rs. 255.61 Crores and Rs. 278.84 Crores in FY 2014-15 and FY 2015-16 respectively towards depreciation charges.

The Petitioner has submitted that they have calculated the various components of O&M expenses as per the methodology, including the indexation mechanism, provided in the MYT Regulations, 2012. Accordingly, the Petitioner has claimed Rs. 1066.47 Crore and Rs. 1157.11 Crore towards O&M expenses for the FY 2014-15 and the FY 2015-16 respectively. The indexation factor has been taken as 8.24% based on WPI/CPI indices for the FY 2012-13 and the FY 2013-14.

The Petitioner has projected the non-tariff income in line with the approved non-tariff income by the Commission in the MYT Order dated 29.05.2014 i.e. Rs. 150.91 Crore and Rs. 161.45 Crore for the FY 2014-15 and the FY 2015-16. The Petitioner has further submitted that the delayed payment surcharge is collected against the receivables from the consumers that are not received in time. As there is a delay in receiving the revenue, the Nigam has to raise additional working capital. Therefore, the revenue received on account of delayed payment surcharges is not an income of the Nigam, rather it is a carrying cost recovered from consumers to pay for the interest on the increased portion of the working capital requirement on account of the delay in recovering the revenue for sale of power to the consumers. Therefore, the Petitioner has requested that the revenue from delayed payment surcharge should not be considered as part of the income of the Nigam.

UHBVNL, in its present Petition, has submitted that 'Return on Equity' is an important source of funding a part of the capital expenditure planned by the Utility in order to improve the distribution system and to achieve further loss reduction and that disallowing ROE on account of the financial performance deprives the Petitioner of an

indispensable source of internal accrual which is more important in view of the financially constrained position that makes it very difficult for it to borrow funds from the market to fund basic capital expenditure. UHBVN has further submitted that they have submitted an application for review of the MYT Regulations, 2012 wherein they have requested the Commission to allow the ROE at a rate of 14%.

In addition to the above, the Petitioner has sought true up of RE Subsidy based on the actual AP sales data for the FY 2011-12, FY 2012-13 and the FY 2013-14. The true up amount for RE Subsidy for UHBVNL and DHBVNL has been worked out as Rs. 3118.5 million, Rs. 925.9 million and (-) 1471.5 million for the FY 2011-12, FY 2012-13 and the FY 2013-14 respectively.

UHBVNL has submitted that the revenue that is expected to accrue from sale of energy has been calculated by them based on the average-billing rate of the FY 2013-14 i.e. as per the category wise actual revenue collected and actual units sold in the FY 2013-14. The average billing rate arrived at as above has been increased by 50 paise per unit (in all categories except agriculture and domestic) as per the increase in tariff that was allowed by the Commission vide the MYT Order dated 29<sup>th</sup> May, 2014. The tariff of domestic category of consumers has been reduced by 38 paise per unit. Accordingly, the revenue for Intra-State Sales have been estimated as Rs. 5399.57 Crore and Rs. 5939.22 Crore for the FY 2014-15 and the FY 2015-16 respectively.

Additionally, the revenue from Inter-State sales projected for the FY 2014-15 and the FY 2015-16 has been considered at 80% of the average power purchase cost including transmission charges. Accordingly, the Inter-State sales revenue per unit has been considered as Rs. 3.33/kWh for the FY 2014-15 and Rs. 3.55/kWh for the FY 2015-16

UHBVNL has submitted that the RE Subsidy has been worked out for the FY 2015-16, after adjusting the average rate of growth on the subsidy approved by the Commission for the FY 2014-15. The AP sales for the FY 2015-16 have been taken at 5% increase with respect to the AP sales in the FY 2014-15. Moreover, the effect of increase in the approved average cost of supply by the Commission in the MYT Order dated 29.5.2014 has also been considered. Accordingly, RE Subsidy for the

FY 2014-15 and the FY 2015-16 have been calculated at Rs. 5284.1 Crore and Rs. 5623.50 Crore respectively. The Petitioner has further submitted that for the present petition the amount of subsidy allocation for UHBVNL has been taken as 71% of the total subsidy amount. This is because the Commission has historically allocated subsidy between UHBVNL and DHBVNL based on the respective revenue gap, which works out to 75% in the case of UHBVNL and 25% in the case of DHBVNL. However, the ratio of 71% has been considered since Jind, primarily an agrarian district, has been transferred to DHBVNL.

The Petitioner has submitted that the revenue from Fuel Surcharge Adjustment (FSA) has been calculated for the existing FSAs (except recovery from the quarterly FSA on account of power purchase cost in the FY 2014-15). The FSA recoveries vide the Commission's Order dated 26<sup>th</sup> June, 2012 and automatic recovery of FSA from September, 2012 (FSA for the FY 2012-13) have been considered in the FY 2014-15 and the FY 2016-17 for the entire year as the recovery of the aforesaid FSAs have been considered to continue over the projection period of the FRP without sunset. It has been added that the FRP stands approved from the State Cabinet and approved in-principle by the Commission as well. The recovery from the FSA for the FY 2014-15 has not been included in the revenue from FSA.

The summary of the aggregate revenue requirement, proposed by UHBVNL, is as under:-

**Table 2.1: Summary of ARR for FY 2014-15 and FY 2015-16 of UHBVN (In Rs. Cr)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
<b>True up Based on Provisional Accounts</b>		<b>Estimated</b>	<b>Projected</b>
Power Purchase Cost		9,381	10,434
O&M Expense		1,066.47	1157.11
Depreciation		255.61	278.84
Interest & Finance Charges		1620.13	2173.61
ROE		217.96	236.88
Other Miscellaneous			
<b>Expenses</b>		<b>12541.45</b>	<b>14280.93</b>
Non Tariff Income		150.91	161.45
<b>Net ARR</b>		<b>12390.54</b>	<b>14119.47</b>
<b>Income / Receipts @ Current Tariff</b>		<b>6658.93</b>	<b>7459.91</b>
<b>Aggregate Revenue Requirement ( Expenses-Income)</b>	<b>2081.60</b>	<b>5731.61</b>	<b>6659.57</b>



Income from FSA		742.78	10.47
Subsidies		3,751.64	3,992.33
Carrying Cost	127.50	346.39	
<b>Gap to be Addressed</b>	<b>2209.09</b>	<b>1583.59</b>	<b>2656.76</b>
<b>Add income due to tariff</b>			<b>880.53</b>
<b>Less :</b>			
Depreciation		255.61	<b>278.84</b>
FSA for FY 2014-15		114.12	
<b>Add:</b>			
Loan Repayment - Capex		262.42	<b>284.10</b>
WC Changes		12.67	<b>100.79</b>
<b>Net Cash Gap / (Surplus)</b>		<b>1488.95</b>	<b>1882.29</b>

To address the revenue gap, the Petitioner has proposed to increase the tariff across the consumer categories by 15% in line with the FRP. Further, in view of the fact that no further funding is available for the FY 2015-16 and also given that repayment of loans are scheduled to begin in the FY 2015-16, the Nigam has proposed to meet the additional funding requirements by scheduled drawl of already approved loans undertaken under FRP. The break-up of the ARR into Wheeling and Supply business, as provided by UHBVNL, is as under:-

**Table 2.2: Wheeling and Retail Supply ARR of DHBVN (MOP Losses)**

Wheeling and Retail Supply ARR of DHBVN ( MOP Losses)	Criteria		FY 2014-15		FY 2015-16	
	Wheeling	Retail	Wheeling	Retail	Wheeling	Retail
Power Purchase Cost	0%	100%	-	9,381	-	10,434
Employee Cost	48%	52%	243	263	263	285
A&G Expenses	42%	58%	34	47	37	51
R&M expenses	70%	30%	78	33	86	37
Terminal Liability	48%	52%	180	195	195	211
Depreciation	82%	18%	229	50	249	55
Interest on Long Term Loan	90%	10%	99	11	109	12
Interest on Short Term Loan	10%	90%	150	1,346	183	1,646
Interest on security Deposit	10%	90%	6	57	7	62
ROE	90%	10%	211	23	228	25
Non-Tariff Income	11%	89%	17	134	18	144
<b>Net ARR</b>			<b>1214</b>	<b>11274</b>	<b>1340</b>	<b>12,676</b>
Revenue (Interstate)	0%	100%	-	1,555	-	1,986
Revenue (Intrastate)	29%	71%	1,566	3,834	1,722	4,217
Agriculture Subsidy	0%	100%	3,752			3,992
Interest from FSA	0%	100%	927			904
Carrying Cost			263			
<b>Total Revenue</b>	<b>1,565.87</b>		<b>9804.39</b>	<b>1722.37</b>		<b>11,099.33</b>
<b>Gap to be addressed</b>	<b>(352.20)</b>		<b>1469.50</b>	<b>(382.71)</b>		<b>1,576.61</b>

## **ARR of DHBVNL**

The Petitioner i.e. DHBVNL, has followed similar methodology as adopted by UHBVNL (as discussed above) for proposing various components of True-up for the FY 2013-14, Annual Performance Review for the FY 2014-15 and revised ARR for the FY 2015-16. Hence, for the sake of brevity, the same are not being reproduced here.

DHBVNL has claimed Rs. 2688.07 Crore towards True-up for the FY 2013-14 and has submitted that they may be allowed carrying cost of Rs. 1646.4 million on the trued-up amount in the ARR and tariff(s) for the FY 2015-16.

The power purchaser quantum (including Jind Circle) has been projected by the Petitioner at 28,174.50 million units and 29,408.86 million units at a cost of Rs. 116404.2 million and 129509.3 million units for the FY 2014-15 and the FY 2015-16 respectively inclusive of transmission charges. Accordingly, the average power purchase cost has been projected at Rs. 4.13 / kWh and Rs. 4.40/kWh for the two financial years respectively.

For the FY 2014-15, the Inter-State transmission losses and the Intra-State transmission losses have been considered by DHBVNL as 3.82% and 2.50% respectively. However, for the FY 2015-16, the Inter-State transmission losses and the Intra-State transmission losses have been considered as 3.82% and 2.48% respectively i.e. as approved by the Commission in the MYT Order.

## **Distribution losses**

For the FY 2014-15 and the 2015-16, the distribution losses of DHBVNL have been projected as 24.48% and 21.96% respectively based on the AT&C losses as notified by the Ministry of Power, Government of India. Accordingly, DHBVNL has estimated the energy available to them at their periphery at 26,999 MUs and 28,228 MUs in the two financial years.

In addition to the above, DHBVNL has further submitted the revised estimate of Capex for the FY 2014-15 and the FY 2015-16 as Rs. 8573.9 million and Rs. 13442.2 million respectively. DHBVNL has also sought True-up of RE Subsidy for the FY 2011-12, FY 2012-13 and the FY 2013-14, based on actual AP sales in the relevant

financial years on the same lines as UHBVNL. The Petitioner has further submitted that the Commission may allocate Agriculture (AP) Subsidy for the FY 2013-14 onwards between two of Discoms (DHBVN & UHBVN) based on actual Agriculture (AP) sales, which would be justified/ realistic approach to bridge the financial gap of DHBVNL to provide supply to AP consumers at subsidised tariff as well as pass such order(s) and or direction(s) for ensuing years.

The aggregate revenue requirement for the control period FY 2014-15 and the break-up into Wheeling and Supply business on the basis of the Allocation adopted by DHBVN is as under:-

**Table 2.3: ARR for FY 2014-15 and FY 2015-16 of DHBVN**

<b>Particulars</b>	<b>FY2013-14</b>	<b>FY2014-15</b>	<b>FY2015-16</b>
Power Purchase Cost	11,640		12,951
O&M Expense	1,117		1,199
Depreciation	253		320
Interest & Finance Charges ( Net)	1,491		1,969
ROE	212		240
Other Miscellaneous			
<b>Expenses</b>	<b>14,713</b>		<b>16,678</b>
Non-Tariff Income	134		150
<b>Net ARR</b>	<b>14,579</b>		<b>16,528</b>
<b>Income / Receipts @ Revenue</b>	<b>9,187</b>		<b>10,140</b>
<b>Aggregate Revenue Requirement ( Expenses- Income)</b>	2,688.07	5,391.60	6,388.27
Income from FSA	1,387.67		1,310.66
Subsidies	3,130.41		3,423.62
Carrying Cost	164.64		429.25
<b>Gap to be addressed</b>	<b>2,852.71</b>	<b>1,302.77</b>	<b>1,653.99</b>
<b>Less :</b>			
Depreciation			320
FSA for FY 2014-15			-
<b>Add:</b>			
Loan Repayment - Capex			300.84
WC Changes			382
<b>Net Cash Gap / (Surplus)</b>			<b>2016.99</b>

**Table 2.4: Wheeling and Retail ARR for FY 2014-15 and FY 2015-16 ARR of DHBVNL**

Wheeling and Retail ARR for FY 2014-15 and FY 2015-16 ARR of DHBVNL Particulars	Criteria		FY 2014-15		FY 2015-16	
	Wheeling	Retail	Wheeling	Retail	Wheeling	Retail
Power Purchase Cost	0%	100%	-	11,640	-	12,951
Employee Cost	48%	52%	378	409	409	443
A&G Expenses	42%	58%	30	42	33	45
R&M expenses	70%	30%	75	32	83	36
Terminal Liability	48%	52%	72	78	72	78
Depreciation	82%	18%	207	45	262	58
Interest on Long Term Loan	90%	10%	102	11	130	14
Interest / Repayment on Short Term Loan	10%	90%	129	1,162	173	1,557
Interest on security Deposit	10%	90%	9	78	9	85
ROE	90%	10%	191	21	216	24
Non Tariff Income	11%	89%	15	119	16	133
<b>Net ARR</b>			<b>1178</b>	<b>13,401</b>	<b>1,371</b>	<b>15,157</b>
Revenue (Interstate)	0% 100%			1,031	<b>1,390</b>	
Revenue (Intrastate)	29%	71%	2,365	5,791	<b>2,537</b>	<b>6,212</b>
Agriculture Subsidy	0%	100%		<b>3,130</b>		<b>3,424</b>
Interest from FSA	0%	100%		<b>1,388</b>		<b>1,311</b>
Carrying Cost				<b>429</b>		
<b>Total Revenue</b>			2365.17	10910.83	2537.35	12,336.88
<b>Gap to be addressed</b>			<b>1,187.06)</b>	<b>2,489.83</b>	<b>(1166.20)</b>	<b>2,820.19</b>

The Petitioner has estimated the cumulative revenue gap from the FY 2013-14 to the FY 2015-16 at Rs 5809.47 Crore after taking into consideration the revenue gaps, holding costs and Subsidies to be availed by them in the respective financial years. The net cash gap in the FY 2015-16 has been estimated by DHBVNL at Rs 2016.99 Crore

To address the above mentioned revenue gap, the DHBVNL has proposed to increase the tariff across consumer categories (except Agriculture) by 15% in line with the FRP.

### 2.3 Public Proceedings

In accordance with the provisions of section 64 (2) of the Electricity Act, 2003, UHBVNL & DHBVNL published their petitions, in abridged form, in order to ensure public participation. The Public Notice was issued by UHBVNL in the Indian Express

(English) dated 7.12.2014 & Hari Bhumi (Hindi) dated 6.12.2014 and by DHBVNL in The Economic Times (English) on 19.12.2014, Dainik Tribune (Hindi) on 15.12.2014 and Dainik Jagran (Hindi) on 14.12.2014, inviting objections / suggestions / comments from the stakeholders. The petitions were also hosted by UHBVNL & DHBVNL on their respective websites i.e. [www.uhbvn.com](http://www.uhbvn.com) and [www.dhbvn.com](http://www.dhbvn.com).

The Commission also issued public notice in the Hindustan Times (English) dated 15.01.2014 and Dainik Bhaskar (Hindi) dated 16.01.2014 intimating the stakeholders and public regarding the date of public hearings. The Public Notice was also hosted on the website of the Commission.

Public hearings, as per the aforesaid notice, were scheduled to be held on 13.02.2015 at 10:00 A.M. in respect of MYT APR/ ARR/Tariff petitions of UHBVNL and 13.02.2015 at 03:00 P.M. in respect of MYT APR/ ARR/Tariff petitions of DHBVNL in the court room of the Commission.

The Public hearings were held as per the schedule i.e. on 13<sup>th</sup> February, 2015 in respect of petitions of UHBVNL and DHBVNL. Some of the objectors who had submitted written objections did not attend the hearing. However, some other persons representing different consumer categories, who had not filed written objections, were present in the hearing. The distribution licensees i.e. UHBVNL and DHBVNL made detailed presentations of their respective ARR proposals in the hearings wherein they highlighted their various achievements and initiatives to improve efficiencies besides dwelling on the projections/proposals made in their respective Petitions under consideration of the Commission.

A summary of the objections filed by the stakeholders and the replies filed by the Discoms thereto is as under:-

#### **2.4 Objections from Stakeholders and response of Distribution Licensees**

The stakeholders who filed objections on the Petitions filed by the UHBVNL and DHBVNL are listed below:-

- a) Faridabad Industries Limited, FIA House, Bata Chowk, Faridabad.

- b) Gurgaon Industrial Association, GIA House, IDC, Mehrauli Road, Opp. Sector-14, Gurgaon.
- c) Delhi Metro Rail Corporation Limited, Metro Bhawan, Fire Brigade Lane, New Delhi.
- d) Sh. R. K. Atoliya, Chief Electrical Distribution Engineers, Northern Railway, Baroda House, New Delhi.
- e) Hindustan National Glass & Industries Limited, Bahadurgarh, Haryana.
- f) M/s Jindal Stainless Limited, Hisar.
- g) Haryana Renewable Energy Development Agency (HAREDA)
- h) Citizens Welfare Association (Regd.), Panchkula.
- i) Shri Sampat Singh, Hisar.
- j) Shri R. S. Chaudhari, National General Secretary, INLD.
- k) Shri Amit Verma, Hisar.
- l) Shri Balwant Singh, and Shri Ravinder Singh, village Jawali, District Kaithal, Haryana.

In addition to the above, Dr. Kirit Somaiya, MP, Chairman, Parliamentary Committee on Energy, vide his letter addressed to the Commission, raised the following issues.

#### **2.4.1 Comments received from Dr. Kirit Somaiya, MP, Chairman, and Parliamentary Committee on Energy**

The Discoms/ Power Supply Companies have asked for further hike of 15% to 30% in the electricity charges is shocking. The prices of imported crude oil have come down from 140 dollar per barrel to 50 dollar per barrel. The prices of imported coal have also come down drastically. The Distributions/Discoms/ Power Supply Companies should have reduced the electricity tariff six months back as prices of both imported crude oil and coal are coming down the last one year. As per our knowledge the Company's cost reduction will be 40% in the FY 2014-15 and further 50% in the FY 2015-16. However, instead of bringing down the prices they are asking for further increase which is nothing but exploitation of small consumers and abuse of monopoly situation.

### **Discom's reply**

The power generation companies passes on the increase of cost of power (produced due to increase in coal/fuel prices on monthly basis based on demand and supply of coal) to the distribution companies which gets legitimately passed on to the consumers. The SERCs of various states revises the tariffs for electricity periodically (every year or once in every two to three years). The new tariff is set based on the cost of production and distribution of electricity. However, the prices of fuel or coal changes throughout the year and the utilities have to manage these uncontrollable cost variations by legitimately passing them to the consumers. The amount of FSA is a cumulative effect of increase in sales and intermittent increase in the power purchase cost.

Thus, on one side as the tariff to be charged from the consumers are fixed by the Commission, any variation in the power purchase cost regarding increase/decrease in fuel prices is taken care by the Fuel Surcharge Adjustment based on power purchase for every quarter by the Discoms. Moreover, true up of such FSA charges, including their applicability and recovery thereto, are also submitted periodically to the Commission for prudence check and necessary approval.

#### **2.4.2 Objections filed by the Railways**

##### **a) Cost of Supply**

The category wise cost of supply has not been provided by the Discoms. The Discom should work out the cost of supply & cross subsidy for railway traction and reduce cross subsidy as per stipulations of National Tariff Policy. Accordingly, the Railway traction tariff should be reduced suitably so as to reduce cross subsidy as per National Tariff Policy.

##### **Discom's Reply**

The tariff applicable to Railways presently is not only within the limits of National Tariff Policy but also lower than the Average Cost of Supply. The

effective tariff for the Railways for the FY 2014-15 at all voltage levels is lower than the average cost of supply.

### **b) Power Purchase Cost**

Average power purchase cost of DHBVNL for the FY 2014-15 and the FY 2014-15 is Rs. 4.13/unit & Rs. 4.40/unit respectively, whereas the average revenue realization from railway traction supply for the 2014-15 (up to October, 20114) is Rs. 6.85/unit. The average unit realization ought to be commensurate with the average power purchase cost after adding reasonable wheeling and transmission charges.

### **Discom's reply**

Railway Traction is a cross-subsidizing consumer; and thus the tariff of Railways should be kept higher than the average cost of supply in order to compensate tariff reduction in case of domestic/agricultural consumers. The element of cross-subsidy is lower than the limit of 20% as envisaged in the tariff policy for the Railway traction. The tariff for the railways has to be rationalized by the Commission keeping in mind the increase in the cost of service and the fact that the cross-subsidy cannot be eliminated immediately resulting in abnormal tariff shock to other consumers.

### **c) Distribution Losses**

For the FY 2014-15 and the FY 2015-16, the distribution losses of DHBVNL have been proposed as 24.46% and 21.96% respectively. The proposed distribution losses for the FY 2014-15 and the 2015-16 by DHBVN as 24.46% and 21.96% respectively, are very high compared to distribution losses of DISCOMs of neighboring states. Further, as per Abraham Committee Report for release of APDRP funds, there are about 169 towns in India with AT&C loss level less than 15%. Therefore, DHBVNL should make extra efforts to reduce the distribution losses and AT & C losses and pass its benefit to the consumers by way of reduction in tariff.



## Discom's reply

In response to the above the DHBVNL has submitted that they have achieved significant loss reduction in past few years through bifurcation and trifurcation of Feeders Program. However, due to the revision of sales to Agriculture category in the FY 2011-12, the distribution losses had gone up to 31.20%. Further the supply hours in rural areas had increased from 11 hours to 14 hours which itself leads to an increase of about 2.8 % in the overall average losses because of over 60 % losses in the rural area.

The distribution loss reduction targets for the Control Period (FY 2014-15 to FY 2016-17) have been set based on the mandatory conditions as per the Central FRP Scheme for receiving matching grant from the Central Government on account of accelerated AT&C loss reduction. The main thrust for distribution and AT&C loss reduction is to continue to pursue the loss reduction programs initiated in earlier years and also increasingly use improved technology to target erring consumers and reduce the losses further during the projection period. The investments being made under R-APDRP schemes are also expected to help in the reduction of distribution loss, especially in urban pockets. The distribution and AT&C loss reduction targets envisaged for UHBVN for the Control Period (FY 2014-15 to FY 2016-17) in the FRP and for the purpose of MYT filing has been summarized below:-

Parameter	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Distribution Losses (%)	27.54	25	23.0	20.9
AT & C Losses (%)	31.53	28.38	25.67	23.26

It has been submitted that the Nigam has constituted theft detection teams to reduce commercial leakages through theft/ pilferage. The outstanding arrears from connected/disconnected consumers are also being recovered by launching arrears recovery drives/schemes and by assigning specific arrears recovery targets to the sub-divisions. From the above submissions it is clear that the Nigam has been making the best possible efforts to reduce the losses and increase the quality of supply and system reliability.

#### **d) Traction Tariff**

The current effective rate, considering all the charges is about Rs. 6.85 per unit for Railway Traction supply. The energy charges should not be at such high rates & should be linked to cost of supply for Railway Traction. Northern Railway has been making timely payment, drawing uninterrupted uniform supply day/night, contributing negligible transmission & distribution loss etc. & is a public utility functioning in the interest of the Nation. It is requested that traction tariff be reduced suitably so that economical mode of transport could be provided to the general public.

#### **Discom's reply**

The Hon'ble Appellate Tribunal for Electricity in its judgments in various appeals had rejected the contention of the Railways that the energy charges recovered from the Railways are high.

#### **e) Demand Charges**

The demand charges @ Rs. 140/- per kVA are being levied for railway traction. It should be fixed at a lower level as Northern Railway avails supply at 66 kV. Railways erect and maintain the infrastructure and provide capacitor banks to improve power factor. All such investments add additional heavy cost per kWh to the Railways besides tariff, whereas utility is not required to invest any extra amount on infrastructure for giving supply to Railway.

#### **Discom's reply**

Considering the techno-economical reasons that higher load should be fed by high voltage level which ensures maintaining balance in the system topology, reliable supply of power and lower overall system loss levels, the supply to the railway traction is made at 132/220 kV. It is obligatory for the high voltage consumer to take supply at 132/220 kV. Therefore, claim of Railways for exemption from the demand charges on this ground is not justified. The Nigam incurs demand related fixed cost for maintaining an electrical system to meet each customer's incidental demand and that in

fairness to all customers this cost needs to be met by the customers that demand this capacity. The demand charges represent the costs associated with the total capacity that the customer envisages and his actual contribution to the systems peak demand. The Nigam is not charging any associated cost in respect of the capital investment made by the railway traction.

The Commission has already made kVAh billing applicable for Industrial and Bulk Supply consumers as well; apart from Railway traction consumers. The Commission has legitimately applied principle of parity while deigning tariff structure of other categories as well. Unlike Railways, the HT Industrial consumers are required to pay additional peak load exemption charges for power consumption during peak load time of the day, whereas railways are being given preferential continuous power supply at lesser demand charges with no additional peak load charges. Hence no further special treatment regarding lowering of demand charges may be allowed to the railways in accordance with the Section 62(3) of the Electricity Act, 2003.

**f) Penalty on over drawl**

The electric traction load of railway is almost constant. The traction load exceeds the limit under the following conditions:-

- i) Sometimes, load fluctuates owing to various factors like traction supply interruptions by Utility, other power supplying authority, public agitations, accidents etc. leading to bunching of trains in a particular zone, which causes maximum demand to exceed for a short spell.
- ii) In case of failure of any of TSS, which happens due to non – availability of supply to the concerned TSS, to ensure uninterrupted movement of trains, the supply is extended from adjacent TSS. Under this condition, the maximum demand sometimes exceeds the contract demand and huge penalty has to be paid for no fault. Railway is also not authorized to put penalty on Discoms for non availability of supply.

In both the cases, the limiting maximum demand is beyond the control of Railways. Therefore, Railways may be completely exempted from payment of load violation charges as a special case.

### **Discom's reply**

The penalty is being imposed on the over-drawl of power to manage the load on the distribution and transmission system. When the over-drawl of power takes places, there is a load strain on the transmission and distribution systems and the Nigam has to manage the load of the system, which results in extra cost to the Nigam. In addition, such over draws by the consumer result in increased wear and tear on the system translating into higher non-routine/un-planned R&M expenses incurred by the Nigam. In addition, over-drawl can damage the transmission equipment of the licensee. In the event of over-drawls, Nigam has to bear additional expenses over any deviation from the schedule of power drawls that are levied by the grid operators in order to maintain system stability. Therefore the penalty imposed on such over drawls by the Nigam is justified.

### **g) Power Factor Rebate for Railway Traction**

With introduction of kVAh based tariff for the FY 2014-15, power factor rebate for all categories of consumers has been discontinued. It is submitted that Railways' traction load is inductive in nature and without adequate capacity of capacitor banks, inherent power factor of traction load is around 0.70 lagging. Therefore, Railways have spent substantial amount on providing capacitor banks to attain the level of high Power Factor of 0.95 and above. This arrangement also compensates the low power factor of other loads connected to the Grid, thereby, increasing Grid stability and reducing the requirement of reactive power as well as Line losses. During the off-peak period, when other types of HT loads reduce considerably, the Railways' traction load on the Grid remains almost constant. This helps in to improve the system plant load factor. Further, Railways has incurred substantial amount in provision of capacitor banks which is beneficial to grid also. Railways

requested to reinstate the incentive for maintaining high power factor rebate for railway traction category.

**Discom's reply**

The Commission had introduced kVAh billing for the Railways; the power factor penalty/incentive has now in built effect in the tariff. Therefore, there is no need of power factor rebate in the railway tariff.

**h) Incentive from Timely Payment.**

Railways have never defaulted in payment of energy bills. Therefore, some incentive for timely payment should be considered.

**Discom's reply**

There is no policy of providing incentive/rebate for timely payments as it increases the financial cost burden to the Nigam and the revenue assessment from the consumer will go down. Timely payment of bills by the Railways, does not entitle them to claim incentive for the payments. The Nigam is conventionally dependant on these funds for further payments to the stakeholders in the entire value chain.

**i) Metering for Railways**

The meter for railway traction supply should be provided at railway traction substation instead of Grid sub Station to minimize line losses. PSPCL has already shifted the energy meters for railway traction from GSS to TSS.

**Discom's reply**

The Northern Railways avails supply at 132/220 kV at which the Nigam's transmission/ distribution system hands over the responsibility to the Railways. Hence, the current metering arrangement where the metering is done at the Nigam's sub-station is pragmatic and in line with the commercial principles. Also, since the downstream network is maintained by the Railways, the losses on this network should also be to their account.

## **j) Payment of ACD/ Consumption Security Deposit**

Railway may be exempted from payment of ACD/Security Deposit as done by Rajasthan or else Railways may be allowed for payment of ACD/Consumption Security deposit in the shape of Letter of Assurance from RBI instead of cash. Railway is exempted from payment of ACD/Security deposit in Rajasthan. In Maharashtra, payment of ACD/ consumption security is through Bank guarantee from RBI instead of cash deposit. In UP, ACD/consumption security above Rs. 50 lakhs is through Bank guarantee. In West Bengal, there is no provision of ACD/Security deposit.

Further, Railway submitted that Department of Economic affairs, Ministry of Finance conveyed no objection in changing the nomenclature of the “Letter of Guarantee” to “Letter of Assurance” for the purpose of submission of Security Deposit to State Electricity Boards (SEBs)/DISCOMs. Also, Reserve Bank of India has confirmed for issuing of “Letter of Assurance” in lieu of “Letter of Guarantee” to Railways for the same. Therefore, Railways requested that railway it may be exempted from payment of ACD/Security deposit as in Rajasthan else may be allowed for payment of ACD/Consumption Security deposit in the shape of Letter of Assurance from RBI.

### **Discom’s reply**

Railways had submitted a letter for exemption from Advance Consumption Deposit (ACD) and had requested the Commission for consideration. The Commission, vide its memo no. 6073/HERC/Tariff/82 dated 06.12.2012, had intimated that the request made by the Railways was not feasible because as per the prevailing instructions, Advance Consumption Deposit (ACD) is to be deposited by the consumer in cash only and there is no provision such as Bank Guarantee as a medium to pay ACD in the HERC (Duty to supply electricity on request, Power to recover expenditure incurred in providing supply & Power to require security) Regulations, 2005. Hence, Northern Railways should abide by the Regulations and the ACD should continue to be deposited in cash or through demand draft.

### **k) Disparity between Traction tariff for Railway & DMRC**

In the tariff order for FY 2014-15, tariff for DMRC has been fixed much lower compared to railway traction, while both Railways & DMRC are operating in the railway transport sector. DMRC is catering to commuter services in NCR region only, whereas Railways provides essential commuter services much beyond Delhi, meeting the aspirations of larger population of Haryana State commuting to Delhi at a very low fare. Fixing traction tariff higher than DMRC on the ground that DMRC provides state of art & preferred mode of transport for the public is not justifiable. The disparity between tariff for railway traction & DMRC should be removed and traction tariff should be at par with tariff for DMRC.

#### **Discom's reply**

Determination of tariff is under the purview of the Commission and thus Nigam is charging the tariff as determined by the Commission from time to time. The Nigam requests the Commission to pass a judgment considering Nigam's dismal financial health in this regard; wherein as such the Nigam would not be able to bear any further revenue losses on account of reduction in electricity tariffs.

### **l) Provision of alternative supply arrangement for Railway Traction and levy of load violation charges.**

Sometimes in case of incoming supply failures, Railway have to extend the feed of Ballabgarh/TSS in the feeding zone of failed TSS of other Discom and have to pay load violation charges for exceeding the sanctioned contract demand for the circumstances which are beyond the control of the Railways. It is submitted that whenever there is a supply failure from other Discom, then till such time the supply failure persists, the instances of maximum demand exceeding contract demand due to feed extension of Ballabgarh/TSS should be ignored & no load violation charges should be levied for that period.

### **Discom's reply**

When the over drawl of power takes places, there is a load strain on the transmission and distribution systems and the Nigam has to manage the load of the system which results in extra cost to the Nigam. Also, such over drawls by the consumer result in increased wear and tear on the system translating into higher non-routine R&M expenses incurred by the Nigam. Hence, the levy of over-drawl/peak violation charges is a deterrent mechanism to ensure grid stability and operation within the rated parameters of the system.

### **m) Revenue Gap**

DHBVNL has projected a total revenue gap of Rs. 3898.72 Crore consisting of the estimated revenue gap for FY 2014-15 along with the projected ARR of FY 2015-16 including recovery of the un-recovered revenue gap for the FY 2013-14. To cover this revenue gap, DHBVNL has proposed 15% increase in tariff across all the consumer categories. It is submitted that the revenue gap of DHBVNL should be supported by the Government Subsidy and there should be no tariff hike and tariffs of genuine consumers like railway should not be increased.

### **Discom's reply**

The finalisation of the electricity tariffs for various consumer categories is the prerogative of the Commission. The Nigam has proposed to increase the tariff across the categories by 15% in line with the Financial Restructuring Plan FRP (that stands approved from the State Cabinet and approved in-principle from the Commission). Further, as proposed in the APR submitted for the FY 2014-15, by the Discom to the Hon'ble Commission; in view of the fact that no further funding is available for FY 2015-16 and also given that repayment of loans are scheduled to begin in FY 2015-16, the Nigam proposes to meet the additional funding requirements by scheduled drawl of already approved loans undertaken under FRP.



**n) Grant of Short Term Open Access (STOA) for Diwana & Ballabgarh Railway Traction Sub-Stations (TSSS) of Northern Railway**

Northern Railways had processed Short Term Open Access (STOA) applications as per Haryana Electricity Regulatory Commission (Terms and Conditions for Grant of Connectivity and Open Access for Intra State Transmission and Distribution System) Regulations 2012, with HVPNL for Diwana & Ballabgarh TSSS of Northern Railways. But even after about 6 months, HVPNL has yet not granted their consent for the same and linking it with other issues. Railways requested to issue suitable directives to HVPNL authorities to expedite granting consent of STOA for Diwana & Ballabgarh TSS of the Northern Railway.

**Discom's reply**

The matter relates to HVPNL and thus the Nigam has no comments to be submitted on the same.

**o) Non Traction Electric Supply**

There is single point metering at all these connections and maintenance of total infrastructure of sub stations, distribution network, individual metering/billing, internal recoveries etc. is Railway's responsibility. Even distribution losses on this network are Railway's liability, which is a substantial part of the energy supplied. Railways requested that a rebate of 15% be given over total energy bill towards maintenance and operation of distribution network, billing, and metering, financial recovery and distribution losses. The similar rebate is provided by NDPL, BSES etc.

**Discom's reply**

The Nigam does not agree with the contention of the objector for providing rebate on account of maintenance and operation of the distribution network, billing, and metering, financial recovery as it is the responsibility of the bulk supply consumer to bear such cost. The tariff charged by the Nigam is for the distribution network owned and managed by the Nigam. The Nigam

does not levy any charges for maintenance and operation of the distribution network that is exclusively maintained and operated by Railways.

**p) Calculation of contract demand**

Railway normally provides one standby transformer at each of the sub-station and as such, the sum of the rated capacity of 11 kV transformers should not be taken as contract demand for the purpose of levy of monthly minimum charges. Other State Electricity Boards do consider the Contract demand/ Maximum demand for this purpose (and not the connected load) and the same practice should be followed by DHBVN also.

**Discom's reply**

Minimum Monthly Charges are not levied on the Northern Railways presently. Instead the fixed charges @ Rs. 140 per kVA or part thereof of the billable demand, as per the tariff schedule notified by the Commission vide schedule of tariff for FY 2014-15 for supply of electricity by distribution licensees i.e. UHBVNL and DHBVNL in Haryana vide MYT order dated 29.5.2014, is levied. So, the objection of the Northern Railways is devoid of any merit.

**q) Time limit for repair**

A time limit for the repair and installation of kWh/ kVAh/ MDI meter by DHBVNL may be fixed.

**Discom's reply**

The Nigam persistently endeavours to replace the defective meters in minimum possible timeframe; the time incurred for the replacement of defective meters depends upon the availability of meters in the stores of the Nigam. Moreover, the Nigam endeavours following the Haryana Electricity Supply Code Regulations, 2014 notified by the Commission in this regard.

**r) Billing**

Northern Railway is having number of connections at various locations. Separate bills are being issued by different Executive Engineers having different bills recovery points. A consolidated single bill can be issued incorporating consumption of all such connections to Railway. This shall avoid passing of each and every bill and their delivery to different agencies and shall therefore enable payment in time.

**Discom's reply**

Nigam has noted the point put forth by the consumer regarding the issue of consolidated bill and would try to consider the same in due course of time. However, provision has been made by Discom wherein the billing information of all the consumers is available online on a real time basis. This system of online billing has commenced from 09<sup>th</sup> January, 2014.

**s) Revision of Contract Demand**

Revision of contract demand should be made effective from the date of application without linking it with other issues.

**Discom's reply**

Revision in the contract demand shall be made effective from the date of approval and not from the date of application since the Nigam has to ensure the capability of the network before allowing for any up gradation of the contract demand.

**t) Release/enhancement of connections**

Minimum time should be fixed for release /enhancement of the connections.

**Discom's reply**

Framing of regulations and tariff fixation is the sole prerogative of the Commission and the Commission may decide on the same accordingly.

Nonetheless, the Nigam shall endeavour following the Haryana Electricity Supply Code Regulations, 2014 notified by the Commission in this regard.

**u) Meter testing charges**

No meter testing charges should be levied for new connections/ enhancement of the load.

**Discom's reply**

The meter testing charges are levied only when the meter is owned by the consumer and no such charges are applicable when the Nigam supplies the meter. Nonetheless, the Nigam would endeavor following the recently notified Electricity Supply Code Regulations, 2014 dated 8<sup>th</sup> January, 2014 by the Commission in this regard.

**2.4.3 Objections filed by DMRC**

**a) Electricity Tariff for DMRC:**

In November, 2006 before opening of the section in 2010 that DMRC signed an agreement with Government of Haryana for the electricity supply. The relevant para for the water supply and electricity tariff reads as under.

*“Government of Haryana shall provide water at no profit/ no loss basis to Delhi Metro Rail Corporation Limited. Government of Haryana shall also arrange to provide electricity on cost price from Transco, under open access system. Delhi Metro Corporation limited shall pay wheeling charges as decided by Haryana State Electricity Regulatory Authority as applicable from time to time.”*

Further, average unit rate paid by DMRC in FY 2013-14 and 2014-15 (till Nov. 2014) has worked out to be Rs. 6.50 & Rs. 6.94 respectively vis-à-vis purchase cost of Rs. 4.21 & Rs. 4.31. With the proposed increase of 15% in tariff, the average unit rate for FY 2015-16 works out to be Rs. 8.10/kVAh.

DMRC does not make profit and has incurred cumulative losses of Rs. 1170 crores till 31.03.2014. DMRC will not be able to sustain any additional increase in tariff charges without passing it in to the consumers. Further, as per the petition submitted by DHBVNL, the purchase cost of DHBVNL is Rs. 4.59/- and DMRC is already paying higher rate to DHBVN which is against the agreed principle in fixing DMRC tariff.

DMRC submitted that the tariff for metro is to be fixed in accordance with the agreement with Government of Haryana and requested to fix up the tariff for DMRC at the cost price of DHBVNL. DMRC also requested to advise DHBVNL to refund the excess amount already paid by DMRC in previous years.

#### **Discom's reply**

Tariff determination is under the purview of the Commission. The tariffs for the Commission has fixed DMRC vide their tariff order for the FY 2014-15 dated 29<sup>th</sup> May 2014, which is being levied on to DMRC. Further, the Commission in tariff order for FY 2014-15 avers that as per National Tariff Policy, the tariff has to be reckoned with the average CoS of the Discoms. The tariffs fixed for various categories by the Commission are in line with National Tariff Policy. Further, any profits if made by Discom are adjusted in the subsequent tariff order.

#### **b) Imposition of Electricity Duty and Municipal Tax**

As per the Clause 14 of the agreement signed by DMRC with Government of Haryana for the electricity supply, DMRC shall be exempted from all taxes (as Property tax, Electricity Tax, Advertisement tax, Labour welfare cess and other state taxes) in the state. Further, Financial Commissioner and Principal Secretary to Government of Haryana, Power Department vide notification dated 09.11.2006 exempted Delhi Metro Rail Corporation Limited from the payment of electricity duty on power of Haryana power utilities consumed during traction by the Delhi Metro Rail Corporation Limited. DHBVN from April 2012 DHBVN has started levying Electricity Duty

and Municipal Tax in their electricity bill which is violation of the spirit of the agreement made between DMRC & Govt. of Haryana. DMRC submitted that Electricity Duty and Municipal Tax may not be levied on DMRC by DHBVN.

**c) Issue pertaining to Open Access system of DHBVNL**

DMRC has engaged M/s Power Trading Corporation for open access system for its Sushant Lok Substation at Gurgaon. An application dated 7<sup>th</sup> October, 2014 was filed to CE (SO&C), HVPNL. At present it is with the office of SDO DHBVN (Sector 52 A, Sub Station) for clearance/ permission. Same has not been cleared, on the pretext that DMRC is not paying Electricity Duty & Municipal Tax. The clearance for application filed by M/s PTC on behalf of DMRC may please be granted by DHBVN at the earliest, as these taxes are not payable by DMR.

**2.4.4 Objections received from Faridabad Industries Limited (UHBVNL true up).**

**a) O&M Expenses**

As per 13.2 of MYT Regulations, 2012, truing-up of uncontrollable items shall be carried out at the end of each year of the control period through tariff resetting for the ensuing year and for controllable items shall be done only on account of force majeure conditions and for variations attributable to uncontrollable factors.

As given in the true-up petition of UHBVNL, UHBVNL has spent Rs 19.52 crore more on employee expenses, 17.86 crore more on A & G expense which need to be disallowed by the Commission in view of regulation 45.3 of the MYT Regulations and note 2 of the regulation 45.3.

Further, the licensee has not given any reasons or justification regarding variations in these costs, Commission must consider disallowing these costs while considering true up for FY 2013-14 in line with legal provisions stipulated in tariff regulations.

Further, actual R & M expenses of UHBVNL are very low at Rs 38.11 crores against the approved figure of Rs 98.22 crores as per the tariff order dated 30<sup>th</sup> March 2013. UHBVNL is not spending enough on R & M expenses as a percentage of total ARR. It should improve its operational performance with judicious expenditure on R & M.

### **Discom's reply**

The true up petition for yearly true up purpose for the FY 2013-14 has been submitted considering provisional Annual Accounts for the period from 1<sup>st</sup> April 2013 to 31<sup>st</sup> March 2014, and the Discom has already submitted in the true up petition that the finalized accounts shall be submitted to the Commission as soon as they are audited.

The increase in O&M expenses is mainly on account of employee costs and terminal liabilities that are beyond the control of the Discoms. Hence the same needs to be approved even because the Commission has also agreed to consider the "Terminal liabilities with regard to employees on account of changes in pay scales or dearness allowance due to inflation" as an uncontrollable parameter vide the HERC MYT Regulations, 2012.

### **b) RPO Obligation:**

The Commission, in its tariff order dated 30<sup>th</sup> March 2013, had stipulated the RPO obligation for the Discom as 1232.58 MUs. The Commission had further directed that any shortfall in meeting RPO shall be treated in accordance with the Regulation 64 of HERC (Terms and Conditions for determination of Tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2010 and Discom shall be penalized accordingly which is fully supported by MYT regulations 2012 and also regulation 59.8 of MYT Regulation clearly stipulates that distribution license is obliged to follow renewable energy regulations and is to be penalized accordingly in case of any shortfall.

As per the present petition, there is hardly any energy purchase from renewable energy sources. The Commission is therefore, requested to treat the violation in accordance with the provisions of regulations 65, 66 and 67 of HERC Renewable Energy Regulation on RPO and penalize the DISCOM accordingly.

### **Discom's reply**

With the existing renewable installed capacity as on date, 21 MUs is expected to be generated from solar power projects and 450 MUs is expected to be generated from non-solar projects. Thus, HPPC expects to receive a total generation of 471 MUs if the power projects run at maximum PLF against the target of 1610 MUs for the FY 2014-15.

With modification in the Solar RPO for Haryana DISCOMS from 0.25% of the overall RPO in FY 2011-12 to 0.25% of the entire energy consumption in FY 2014-15 has drastically increased the RPO quantum to an extent which seems unrealistic to achieve, keeping in view existing as well as planned solar generation in the state. If it is made obligatory for the DISCOMS to purchase solar power to this extent, it would push up the cost of power purchase significantly since the remaining RPO quantum would have to be sourced from solar power stations located outside the state, or through Renewable Energy Certificates (REC) purchased from the Exchange at tremendously high rates. Such exceptionally high cost of power purchase would ultimately have to be passed on to consumers of the state.

Certain renewable capacity addition was planned in the state but failed to materialize, making it difficult for the Haryana Discoms to procure renewable power in order to meet the RPO. For instance, out of the 21 biomass power projects of 192.9 MW allotted in FY 2006-07, only 5 projects of capacity totalling 50.9 MW are under execution/consideration while the remaining projects have been cancelled.

Purchase of solar power to meet its RPO would push up the cost of power purchase significantly since the remaining RPO quantum would have



to be sourced from solar power stations located outside the state, or through purchase of Renewable Energy Certificates (REC) from the Exchange at high rates. Such exceptionally high cost of power purchase would ultimately have to be passed on to consumers of the state. Furthermore, if the RPO backlog of the FY 2011-12 to FY 2014-15 is not relaxed by this Commission then the consumers of the state will have to bear extra financial burden.

However, the following steps have already been taken by HPPC in order to meet the RPO targets:

### **Solar RPO**

- HPPC has signed Power Sale Agreement (PSA) with Solar Energy Corporation of India (SECI) on 22.8.2014 for purchase of 80 MW of solar power @ Rs. 5.5/kwh for 25 years. Considering 19% PLF, HPPC will get 133 MUs in a year.
- HPPC has floated NIT for purchase of 50 MW of solar power whose Financial bid is under finalization. With this power available, HPPC will get 83 MUs of solar power in a year.
- After finalization of the above tender, another tender for 150 MW solar power will be floated.
- Haryana DISCOMs intend to procure 250 MW of solar power under JNNSM Phase II batch III scheme at a tariff of Rs. 5.50 in the first year which will increase by Rs. 0.05 every year and will be capped finally at Rs. 6.50 in the 21st year
- Haryana has given consent to MNRE to purchase 150 MW of solar power bundled with thermal power. The bundled power would be made available to DISCOMs through PSA valid for 25 years. The first year bundled tariff would in any case be less than Rs.4.00 kw/hr.
- HAREDA has floated Solar Policy 2014 vide which they will invite tender for 100 MW solar power in two phases. This power too will be purchased by HPPC.

- HAREDA expects that 200MW of solar power will be purchased through Rooftop solar panels.
- MNRE has floated concept paper for erecting solar panels on Canal Tops/banks. HPPC has written to Irrigation Department, Haryana to explore the possibilities of erection of such solar panels on Haryana canals.

### **Non-Solar RPO**

- HPPC has purchased 44.02 MUs of Hydro power (renewable power) on short term basis from HPSEB in the months of August & September and is in the process of purchasing 200 MUs (approximately) of more such power till March 2014.
- It is pertinent to point out that HPPC had floated tender for purchase of 100 MW of non - solar power but the NIT could not mature due to poor response from the bidders.
- Further, HPPC has signed PPA with Biomass based Renewable Energy Developers whose projects are yet to be commissioned.

In addition to above, shortfall if any in meeting RPO targets will be met by purchasing RECs at the end of financial year.

### **c) Power purchase Costs**

UHBVNL has asked for a true up of power purchase cost of Rs. 8913.31 Cr for FY 2013-14. It has indicated the average actual per unit cost as Rs. 4.22/- against the approved average power purchase cost of Rs 3.36/- per unit by HERC in its tariff order dated 30<sup>th</sup> March 2013. However, as per MYT Regulations 8.3 (b) of 2012, power purchase cost for short term power and Unscheduled Interchange (UI) is a controllable parameter and any cost escalation on account of short term power and UI cannot be allowed to pass on in the ARR of the distribution licensee.

The actual power purchase cost of UHBVNL for FY 2013-14 has gone up by Rs 1924 cr though total power purchase quantum in the state of Haryana has come down by 7224.5 MUs for both DISCOMs. Higher actual power purchase cost for UHBVNL of Rs 4.22 per unit is mainly on account of short term power purchase at an average rate of Rs 3.73 per unit which is higher than average price of Rs 3.36 per unit approved by the Commission. Further, the Commission had not allowed any short term purchase or drawl under UI mechanism for estimating power purchase cost for UH and DH for FY 2013-14. The HERC MYT Regulation 2012 do not allow the provisions of pass through of quantum and cost of short term power purchased by the DISCOMs without the approval of the Commission.

FIA requested not to consider and allow any power purchase cost incurred on account of short term power purchase for the FY 2013-14 and to disallow any illogical and imprudent procurement of power resulting in trading loss and true up ARR for FY 2013-14 only after adjusting the FSA already collected from the consumers.

The power purchase cost of UHBVNL and DHBVNL is considerably higher than that of some other DISCOMs like MP and Rajasthan as a percentage of their total ARRs.

FIA also requested to guide the distribution licensees of Haryana to carry out a better power procurement planning in short, medium and long run so as to arrive at an optimum power purchase cost.

### **Discom's reply**

The power generation companies passes on the increase of cost of power (produced due to increase in coal/fuel prices on monthly basis based on demand and supply of coal) to the distribution companies which gets legitimately passed on to the consumers.

The prices of fuel or coal changes throughout the year and the utilities have to manage these uncontrollable cost variations by legitimately passing

them to the consumers. The amount of FSA is a cumulative effect of increase in sales and intermittent increase in the power purchase cost.

The Discoms-Uttar Haryana Bijli Vitaran Nigam (UHBVN) and Dakshin Haryana Bijli Vitaran Nigam (DHBVN) apply Fuel Surcharge Adjustment as a pass-through cost to its consumers in accordance with HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 on a quarterly basis.

Moreover, the Nigam has already provided details of the source wise power purchase quantum and actual rates per unit to the Commission as a part of the APR filings. There has been no power procurement done from any un-approved sources of power. During peak hour season, the Haryana Power Purchase Cell has to purchase power at extra high rate to meet the requirement of tube well consumers.

The FSA for FY 2013-14 has been calculated based on audited accounts and the true up of the same has already been submitted to the Commission. Moreover, the quantum of FSA for FY 2013-14 has been higher owing to the reasons that were accepted by the Commission vide HERC order dated 14.7.2014 (in the matter of Petition under section 94 of the Electricity Act 2003 read with Regulation 78 (1) & (2) of Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 seeking review of Order dated 30th March, 2013 passed by the Commission in the matter of Determination of Distribution and Retail Supply ARR and Tariff for FY 2013-14.

Moreover, the Commission had already allowed part recovery of tentative FSA for FY 2011-12 @ 40% of 24463.7 million vide tariff order for FY 2013-14. However, the Commission had allowed funding of the remaining FSA (Rs. 14678 Millions) through borrowings vide tariff order for FY 2014-15.

The discoms have already submitted the FSA quantum to be recovered presently along with the status of recovery of existing FSAs till

September 2014 to the Commission for perusal and further directions to the same.

**d) Employee Expenses**

Actual employee expenses of UHBVNL for the true up has been shown as Rs. 814.51 cr for the FY 2013-14. As per HERC MYT Regulations 2012, Commission may kindly approve only the expenses as approved in its tariff order dated 30<sup>th</sup> March 2013 and disallow any expenses beyond that.

**Discom's reply**

The Commission has notified the MYT Regulations, 2012 and on perusing the Note-6 of the para 57.3 (b) of the said regulations, it may be seen that the "Changes in the pay scales of employees necessitated on account of pay revision by Pay Commission or by the State Government orders shall be considered by the Commission for true-up during the mid-year performance review and true-up". Thus all legitimate expenses towards the existing employee costs are requested to be considered on actual basis by the Commission.

**e) Administrative & General Expenses**

UHBVNL has requested for approval of net A&G expenditure of Rs.75.46 crores on actual basis. However, as it can be allowed only on normative basis, Commission may allow this expense to the extent of approved expenditure of Rs 57.6 crores as per its order dated 30<sup>th</sup> March 2013 and the balance may be disallowed by the Commission.

**Discom's reply**

While estimating the A&G expenses for a particular year, the discom has to follow the postulates of the HERC MYT Regulations 2012. However, the actual expenses are always subject to prudence check and may be allowed once the Commission gets convinced to the genuine and legitimate approvals of the same. At the time of MYT Tariff petition submission, the

latest Consumer Price Index (CPI) and Wholesale Price Index (WPI) was available only for FY 2011-12 and FY 2012-13 with few month of FY 2013-14. Hence, to get inflation index, the inflation data of FY 2011-12 and FY 2012-13 had been utilized for computation of inflation factor, which comes out to be 9.21%.

Moreover, any expenditure incurred during the year against the approved quantum by the Hon'ble Commission for the respective year is subject to True Up at the end of the year. Hence, the A&G expenses are also subject to true up at the end of the FY 2013-14.

**f) Capital Expenditure**

UHBVNL has requested for approval of capital expenditure of Rs. 546.66 crores against the approved capital expenditure of Rs. 457.49 crores. As per regulation 8.3(b) of the MYT Regulation 2012, capital expenditure is a controllable parameter and cannot be allowed to be passed on actual basis and regulation 13.2 provides that Truing-up of controllable items shall be done only on account of force majeure conditions and for variations attributable to uncontrollable factors. Further, Utility has not provided details of capital expenditure scheme wise for prudent analysis by the Commission for checking before any expense on this account is allowed in line with the existing Regulations.

As DISCOM has not indicated any reasons or justifications for higher cost of capital expenditure and nor there were any force majeure conditions, capex of only Rs 457.49 crores may be allowed by the Commission.

**Discom's reply**

The capital expenditure is incurred by the discoms to strengthen power distribution system in the state, so as to ensure more power with greater reliability to meet the increasing demand. The total installed power generation capacity (from all sources, including state's own projects and long term arrangements from other sources) in Haryana has increased to over 10,000

MW. To meet the increasing demand of power in the state, the power utilities are likely to make arrangements for an installed generating capacity of 18,000 to 19,000 MW by 2016. Accordingly, discoms have judiciously planned the capital expenditure over the next three to four years, for which integrated planning has already been initiated to match the increase in demand of the state. The utilities have plans to construct new sub-stations of various levels and augment capacity of existing sub-stations in the next three years and the transmission and distribution network is also being strengthened.

Thus, on a real time basis, any increase in capital expenditure may differ from the approved expenditure in view of the variations in various assumptions.

**g) Interest on working Capital and borrowings**

UHBVNL in its true-up petition has asked for the interest on the borrowing on working capital as Rs. 1444.68 crores against the Commission's approved figure of Rs 127.71 crores. As per regulation 8.3 (b) of MYT regulations 2012 notified, interest and finance charges are a controllable parameter and cannot be allowed on actual basis. In addition, regulation 12.1 of MYT Regulations provides for incentive and penalty framework. Further, 12.2 and 12.2 (a) of these Regulations clearly stipulate that interest on working capital would be subjected to Incentive and Penalty frame work when it is less or exceeds the levels specified by the Commission. Also in line with regulation 22 of ibid Regulations on working capital, the requirement of working capital is worked out by the Commission after due diligence and considering various factors and any excess cost incurred on this is be subjected to a penalty frame work and treated accordingly.

FIA has requested to allow the interest and finance charges to the tune of Rs 127.71 crores only and disallow the balance.

## **Discom's reply**

The Nigam is compelled to borrow short-term loans in order to meet its basic minimum expenses. In the absence of any tariff hike for a period of nine years, i.e. until September 2010, the Nigam was faced with a situation where the cost of supplying power was far more than the tariff being realized from consumers, in which case the Nigam had to make ends meet by borrowing short term at whatever rates were prevalent in the market at that time. However, the Commission has been allowing working capital equivalent to only one month's ARR. The Nigam has been badly constrained by lack of funds on account of the tariff being much lower than the cost of supplying power and hence had no other option but to borrow short-term loans in order to meet its duties and obligations to supply power as a licensee.

The Nigam is facing additional financial burden on account of disallowance of the major part of its working capital requirement, due to which the Nigam has to bear the interest cost of short-term loans borrowed from various financial institutions. Hence, disallowance of interest on working capital is leading to further increase in the interest cost (through short-term borrowings to finance daily cash deficit), thereby creating a vicious cycle.

Therefore, the Nigam requests the Commission as well as consumers/stakeholders to keep in consideration the fact that the Nigam has no option other than short-term borrowings to continue its operations, in view of the inadequate tariff and regulatory disallowances.

With regard to the outstanding receivables, it is pertinent to mention that the maximum defaulting amount pertains to rural consumers of the Nigam's area of supply. In rural areas it has been noticed that people hold back on bill payments hoping for surcharge/arrear waiver schemes of the kind that have been launched in the past. Often, due to political compulsions, the Nigam has not been able to recover these net receivables. However, the Nigam is trying its best to constantly organize campaigns to recover outstanding dues.



## **h) Interest on Consumer security deposits**

UHBVNL in its true-up petition has asked for interest on deposits of Rs 63 crores against the approved costs of Rs. 39.31 crores by the Commission. As it is a controllable parameter and has to be allowed only on a normative basis, the Commission may kindly consider allowing only Rs 39.31 crores in line with MYT Regulations, 2012.

### **Discom's reply**

The Commission has clarified the interest to be paid to the consumer for the Security Deposit vide 'The Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 1<sup>st</sup> Amendment, 2014.

Thus, the amount of interest on deposits of Rs 63 crores has been based on the actual figures from the provisional accounts of the discom and thus needs to be allowed on actuals.

## **i) Interest and finance Costs**

UHBVNL in its petition has given the total actual interest and finance cost as Rs. 1608.80 crores for FY 2013-14 against the approved figures of Rs. 357.327 crores. Interest and finance costs are a controllable parameter and have to be allowed as per cost approved by the Commission in line with the regulation 8.3(b) of MYT Regulations. The Commission may therefore, disallow any charges claimed by the Discom beyond Rs. 357.327 crores.

### **Discom's reply**

The discoms had proposed Rs. 1790.6 Crores as the estimated Interest and Finance Expenses for FY 2013-14 in the ARR petition for FY 2013-14; whereas the Commission had approved Rs. 357.33 crore since the interest on working capital loans was not allowed. In actual, the Interest and Finance Expenses have been very close to the estimations done by the discoms and thus the same are requested to be approved. This is because the purpose of providing interest on working capital is to service the cash flow

necessary for the discoms to conduct its business activities namely to take care of the time period between incurring of the cash expenditure by the discoms and the realization of the revenue by the discoms.

The interest on finances charges and the interest on working capital are two separate heads in the total annual revenue requirements to be allowed to the discoms. The purpose of both of the above is different. While the interest charges are provided to service the Long Term Loans taken by the discoms for Capital Expenditure purposes, the interest on working capital is provided to service the working capital requirements of the capital.

**j) Depreciation:**

UHBVNL has claimed total depreciation of Rs. 207 crores during FY 2013-14 as against the approved cost of Rs. 175 crores. Depreciation is a controllable parameter and has to be allowed as per cost approved by the Commission in line with the regulation 8.3(b) of MYT Regulations. The Commission may disallow any depreciation charges claimed by the Discom beyond Rs 175.03 crores.

**Discoms reply**

The actual opening GFA for FY 2013-14 is at Rs. 5470.89 Cr. and closing balance is at Rs. 5969.59 Cr.; the corresponding gross depreciation for FY 2013-14 works out to be Rs. 236.51 Cr. and net depreciation (after adjusting for depreciation on consumer's contribution and grants of 29.02 Crores) comes out at Rs. 207.48 Cr.

**k) Return on Equity:**

UHBVNL has claimed a return on equity of Rs. 228.24 crores for FY 2013-14. The Commission in its tariff order dated 30<sup>th</sup> March 2013 for FY 2013-14 had not allowed ROE to the licensee on account of their poor performance and erosion of net worth due to accumulation of losses. Despite being denied return on equity in the tariff order for FY 2013-14, the licensee has again claimed ROE of Rs. 228.24 crore without any significant

improvement in performance. The interest subsidy may be approved to the licensee under the National Electricity Fund (NEF), if ROE is allowed. However, the licensee has availed benefits like interest subsidy under NEF in the past, but the performance of the utility has not improved. It is extremely important to link the ROE with the improvement in efficiency of the licensee, failing which no ROE may be given to it. Passing on ROE without improvement in performance will put additional tariff burden on the consumers. Also regulation 20.1 of MYT Regulations 2012 stipulates that return on equity shall be decided by the Commission on the basis of overall performance of the licensee.

FIA requested the Commission to take a judicious decision in the matter and disallow the RoE for FY 2013-14 in consonance with its own earlier tariff orders and the provisions given in the tariff regulations.

#### **Discom's reply**

The norms set by the MYT Regulations, notified by the Commission on 05.12.2012, provides a maximum limit of 14% per annum.

Return of Equity ROE is very vital source of funding a portion of Capital Expenditure planned by the Utilities in order to improve the system and to achieve further loss reduction. Disallowing ROE on the context of financial performance deprives the utilities of an indispensable source of internal accrual which is more significant in view of the financially constrained position that creates a very difficult situation while endeavoring to borrow funds from the market to fund basic capital expenditure.

Moreover this is significant from the fact that the framing of FRP and notifying the same after approval of the state cabinet for the forthcoming period including the MYT control period envisages recapitalization resulting in recouping of negative net worth over the turnaround period. Not allowing ROE would further delay the turnaround as envisaged under FRP scheme for the power discoms of Haryana. Thus in order to ensure the efficient development as well as financial viability of DISCOM, the Commission must

allow at least a minimum percentage of return on equity to the distribution companies.

**I) Expenditure due to other debts**

UHBVNL has claimed an expenditure of Rs. 13.11 crores and Rs 10.3 crores on account of other debts like miscellaneous losses, unrealized surcharge, etc.

There is no scope for recovery of expenses on account of such under performance and incompetency on part of DISCOM and there is clear provision in Regulation regarding bad and doubtful debts as given at regulation 64 of HERC MYT Regulations 2012.

Discom has not been mandated to waive off any kind of bad debts and instead charge the same from the consumer through its ARR. This is absolutely against any norms of commercial transactions. The waived off bad debts cannot be loaded on any consumers; it has to be suffered by Discom as a loss. This results in decrease in collection efficiency, increase in commercial losses and overall worsens the scenario of AT & C losses, which is the ultimate benchmark for the health of any distribution utility. Moreover, the honest consumer, who is diligently and regularly paying his dues, has to bear the brunt of defaulters and pay for their misdeeds. Further the facility of waiving off creates a bad habit amongst consumers expecting this undue and unfair advantage every time from the government authorities and promotes wastage of energy, thereby, resulting in more distribution losses. There is no provision for waiving of any kind of electricity dues and the Discom should be sternly warned that they must take recourse to all possible means of recovery against the defaulters.

As there is no justification given by licensee, the Commission is requested not to consider this expense in the ARR while truing up the costs for the FY 2013-14.

### **Discom's reply**

As per the provisional accounts of UHBVNL, there is an amount of Rs. 13.11 Cr., recorded under the head of other debts. The amount consists of expenditure on account of revenue amount refunded, misc. losses and written off amount as well as amount of unrealized surcharge from consumer.

The amount of unrealized surcharge from consumer i.e. Rs. 10.3 Cr. is accounted for surcharge that is not realized from consumer and of the period from 2004 to 2013-14. The same amount has been considered in revenue of earlier years but not realized in actual.

### **m) Distribution losses**

UHBVNL has neither indicated figures of actual distribution loss for FY 2013-14 nor attached any format for the distribution loss along with its true up petition. The Commission had approved a target of 27.5% distribution loss in its tariff order dated 30<sup>th</sup> March 2013 for FY 2013-14. Further distribution loss is controllable parameter and any short fall on account of distribution losses is to be subjected to the penalty framework as stipulated in the 57.1(g) of MYT Regulations 2012.

FIA requested to direct the licensee to provide the necessary information and figures on the actual distribution losses for FY 2013-14 immediately to assess the performance of licensee against the targets of distribution loss levels for FY 2013-14.

### **Discom's reply**

The true up petition for the purpose of yearly true up for the FY 2013-14 has been submitted considering provisional Annual Accounts for the FY 2013-14, and the finalized accounts shall be submitted to the Hon'ble Commission as soon as they are audited.

The accounts of UHBVN stand audited from the external chartered accountants and the AG audit of these accounts is under progress.

As the power distribution system in Haryana is lengthier because of socio-economic and geographic reasons as the state has highest density of agriculture tube wells in the country i.e. more than 11 tube wells per square km, the trend of people of residing in Dhanies (hamlets) in farms is increasing. Because of this fact the distribution losses in the State are comparatively higher. However, the Nigam has achieved significant loss reduction in past few years through a bifurcation and trifurcation of Feeder Program as shown in the table below:-

Year	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
Distribution Losses (%)	31.04%	28.66%	28.56%	27.02%	25.92%	24%	31.20%	31.26%	32.40%

However, due to the revision of sales to Agriculture category in FY 2011-12 (as per the methodology bases on the AP feeder input units), the distribution losses had gone up to 31.20%. Further the Discoms increased the supply hours in rural areas from 11 hours to 14 hours which by itself leads to an increase of about 2.8% in the overall average losses because of over 60% losses in rural areas.

For the FY 2014-15 and 2015-16, the distribution losses of UHBVN have been considered as 28.58% and 24.79% respectively that were further evaluated based on the AT&C losses notified by the Ministry of Power, Government of India for the state of Haryana, considering approved collection efficiency of 98.5%.

#### **n) Collection Efficiency & AT&C Losses**

As per 3.13 of MYT regulations 2012, collection efficiency is defined as ratio of total revenue realized to the total revenue billed during the year and its target has been specified in 57.2 of the regulations as under:-

For the FY 2013-14, the Commission specified collection efficiency of 98 % for UHBVN. UHBVNL in the true up petition indicated revenue realized but provided no information regarding revenue billed and the collection efficiency for FY 2013-14.

Similarly for AT&C losses, the actual figures for FY 2013-14 are required to be provided by the licensee and the same would be subjected to the prudence check of the Commission and any shortfall in the targets will be subjected to the penalty framework as per regulation 12 of MYT Regulations 2012.

FIA requested to direct the licensee to provide the necessary information and figures immediately to assess the performance of licensee against the targets for these controllable parameters.

#### **Discom's reply**

The true up petition for yearly true up purpose for the FY 2013-14 has been submitted considering provisional Annual Accounts for the FY 2013-14, and the finalized accounts shall be submitted to the Hon'ble Commission as soon as they are audited. Presently, the AG audit of UHBVN accounts is under progress after the audit from the external Chartered Accountants.

The improvement in collection efficiency as per audited accounts of Uttar Discom is shown below. The AT&C losses of UHBVN as per audited accounts were 35.88% in the FY 2013-14.

<b>Parameter</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Collection Efficiency (%)	91.73%	92.87%	92.00%	93.69%	94.84%

#### **2.4.5 Objections filed by M/s Jindal Stainless Limited, Hisar**

##### **a) O&M Expenses**

DHBVN application for truing up the financial results of the year 2013-14 shows a large variation in all important performance statistics as compared to the parameters approved by the Commission. For ready reference some of the important parameters are given hereunder,

**Table 2.5: O & M Expenses**

<b>Parameter Power</b>	<b>Approved by HERC</b>	<b>Actual as per DHBVN</b>	<b>Variation (%)</b>
Power purchase (MUs)	54749	47524	(-) 13.20
Cost of power purchase (Rs. crore)	18471	20046	20.44
Per unit cost (Rs.)	3.36	4.22	25.60
O&M Expenses (Rs. crore)	715.53	968.93	35.41
Employees expenses (Rs. crore)	577.90	687.15	18.90
A&G expenses (Rs. crore)	52.84	66.57	25.98
CAPEX (Rs. crore)	519.47	953.05	83.47
Interest & Financing cost (Rs. crore)	300.04	991.69	230.52
Energy sales Agriculture (MUs)	3712	4399	18.51
Energy sales non-agriculture (MUs)	13873	12439	(-) 10.34
Net Annual Revenue Requirement (Rs. crore)	9133.33	12226.68	33.87
Total Income (Rs. crore)	7698.35	9780.25	27.04
Revenue Gap (Rs. crore)	(-) 1434.99	(-) 2446.43	70.48

The Utility has approached the Commission to allow a true up of gap of Rs.2688.07 crore, which is nothing less than 30% of the total approved ARR. If such huge variation is to be allowed, then the very purpose of the detailed exercise of approving ARR and other performance parameters becomes infructuous. Ultimately, the consumers have to bear the difference by way of successive tariff increase. Moreover, these figures do indicate the lack of seriousness of the licensee to achieve the fixed parameters.

It would be recalled that every year such non-compliance of performance targets fixed by the Hon'ble Commission result in accumulation of losses of the Utilities which ultimately are to be made good from the corresponding tariff increase and ultimate financial burden to the electricity consumers.

The Commission had worked out a total borrowing of the Utilities as Rs.21877 crore, as on 31.03.2014 and left an uncovered gap of Rs. 3904 crore at the end of 2014-15. Such huge gaps in revenue speak of persistent poor financial management of the Utilities, which are bound to hurt the consumers at large.



Further, actual R&M expenses of DHBVNL are very low at Rs 58.91crores against the approved figure of Rs 85.79 crores as per the tariff order dated 30<sup>th</sup> March 2013. DHBVNL is not spending enough on R&M expenses as a percentage of total ARR. It should improve its operational performance with judicious expenditure on R & M.

The Commission is requested to direct the licensee to work on improving its operational performance by judicious expenditure in O&M cost for supplying quality and quantity power to the consumers.

**b) Recovery of Fuel Surcharge Adjustment in an arbitrary manner**

Section 61 of the Electricity Act, 2003 provides for the specifying the terms and conditions for determination of tariff with special reference to various guidelines. Section 62 (4) of Electricity Act, 2003 provides for the manner in which tariffs are to be revised. Regulation 66 of the HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 provide for the recovery of FSA on quarterly basis.

In-spite of these clear policy guidelines, the distribution licensees are levying the FSA purely on arbitrary manner. The Commission has given clear verdict about the recovery of FSA over a designated period but the Utility is continuing to recover the past FSA irrespective of the expiry of permitted date. The FSA of 21 paisa/unit (to be charged up to 48 months starting from 1<sup>st</sup> July 2010) on HT industry levied vide Commission's order dated 14.06.2010 should have been stopped from 01.07.2014. The licensees are still charging the same and are under wrong notion that FSA is an income for the licensee. Further, the recovery of FSA (i.e. 27 paisa/unit for HT industry) determined by the Commission vide order dated 26.06.2012 (to be levied up to 24 months from 01.07.2012) should have been discontinued by 30.06.2014 but the licensees are continuing to charge the same without getting prior approval of the Commission.

The recovery of FSA is the recovery from agriculture consumption. The agriculture tariff is subsidized but the impact of FSA is equally to be levied on the power supplied to agriculture category of consumers. Extra cost incurred for purchase of this power has to be recovered from this category of consumers. If the tariff for agriculture sector is subsidized, the FSA on this component of energy should come as additional RE subsidy from the State Govt. instead of passing it on to the non-agriculture consumers.

**c) Cross Subsidy Surcharge on open access power**

There is very heavy cross subsidy element in the electricity tariff which is causing undue burden on the subsidizing sector of consumers. There has been no attempt to reduce cross subsidy. The only major sector getting the benefit of cross subsidy is the 'Domestic sector'. Unless the cross subsidy on this sector is reduced successively other sectors like industry would continue to reel under the pressure of heavy cross subsidies burden. The historical data shows that in January 2014, in the wake of Lok Sabha elections, the then State Government suo-moto announced reduction of tariff for the 'Domestic Sector' including the incidence of FSA.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of Section 65 of the Act. As a substitute of cross-subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers.

The Commission has been reducing the cross subsidy surcharge over the past many years and it was 40% of the subsidy. Only in FY 2014-15, the cross subsidy was again equated with the subsidy, thus increasing the cross subsidy surcharge from 53 Ps/kWh to 202 Ps/kWh for HT Industrial consumers. On the other hand for NDS HT consumers it was increased from 46 Ps/kWh to 84 Ps/kWh only. This resulted in purchase of power through open access totally unviable, which is against the Policy Guidelines. Unless

the cross subsidy to the subsidized sector is reduced, the resultant burden would continue on the subsidizing sector.

The Commission may address this issue and reduce the cross subsidy surcharge so as to make open access route of power purchase viable.

**d) Need for escalated action on release of new connections to utilize surplus power**

The State will have 9540 MUs surplus power, which is proposed to be sold at 80% of the approved power purchase cost. However, inter-State sale of 3946.79 MUs have accounted for by DHBVN during 2015-16 @ Rs.3.52/kWh.

Presently, the Utility is saddled with huge quantum of surplus power and there are new applicants awaiting release of connections for years together. New connections should be released so that the surplus power is sold within the State instead of selling it to the persons outside the State at lower rates.

**e) Need for reduction in electricity tariff for industrial consumers**

The electricity tariffs for industrial consumers in Haryana are one of the highest in the country. The increase in cross-subsidy surcharge on HT industrial consumers and levy of Additional subsidy in the ARR order dated 29.05.2014 rendered the purchase of power through open access also unviable. It has become very difficult for the State industry to survive in the national/international markets. The Commission should come to rescue and help these industrial units by giving suitable reduction in the electricity tariffs. This sector is highly cross subsidizing the subsidized sector of consumers and in line with the 'National Electricity Policy and the Tariff Policy, it is the duty of the Appropriate Commission to reduce the cross subsidies and to achieve a scenario where every electricity consumer is required to pay the actual cost of service.

Over the years proportion of power sold to industries is on the decline which is not a healthy sign for the State economy. The Commission is requested to look into this important aspect of the tariff determination and give suitable relief to the sagging industry in the State. There is need to successively reduce the level of cross subsidization by charging the subsidized sector of consumers appropriately.

**f) Request for notifying the date of application of new ARR order**

The Commission has been making the ARR orders and the new tariff order applicable from a prospective date after the date of notification of the order. It was only in the last ARR order of 29.05.2014 that the new tariff was made applicable from a retrospective date. There are very serious consequences of retrospective application of tariff as the expenses are already booked and any past expenses create lot of consequential cash flow problems. Even in the case of open access power, which was purchased with a clear vision of the net applicable rate to the consumer, any retrospective application or upward revision of open access charges render the entire economics of power purchase through open access unviable. We would earnestly request that the future orders may kindly be made applicable prospectively.

**Discom's reply**

The True-up petition provides an overview of the difference between the approved expenditure for FY 2013-14 under consideration vis-à-vis the actual expenditure incurred by the Nigam, under all heads. The FSA/RA adjustments to the true-up of Expenses for FY 2013-14 has also been provides. All calculations have been clearly and legitimately been shown in the ARR petition and the same have been submitted to the Commission for approval. Nevertheless validations for all expenditure parameters have already been provided for the various expense and revenue parameters in the said true up petition.

DHBVN had to address the shortfall of revenue owing to the unaddressed revenue gaps in the tariff orders of the preceding years (based on allowance of each of the legitimate expenses) by way of borrowings. Hence, despite performance improvement measures that had been stringently been taken, the cascading effect of the ever-time piling up of unaddressed revenue gaps has led to accumulated losses of the discoms to the present level. The reasons that have led to the financial distress are given hereunder:

- **Regulatory Reasons**

- No tariff increase for nine years from 2001-02 to 2009-10.
- Delay in approval of FSA coupled with staggering of recovery of FSA over 3-4 years.
- Significant disallowance of costs by HERC in the ARR orders. (~only 36% of Interest & Finance charges allowed by Commission during 2011-12 to 2013-14).
- Deficit in the revenue requirement (ARR) was bridged through creation of Regulatory Assets/acknowledgement of uncovered revenue gap rather than tariff increase. The borrowings against this regulatory asset/gap further increased the debt servicing cost.
- Inadequate RE subsidy due to disallowance of Agricultural sales.

- **Other Reasons**

- Due to poor financial health of Discoms banks stopped funding in June 2011.
- Significant increase in employee cost attributable to 6<sup>th</sup> Pay Commission.
- Massive receivables in books of accounts due to socio-political factor amounting to over Rs. 4900 Crs as on 31<sup>st</sup> Mar 2012 (UHBVN & DHBVN).

Accordingly, both discoms (UHBVN and DHBVN) are undergoing financial restructuring under FRP notified on 05<sup>th</sup> October 2012 by Ministry of Power, Government of India. The successful implementation of the scheme is absolutely critical from the perspective of financial turnaround of the discoms. Further, it is pertinent to note that the term of FRP is co-terminus with that of MYT control period. The total financial restructuring under FRP scheme envisaged for both discoms on aggregated basis is Rs 21,439 Cr, which needs to be repaid over a period of time including the control period of present MYT regulations. Thus, in order to achieve the targets set in the Financial Restructuring Plan, it is essential for every stakeholder therein to perform for improvement in line with the FRP.

#### **2.4.6 Objections filed by Shri Sampat Singh and Shri Amit Verma, Hisar.**

##### **a) Alarming financial position of the power distribution utilities in Haryana**

After more than sixteen years of reforms, the financial position of the power distribution utilities amply demonstrates the dismal situation and absolute failure of the utilities to transform themselves into efficient service providers. All the inefficiency of the distribution companies cast their shadow on the financial condition of consumers. The consumers are to pay more and more every year.

The accumulated losses with extraordinary items of Rs. 7519 crore as on 31.03.2014 is Rs.26806 crore (Rs.19770+Rs.7519) as against only Rs 191 crore in FY 2001-02. Receivable amount is Rs.5969 crore. Loan of Discoms stands today at about Rs. 28040 cr. (UH Rs.15500 + DH Rs.12540) crore.

Subsidy has crossed Rs.5631 crore excluding subsidy as share of fuel surcharge adjustment as against an amount of Rs.138 crore when these utilities were created. Share of fuel surcharge adjustment is pending from 2009-10 to 2013-14 which amounts Rs. 2116 crore. So the total amount of subsidy has crossed Rs.7800 crore.

## **Discom's reply**

The Commission approves various parameters like power purchase costs, Inter-state and intra state transmission charges, O&M expenses, A&G Expenses, R&M expenses, Employee expenses and Interest and Finance Charges etc. and in order to balance the cumulative effect, the Commission takes a decision to revise the tariffs of all the categories in order to optimally balance the interests of the stakeholders in the power industry of the state of Haryana.

The power generation companies pass on the increase of cost of power (due to increase in coal/fuel prices on monthly basis based on demand and supply of coal) to the distribution companies which gets legitimately passed on to the consumers.

The tariffs for electricity is revised periodically (every year or once in every two to three years) and the new tariff is set based on the cost of production and distribution of electricity. But the prices of fuel or coal changes throughout the year and the utilities have to manage these uncontrollable cost variations by legitimately passing them to the consumers. The amount of FSA is a cumulative effect of increase in sales and intermittent increase in the power purchase cost.

The Discoms apply Fuel Surcharge Adjustment as a pass-through cost to its consumers in accordance with HERC Multi Year Tariff Framework Regulations, 2012 on a quarterly basis. Accordingly, per unit fuel cost pass through gets calculated based on the norms and guidelines laid down by the Commission.

The FSA applicable to the Agricultural consumers is being provided as FSA subsidy by the State Government to the two power distribution companies in the state. This subsidy is different from the RE subsidy paid by the State Government which corresponds to the subsidized tariff of a meagre 10 paisa per unit being charged from the agricultural consumers in the State of Haryana.

## **b) True-Up Expenditure of FY 2013-14**

The Nigam has applied no mind and the filing was done without any rationale. A perusal of the petition for true up of the FY 2013-14 shows the deteriorating financial position of UHBVNL. The Commission approved the expenditure of Rs. 8225.47 Crore for the FY 2013-14 but at the end of this FY, the expenditure was to the tune of Rs. 11943.99 crore leaving a revenue gap of Rs. 3720.82882.05 crore which works out to 47% more. Thus, the attitude of Nigam was lukewarm towards the Order of the Commission as far as expenditure is concerned and it was suppressed at the time of filling of the ARR. This was the main reason of this gap and the Nigam has filed petition before Commission to transfer this burden on to the poor consumers.

### **Reply of distribution licensee:**

In the True-Up petition, an overview of the difference between the approved expenditure for FY 2013-14 under consideration vis-à-vis the actual expenditure incurred by the Nigam under all heads, has been provided. Further the FSA/RA adjustments to the True-up of Expenses for FY 2013-14 have also been provided. Thus, all calculations have been clearly and legitimately been shown in the ARR petition and the same have been submitted to the Commission for humble approvals.

## **c) Power purchase gap**

The approved power purchase amount was Rs.6988.83 cr. but the actual came to the tune of Rs.8913.31 crore leaving a gap of Rs.1924.48 cr. The quantum of power purchase of UH & DH approved as 54748.5 million units but actual power purchased was 47524 million units. The actual power purchase was 13% less than proposed power purchase though the expenditure was 28% more. The actual power purchase volume was lower by 722.4 crore units, at an average per unit cost of Rs 3.36 the amount should also have been lower by Rs.2927.40 crore. The benefit of the same should have been passed on to the electricity consumers of Haryana.



### **Reply of distribution licensee:**

The true up of power purchase costs has been done in order to ensure that the Discoms should be allowed the additional cost of power purchase at the end of the FY 2013-14. Thus, the increase in power purchase cost despite decrease in power purchase quantum pertains to the higher per unit power purchase cost in actual as compared to the approved rates. Thus, in order to maintain power supply to the consumers viz-a-viz the demand, the Discoms have to avail power even at higher rates from the power exchanges for continued power supply based on available power resources and system availabilities.

#### **d) The Release of Tube-well Connections**

The release of tube-well connections is also very difficult and the farmers running from one office to another office for getting tube-well connections. First the farmer goes to bank for getting loan & after getting loan he starts to work for his tube-well. However, before getting tube-well connection, the interest of his debt crosses the basic loan amount. So, it becomes a problem for him to survive.

At present, demand notices issued up to December 2011, are being processed as per the Government directive and presently 33505 no. tube-well connection applications are pending.

#### **Discom's reply**

Distribution Power Utilities have launched the self-execution scheme for release of tube-well connections. As per the said scheme, the material is to be arranged by the consumer as per Nigam's specifications. The work is to be got done through contractor duly approved by the Chief Electrical Inspector to Govt. of Haryana. There is a regular increase in the release of tube-well connections every year.

**e) Operation and maintenance expenses**

Rs 704.28 crore was approved but actual expenses were Rs.958.08 crore leaving a gap of Rs 253.80 crore which is 32% on higher side. Even after the approval of Commission, there is 32% increase in expenditure.

**Discom's reply**

The increase in O&M expenses is mainly on account of employee costs and terminal liabilities that are beyond the control of the Discoms. Hence, the same needs to be approved even because the Commission has also agreed to consider the "Terminal liabilities with regard to employees on account of changes in pay scales or dearness allowance due to inflation" as an uncontrollable parameter vide its Multi Year Tariff Framework Regulations, 2012.

**f) Terminal liability**

Rs. 100.35 crore expenditure was approved by the Commission but the actual expenditure incurred was Rs.346.88 crore which is Rs.246.53 Crore i.e. 246% more. This shows the commitment of utility towards the Commission order. This amount needs to be explained i.e. the deviation is nearly two and half times of the amount approved by the Commission.

**Discom's reply**

The increase in terminal liabilities is beyond the control of the Discoms. Hence the same needs to be approved even because the Commission has also agreed to consider the "Terminal liabilities with regard to employees on account of changes in pay scales or dearness allowance due to inflation" as an uncontrollable parameter vide its Multi Year Tariff Framework Regulations, 2012.

### **g) Repair and Maintenance expenses**

Despite the short coming and frequent power out ages shortage of the distribution system, UHBVNL has spent Rs.68.11 crore i.e. less on repair and maintenance as compared to the amount i.e. Rs.98.22 crore allowed the Commission. Only Rs.68.11 crore was spent under this head. This shows the apathy of utility toward this main work. This also needs justification.

#### **Discom's reply**

Any expenditure incurred during the year against the approved quantum by the Commission for the respective year is subject to True Up at the end of the year. Hence, the R&M expenses are also subject to true up at the end of the FY 2013-14, which would actually reduce the net revenue gap, received post true up exercises. In addition, the R&M expenses are incurred over renewal/revamping of the malfunctioning or non-functioning system in order to ensure continuity of the operations and supply of power to consumers. Thus, expenditure incurred for Repair and Maintenance of the system is subject to requirement and is completely need based.

### **h) Terminal liability**

Break-up of A &G expenses which exceeded the amount approved by the commission by Rs.17.86 crore needs to be provided with appropriate justification.

#### **Discom's reply**

While estimating the A&G expenses for a particular year, the Discom has to follow the postulates of the HERC MYT Regulations 2012. However, the actual expenses are always subject to prudence check and may be allowed once the Commission gets convinced to the genuine and legitimate approvals of the same.

Further, at the time of MYT Tariff petition submission, the latest Consumer Price Index (CPI) and Wholesale Price Index (WPI) was available

only for FY 2011-12 and FY 2012-13 with few month of FY 2013-14. Hence, to get inflation index, the inflation data of FY 2011-12 and FY 2012-13 had been utilized for computation of inflation factor, which comes out to be 9.21%.

Moreover, any expenditure incurred during the year against the approved quantum by the Commission for the respective year is subject to True Up at the end of the year. Hence, the A&G expenses, are also subject to true up at the end of the FY 2013-14.

#### **i) T&D Losses**

A major element of T&D losses declined from 40% to 33% in about 14 years i.e. about 0.57% per annum. Percentage of Losses over last 3 years is increasing despite a huge amount of Rs.4000 crore have been spent on Capital assets in these 3 year losses were 25.54 % in the FY 2011-12 but these losses have increased to 33% T&D losses in Haryana which are at the highest in the country. As compared to other state losses are 15% in Punjab, 16% in HP, 22% in Gujrat & 18 % in Tamilnadu. The main element of distribution losses of about 33% i.e. about 14 % on a conservative estimate is on account of commercial losses which is nothing but theft, pilferage and defective / slow / dead meters which run into lakhs. Further, a percentage reduction in such losses would lead to revenue realization of more than Rs. 200 Crore. So, the share in cash deficit was Rs.4200 crore in FY 2013-14. Thus a proper trajectory if followed for reduction of losses would have prevented the avoidable tariff hike for the electricity consumers in Haryana.

#### **Discom's reply**

As the power distribution system in Haryana is lengthier because of socio-economic and geographic reasons as the state has highest density of agriculture tube wells in the country i.e. more than 11 tube wells per square km, the trend of people of residing in Dhanies (hamlets) in farms is increasing. Because of this fact the distribution losses in the State are comparatively higher. However, the Nigam has achieved significant loss

reduction in past few years through a bifurcation and trifurcation of Feeder Program as shown in the table below:-

Year	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
Distribution Losses (%)	31.04%	28.66%	28.56%	27.02%	25.92%	24%	31.20%	31.26%	32.40%

However, due to the revision of sales to Agriculture category in FY 2011-12 (as per the methodology bases on the AP feeder input units), the distribution losses had gone up to 31.20%. Further the Discoms increased the supply hours in rural areas from 11 hours to 14 hours which by itself leads to an increase of about 2.8% in the overall average losses because of over 60% losses in rural areas.

For FY 2014-15 and 2015-16, the distribution losses of UHBVN have been considered as 28.58% and 24.79% respectively that were further evaluated based on the AT&C losses notified by the Ministry of Power, Government of India for the state of Haryana, considering approved collection efficiency of 98.5%.

The distribution loss reduction targets for Control Period (FY 2014-15 to FY 2016-17) have been set by the Commission based on the mandatory conditions as per the Central FRP Scheme for receiving matching grant from the Central Government on account of accelerated AT&C loss reduction. The distribution and AT&C loss reduction target envisaged for UHBVN for Control Period from the FY 2014-15 to the FY 2016-17 in the Financial Restructuring Plan (FRP) and for the purpose of the MYT filing, has been summarized below:-

Parameter	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Distribution Losses	27.54%	25%	23.0%	20.9%
AT & C Losses	31.53%	28.38%	25.67%	23.26%

The Commission has already been very stringent towards allowed distribution losses every year and thus the expenses allowed by the Commission every year while approving the annual revenue requirement are

based on targeted loss levels approved by the Commission, and accordingly the disallowed loss levels if any are not considered for calculation of ARR.

The Nigam has constituted theft detection teams and the outstanding arrears from connected/disconnected consumers are also being recovered by launching arrear recovery schemes and by assigning arrear recovery targets to the sub-divisions. The improvement in collection efficiency as per audited accounts of Uttar Discoms is shown below:-

UHBVN	2009-10	2010-11	2011-12	2012-13	2013-14
Collection Efficiency (%)	91.73	92.87	92.00	93.69	94.84

**j) Unrecovered regulated asset**

Any unrecovered regulated assets should not be allowed to be recovered through tariff. The same should be amortized by way of efficiency gain and reduction of AT & C losses beyond the benchmark set by the HERC.

Above said figures are the major reasons out of so many other reasons of the revenue gap. Question arises where the poor and illiterate consumers stand? Who is here to watch their interest? Every time they are given a heavy dose to fill up this gap.

FY 2013-14 has passed 9 months ago but its bad results are still running against the consumers. The UHBVNL has filed a petition before the HERC to allow the true-up for FY 2013-14 and pass on the revenue gap of Rs.1496 crore to the consumers surprising the company has also demanded suitable holding cost over the true up gap.

I would request the Commission to reject the true-up of ARR of FY 2013-14 of UH may please be rejected out-rightly.

**Discom's reply**

The unrecovered regulated assets are the part of the approved ARR of the Discoms that are left for recovery in the forthcoming years instead of the respective financial year. By definition, regulatory assets include previously

incurred losses that are in the nature of deferred expenditure and that can be recovered from consumers in future provided allowed by regulatory authorities.

If the regulatory assets have not been allowed for recovery in a particular year, it does not mean that the same shall be diluted on terms of additional loss reduction as this would lead to an unjustified loss to the discoms under the umbrella of the law of regulatory assets.

Moreover, the order in OP No. 1 of 2011 dated 15<sup>th</sup> February, 2013 of the Hon'ble Appellate Tribunal for Electricity also iterates as under:-

*“In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding three years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset shall be allowed to the utilities to avoid problem of cash flow.”*

Hence, the objection is unjustified on the face of record.

**k) Non-compliance of HERC directions:**

- a) UHBVNL has never cared for the execution of the Directives given by HERC. HERC directed the company in the year 2001 to disclose consumers category-wise revenue i.e. expected in the coming FY with all the calculation details separately into revenue from energy charges and revenue from MMC along with a work sheet of the underline data but the same has not been complied till date. There are more than 100 directives which are yet to be complied.
- b) Despite repeated directions from the Commission as well as the Appellate Tribunal for Electricity, New Delhi, no voltage wise cost of service {COS} study has been filed by the Discoms. In its absence

determination of tariff as well as Cross – subsidy surcharge would be only approximation.

- c) Despite repeated directions from the Commission to replace dead/defective consumer meters in a time bound manner and within the cut-off date specified by the HERC little progress seems to have been made. The Nigam must submit the details of existing dead / defective meters as on date along with the reasons for not replacing the same and the names of officer concerned who was supposed to replace these meters. The Commission may initiate proceedings under section 142 of the Act against these officers for non-compliance.
- d) UHBVNL enters into a lot of litigations in the Commission, against the Commission and against the Consumers in APPELLATE TRIBUNAL FOR ELECTRICITY, High Court / Supreme Court etc. UHBVNL needs to provide the expenses incurred by them in FY 2013-14 and FY 2014-15 on all such litigations, the cost of which is again passed on to the Consumers which needs to be disallowed.
- e) Despite repeated directions from the Commission, UHBVNL continues to tinker with FSA and other commercial aspects having financial impact on the electricity consumers by issuing sales circulars. UHBVNL needs to file an affidavit that they have not violated the directions of the Commission on this issue. In case violations are pointed out by the consumers and to the satisfaction of the Commission in the public hearing then the Commission may proceed against UHBVN for perjury i.e. filing a false affidavit and proceeded against under the law against the officer concerned for filing a false affidavit.

The True-up of ARR for FY 2013-14 for UH sought needs to be rejected on these grounds itself.



### **Discom's reply**

- Revenue Estimations for FY 2014-15 and FY 2015-16 have already been shown in the APR filings done by the discoms with all justifications and calculations. The replies to the HERC directives have been timely submitted to the Commission from time to time except in certain case when owing to genuine reasons the replies have been furnished with some delay.
- The distribution licensees are in the process of undertaking the category wise cost to serve; however, the same has been delayed due to various reasons. The distribution licensees are in the process of undertaking individual consumer indexing and feeder indexing and the same is taking some time. The non-submission of category wise cost to serve will not invalidate the tariff fixation exercise by the Commission. The Commission is empowered to determine tariff on a suo-moto basis as well.
- The cost associated with the Litigation matters is a part of the operational cost of the discoms and these expenses are mostly an unavoidable part of expenses for the discoms. Since the discoms have to appear for these litigations under the jurisdiction and laws beneath the legal constitution of the country/state, the expenses owing to these matters shall not be borne by the discoms. Hence these expenses are eligible to be refunded by means of appropriate revenue either from the state government or the consumers who ultimately are the beneficiaries of the discom's operations.
- The power generation companies pass on the increase of cost of power (due to increase in coal/fuel prices on monthly basis based on demand and supply of coal) to the distribution companies which gets legitimately passed on to the consumers. The amount of FSA is a cumulative effect of increase in sales and intermittent increase in the power purchase cost. As per the HERC regulations, the FSA up to 10% of the approved cost of power purchase is automatically passed through; on a quarterly basis by

the discoms. However since the FSA amount is more, the recovery spills over a period of 3 -4 years. The HERC also in the past when the FSA was levied after the end of the year after HERC approval allowed the recovery of FSA over 3-4 years though the discoms incurred and paid the entire cost of power purchase on a regular basis during the year itself. However the true up of the quantum of FSA applicable and recovery is being filed on a quarterly basis to the HERC. The discoms (UHBVN and DHBVN) have already submitted true up of the quantum of FSAs applicable and recovery thereof till September 2014 of the existing FSA levies providing details of the under recovery of the respective FSAs from Non-Agricultural Consumers; to the State Commission for further perusal and necessary orders thereon. Thus the objection is not sustainable.

#### **2.4.7 Objections received from Balwant Singh, Ravinder Singh, Village Jawali District Kaithal, Haryana.**

Utility may directed to release all pending tube well connections immediately to safe guard the interest of the farmers.

##### **Discom's reply**

The self execution scheme for release of tube-well connections was launched by the Power Distribution Utilities. As per scheme, the material is to be arranged by the consumer as per Nigam's specifications. The work is to be got done through contractor duly approved by the Chief Electrical Inspector to Govt. of Haryana. The tube-well connections under the scheme are being released by the Discoms. There is a regular increase in the release of tube-well connections every year.

Under Self Execution Scheme (SES), there was no cut-off date and the applicant would have been able to opt for the SES. In the scheme total material have to be procured by the applicant through empanelled firms except ACSR and Transformer for which cost have to be deposited with the Nigam. The work was to be executed through class-I empanelled contractor and after getting the

line/ transformer checked from the Chief Electrical Inspector, the connections are released out of turn.

However, in the scheme, there was large-scale exploitation of applicants by the Contractors and it was been observed that the quality of the material (except DT & ACSR) used under self-execution is of inferior quality. As a result, the Self Execution Scheme was suspended on 17.06.2014. There are some applicants in the existing general scheme who have deposited requisite amount against demand notices under general category. They are planned to be treated under previous existing general category scheme. However, existing applicants of the general scheme shall also be issued notices to adopt the new scheme (SFS). The work being executed under Self execution scheme shall continue to be executed.

Now, both the schemes shall be subsumed into one scheme called Self Financing Scheme and all other applicants shall be considered under new scheme (SFS).

### **Objections**

Either option of self-execution be given or utility provide connection within a stipulated period.

### **Discom's reply**

The Discoms are already considering the option of self-finances scheme and thus the objection gets addressed thereon.

### **Objections**

Continuous 8 to 10 hour electricity be provided for agriculture.

### **Discom's reply**

The discoms ensure uninterrupted supply of power for at least eight hours daily to the agricultural sector.

## **Objections**

Bills as per actual agriculture consumption be ensured by the utility.

## **Discom's reply**

Actual billing of Agriculture Pump set consumers are being done by the discoms for metered AP consumers. For unmetered consumers, flat rate billing as per the Agriculture Pump set Supply tariff notified by the Commission for FY 2014-15 vide tariff order dated 29.5.2014.

## **Objections**

Damage Transformers are not being replaced timely even after lot of pursuance. Time lines be enforced on the utility.

## **Discom's reply**

The Nigam has installed additional distribution transformers and augmented their capacity. New electricity poles have been erected and maintenance of transformers has been carried out and worn out cables replaced to ensure uninterrupted power supply in the villages in summer and paddy season.

For removing the technical losses associated with the unbalanced loading of distribution transformers, the balancing of load is being done along with the requisite augmentation of overloaded distribution transformers. The new distribution transformers and 33 KV sub-stations are being created at required load centres to meet the load growth and reduction technical losses due to overloading.

- i) UHBVN has total 244640 Nos. distribution transformers with a total installed capacity of 10487588 MVA exist in the system as on 31.12.2014.

- ii) 13185 Nos. of DTs were added during FY 2012-13 and 13305 Nos. of DTs were added during FY 2013-14 ; further 15112 have been added till 31.12.2014;

#### **2.4.8 Objections filed by Shri Balwant Singh and Shri Ravinder Singh, Village Jawali District Kaithal, Haryana.**

##### **Objections**

There is a need to control the Transmission line-losses and Distribution line-losses within the specific limits of the Indian Electricity Act, 2003 as the same continues to be on the higher side.

##### **Discom's reply**

As the power distribution system in Haryana is lengthier because of socio-economic and geographic reasons as the state has highest density of agriculture tube wells in the country i.e. more than 11 tube wells per square km, the trend of people of residing in Dhanies (hamlets) in farms is increasing. Because of this fact the distribution losses in the State are comparatively higher. However, the Nigam has achieved significant loss reduction in past few years through a bifurcation and trifurcation of Feeder Program as shown in the table below:

Year	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
Distribution Losses (%)	31.04%	28.66%	28.56%	27.02%	25.92%	24%	31.20%	31.26%	32.40%

However, due to the revision of sales to Agriculture category in FY 2011-12 (as per the methodology bases on the AP feeder input units), the distribution losses had gone up to 31.20%. Further the Discoms increased the supply hours in rural areas from 11 hours to 14 hours which by itself leads to an increase of about 2.8% in the overall average losses because of over 60% losses in rural areas.

For the FY 2014-15 and the FY 2015-16, the distribution losses of UHBVN has been considered as 28.58% and 24.79% respectively that were further evaluated based on the AT&C losses notified by the Ministry of Power,

Government of India for the state of Haryana, considering approved collection efficiency of 98.5%.

The distribution loss reduction targets for Control Period (FY 2014-15 to FY 2016-17) have been set by the Commission based on the mandatory conditions as per the Central FRP Scheme for receiving matching grant from the Central Government on account of accelerated AT&C loss reduction. The distribution and AT&C loss reduction target envisaged for UHBVN for Control Period (FY 2014-15 to FY 2016-17) in the FRP and for the purpose of MYT filing, has been summarized below:-

Parameter	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Distribution Losses	27.54%	25%	23.0%	20.9%
AT & C Losses	31.53%	28.38%	25.67%	23.26%

The Commission has already been very stringent towards allowed distribution losses every year and thus the expenses allowed by the Commission every year while approving the annual revenue requirement are based on targeted loss levels approved by the Commission, and accordingly the disallowed loss levels if any are not considered for calculation of ARR.

The Nigam has constituted theft detection teams and the outstanding arrears from connected/disconnected consumers are also being recovered by launching arrear recovery schemes and by assigning arrear recovery targets to the sub-divisions. The improvement in collection efficiency as per the audited accounts of UHBVNL is as under:-

Name of Parameter-UHBVN	2009-10	2010-11	2011-12	2012-13	2013-14
Collection Efficiency (%)	91.73%	92.87%	92.00%	93.69%	94.84%

## Objections

There are very large number of thefts in rural areas; colonies; industrial-units etc. that requires immediate control by the HVPNL organization & its Associates.

## **Discom's reply**

The Discoms have achieved significant loss reduction in past few years through a bifurcation and trifurcation of Feeder Program and the details for reduction of losses have already been provided in the submissions over aforesaid points. Further, taking into the cognizance of the ground realities of having higher losses in the far stretched out areas, theft prone areas and substantial amount of consumers who are not able to pay the electricity bill; DHBVN and UHBVN find themselves in a conundrum in realizing the revenue from such areas.

The Discom has notified Sales Circular No.U-60/2013 dated 10.12.2013 on the subject "Instructions for dealing the cases of theft of Electricity under Electricity Act-2003, Electricity (Amendment) Act, 2003 and Electricity (Amendment) Act, 2007" wherein the revised instructions for dealing the cases of theft of electricity under Section-135 of EA-2003 were provided for immediate compliance.

Additionally, the following measures are being taken for reduction of theft:-

- i) Intensive checking of consumer premises is being undertaken to detect the theft of Electricity.
- ii) Computerization of Vigilance Activities: Online FIR registration of electricity thefts has been initiated. On-Line Loading of FIR:-On detection of theft case, it is mandatory to lodge On-Line FIR within 24 hours.
- iii) Relocation of Three phase and Single phase meters outside consumer premises.
- iv) Replacement of defective meters.
- v) Checking of PDCO premises.
- vi) Automatic Meter Reading (AMR) on HT Industrial consumers:- For preventing the Theft of Electricity in industrial consumers, the contract for implementing of AMR and Billing of HT Industrial

consumers have been awarded to M/s TCS, which has been implemented.

- vii) Voluntary Disclosure Scheme for declaration of unauthorized loads
- viii) Regularization of Kundi connections / Meter sealing: - Kundi connections by unscrupulous elements of the society are targeted and their connections regularized after completing necessary Nigam formalities. Also the activity of meter sealing of consumers is carried out regularly.
- ix) Installation of Electronic Meters:-Around 37 lacs Nos. Electronic meters have been installed after replacing old Electromechanical meters.
- x) Optical Port meters: - Around 7.35 lacs consumers are provided with meters optical port.
- xi) Tri-vector meters:-High value Consumers approx. 25000 Nos. are provided with advance meters which are capable of storing 180 days metering data, tamper data, Load survey data on half hour interval basis and Time of day consumption data.
- xii) Automatic Meter reading [AMR] of HT Consumers: - AMR based on GPRS technology has been implemented on 4000 HT Industrial consumers in UHBVN.
- xiii) Automatic Meter Reading of feeder meter :-For automatic meter reading of feeder meter, the work has been executed by M/s NELCO and around data if approx 2000 nos. feeders is being received through GPRS Routers.
- xiv) Automatic meter reading of DTs:- For automatic meter reading of DTs, the work has been executed by M.s Omneagate for around 20,000 DTs in Yamunanagar & Jind District.
- xv) CMRI Meter reading of HT/LT Consumers- All the high value consumers [25,000] are being read through CMRI for down loading



the meter data. The Optical port of around 7.35 lacs LT consumers is being brought outside for electronic meter reading through CMRI.

### **Objections**

The HVPNL and their Associate organizations have increased their undesirable, un-wanted and un-necessary expenditures in their organizations for facilitating their officials and other un-necessary over-head expenditure (which could be avoided or reduced but not), which need immediate attention to control over.

### **Discom's reply**

The Discom has projected the O&M expenses for FY 2014-15 and FY 2015-16 based on the postulates of MYT Regulations over the figures received from provisional accounts of FY 2013-14 while calculating the Annual Revenue Requirement for FY 2014-15 and revised ARR for FY 2015-16. The calculations have been clarified in the APR filings submitted to the Commission.

The actual expenses are subject to prudence check and may be allowed by the Commission if found, genuine and legitimate.

### **Objections**

There are high numbers of non-payments of power-bills lying pending to recover worth crores of Rupees, mostly in rural areas, industrial units & Govt./ Non-Govt. offices etc. which need immediate actions to recover the Nigam's revenue.

### **Discom's reply**

The maximum defaulting amount pertains to rural consumers of the Nigam's area of supply. In rural areas people hold back on bill payments hoping for surcharge/arrear waiver schemes. Often, due to political compulsions, the Nigam has not been able to recover these net receivables. However, the Nigam is trying its best to constantly organize campaigns to recover outstanding dues.

The total number of connected and disconnected consumers and defaulting amount that correspond to the Domestic-Rural, Agriculture, Irrigation and Panchayat together correspond to 73% of the total defaulting number of consumers and total defaulting amount.

Nigam had decided to introduce scheme for Settlement of various categories of Electricity consumers where disputes are pending in Courts/Arbitration/DCDRF/State Commission/National Commission etc., in the Lok Adalats.

The Discoms are implementing Pillar Box Scheme on voluntary basis and those villages which are willing to adopt "Pillar box Scheme" will only be covered under the scheme. The areas opting for the "Pillar Box Scheme" will be given power supply for 24 hours a day. A rebate of 20% will be given in bills to the consumers having the "Pillar Box System".

A special campaign was launched to disconnect the premises of defaulting consumers. Under the campaign, during FY-2014-15 (upto September 2014), 223746 connections were disconnected temporarily/ permanently and an amount of Rs. 395.63Crore recovered.

### **Objections**

The maintenance of Distribution-lines, Transformers, LT lines, Cables etc have not provided with proper maintenance because of which the line-losses goes further more-high, thus, need proper maintenance immediately.

### **Discom's reply**

During the last 10 years, 275 new 33 kV Substations have been commissioned, 441 existing 33 kV Sub Stations augmented and 2126.03 km of new 33 kV Lines have been added in the system at a cost of Rs. 778.37 crore to strengthen the distribution system.

The Nigam has installed additional distribution transformers and augmented their capacity. New electricity poles have been erected and

maintenance of transformers has been carried out and worn out cables replaced to ensure uninterrupted power supply in the villages in summer and paddy season.

A decent growth in their consumer base over the last few years is being witnessed in their license areas. For this purpose continuous addition and augmentation is done with an objective to cater to additional load, to provide better quality power supply and better consumer service.

The capacity of 73 Nos. of existing 33 kV substations was augmented during FY 2013-14. During current financial year, 40 No. 33 kV S/Stn. have been augmented up to Nov-2014.

### **Objections**

The electronic meters are mostly become defective due to their working in open at out-side poles, thus remedial measures need to be adopted on top priority.

### **Discom's reply**

There has been a regular improvement towards replacement of dead/defective meters and replacement of electromechanical meters with electronic meters.

### **Objections**

There is almost all the distribution transformers are over-loaded because of which line-losses are quite high.

### **Discom's reply**

The Nigam has installed additional distribution transformers and augmented their capacity. New electricity poles have been erected and maintenance of transformers has been carried out and worn out cables replaced to ensure uninterrupted power supply in the villages in summer and paddy season.

For removing the technical losses associated with the unbalanced loading of distribution transformers, the balancing of load is being done along with the requisite augmentation of overloaded distribution transformers. The new distribution transformers and 33 KV sub-stations are being created at required load centres to meet the load growth and reduction technical losses due to overloading.

- UHBVN has total 244640 Nos. distribution transformers with a total installed capacity of 10487588 MVA exist in the system as on 31.12.14.
- 13185 Nos. of DTs were added during FY 2012-13 and 13305 Nos. of DTs were added during FY 2013-14; further 15112 have been added till 31.12.14.

#### **2.4.9 Objections file by Sh. R. S. Chaudhary, IAS (Retd.) National General Secretary, INLD.**

##### **a) ARR 2013-14 (TRUE-UP)**

Truing-up of ARR for 2013-14 has been same sought by UHBVNL & DHBVNL based on the provisional accounts. The same should have been sought on the basis of audited accounts for the financial year 2013-14 as the same should have been finalized/audited within 6 month. In it absence no truing-up should be allowed by HERC. Moreover, the delay in getting the Accounts Audited including statutory audited needs to be explained and brought to the notice of the public.

##### **Discom's reply:**

As per the HERC MYT Tariff Regulations, 2012, the Commission has allowed to file true up tariff petition for FY 2013-14 on the basis of available provisional annual accounts of FY 2013-14. The finalized accounts shall be submitted to the Commission as soon as they are audited.

The accounts of UHBVN stand audited from the external chartered accountants and presently the same are being audited by AG office.

## **b) Power Purchase**

### **Objections**

The actual power purchase volume in the case of UHBVNL was lower by 722.4 Corer Unit, at an average per unit cost of Rs. 3.36/ Unit the amount should also have been lower by Rs. 2927.4 Corer. The benefit of the same should have been passed on to the electricity consumers of Haryana. Any expensive power purchased from un-approved resources including short term should be disallowed. The Discoms also needs to explain the reason for backing down HPGCL Stations owned by the State Govt. thereby leaving huge producers.

Additionally, it needs to be explained as to why they have been under drawing their allocated share of power from the Grid for which, on an average they have paid more than Rs. 4.0/kWh and in return they get UI of less than 1.50/kWh. The details and losses on trading account by UHBVNL and DHBVNL needs to be provided for public scrutiny. Losses arising out of such trading activity should be borne by the State Govt. and not passed on to the Electricity Consumers of Haryana.

### **Discom's reply**

The true up of power purchase costs is done in order to ensure that the Discom should be allowed the additional cost of power purchase at the end of the FY 2013-14. This is because the Discom needs to arrange power from available and approved sources and short term power from the power market/exchanges.

Thus, the increase in power purchase cost despite decrease in power purchase quantum pertains to the higher per unit power purchase cost in actual as compared to the approved rates. In order to maintain power supply to the consumers viz-a-viz the demand, the Discoms have to avail power

even at higher rates from the power exchanges for continued power supply based on available power resources and system availabilities.

The Nigam has already provided details of the source wise power purchase quantum and actual rates per unit to the Commission as a part of the APR filings. There has been no power procurement done from any un-approved sources of power. During peak hour season, the Haryana Power Purchase Cell has to purchase power at extra high rate to meet the requirement of tube well consumers.

Further, the power procurement from various sources in real time/on a daily basis are dependent on the availability of the power from various approved sources. Thus the Discom have to avail the power on merit order dispatch principles from the available power sources and thus such variations between the approved and actual power purchase are evitable.

### **c) Spending a lot of Money**

#### **Objections**

UHBVN and DHBVN has spent a lot of money of the following:-

- HVDS
- Pillar-box metering
- Aerial bunched cables
- Locating meters outside consumers premises
- Segregation of A.P. feeder 11 KV

The cost-benefit of the same needs to be provided. Any additional Capex undertaking without approval of the Commission needs to be disallowed i.e. Rs. 546.6 Crore against approved Rs. 457.49 Crore. The interest thereto also needs to be disallowed. While DHBVN, as against Rs. 959 Crore approved by HERC for FY 2014-15, has spent only Rs. 857 Crore. The interest, depreciation, O&M etc. needs to be accordingly revised and the benefits passed on to the Electricity Consumers of the State.

## **Discom's reply**

The capital expenditure is incurred by the discoms to strengthen power distribution system in the state, so as to ensure more power with greater reliability to meet the increasing demand. The total installed power generation capacity (from all sources, including state's own projects and long term arrangements from other sources) in Haryana has increased to over 10,000 MW. To meet the increasing demand of power in the state, the power utilities are likely to make arrangements for an installed generating capacity of 18,000 to 19,000 MW by 2016. Accordingly, discoms have judiciously planned the capital expenditure over the next three to four years, for which integrated planning has already been initiated to match the increase in demand of the state. The utilities have plans to construct new sub-stations of various levels and augment capacity of existing sub-stations in the next three years and the transmission and distribution network is also being strengthened.

The Capex proposed under Central Govt. scheme like RGGVY, R-APDRP and Smart Grid gets delayed due to unavoidable reasons which are beyond the control of the Nigam. The approval for the DPR and re-approval for the changes proposed and the tendering process/finalization of award consumes major time. Further due to problems in implementation of CAPEX projects, the capital expenditure during the financial year varies with respect to the timelines and quantum as compared to the approved figures.

Moreover, in the recent years the capital expenditure in the DISCOMs is more focused and selective with a view to derive maximum benefits with appropriate level of expenditure. The reduction in DT damage rate, improvements in HT-LT Ratio, replacement of meters etc have led to reduction in losses and improvement in operational efficiency and power supply by the discoms.

## **d) Working Capital**

### **Objections**

In the case of UHBVNL, HERC approved W/C interest of Rs. 127.7 Crore against this claim of Rs. 1444.68 Crore which even exceeds the W/C requirement of Rs. 1064 Crore i.e. the interest claimed now exceed the principal amount. This is despite the fact the outstanding receivable of UHBVNL & DHBVNL more than Rs. 4000 Crore. Hence, the Discoms needs to manage their payable and receivable in an appropriate manner and should not be allowed to fund their losses due to by way of additional short-term borrowing and interest thereto. The Discoms needs to provide the policy/mechanism that they want to deploy for bringing the working capital requirement and interest on the same within the norms.

### **Discom's reply**

Apart from interest on loans raised to fund revenue gap and capital expenditure, interest expenses are incurred on loans availed to finance the deficit in working capital of the licensee.

The Nigam is compelled to borrow short-term loans in order to meet its basic minimum expenses. In the absence of any tariff hike for a period of nine years, i.e. until September 2010, the Nigam was faced with a situation where the cost of supplying power was far more than the tariff being realized from consumers, in which case the Nigam had to borrow short term loans.

The Nigam is facing additional financial burden on account of disallowance of the major part of its working capital requirement, due to which the Nigam has to bear the interest cost of short-term loans borrowed from various financial institutions. Hence, disallowance of interest on working capital is leading to further increase in the interest cost (through short-term borrowings to finance daily cash deficit), thereby creating a vicious cycle.

Due to collection shortfalls, certain billed revenue remains uncollected thereby adversely affecting cash flows of the Nigam.



Thus, considering all the facts stated above, it is quite obvious that the interest and finance charges would increase.

However, the UHBVN has projected the interest on working capital as per the provisions made in Financial Restructuring Planning (FRP) approved by the Govt. and in principle approved by HERC.

Hence, UHBVN has projected the interest on working capital borrowings as per projections made in the MYT ARR filing, which is also in line with the provisions of interest in FRP, instead of strictly adhering to the working capital norm specified in HERC regulations, which is extremely inadequate and adds to the financial detriment of the UHBVNL.

#### **e) Surplus Power**

UHBVN and DHBVN has considered sale of surplus power as intra state sale at 20% lower than the cost of purchasing the same thereby consumers of Haryana are called upon to cross subsidize the electricity consumers of other states. This should not be allowed as there exists a huge backlog of new load/ connections sought by different categories of consumers as well as frequent power cuts and restricted supply to Agriculture and Rural Domestic Consumers. The Haryana consumer cannot be saddled with the cost of inefficiency of the Nigam in assessing the load requirement and purchasing power without proper load forecast.

#### **Discom's reply**

The mismatch in demand and supply is due to various factors, like changing weather conditions, socio-cultural events or sometimes festivals etc. for which licensee is not responsible solely at its part. Licensee intended to fulfill all available load demand of consumers at any instant of time. Hence, long term power purchase agreements have already been executed to meet this demand.

Under present circumstances, Haryana also has surplus power left owing to continuous increase in open access consumers not purchasing

power from licensees and thus the distribution companies have to surrender huge quantum of power every day. Consequently, fixed charges over the surrendered power to the power suppliers along with UI charges at the time of already existing surplus power in the system and high frequency has to be borne by the Discoms. The distribution companies are bound to sell the surplus power in the power exchanges at cheaper rates in order to prevent hefty financial losses. Thus, these consumers are in fact buying the same power from the power market at cheaper rates and practicing gaming of power. The open access consumers in fact are purchasing power both from the discoms and the power exchange in the real time on random basis in order to get the cheapest power from where so ever available.

A number of PPAs have been entered into for purchase of Power from various public sector generating companies in anticipation of higher demand in the future with the anticipation of greater industries and commercial consumption. This has been done to ensure that adequate power availability on a firm basis at all times particularly during the peak winter and summer seasons.

In addition, the demand pattern of the state of Haryana is such that it has two peak periods, morning and evening and the rest of the time, the demand is low in off peak periods resulting in considerable surplus of power. The sale price during these off peak hours is less than the average purchase cost, since there is no demand during these hours. Given this constraint, the DISCOMs have to maximize returns on sale of surplus power by preferably tying up sale of as much power as possible through banking and inter-state sale arrangements and minimize sale through UI or the exchanges. However, it has been recognized that despite one's best intentions and given the vagaries of demand and sudden outages we may not be able to sell surplus power at the rates of purchase. This loss is the price we have to pay for ensuring availability of quality power at all times. Hence the only option available with the discoms is to either back-down the surplus power or sale the surplus power at existing market rates to other states.

#### **2.4.10 State Advisory Committee (SAC)**

The meeting of the State Advisory Committee (SAC) was held on the MYT APR/ARR/Tariff/ True-up Petitions of all the utilities in accordance with the provisions of the Act. The meeting of the SAC was scheduled to be held on 26<sup>th</sup> February, 2015 in the conference room of the Commission at Panchkula. The agenda along with executive summaries of the ARR/APR/ True-up petitions of the distribution licensees was also sent to the Members. The issues raised by the SAC members and their suggestions thereto are presented below:-

Shri H.L. Bajaj, former Chairman of Central Electricity Authority and ex-member (Technical) of the Appellate Tribunal for Electricity, New Delhi, provided his valuable comments on the ARR, APR of the power utilities. Shri Bajaj suggested that the power tariff can only be made reasonable in case the Discoms monitor their line losses including the feeder level data and brought them within the norms set by the Commission. He also dwelt at length on the unrealized revenue from the electricity consumers and the need to liquidate the receivables to ensure financial viability of the power sector in Haryana. Additionally, he commented on the need to efficiently plan and execute the Capital Investments by the power utilities. He also stressed the need to give sensible targets to the power utilities as the performance targets are often not achievable thereby the financial burden is passed in the form of higher tariffs to the consumer categories including Industries who are already paying much above the cost they incur for the power supplied by the Discoms.

Shri Devendra Singh, IAS, Principal Secretary, Industry, Govt. of Haryana, suggested that HT Industry tariff needs to be rationalized so as to encourage setting up of Industries in Haryana and making the existing industries competitive. He was of the view that the reduction in cross-subsidy surcharge should be essentially linked with the reduction in the cross-subsidy. Hence, reduction in the cross-subsidy surcharge cannot be considered in isolation. On the issue of consumers defaulting in making payment for the power purchased by them, Shri Singh was of the view that the major defaulters are the rural domestic consumers and he stressed the need to pursue the feeder pillar-box scheme more vigoursly by the Discoms. He further suggested a simplified scheme to facilitate collection of the defaulting amount from the rural domestic consumers.

Additionally, regarding promotion of renewable energy in the State, he suggested development of solar park and stressed the need for waiving of wheeling charges as well as cross-subsidy surcharge on the renewable power developers in the State. Shri Singh further stressed the need for energy audit, removal of manual reading of meters by introducing AMR/CMRI and consumer indexing right up to the transformer level.

Shri Anshul Yadav, commenting on the generating source wise power purchase volume and cost of the Discoms, he suggested that in case the expensive sources like HPGCL, Aravali & CLP are avoided then the average power purchase cost will decline from Rs. 3.60/kWh to Rs. 2.70/kWh. Additionally, regarding power purchased from Aravali Power Co. Ltd., he commented that the cost of such power is un-reasonably high. Hence, there is a need to look into the matter and explore the possibilities of re-negotiating the Power Purchase Agreement or terminating the PPA after recovering the incentives and investment provided to the project by the State Government. On the performance of the Discoms he commented that there is a serious cash losses and the physical distribution system is in poor shape requiring significant capital investments. He commented on the need for accurate demand forecasting for effective power system operation. He further commented that the Discoms have failed to implement 100% metering and also installation of meters at all points for diligent monitoring of the power system. In conclusion, he suggested that the cost of generation need to be optimized by the State power generating companies and cost of power purchase ought to be optimized by the Discoms, besides several suggestions on the retail tariff structure, promotion of rooftop solar system as well as billing and delivery of electricity bills through electronic mode.

Shri Yadav further suggested that the Power Utilities need restructuring of staff deployed at different divisions and locations of the Discoms. He suggested that the Legal Cell and Vigilance cell should be reassessed in terms of their outcome with reference to the cost being incurred on them. He also suggested that all measures should be undertaken at all levels by the Utilities consciously and constantly so that substantial savings could be achieved thereby avoiding the need of tariff increase.

Sh. R.S. Pannu, Advocate, President RWA, Hisar said that most of the Power Plant of HPGCL are not running to their capacity. Commission should motivate the

society for nuclear power plants. He advocated special tariff for 'Melas' and higher tariff rates for various 'Deras'. He also expressed concern regarding 33000 tube-well pending release of connections. Shri Pannu further mentioned that as four plants in Panipat are not in operation, hence there is strong need of restructuring of the staff. Similarly, staff in DHBVNL and UHBVNL has been recruited without meeting the qualifications and experience of the posts mentioned in the rules. Mallies, Chowkidars and computer operators have been engaged in the Utilities in such a fashion and they are not delivering any good and are a liability on Utility and resultantly on the consumers. He mentioned that Plants in Hissar district are causing great pollution in the area for which suitable measures need to be undertaken at the earliest possible. He further mentioned that revenue circulars are being issued by the Power Utility without the approval of the HERC, which is against the regulations framed by the Commission. In order to cut the expenditure of the Utilities, he suggested that training centers of all the Utilities should be at one place rather than at many places in the State. Training Institute at Madanpur is said to have been created with a huge investment which is lying idle. It should be utilized commonly by all the Utilities. Similarly intera-Utility disputes should be withdrawn from different Courts and should be decided by the Utilities among themselves with the guidance of the Government/Power Secretary who is the Chairman of the Utilities. This will save unnecessary expenditure incurred on the advocates in the shape of fee. He further suggested that advocates of repute should be engaged only in cases where heavy revenue/monetary stake is involved and not for petty issues. It could save lacs of rupees of Utilities in a year. He suggested that Technical staff is not being recruited despite approval of HERC/Government and non-technical staff is being recruited beyond need. He requested that Haryana Gaushalas be treated at par with agriculture sector in terms of tariff.

Sh. Ashish Srivastava, Chief Electrical Distribution Engineer, Northern Railway highlighted the following points:-

1. As per National Tariff Policy, tariff charged from various categories should be linked to cost of supply.
2. Commission should lay down road map for reduction of transmission and distribution losses.

3. Railway should not be considered as a commercial organization for the purpose of tariff.
4. Discoms are charging FSA more than approved by the Commission.
5. Metering in case of Railways should be at their end instead of at sub-station.

The MD/ UHBVNL, Sh. Nitin Yadav, IAS suggested that tariff for LT industry should be decreased as in other states LT tariff is lower than HT tariff. He also stated that fixed charges regime should not be resorted to. The recovery of fixed cost of the infrastructure has to be stopped somewhere when the cost of infrastructure is fully recovered.

Sh. D.K. Chopra, Additional Director, HAREDA stated that Govt. of India is asking the State Renewable Energy Development Agencies to promote renewable energy without subsidy. He suggested that Commission should issue directions to Discoms to levy a cess along with tariff to create a fund for development of renewable energy in the State.

Sh. R.K. Podar, Regional Director, PHD chamber of Commerce and Industry expressed his strong concern regarding continuous rise in tariff, industry is becoming sick and is shifting to neighbouring States. He said levy of additional surcharge has adversely affected the open access and drawl of power through open access has considerably decreased. He also stated that cross-subsidy surcharge should be calculated based on cost of supply to the consumer. He also pointed out that cross subsidy in case of industrial consumers is Rs. 2/- unit and for NDS consumer it is only 64 p/ unit whereas there should not be such difference. He concluded by saying that industry is ready to pay justified cost, it can even subsidize DS consumers but it should not get killed in the process.

Shri Arun Verma, MD, DHBVNL apprised the SAC members regarding the following major steps taken by the Utility to reduce losses and bring in efficiency:-

- i) Started mass drive for replacement of defective meters,
- ii) Utility has arranged sufficient meters and field officers have been given targets for replacement of the defective meters,
- iii) Started consumer indexing, likely to be completed by December 2015,

- iv) Introducing CMRI meter reading for DS consumers,
- v) Introduced revenue reconciliation on monthly basis, and
- vi) Enhanced checking of DS and NDS consumers.

He brought out the sorry state of affairs in case of revenue collection from rural domestic consumers. He said, out of 18 lacs rural domestic consumers five lac are without meters. Out of 13 lac only 8 lac are paying bills and out of 8 lacs, five lacs are paying only MMC. He suggested that MMC should be suitably increased. He also stated that 30 to 40% of AP consumers have their actual load more than their sanctioned load. He also dwelt on difficulties faced by DISCOMS for disposing surplus power due to wide variations in the peak from 9000 MW in summer to 3000 MW in winter.

The MD, HPGCL, Sh. K.V. Rama Rao dwelt on the various measures taken by HPGCL to bring in more efficiency in its operations. He said that they have introduced lot of best practices and new technologies, have set up benchmarks to reach national level in performance and are effectively using the manpower. He also spoke on phasing out of Panipat TPS Unit 1 to 4. He said that HPGCL is venturing into Solar Power Generation and is planning to set up Solar Power Plants in the vacant land of HPGCL's various generating stations. He further said that besides the one coal block already with HPGCL, matter is being taken up with MoP and MoC for allocation of one more coal block which will be developed in next five to six years. He also said that HPGCL is planning to start 3<sup>rd</sup> party coal sampling which will lead to better quality of coal. He listed backing down of Thermal Units as the major issue being faced by HPGCL. He expressed the apprehension that if the units are not run, the State may lose coal linkages to other States. He concluded by saying that with the efforts being put in, HPGCL will be able to reduce per unit cost of generation.

Responding to query of HERC Member Shri M.S. Puri regarding compliance of RPO, MD, UHBVNL stated that they have floated tenders for 50 MW Solar Power and would be floating tenders for another 150 MW shortly. On power procurement, he said that DISCOMS are planning in such a manner that they don't have to go for short term power. To meet power requirement for FY 2019-20 onwards, he said DISCOMS need to start long-term Case-I bidding but are waiting for the coal prices to stabilize. He further

said that HVPNL would be concentrating more on SLDC, SCADA etc. in the next 3-4 years but their immediate priorities are strengthening the Transmission system and to streamline load management. He emphasized that cost of supply must be passed on to the consumers for commercial viability of the utilities.

The Chairman HERC stressed the need to introduce TOD at the earliest so that the load issue could be flattened to some extent. MD, DHBVNL stated that there are not many industrial units, which may shift their load to night hours. Member, HERC Shri Puri stated that the Discoms should award specific studies to examine all the aspects relating TOD so that the feasibility of the same could be assessed.

HERC



## CHAPTER 3

### ANALYSIS OF TRUE UP AND ARR FILINGS AND COMMISSION'S ORDER

The Commission, while passing this order for True-up of the FY 2013-14 ARR, Annual (Mid-year) performance review of the FY 2014-15 and determination of revised ARRs of the UHBVNL and DHBVNL for the FY 2015-16, has taken into account their respective 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 suggestions of the Members of State Advisory Committee.

The Commission has taken note of the concern expressed by Dr. Kirit Somaiya regarding declining trend in the cost of imported crude oil and coal and 15% tariff hike proposed by the Discoms. The Commission, in its present Order, has attempted to minimize the cost of power purchase by allowing drawls from expensive sources of generation including gas based Power Projects to the minimum possible level including power available from HPGCL's Power Plants of older vintage which has comparatively higher fuel/variable cost. Since the quantum of imported coal used at HPGCL's Power Plants is not very significant, the impact of reduction in the cost of imported coal is not much. In the case of all other power plants the tariffs are either determined by the CERC or governed by the PPAs, hence, as and when the same are revised by the authority concerned, the same shall be reflected in the FSA.

The Northern Railways have raised the issue of shifting of the energy meters from the Grid Sub-station to the Traction Sub-station as well as waiving off the requirement for ACD/Security deposit. The Commission observes that these issues have been raised in the past as well which were rejected by the Commission. Hence, in the present Order the Commission is not examining these issues again. Additionally, the Railways have raised the issue of load violation charges levied by the Discoms for exceeding the contract demand in different circumstances i.e. bunching of trains during certain hours, traction supply failure of TSS and extension of supply from the adjacent TSS etc. The Commission has taken note of the objections filed by the Railways and observes that the Railways may provide its load duration curve as well as the details of the instances when load violation charges were levied by the Discoms due to reasons attributable to the Discoms. The Commission shall examine the relevant data submitted

by the Railways and pass an appropriate Order in the matter. The Railways have also raised the issues of Power Factor rebate and incentive for timely payment of electricity bills by them. The Commission has considered the objections and is of the view that kVAh tariff itself has built in incentive mechanism i.e. by maintaining a power factor of more than the prescribed norm of 0.90, the Railways shall be able to reduce the billable energy in kVAh. As far as incentive for timely payment of energy bills is concerned, the Commission is of the view that the Railways are at par with all other consumer categories that pay their electricity bills in time. However, for those who do not, a delayed payment surcharge is levied. Thus, the Commission cannot create a disparity between consumers by offering incentive to the Railways for timely payment of the bills and none to others. Regarding their request that a time limit for repair and installation of meters be fixed, the Commission observes that the timeline for repair and installation of meters is already covered in the Electricity Supply Code notified by the Commission as well as the Standards of Performance Regulations.

The Commission observes that the stakeholders including FIA has raised several issues regarding trueing up of the FY 2013-14 ARRs of the Discoms. To allay the fears of the stakeholders the Commission would like to assure them that each and every component of expenditure for which trueing up has been sought by the Discoms have been examined in the light of the MYT Regulations, 2012 and only those expenditures found eligible for trueing up have been considered by the Commission. Regarding the non-fulfilment of RPO by the Discoms, the Commission shall hear the matter separately and pass an appropriate Order after hearing the stakeholders.

Almost all the stakeholders have raised the issue of high distribution losses of the Discoms as compared to those of the neighbouring States. The Commission is seized of the issue of high distribution losses in general and commercial losses in particular. The Commission has directed the Discoms to reduce the number of feeders reporting losses in excess of 50% besides taking timely action for replacement of dead/defective and slow energy meters and taking other measures for reducing technical and commercial losses in the distribution system. The Commission has kept the distribution loss trajectory as per the revised FRP targets.

The Commission has taken note of the issue pertaining to Open Access raised by DMRC as well as Northern Railways. As the matter relates to HVPNL, the

Commission has already directed HVPNL to submit status report. The Commission shall examine the same and decide the matter accordingly.

### **3.1 True-up of the ARR for the FY 2013-14**

The Discoms have submitted their filings for true up of the ARR for the FY 2013-14 based on the audited accounts. The true up petitions have been examined in the light of the MYT Regulations, 2012, relevant Orders of the Commission and the audited accounts. The MYT Regulations, 2012 provides as under:-

#### **“13. TRUING-UP**

13.1 *Truing-up of the ARR of the previous year shall be carried out along with mid-year performance review of each year of the control period only when the audited accounts in respect of the year(s) under consideration is submitted along with the application. In case audited accounts pertaining to the year, of which truing-up is to be undertaken, are not available, the generating company or the licensee as the case may be, shall submit the provisional account duly approved by the Board of Directors of the company/licensee.*

13.2 *Truing-up of uncontrollable items shall be carried out at the end of each year of the control period through tariff resetting for the ensuing year and for controllable items shall be done only on account of force majeure conditions and for variations attributable to uncontrollable factors.*

13.3 *The Commission shall allow carrying costs for the trued-up amount (positive or negative) at the interest rates specified in these regulations by adjusting the interest allowed on the working capital requirement for the relevant year of the control period.*

*Provided that no carrying cost shall be allowed on account of delay in filing for true-up due to unavailability of the audited accounts;*

*Provided further that if the Commission determines an over recovery during the true-up, funding cost for such trued up amount shall be considered for the delayed period and adjusted accordingly as per provisions of this regulation.*

13.4 *Over or under recoveries of trued-up amount in previous year(s) of the control period shall be allowed to be adjusted in the ensuing year of the control period by appropriate resetting of tariff. The unrecovered amount in the one control period shall be adjusted in the subsequent control period”.*

The petition(s) for true up of each item is discussed below:-

### 3.1.1 O&M Expenses

The O&M expenses comprise of employee cost, Terminal benefits, R&M expenses and A&G expenses. The MYT Regulations clearly lay down the methodology to be used for calculating these items and has laid down the principles for true up of the same. However, the transfer of Jind circle from UHBVNL to DHBVNL in the beginning of July has to be taken into account and therefore the approved expenses for both UHBVNL and DHBVNL have to be adjusted to enable a true comparison of actual expenditure with the approved expenditure for true up exercise for the FY 2013-14.

Based on Regulation 57.3 of HERC MYT Regulations 2012 Inflation factor for the FY 2013-14 is determined as under:-

$$\text{INDEX}_n = 0.55 * \text{CPI} + 0.45 * \text{WPI}$$

**Table 3.1: Index Calculation**

Index = (0.55 * CPI + 0.45 * WPI)	
Index (n) for FY 2012-13	209.72
Index (n-1) for FY 2013-14	193.75
<b>Inflation</b>	<b>8.24%</b>

#### 3.1.1.1 UHBVNL

The Commission had allowed O&M expenses (excluding terminal benefits) amounting to Rs. 580.62 crore. for the FY 2012-13 as part of true up which shall therefore form the base year figures for the purpose of calculating the normative O&M expenses for the FY 2013-14. After accounting for the increase (based on the inflation factor) calculated as per the MYT Regulations, the allowable O&M cost for the FY 2013-14 works to Rs. 628.46 crore. The actual expenditure incurred by UHBVNL is Rs. 655.41 crores including expenses of Jind circle of Rs. 44.21 crores and audited expenses of UHBVNL of Rs. 611.20 crore. The actual expenditure, therefore, is in excess by Rs. 25.24 crore which cannot be allowed to be trued up as per the MYT Regulations. However, the disallowance is allocated over the total O&M expenses of Jind and of UHBVNL excluding Jind and the disallowance for UHBVNL works to Rs. 25.24 crores and the balance amount of Rs. 38.49 crores is allowed to be trued up.

**Table 3.2: O&M expenses of UHBVNL for FY 2013-14**

(Rs. in Crores)

Particulars	FY 2012-13	FY 2013-14	FY 2013-14	FY 2013-14
	Audited	HERC Approval	UHBVNL Revised estimates	HERC revised approval
Employees Expenses	449.96	448.11	511.84	486.60
A & G Expenses	64.01	57.6	75.46	75.46
R & M Expenses	66.65	98.22	68.11	68.11
<b>Total</b>	<b>580.62</b>	<b>603.93</b>	<b>655.41</b>	<b>630.17</b>

### 3.1.1.2 DHBVNL

The total O&M expenses for DHBVNL excluding terminal benefits approved by the Commission for the FY 2012-13 was Rs. 554 crore. After indexing for inflation, the amount that can be allowed amounts to Rs. 630.68 crore for DHBVNL excluding O & M expenses for Jind circle which amount to Rs. 44.21 crore.

The licensee has submitted that there is an additional expenditure of Rs. 20.82 crores on LTC during the FY 2013-14 which was only Rs. 3.05 crores during the FY 2012-13 and therefore may be considered as one time expenditure. The Commission therefore allows true up of LTC on actual basis amounting to Rs. 17.13 crores.

The total allowable O&M expenses for FY 2013-14 as above amount to Rs. 692.02 crores as against actual expenditure of Rs. 656.34 crores. Hence, the actual O&M expenses for DHBVNL for the FY 2013-14 are allowed to be trued up as per details provided in the table 3.3.

**Table 3.3: O & M expenses of DHBVNL for FY 2013-14**

(Rs. in Crores)

Particulars	FY 2012-13	FY 2013-14	FY 2013-14	FY 2013-14
	Audited	HERC Approval	DHBVNL Revised estimates	HERC revised approval
Employees Expenses	455.00	418.47	530.85	530.85
A & G Expenses	53.00	52.84	66.58	66.58
R & M Expenses	46.00	85.79	58.91	58.91
<b>Total</b>	<b>554.00</b>	<b>557.10</b>	<b>656.34</b>	<b>656.34</b>

### 3.1.2 Terminal benefits

Terminal benefits being uncontrollable expenses as per the MYT Regulations, 2012, are to be trued up based on actual amount as per the audited accounts. The same is Rs. 346.88 crores for UHBVNL and Rs.156.30 crores for DHBVNL.

### 3.1.3 Depreciation

The Commission observes that the actual opening GFA as on 1.4.2013 for UHBVNL at Rs. 5470.89 crore is less than Rs. 5723.55 crore estimated by the Commission for calculating depreciation for the FY 2013-14. Similarly, the actual opening GFA as on 1.4.2013 for DHBVNL, as per audited accounts for FY 2013-14, at Rs. 4412.21 crore is less than Rs. 4973.61crore estimated by the Commission. However, depreciation of Rs. 230.06 crore and Rs. 206.96 crores respectively is higher than that allowed in the Commission's Order on account of the difference in the composition of the assets, and is therefore allowed to be trued up as per the details provided in the table 3.4.

**Table 3.4: Depreciation of UHBVNL for FY 2013-14**  
(Rs. In Crores)

Particulars	FY 2013-14	FY 2013-14	FY 2013-14
	HERC Approval	UHBVNL Revised estimates	HERC revised approval
Opening Gross GFA for the year	5723.55	5470.89	5470.89
Depreciation	197.69	230.06	230.06
Rate of Depreciation	<b>3.45</b>	<b>4.21</b>	<b>4.21</b>
Less: dep on consumer contribution	22.67	28.20	28.20
<b>Net Depreciation</b>	<b>175.02</b>	<b>201.86</b>	<b>201.86</b>

**Table 3.5: Depreciation of DHBVNL for FY 2013-14**  
(Rs. In Crores)

Particulars	FY 2013-14	FY 2013-14	FY 2013-14
	HERC Approval	DHBVNL Revised estimates	HERC revised approval
Opening Gross GFA for the year	4959.01	4412.21	4412.21
Depreciation	165.44	206.96	206.96
Rate of Depreciation	3.34	4.69	4.69
Less: dep on consumer contribution	36.31	57.08	57.08
<b>Net Depreciation</b>	<b>129.13</b>	<b>149.88</b>	<b>149.88</b>

### 3.1.4 Interest on consumers security deposit

The increase in interest on consumer security deposit by Rs. 6.16 for UHBVNL and Rs. 30.03 crore for DHBVNL is due to increase in base rate on which the interest is

to be calculated as per the HERC Regulations. This being uncontrollable, is allowed as true-up.

### 3.1.5 Interest on loan for capital expenditure

The Commission observes that both the Discoms have incurred expenditure on capital works in excess of that approved by the Commission. The MYT Regulations clearly provides as under:-

*“9.7 In the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the mid-year performance review and true-up, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the generating company or the licensee vis-à-vis the approved capital expenditure and in case of significant difference between the actual expenditure viz-a-viz the approved expenditure, the Commission may true up the capital expenditure, subject to prudence check, as a part of annual true up exercise on or without an application to this effect by the generation company/licensee. The generating company and the licensee shall submit the scheme-wise actual capital expenditure incurred along with the mid-year performance review and true-up filing.*

*9.8 In case during the mid-year performance review, the actual cumulative capital expenditure incurred up to the current year starting from first year of the control period, is less by more than 15% of the approved cumulative capital expenditure, the Commission shall true-up the costs incidental to the actual capital expenditure in the current year and remaining years of the control period.*

*Provided that the actual capital expenditure incurred shall be only for the schemes as per the approved capital investment plan.*

***Provided that if the actual capital expenditure incurred is more than the approved capital expenditure, the Commission shall not allow any true-up of the cost incidental to such variations.***

*9.9 In case the capital expenditure is required due to Force Meajure events for works which have not been approved in the capital investment plan or for works that may have to be taken up to implement new schemes approved by the State/Central Govt., the generating company or the licensee shall submit an application containing all relevant information along with reasons justifying emergency nature of the proposed work seeking approval by the Commission. In the case of works or schemes, other than those required on account of Force Meajure events, the Commission shall consider to give approval only in those cases where the*

*works / schemes are wholly / substantially financed by the State / Central Government or, in view of the Commission, shall benefit a large mass of consumers of the State. The generating company or the licensee may take up the work prior to the approval of the Commission only in case the delay in approval will cause undue loss and such emergency nature of the scheme has been certified by the Board of the Directors and intimated to the Commission:*

*Provided that the generating company or the licensee shall submit the requisite details, as required as per regulation 9.1 above, within 10 days of the submission of the application for approval of emergency work;*

*Provided further that for the purpose of regulation 9.7 and 9.8, such approved capital expenditure shall be treated as a part of actual capital expenditure incurred by the licensee as well as the capital expenditure approved by the Commission.*

- 9.10 *In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case may be, shall file an application with the Commission at the end of control period for trueing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case to case basis. The true-up application shall contain all the requisite information and supporting documents.*

*Provided that any additional capital expenditure incurred on account of time over run and / or on unapproved schemes not covered under regulation 9.9 or unapproved changes in scope of approved schemes shall not be allowed by the Commission unless the generating company or the licensee, as the case may be, is able to give adequate justification for the same.”*

The MYT Regulations, 2012 clearly provides that that if the actual capital expenditure incurred is more than the approved capital expenditure, the Commission shall not allow any true-up of the cost incidental to such variations. And in compliance, the interest on borrowings for capital works is separately calculated for approved works and for works not approved by the Commission. In accordance with the above regulation, the Commission allows true up of interest cost on borrowings for approved expenditure and interest cost incurred by the DISCOMS beyond this shall be addressed only at the end of control period.



### 3.1.5.1 UHBVNL

The Commission observes that the licensee has incurred an expenditure of Rs.599.92 crore on additions to capital works as against Rs. 457.49 crore approved by the Commission for the FY 2013-14. Hence, on this account, an additional interest cost has been incurred. The interest on borrowings for capital works is therefore separately calculated for approved works and for works not approved by the Commission. Also, as per the proposed capital investment plan, the State Government was to contribute Rs. 231.39 crore of equity but no equity has been received during the FY 2013-14 and all the funding of the capital works has been through loans or consumer contribution. The petitioner has submitted that a part of the Capex was also funded through working capital borrowings, accordingly, Rs. 21.4 crore (Rs 168.43 crore - Rs. 147.03 crores) interest on Capex loan forms part of interest on working capital borrowings. Accordingly, the interest on Capex loan for the approved works amounts to Rs. 162.82 crore and on unapproved works the same amounts to Rs. 5.61 crore as compared to Rs. 183.47 crores approved by the Commission for the FY 2013-14. Resultantly, Rs 20.65 crores interest on term loan is disallowed on account of true up as against the approved cost. The details are as per table 3.6.

**Table 3.6: Interest on Capex Loan of UHBVNL for FY 2013-14**

(Rs. in Crores)

HERC Approval	Op. Balance at the beginning of the year	Amount received during the year	Principal Repayment	Closing Balance	Interest	IDC	Net Interest
Term Loan 2013-14							
Actual	1894.22	585.07	189	2,290.29	247.75	79.32	168.43
Approved	1894.22	446.17	189	2,151.39	239.50	76.68	162.82
Excess over approved		142.43			8.25	2.64	5.61

### 3.1.5.2 DHBVNL

The Commission observes that the licensee has incurred an expenditure of Rs. 914.20 crore on additions to capital works as against Rs. 519.47 crores approved by the Commission for the FY 2013-14. Hence, on this account, an additional interest cost has been incurred. Also, as per the proposed capital investment plan, the State Government was to contribute

Rs. 197.85 crore of equity but no equity has been received during the FY 2013-14 and all the funding of the capital works has been through loans or consumer contribution. The petitioner has submitted that part of Capex was also funded through working capital borrowings and accordingly, Rs. 54.57 crore interest on Capex loan forms part of interest on working capital borrowings as submitted by the licensee. However, the interest on loan for capital works as per HERC working before IDC is estimated to be Rs. 165.85 crores for approved works and Rs. 20.59 crores for unapproved works. After apportioning the IDC, the net interest expensed on Capex loan for approved works amounts to Rs. 109.95 crore and on unapproved works it amounts to Rs. 13.65 crore as compared to Rs. 125.55 crores approved as per HERC order for FY 2013-14. Resultantly, Rs 15.60 crores interest on term loan is disallowed on true up as against the approved cost as per details provided in the table 3.7.

**Table 3.7: Interest on Capex Loan of DHBVNL for FY 2013-14**

(Rs. in Crores)

HERC Approval	Op. Balance at the beginning of the year	Amount received during the year	Principal Repayment	Closing Balance	Interest	IDC	Net Interest
Term Loan 2013-14							
Actual	1226.22	762.84	232.23	1756.83	186.44	62.85	123.60
Approved	1226.22	433.46	232.23	1427.45	165.85	55.91	109.95
Unapproved		329.38			20.59	6.94	13.65

### 3.1.6 Interest on working capital loan

Working capital loan is to be calculated as per MYT Regulations and interest is calculated accordingly.

**Table 3.8: Interest on Working Capital Loan of UHBVNL**

(Rs. in Crores)

Particulars	Amount
O&M expenses for 1 month	83.52
Maintenance spares 1% of GFA	54.71
2 months receivables	1470.99
Uncollected revenue	176.52
Total	1785.74
Less	
ACD	611.98

Net working capital	1173.77
Interest rate	12%
Interest cost	141

**Table 3.9: Interest on Working Capital Loan of DHBVNL**  
(Rs. in Crores)

Particulars	Amount
O&M expenses for 1 month	80.75
Maintenance spares 1% of opening GFA	44.12
2 months receivables	1657.60
Uncollected revenue	182.66
Total	1965.13
Less :	
ACD	807.56
Net working capital	1157.58
Interest rate	12%
Interest cost	139

### 3.1.7 Interest on FRP borrowings

The Discoms have been allowed to borrow additional funds as per the approved Financial Restructuring plan. Interest cost of these borrowings had not been anticipated at the time of finalization of the ARR for the FY 2013-14. Now that the FRP has been approved by the Commission, interest on these borrowings is also required to be trued up. The Commission had determined interest on FRP borrowing at Rs. 2188 crore for the FY 2012-13 and Rs. 2186 crore for FY 2013-14 as part of MYT Order dated 29<sup>th</sup> May, 2014. Further, regulatory assets and unrecovered FSA also forms part of these borrowings. Interest on unrecovered FSA has been allowed as carrying cost as part of FSA recovery and as such is excluded for the purpose of calculating interest cost that is to be allowed as part of FRP borrowings. The estimated additional expenditure on account of FRP borrowings is as given below:-

**Table 3.10: Interest on FRP borrowings**

(Rs. in Crores)

	State Government Share	DISCOMS Share	Total
Total short term borrowings as on 31.3.2012 to be considered under FRP	7366.60	7366.60	14733.20
less unrecovered FSA as on 31.3.2012 ( interest already provided In FSA order)		4593.38	4593.38
Balance	7366.60	2773.22	10139.82

Interest for FY 2012-13 @ 12.5%	920.83	346.65	1267.48
Balance outstanding as on 31.3.2013	8287.43	3119.87	11407.30
Regulatory asset proposed to be recovered during FY 2013-14		1042.18	1042.18
Regulatory asset actually recovered during FY 2013-14		942.66	942.66
Less FRP bonds taken over by the state Government	7366.60		7366.60
Balance FRP borrowings as on 31.3.2014	920.83	2177.22	3098.04
Interest for FY 2013-14 on above @12.5%	676.81	324.45	1001.25
Balance outstanding as on 31.3.2014 including interest on Rs. 7366 crores till the date of takeover by the state Government	1597.63	2501.66	4099.30
Less borrowing already provided in transmission tariff		1000.00	1000.00
Balance amount on which interest is to be provided	1597.63	1501.66	3099.30
Interest for FY 2014-15 @12.5%	199.70	187.71	387.41
FRP borrowings as on 31.3.2015	1797.34	1501.66	3299.0
Add HVPNL bonds transferred from HVPNL to UHBVNL and DHBVNL		1000.00	1000.00
Total borrowings as on 1.4.2015	1797.34	2501.66	4299.0
Interest for FY 2015-16 @ 12.5%	224.67	312.71	537.371

As part of true up, the Commission allows additional interest cost on FRP borrowings amounting to Rs. 346.65 crores for the FY 2012-13 and Rs. 324.45 crores for the FY 2013-14 for the two Discoms.

### 3.1.8 Cost of raising finance and bank charges

UHBVNL had proposed an expenditure of Rs. 11.06 crore on account cost of raising additional funds under FRP borrowings for the FY 2013-14. However, considering the estimate un-reasonable, the Commission had allowed Rs. 6.83 crore, based on the audited figures of the FY 2011-12 subject to true up. Now, as per the audited accounts, the UHBVNL has incurred a cost of Rs. 157.32 crore on this account and is allowed to be trued up.

The Commission observes that DHBVNL has not proposed any expenditure on account of raising finance under FRP borrowings for the FY 2013-14, the Commission allows true up of Rs. 59.26 crores as per the audited accounts on the same basis as for UHBVNL, this expenditure being incurred by the Discoms for additional borrowings under the FRP.

### 3.1.9 Other Debits

UHBVNL has proposed a true up of other debits of Rs. 13.11 crores as per details given the table 3.11.

**Table 3.11: Other expenses**

	(Rs. in Crores)
Provision for Bad & Doubtful Debts	102,962,462
Compensation for injury, death and damage	20,209,533
Infructuous Capital Exp. Written off	1,657,064
Loss on Obsolescence of Stores & Assets	878,846
Sundry Debit balances Written-off	1,103,779
Loss on sale of scrap	-
Provision for amount recoverable from employees	1,033,771
Provision for amount of theft of property pending investigation	3,258,663
<b>Total</b>	<b>131,104,117</b>

The Commission has examined the above and observes that part of other debits includes provisions for bad debts and other losses amounting to Rs. 10.72 crores which are not admissible for true up of actual expenditure. After excluding the amount on account of provisions, the Commission allows Rs.2.38 crores as other debits for true up.

DHBVNL has proposed a true up of other debits of Rs. 457.12 crores as given below:-

As per details provided by DHBVNL, Rs. 440.19 crores has been written back on account of provision for delayed payment surcharge. In this matter, the Commission observes that the Commission has been allowing delayed payment surcharge only on actual receipt basis in its ARR. As no effect has been taken of excess provision made by the licensee, similarly no effect would be taken on account of write back also.

Similarly, the balance amounts also pertain to provisions and write offs and therefore are not eligible for true up not being of the nature of expenditure.

### 3.1.10 Prior period expenses

UHBVNL has filed for true up of prior period expenses (net of prior period income) amounting to Rs. 22.81 crore as per detail given below:-

**Table 3.12: Prior Period Expenses**

	(In Rs.)
<b>Prior period income</b>	
Excess provision for interest in previous year written back	129,879
Readjustment of charges/ expenses in prior period	58,774,557
Other Income Relating To Prior Periods.	28,055,604
<b>Total (A)</b>	<b>86,960,039</b>

<b>Prior period expenses</b>	
Operating expenses	2,006,427
Employee cost	288,130,424
Interest charges	10,916
Other prior period expenses	24,909,578
<b>Total(B)</b>	<b>315,057,345</b>
<b>Net Total (A-B)</b>	<b>228,097,305</b>

The Commission observes that prior period items comprise mainly of employee cost and therefore is allowed to be trued up.

DHBVNL has filed for true up of prior period expenses net of prior period income amounting to Rs. 0.04 crore mainly due to accrued interest written off and is allowed to be trued up.

### 3.1.11 Return on Equity

UHBVNL and DHBVNL have proposed true up of return on equity for the FY 2013-14 amounting to Rs. 228.24 crores and Rs. 201.48 crores respectively. The true up has to be necessarily based on the principles of approved ARR and the relevant regulations. Hence, no return on equity can be considered as part of the true up process in accordance with the ARR and Tariff Order for the FY 2013-14.

### 3.1.12 Non-tariff Income

The Commission had approved Rs. 131.69 crore as non - tariff income for the FY 2013-14 as proposed by the UHBVNL and the actual non - tariff income as per audited accounts is only Rs. 123.11 after excluding income from treasury operation e.g. delayed payment surcharge and discount for timely payment of energy charges and therefore Rs. 9.17 crore is eligible for true up.

The Commission had approved Rs. 95.8 crore as non - tariff income for the FY 2013-14 as proposed by DHBVNL and the actual non - tariff income as per the audited accounts is Rs. 173.41 crores after excluding income from treasury operation e.g. delayed payment surcharge and interest on staff loans and therefore Rs. 77.61 crore is eligible for true up.

### 3.1.13 Power purchase cost

Difference in power purchase cost could arise on account of either actual generating source wise quantum or rate of power vis-à-vis those allowed by the Commission on a projected basis. The difference in rate of power purchase is allowed to the Discoms as FSA along with holding cost and therefore no expenditure on this account can form part of true up to be allowed to the licensee. However, the difference in volume of power purchase for actual sale at normative rates is required to be trued up and the calculation of true up of power purchase cost for the FY 2013-14 is given the table 3.13.

**Table 3.13: Power Purchase Cost**

(Rs. in Crores)

		UHBVNL	DHBVNL	Total
Audited sales adjusted for AP	MU	12005.45	16523.47	28528.92
Approved Distribution losses	%	27.50%	20.30%	
Sales grossed up for Distribution losses	MU	16559.24	20732.08	37291.32
Interstate sales and banking	MU	2436.16	3310.00	5746.16
Total sales	Mu	18995.40	24042.08	43047.48
Intrastate transmission losses	%	2.50%	2.50%	
Sales grossed up for Intrastate transmission losses	MU	19482.46	24658.55	44141.01
Generation within Haryana	MU	9212.15	11659.62	20871.77
Power purchase from outside Haryana	MU	10270.32	12998.92	23269.24
Interstate losses	MU	3.82%	3.82%	3.82%
Grossed up purchases	MU			24193.43
Total purchases	MU	19890.37	25174.83	45065.20
Rate as per HERC Order	Rs.	3.36	3.36	3.36
Power purchase cost for actual sales	Rs. Crore	6683.16	8458.74	15141.91
Power purchase cost as per order	Rs. Crore	6696.36	7765.58	14461.94
True up	Rs. Crore	-13.20	693.16	679.96

### 3.1.14 Revised ARR for FY 2013-14

In view of the above analysis, the Commission approves Rs. 463.24 crores for UHBVNL and Rs. 812.60 for DHBVNL, as true up of the ARRs for the FY 2013-14 as per the details provided in the table 3.14.

**Table 3.14: True up of UHBVNL for FY 2013-14**

(Rs. in Crores)

Particulars	Approved FY 2013-14	Actual FY 2013-14	Difference	Diff. to be allowed	Revised ARR for FY 2013-14
Power purchase cost	6994.08	8913.31	1924.48	-13.20	6980.88

Power Purchase Expenses	6696.36	8615.58	1919.23	-13.20	
Unitary Charges					
Interstate Transmission Charges #					
Intrastate transmission charges	297.73	297.73	0	0	
Operations and Maintenance Expenses	<b>704.28</b>	<b>1002.29</b>	<b>298.01</b>	<b>272.77</b>	<b>977.05</b>
Employee Expense	448.10	511.84	63.73	38.50	486.60
A&G Expense	57.6	75.46	17.86	17.86	75.46
R&M Expense	98.22	68.11	-30.11	-30.11	68.11
Terminal Liability	100.35	346.88	246.53	246.53	346.88
Depreciation	<b>175.03</b>	<b>201.86</b>	26.83	<b>26.83</b>	<b>201.86</b>
Net Interest on term loan incl funded through working capital	183.47	162.82	-20.65	-20.65	162.82
Interest on Security Deposit	39.30	45.46	6.16	6.16	45.46
Interest on Working Capital	127.71	1439.07	1311.36	13.29	141.00
Cost of raising finance and bank charges	6.83	157.32	150.49	143.66	150.49
Other Debits		<b>13.11</b>	13.11	<b>2.38</b>	<b>2.38</b>
Prior period debits/ credits		<b>22.81</b>	22.81	<b>22.81</b>	<b>22.81</b>
Return on Equity Capital		<b>228.24</b>	228.24	<b>0.00</b>	<b>0.00</b>
<b>Total Expenditure</b>	<b>8230.69</b>	<b>12186.29</b>	<b>3955.60</b>	<b>454.07</b>	<b>8684.76</b>
<b>Income/Receipts</b>			0.00		
Non Tariff Income	<b>-132.00</b>	<b>-231.00</b>	-99.00	<b>9.17</b>	<b>-122.83</b>
Revenue subsidy from Govt. (excluding FSA subsidy)	<b>3884.00</b>	<b>3884.00</b>	0.00		
<b>ARR</b>	4478.69	8533.29	4059.84	463.24	8561.93

# Interstate transmission charges for the FY 2013-14 has been accounted for in the FSA Order dated 19.03.2015 (Case No. HERC/PRO-16) issued by the Commission.

**Table 3.15: True up of DHBVNL for FY 2013-14**

(Rs. in Crores)

Particulars	Approved	Actual	Difference	Diff. to be allowed	Revised ARR for FY 2013-14
<b>Power purchase cost</b>	8042.00	11131.35	3089.35	693.16	8735.16
Power Purchase Expenses	7765.58	10811.36			
Transmission charges	276.42	319.99			
Operations and Maintenance Expenses	<b>715.55</b>	<b>812.64</b>	97.10	<b>97.10</b>	<b>812.65</b>
Employee Expense	418.47	530.85	112.38	112.38	530.85
A&G Expense	52.84	66.58	13.74	13.74	66.58
R&M Expense	85.79	58.91	-26.88	-26.88	58.91
Terminal Liability	158.44	156.30	-2.14	-2.14	156.30
Depreciation	<b>129.13</b>	<b>149.88</b>	20.75	<b>20.75</b>	149.88
Net Interest on term loan	125.55	171.08	45.53	-15.60	109.95
Interest on Security Deposit	40.95	70.98	30.03	30.03	70.98
Interest on Working Capital	133.53	690.37	556.84	5.47	139.00
Cost of raising finance and	0.00	59.26	59.26	59.26	59.26



bank charges					
True up of expenses of previous year	42.12	0.00	-42.12	0.00	42.12
Other Debits	0.00	<b>457.13</b>	457.13	<b>0.00</b>	<b>0.00</b>
Prior period debits/ credits	0.00	<b>0.04</b>	0.04	<b>0.04</b>	<b>0.04</b>
Return on Equity Capital		<b>201.48</b>	201.48	<b>0.00</b>	<b>0.00</b>
<b>Total Expenditure</b>	<b>9228.83</b>	<b>13900.51</b>	4671.68	<b>890.21</b>	<b>10119.04</b>
<b>Income/Receipts</b>			0.00		
Non Tariff Income	<b>-95.80</b>	<b>-213.48</b>	-117.68	<b>-77.61</b>	<b>-173.41</b>
Revenue subsidy from Govt. (excluding FSA subsidy)	<b>0.00</b>	<b>-1460.33</b>	-1460.33		
<b>ARR</b>	<b>9133.03</b>	<b>12226.70</b>	<b>3093.67</b>	<b>812.60</b>	<b>9945.63</b>

### 3.1.15 Revenue from sale of Power for FY 2013-14

As per audited accounts for FY 2013-14, the two distribution licensees have recovered revenue of Rs. 14209.81 crores as against Rs. 14291.55 crores estimated by the Commission. The true up revenue from sale of power for the FY 2013-14 is as given in the table 3.16.

**Table 3.16: Revenue from sale of power for the FY 2013-14**  
(Rs. Crores)

	UHBVNL	DHBVNL	Total
Revenue from sale of power			
Interstate	726.00	996.01	1722.01
Intrastate	5350.95	6856.43	12207.38
Fixed charges	425.68	699.17	1124.86
Less revenue from FSA	-844.44	0	-844.44
<b>Total revenue</b>	<b>5658.19</b>	<b>8551.62</b>	14209.81

### 3.1.16 True up of Subsidy for supply to AP consumers for FY 2013-14

The Commission had determined RE subsidy of Rs. 4853.4 crores payable by the State Government to the DISCOMs in order to keep the tariff for AP supply at current levels based on an estimated COS of Rs. 6.28 per unit. As the total ARR has now been revised on account of the true up exercise undertaken by the Commission as mandated by the MYT Regulations, 2012, the COS and the subsidy for AP supply is also required to be revised accordingly to reflect the true up amount. On account of true up, the total ARR for the FY 2013-14 has shown an increase of about 8.18% over the original approved figure of Rs. 19197.95 crores. The resultant revised subsidy for supply of 7773.92 MU to AP consumers works out to Rs. 5281.37 crores and the

revised revenue gap remaining unaddressed for the FY 2013-14 is Rs. 1277.42 crores as per the details provided in table 3.17.

**Table 3.17: True up for FY 2013-14**

(Rs. in Crores)		
True up of subsidy and revenue gap	As per ARR order	As per true up Order
Revised ARR for UHBVNL		8561.93
Revised ARR for DHBVNL		9945.63
ARR for FY 2013-14	17177.22	18507.56
Regulatory asset recovery	1042.18	942.66
FSA for FY 2011-12	978.55	647.28
Interest on FRP borrowings for FY 2012-13		346.65
Interest on FRP borrowings for FY 2013-14		324.45
Total revenue requirement	19197.95	20768.54
COS for AP supply	6.79	
% increase in Total revenue requirement	8.18%	
Proportionate increase in COS	6.90	
AP units sold	7773.92	
True up Subsidy for FY 2013-14	5281.37	5281.37
Revenue from sale of power as per audited accounts		14209.81
Total revenue including subsidy		19491.18
Revenue gap for FY 2013-14 on account of true up		1277.42

### 3.2 Revised ARR for FY 2015-16 based on Mid-year Performance Review

The revised ARR for the FY 2015-16 filed by the Discoms are required to be examined based on the Mid - year review in order to determine the tariff for the FY 2015-16. The Commission's analysis and Order on each of the expenditure items are given in the paragraphs that follow.

### 3.3 Commission's Estimate of Energy Sales for FY 2015-16

#### 3.3.1 AP Consumption

Both the distribution licensees i.e. UHBVNL and DHBVNL have segregated their Agriculture Supply feeders in the year 2009-10. Since then the Commission has been estimating their annual AP consumption based on the actual consumption recorded on segregated AP feeders during the previous year, after adjusting a loss factor of 16% and taking into account the estimated load growth. The Commission observes that despite the fact the UHBVNL has implemented HVDS scheme on segregated AP feeders in four districts, even then their line losses are of the order of 16% or more as estimated from the energy sent on the segregated AP feeders and that actually billed.

The Commission, in its Order on the Aggregate Revenue Requirement of UHBVNL & DHBVNL, for their Distribution & Retail Supply Business under MYT framework for the control period FY 2014-15 to FY 2016-17 and distribution and retail supply tariff for FY 2014-15, determined the AP consumption of the two licensees for the FY 2011-12 and FY 2012-13. The calculations were made as per the details of actual AP consumption provided by the two licensees.

The two licensees, however, through their present Petitions have submitted the revised calculations of AP consumption for the FY 2011-12 and FY 2012-13. These revised calculations have been examined and the same are found to be deficient as explained below:-

### 3.3.2 AP consumption Calculations for FY 2011-12

**Table 3.18: AP consumption as per the HERC MYT Order dated 29.05.2014 (In MUs)**

	UHBVN (2011-12)	DHBVN (2011-12)
AP units as recorded on segregated AP feeders	4,615.85	4,074.69
Loss @ 16%	738.54	651.95
Net AP consumption	3,877.31	3,422.74
Add AP units on other feeders	151.96	110.75
Less Consumption of other category consumers on segregated AP feeders	Nil	186.83
Total AP consumption	4029.27	3346.65

The two licensees, however, in their Annual Performance Review petition for FY 2014-15 have indicated the AP consumption as below:-

**Table 3.19: AP consumption calculated by Discoms (In MUs)**

	UHBVN (2011-12)	DHBVN (2011-12)
AP units as recorded on segregated AP feeders	4,615.85	4,074.69
Less Consumption of other category consumers on segregated AP feeders	0	187
Gross AP consumption	4,615.85	3,887.69
Loss @ 16%	738.54	622.03
Net AP consumption	3,877.31	3,265.66
Add AP units on other feeders	151.96	110.75
Total AP consumption	4,029.27	3,376.41

While the AP consumption for the FY 2011-12, of UHBVNL, is the same as calculated by the Commission, but in respect of DHBVNL, there is a difference of 29.76 MUs. This is because of the reason that the DHBVNL has calculated loss @ 16% after subtracting 187 MUs recorded as consumption of other category consumers on segregated AP feeders, from the total AP consumption of 4,074.69 MUs. However, this is not in order. The consumption of 187 MUs towards other category consumers on segregated AP feeders has been taken from the ledgers and is based on the actual meter readings recorded for individual consumers and the losses are already accounted for. As such, the calculations of DHBVNL is not correct and the actual AP consumption of DHBVNL for the FY 2011-12 is the same as calculated by the Commission i.e. 3346.65 MUs. Hence, the Commission is of the view that for FY 2011-12, no true up of AP consumption is required.

### 3.3.3 AP consumption Calculations for the FY 2012-13

The AP consumption as estimated by the Commission in its MYT Order dated 29.05.2014 for the FY 2012-13 is as under:-

**Table 3.20: AP Consumption calculated by HERC in the MYT Order (In MUs)**

	UHBVNL (2012-13)	DHBVNL (2012-13)
AP unit as recorded on segregated AP feeders	4,831.01	4,205.67
Loss @ 16%	772.96	672.91
Net AP consumption	4,058.05	3,532.76
Add AP units on other feeders	100.26	108.11
Less Consumption of other category consumers on segregated AP feeders	118.26	145.30
Total AP consumption	4,040.05	3,495.57

The two licensees, however, in their Annual Performance Review petition for the FY 2014-15 have indicated the AP consumption as per the details provided in the table 3.21.

**Table 3.21: AP consumption calculated by Discoms (In MUs)**

	UHBVNL (2012-13)	DHBVNL (2012-13)
AP unit as recorded on segregated AP feeders	4,831.10	4,205.67
Less Consumption of other category consumers on segregated AP feeders	0	145.29
Gross AP consumption	4,831.10	4,060.38

Loss @ 16%	772.98	649.66
Net AP consumption	4,058.12	3,410.72
Add AP units on other feeders	118.25	108.11
Total AP consumption	4,176.37	3,518.83

The difference in the calculations done by the Commission and the two Discoms is because of the following reasons:-

1. DHBVNL has calculated loss @ 16% after subtracting 145.29 MUs recorded as consumption of other category consumers on segregated AP feeders from the total AP consumption of 4,205.67 MUs. However, this is not in order as already stated. The consumption of 145.29 MUs towards other category consumers on segregated AP feeders has been taken from the ledgers and is based upon the actual meter readings recorded for individual consumers and the losses are already accounted for. As such the calculation made by the licensee is not in order and the actual AP consumption of DHBVNL for FY 2012-13 is the same as calculated by the Commission i.e 3495.57 MUs.
2. UHBVNL, which earlier reported consumption of other category consumers on segregated AP feeders as 100.26 MUs. in their monthly statements submitted to the Commission, have now omitted to include the same in their revised submissions.

**Hence, for the FY 2012-13 also, the AP consumption determined by the Commission in its ARR order for FY 2014-15 to FY 2016-17 is in order and no true up of AP consumption of the two licensees is required.**

### **3.3.4 AP consumption Calculations for the FY 2013-14**

As the actual AP consumption of two licensees for full period of the FY 2013-14 was not available, as such the Commission in its Order on MYT petition of the two licensees for FY 2014-15 to FY 2016-17, approved the AP consumption for the FY 2013-14, as per table 3.22.

**Table 3.22: AP consumption as calculated by HERC in MYT Order (In MUs)**

AP consumption (MUs)	FY 2013-14
	As provided in ARR order on MYT petition for FY 2014-15 to FY 2016-17
In respect of UHBVNL including Jind circle	4040

In respect of DHBVNL excluding Jind circle	3671
<b>Total AP consumption</b>	<b>7711</b>

The two licensees vide their subsequent filings including that dated 20.03.2015 submitted the AP consumption data of full FY 2013-14 and as per that the revised AP consumption of two licensees for the FY 2013-14 works out as per table 3.23.

**Table 3.23: Revised AP consumption for FY 2013-14 (In MUs)**

Particulars	UHBVN (2013-14)	DHBVN (2013-14)
<b>AP units as recorded on segregated AP feeders (In MUs)</b>	4252.12	4896.51
<b>Loss @ 16%</b>	680.34	783.44
<b>Net AP consumption</b>	3571.78	4113.07
<b>Add AP units on other feeders</b>	133.31	101.81
<b>Less Consumption of other category consumers on segregated AP feeders</b>	15.64	130.42
<b>Total AP consumption</b>	3689.45	4084.47
<b>Total AP consumption of two Discoms</b>		<b>7773.92</b>

Note: The consumption of Jind circle up to August, 2013 has been included in UHBVNL consumption and from September, 2013 onwards has been included in DHBVNL consumption.

The actual consumption of the two Discoms for the FY 2013-14 now works out as 7773.92 MUs (say 7774 MUs) as against 7711 MUs provided in Commission's order on their MYT petition for FY 2014-15 to FY 2016-17. **So for true Up of RE subsidy of the two Discoms for FY 2013-14, the actual AP consumption has been taken as 7774 MUs as against 7863.15 MUs indicated by the two Discoms in their Annual Performance Review petition for FY 2014-15 and 7810.42 MUs indicated in their subsequent filing dated 20.03.2015.**

### 3.3.5 AP Consumption estimated for the FY 2014-15 & FY 2015-16

Considering an annual load growth of 5% in AP consumption, the estimated AP consumption of two Discoms for FY 2014-15 works out as 8163 MUs (7774 x 1.05) and for FY 2015-16 works out as 8571 MUs (8163 x 1.05) as against 8097 MUs and 8502 MUs considered in Commission's order on their MYT petition, for respective years.

**Accordingly, the Commission approves the revised AP sales for the two distribution licensees for the FY 2014-15 and the FY 2015-16 as per that table 3.24.**

**Table 3.24: AP sales for the two distribution licensees**

Sr. No.	AP sales (MUs)	FY 2014-15	FY 2015-16
1	a) In respect of DHBVNL excluding Jind circle.	4023	4224
	b) In respect of Jind circle only.	486	510
2	<b>Total AP sales of DHBVNL including Jind circle (1a+1b).</b>	<b>4509</b>	<b>4734</b>
3	<b>In respect of UHBVNL excluding Jind circle.</b>	<b>3654</b>	<b>3837</b>
4	<b>Total AP Sales of two Discoms (2+3)</b>	<b>8163</b>	<b>8571</b>

### 3.3.6 Metered Sales (Other than AP)

In order to project the respective consumer category wise energy sales of UHBVNL & DHBVNL for the FY 2015-16, the Commission, in line with the methodology adopted in its previous orders, has relied on the CAGR of previous three years data provided by the Discoms for connected load, sales and the resulting consumer category wise consumption per kW. Hence, after applying the projected load factor/ specific per kW consumption to the projected consumer category wise connected load, the consumer category wise sales for the FY 2014-15 have been arrived at. The methodology applied by the Commission for arriving the metered sales is as under:-

- i) The category-wise connected load and energy sales for 1<sup>st</sup> half and 2<sup>nd</sup> half of the FY 2011-12, FY 2012-13, FY 2013-14 & FY 2014-15 (1<sup>st</sup> half ) were considered.
- ii) The category wise consumption per kW for the 1<sup>st</sup> half, 2<sup>nd</sup> half separately is calculated by dividing the category wise energy sales with the category wise connected load for the corresponding period.
- iii) The three year connected load CAGR for 2nd half is computed by using the following formula.

$$\text{II Half Connected load CAGR} = \left( \left( \frac{\text{Connected load for II half of FY 2013-14}}{\text{Connected load for II half of FY 2011-12}} \right)^{1/3} - 1 \right) \times 100$$

- iv) The three year connected load CAGR for full year is computed using the following formula.

$$\text{Full year Connected load CAGR} = \left( \left( \frac{\text{Connected load for FY 2013-14}}{\text{Connected load for FY 2011-12}} \right)^{1/3} - 1 \right) \times 100$$

- v) The connected load for 2<sup>nd</sup> half of the FY 2014-15 is arrived at by multiplying connected load for the 2<sup>nd</sup> half of the FY 2013-14 with the 2<sup>nd</sup> half connected load CAGR.
- vi) The consumption per kW for 2<sup>nd</sup> half of the FY 2014-15 is calculated by taking average of consumption per kW for 2<sup>nd</sup> half of the FY 2011-12, FY 2012-13 & FY 2013-14.
- vii) The energy sales for 2<sup>nd</sup> half of the FY 2014-15 is arrived at by multiplying connected load for 2<sup>nd</sup> half of the FY 2014-15 with consumption per kW for 2<sup>nd</sup> half of the FY 2014-15.
- viii) The energy sales for FY 2014-15 is arrived at by adding the energy sales for 1<sup>st</sup> half of the FY 2014-15 and sales for the 2<sup>nd</sup> half of the FY 2014-15.
- ix) The connected load for the FY 2015-16 is arrived at by multiplying full year connected load for the FY 2014-15 with the full year connected load CAGR arrived at as per Sr. No. iv above.
- x) The energy sales for FY 2015-16 is calculated by the multiplying connected load arrived as per Sr. no. 9 above with consumption per kW calculated for FY 2014-15.

The Commission observes that there has been unmet demand in Haryana in the past years due to quite a few pending new connections as also due to power shortages. However, in the subsequent years substantial augmentation of generation capacity/availability has taken place in Haryana. Hence, the CAGR of past time series data of sales and connected load may not truly reflect the consumer category wise sales for the FY 2015-16. Consequently, except Agriculture, the Commission, in line with the enhanced power availability in Haryana, has assumed an additional sale of 10% over and above energy sales arrived at on the basis of consumer category wise CAGR of



the past data submitted by the Discoms. The Commission thus approves energy sales for the FY 2015-16 as per the details provided in the table 3.25.

**Table 3.25: Approved Sales FY 2015-16 (MUs)**

Consumer Categories	UHBVNL		DHBVNL	
	As approved in ARR order dated 29.05.2014	Approved Sales FY 2015-16	As approved in ARR order dated 29.05.2014	Approved Sales FY 2015-16
Domestic	4867.5	3243.06	4781.70	4716.02
Non Domestic	1428.90	1287.11	2743.21	4155.15
HT Industry	4275.14	3995.10	6441	5431.11
LT industry	1060.4	781.20	859.1	900.64
Agriculture metered	1802	1645.35	2401	2672.60
Agriculture Unmetered	2652	2422.26	1647	1830.52
MITC	6.71	1.99	0	0
Lift irrigation	29.11	50.91	169	184.82
Railway traction inc DMRC	146	154.47	198.79	348.54
Bulk supply	406.82	400.84	611	628.70
Street Light	52.49	51.77	60.48	72.58
PWW	614.9	479.17	453.2	530.75
<b>Total</b>	<b>17342</b>	<b>14513.24</b>	<b>20365</b>	<b>21471.44</b>

The Commission observes that given the power availability scenario there may not be any need to purchase short-term expensive power or drawl under UI mechanism in a low grid frequency situation. However, in case such purchase is necessitated to manage day-to-day operations the purchase rate should not exceed the average per unit cost of power approved by the Commission.

### 3.4 Power Purchase volume

#### 3.4.1 Projections by UHBVNL / DHBVNL

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

licensees. HPPC procures power from the Central Generating Stations from where power has been allocated to Haryana and from time to time additional allocations are made from the central un-allocated quota in the CPSUs and other external sources i.e. NTPC, NHPC, NPC, short term/bilateral arrangements, shared projects such as BBMB as well as power made available by HPGCL from the state generating stations

The total revised power availability for the FY 2015-16) from all external and internal sources i.e. NTPC, NHPC, NPCIL, SJVNL HPGCL, BBMB stations, IPPs, Co-generation, renewable energy generation etc. in order to meet the consumer category wise sale of power by the Discoms, has been projected by the Discoms at 56070.92 MUs as against 53545 MUs allowed in the MYT Order dated 29.05.2014.

### **3.4.2 Commission's Estimate of power purchase Quantum**

As per the submissions of the Discoms and the fact that they have projected surplus energy, 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, the Commission reiterates that 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 as well as explore the possibilities of supplying additional power to the HT Consumers during the hours when the Discoms are resorting to under drawl / backing down of power plants at a concessional rate i.e. lower than the approved tariff and charges. The tariff in such cases could be based on grid frequency based meters. Further, while merit order stacking the Discoms should take into account Fixed Cost of backing down / under-drawl, which they anyway have to pay to the generators in addition to the fuel / variable charges. 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 and to reduce the trading losses incurred by the Discoms.

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 power stations. In order to estimate the power availability in Haryana the Commission while passing the MYT Order dated 29<sup>th</sup> May, 2014 for the period from the FY 2014-15 to the FY 2016-17 had considered the following:-

- (a) CEA's generation target for FY 2012-13 for thermal power stations and FY 2013-14 for hydro and nuclear power stations for which data was available.
- (b) Past trend of actual generation achieved vis-a-vis CEA's generation targets.
- (c) HPGCL's generation targets as approved by the Commission for FY 2014-15, FY 2015-16 and FY 2016-17.
- (d) Expected generation targets from new generating stations as proposed by the Discoms.
- (e) The Commission, for the limited purpose of arriving at power availability, has not taken into account a few sources like Karcham Wangtoo, Lanco Babandh and a few others as the power flow from such sources is uncertain. However, this should not be construed for any other power including approval / disapproval of such sources of power by the Commission.

The Commission observes that CEA's generation targets for the FY 2015-16 are now available. Hence, keeping in view the generation targets, source wise actual availability in the FY 2014-15, the Commission has revised volume of power purchase from each power generating sources. The source wise approved power purchase volume for FY 2015- 16 is discussed in the subsequent paragraphs. The discussions have been restricted to the FY 2015-16 as revised ARR of the FY 2015-16 only is to be determined by the Commission. 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.

### 3.4.3 Availability of power from HPGCL

The Commission has considered power availability at the bus bar from HPGCL sources as per its order dated 27.03.2015 in Case No. HERC/PRO-61 of 2014 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariff for the FY 2015-16. The underlying assumptions are not being reproduced here as the same has been discussed at length in the said order. The power availability (ex-bus energy) from HPGCL's Power Plants is presented in the table below:-

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for the FY 2015-16
HPGCL	20149.46	18,599.03

### 3.4.4 Availability of Power from Faridabad CCGT (FGPP-NTPC)

The 432 MW Faridabad gas based power plant of NTPC is a dedicated station for Haryana. As per Discoms submissions 1937.20 MUs was available from this source to Haryana in the FY 2013-14. For the FY 2015-16 the Discoms have projected 2478 MU from FGPP. The Commission observes that CEA's generation target from this source for the FY 2015-16 is significantly lower than that projected by the Discoms. Hence, for the purpose of projecting availability for the FY 2015-16, the Commission has pegged the power availability from FGPP at 1164 MUs i.e. the generation target of 1200 MUs for the FY 2015-16 adjusted for auxiliary consumption. The Commission's approves volume from FGPP is as per the table 3.26.

**Table 3.26: Power purchase volume from FGPP (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for FY 2015-16
Faridabad CCGT	2478	1164

### 3.4.5 Availability of power from shared projects of BBMB

The Discoms have 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).

The Commission observes that as per Discoms submissions 2850 MUs were available from BBMB power stations in the FY 2012-13 and 3266 MUs in the FY 2013-14. The Discoms have projected 2884 MUs availability from this source in the

FY 2015-16. For projecting availability of power from BBMB sources, the Commission in its MYT order for the control period from FY 2014-15 to FY 2016-17 had considered CEA's generation targets. As CEA's generation targets for the FY 2015-16 is now available, the power availability from the BBMB power plants in the FY 2015-16 has been accordingly revised. The details are as under:-

**Table 3.27: Power Availability from BBMB (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for the FY 2015-16
BBMB	2884.8	2528.44

### 3.4.6 Availability of power from NTPC Power Plants

The Commission in its MYT order for the control period from the FY 2014-15 to the FY 2016-17 had based its approval on the CEA's generation targets after adjusting the same for auxiliary energy consumption and actual availability in the FY 2013-14 from NTPC power stations in which Haryana has share. The Commission observes that CEA's generation targets for the FY 2015-16 are now available which in most cases are at variance with those approved by the Commission for the FY 2015-16 in its MYT Order. Hence, keeping in view the said generation targets and Haryana's share thereto, source wise actual availability in the FY 2014-15, the Commission has considered it appropriate to revise the power availability from NTPC sources in the FY 2015-16. The source details are as per table 3.28.

**Table 3.28: Power Purchase Volume from NTPC (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for the FY 2015-16
Singrauli STPS	1451	1386.23
Rihand I	510	391.54
Rihand II & III	549	680.98
Unchahar I	68	60.09
Unchahar II	141	125.69
Unchahar III	128	130.97
Anta CCGT	149	66.70
Auraiya CCGT	223	108.37
Dadri CCGT	235	110.21
Farakka STPS	59.46	84.60
Kahelgaon I	152	219.04
Kahelgaon II	370	330.00
Koldam HEP	179	47.60
<b>Total</b>	<b>4214.46</b>	<b>3742.02</b>

### 3.4.7 Availability of power from NHPC power plants

The Commission in its MYT Order dated 29<sup>th</sup> May,2014 for the control period from the FY 2014-15 to the FY 2016-17 had based its approval on the available CEA's generation targets after adjusting the same for auxiliary energy consumption and actual availability in the FY 2013-14 from NHPC power stations in which Haryana has share. The Commission, observes that the source wise generation targets for the FY 2015-16 are now available, hence the same would be a better estimation of availability of power to Haryana from NHPC sources in the FY 2015-16. The details are as under:-

**Table 3.29: Power purchase volume from NHPC (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for FY 2015-16
Bairasiul	125	212.43
Salal I	248	478.24
Tanakpur	13	28.66
Chamera I	195	360.01
Chamera II & III	61	169.56
Uri I & II	150	202.78
Dulhasti	115	114.30
Dhauliganga	86	62.50
Sewa II	36	29.58
Parbati III	141.54	60.87
<b>Total</b>	<b>1170.54</b>	<b>1718.93</b>

### 3.4.8 Availability from NPCIL sources

The Commission's, in its MYT order dated 29.05.2014 for control period from the FY 2014-15 to the FY 2016-17, had approved power purchase quantum from the Nuclear Power Corporation i.e. NAPP and RAPP sources based on Haryana's share in the CEA's target generation targets net of auxiliary consumption and further adjusted for actual availability. The Commission has considered it appropriate to revise the same in the light of the CEA's generation targets for the FY 2015-16. The details are as under:-

**Table 3.30: Power Purchase Volume from NPCIL (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for FY 2015-16
NAPP	135.96	138.73
RAPP (3,4,5,6)	463	472.51
<b>Total</b>	<b>598.96</b>	<b>611.24</b>

### 3.4.9 Power Purchase through Short Term/bilateral/UI mechanism

The Discoms have not proposed any drawl of power under short - term / bilateral & UI mechanism. Consequently, the Commission, while estimating quantum of power purchase, has not considered any power from short – term arrangements including drawl under UI mechanism.

#### 3.4.10 Power Purchase from Other Sources

(a) Power Procurement from a few other sources including new power plants proposed by the Discoms include 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. had also been considered by the Commission in the MYT Order dated 29<sup>th</sup> May, 2014. The Commission allows availability from these sources based on CEA’s generation targets available for the FY 2015-16 adjusted for actual availability from these sources in the recent past as reported by the distribution licensee. In case neither CEA’s generation target or past generation data was available, the Commission had adopted power purchase volume as proposed by the Discoms. The source wise details are as under:-

**Table 3.31: Power Purchase from Other Sources (MUs)**

Particulars	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for FY 2015-16
Mundra UMPP	2046.82	2436.46
Sasan UMPP	1817.90	1945.52
Pragati Gas Bawana	671	194
Aravali Power	3109.74	2747.75
DVC – Raghunathpur	539	60.39
Mundra Adani	7670.16	9024.83
DVC – Mejia B	538.64	538.95
THDC Koteshwar HEP 1&2	129	48.38
MGSTPS (CLP) Jhajjar	3199.5	5764.50
Koderma DVC	538.64	274.50
SJVNL	312	278.29
THDC Tehri	219	197.59
Rampur HEP	32.96	216.70
Barh I II	247.78	0.00
<b>Total</b>	<b>21072.14</b>	<b>23727.86</b>

## (b) Availability of Power from Independent Power Producers/PTC

In addition to the power available from Central Sector, State Sector and Shared Utilities, the Discoms have projected availability of power from PTC Tala, PTC J&K, and Lanco Amarkantak etc. The Commission has revised the availability of power from these sources as per the details provided in the table 3.32. In the case of Lanco Amarkantak Unit-2 of 300 MW, Haryana's share has been considered as per the Hon'ble Appellate Tribunal for Electricity Order i.e. 65%.

**Table 3.32: Availability of Power from PTC**

	HERC Approval for FY 2015-16 as per MYT order dated 29.05.2014	Revised HERC Approval for FY 2015-16
PTC - Tala	62.42	48.44
PTC Karcham	208.12	880.77
PTC-Lanco Amarkantak	525.17	1021.50
PTC GMR	0	1464
PTC Baglihar	0	154.78
Teesta III	0	7.79
<b>Total</b>	<b>795.71</b>	<b>3577.28</b>

## (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. Hence, the power purchase volume from such sources has been determined keeping in view the power availability from renewable sources in the FY 2015-16 for which the Commission has approved PPAs. However, the Discoms should meet the solar and non-solar RPO as provided in the HERC RE Regulations. Hence, the Commission has determined power availability from renewable energy sources as under:-

**Table 3.33: Availability from Renewable Energy Sources**

	HERC Approval for FY 2015-16 as per MYT Order dated 29.05.2014	Revised HERC Approval for the FY 2015-16
P&R Gogripur (hydel)	11.42	11.42
Bhoruka Power (hydel)	34.84	34.84
Puri Oil Mills (ydel)	17.30	17.30



Biomass & Cogen Projects	90.42	317.24
Solar Power Projects	1.24	21.30
<b>Total</b>	<b>155.22</b>	<b>402.10</b>

### 3.4.11 Total Approved Power Purchase Quantum

Based on the source wise approvals of the quantum of power, the Commission determines power availability both from inter-state and intra-state generators of 56070.92 MUs in the FY 2015-16.

### 3.5 Power Purchase Cost

The cost of power purchased by the Discoms is mostly a known parameter as the same is governed by the power purchase agreement(s) with the IPPs/electricity traders. In the case of Central Power Sector Units (CPSU's) or generators supplying power to more than one state, the tariffs as approved by the Central Electricity Regulatory Commission (CERC) are applicable. While in the case of State Projects, i.e. HPGCL the generation tariff is determined by the HERC and in the case of NPC (RAPP & NAPP) the Central Government determines the tariff. 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 Commission has notified on 5.12.2012 the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012. The relevant provision of the said regulations on power purchase cost is reproduced below:-

*59.1 The cost of power purchased by the distribution licensees from generating stations of HPGCL shall be worked out based on the tariff determined by the Commission. The cost of power purchase from central generating stations shall be worked out based on the tariff determined by the CERC. Similarly the cost of power purchased from nuclear power stations of Nuclear Power Corporation of India Ltd. (NPCIL) shall be worked out on*

*the basis of tariff notified by the Departmental of Atomic Energy under the Atomic Energy Act, 1961. In case of bilateral transactions, the rates as per PPAs approved by the Commission shall be considered. The cost of power purchase from other generating companies / sources shall be worked out based on invoices raised by the generators during the previous year. In absence of above, rates based on bills of energy purchased during the previous 3 months shall be considered by the Commission.*

*59.2 The cost of power purchase from non-conventional energy sources shall be based on the tariff determined by the Commission as per renewable energy regulations notified by the Commission and as amended from time to time or as per the PPAs approved by the Commission.*

*59.3 Subject to provisions of clause 59.3, any variation in cost of power purchase at the allowed transmission loss level, for reasons beyond the control of the distribution licensee, shall be allowed to be recovered by the distribution licensee by way of FSA, as per the formula approved by the Commission and as amended from time to time. The procurement price to be adopted for working out variation in the cost of power beyond approved power purchase volume shall be the generation tariff approved by the Commission, the rate discovered through competitive bidding and adopted by the Commission or the short-term rates approved by the Commission.*

*59.4 Any loss on account of increase in power purchase cost, not covered above, shall be borne by the distribution licensee.*

*59.5 The Renewable Purchase Obligation (RPO) of the distribution licensee shall be as per the renewable energy regulations notified by the Commission as amended from time to time.*

In view of the MYT Regulations, 2012, the Commission has largely based the estimation of power purchase cost for CPSU's based on the actual average rate reported by the Discoms for the FY 2014-15. In the case of Adani Power the same is based on the relevant year's tariff as per the PPA while in the case of HPGCL power the same has been considered as per the tariff determined by the Commission for the FY 2015-16.

### **3.5.1 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 the FY 2014-15.

### **3.5.2 Price for HPGCL power**

The Commission under sub - section 1(a) of section 86 and sub section 1(a) of section 62 of the Electricity Act 2003 has determined HPGCL's generation tariffs for FY 2015-16 vide its order dated 27th March, 2015 (Case No HERC/PRO – 61 of 2014).

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.

### 3.5.3 Price of Shared utility power

HVPNL, as per the transfer scheme notified by the Government of Haryana, has ownership interest to the extent of equity shares in IPGCL and BBMB projects and the corresponding share in capacities have been allocated to HPPC. HVPNL has to bear its share of net O&M cost in respect of BBMB projects, i.e. net of O&M charges less credit for HVPNL share of revenue for sale of power to common pool consumers. However, in line with the Hon'ble Appellate Tribunal's order on cost of BBMB power, the Commission allows tariff for power from BBMB as per the average actual rate of the FY 2014-15.

### 3.5.4 Price of Power Purchased from Other Sources

The Commission has relied upon the average power purchase rate as per the FY 2014-15 invoices raised by the generators in case of SJVNL, Farakka, Tala HEP, Dhulhasti, Dhauliganga, Tehri, Kahalgaon I and Kahalgaon II in lieu of Tala.

### 3.5.5 Price of Short term Power purchase/bilateral arrangements

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

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

The details of approved rates (Rs/kWh) and cost (Rs. millions) for purchase of power along with approved volume (million units), from various sources for the FY 2015-16 are presented in table below:-

**Table 3.34: Approved Volume, Rate & Cost of Power Purchase for FY 2015-16**

Source	Installed Capacity	MU			Annual Fixed Charges (Rs million)	Variable charges /unit	Annual Variable Charges (Rs million)	Annual Power Purchase Cost (Rs million)
		CEA Targets	Haryana Share	Haryana Quantum				
<b>NTPC</b>								
Singrauli STPS	2000	15150	10.00%	1386.23	745.97	1.23	1708.66	2454.63
Rihand I	1000	19750	6.50%	391.54	366.51	1.67	654.52	1021.03

HERC Order on True-up for the FY 2013-14, Annual (Mid-Year) Performance Review for the FY 2014-15, Revised ARR of UHBVNL and DHBVNL and Distribution & Retail Supply Tariff for the FY 2015-16

Rihand II	1000		5.70%	343.35	382.79	1.71	588.38	971.17
Rihand III	1000		5.61%	337.63	508.48	1.64	554.13	1062.61
Unchhahar I	420	7900	2.62%	60.09	67.12	2.78	167.15	234.27
Unchhahar II	420		5.48%	125.69	146.94	2.70	338.87	485.81
Unchhahar III	210		5.71%	130.97	117.03	2.74	358.84	475.88
Anta CCGT	419	1200	5.73%	66.70	129.74	3.23	215.19	344.93
Auraiya CCGT	663	1900	5.88%	108.37	155.86	5.88	637.10	792.96
Dadri CCGT	830	2300	4.94%	110.21	166.44	4.57	503.79	670.23
Faridabad CCGT	432	1200	100.00%	1164.00	2453.23	2.84	3303.98	5757.21
Farakka STPS	1600	13400	0.69%	84.60	63.29	2.98	252.14	315.43
Kahalgaon I	840	14900	3.04%	219.04	168.23	2.62	574.27	742.49
Kahalgaon II	1500		4.58%	330.00	578.11	2.48	817.16	1395.28
Kol Dam	800	890	5.38%	47.60	0.00	4.60	218.95	218.95
<b>NHPC</b>								
Salal I	180	3200	15.02%	478.24	257.97	0.48	230.56	488.53
Bairasiul	690	700	30.50%	212.43	174.77	0.86	181.88	356.66
Tanakpur	94	450	6.40%	28.66	34.88	1.24	35.42	70.30
Chamera I	540	2290	15.80%	360.01	279.41	0.98	353.71	633.12
Chamera II	300	1415	5.67%	79.83	135.90	1.47	117.20	253.09
Chamera-III	231	1032	8.74%	89.73	137.54	2.18	195.35	332.89
Dhauliganga	280	1100	5.71%	62.50	60.44	1.46	91.30	151.73
Dulhasti	390	2100	5.47%	114.30	363.55	3.03	346.23	709.78
Uri	480	2650	5.42%	142.91	126.97	0.81	115.41	242.38
Uri-II	240	1080	5.57%	59.87	183.77	1.79	106.97	290.74
Sewa II	120	510	5.83%	29.58	82.13	2.35	69.48	151.61
Parbati-III	520	700	8.74%	60.87	83.58	3.18	193.47	277.06
<b>SJVNL (Nathpa Jhakri)</b>								
SJVNL	1500	6550	4.27%	278.29	533.68	1.60	446.40	980.09
Rampur HEP	412.02	1450	15.02%	216.70	120.56	1.55	336.75	457.31
<b>THDC</b>								
Tehri (THDC)	1000	2797	7.10%	197.59	345.24	2.29	453.16	798.40
Koteshwar HEP	400	1155	4.21%	48.38	100.62	1.99	96.42	197.03
<b>NPC</b>								
NAPP	440	2384	6.36%	138.73	0.00	2.48	344.54	344.54
RAPP (3-4)	440	7645	10.91%	310.92	0.00	2.74	851.93	851.93
RAPP (5-6)	440		5.67%	161.59	0.00	3.41	551.02	551.02
HPGCL				18599.03	19565.07	3.37	62678.73	82243.80
<b>Shared Project</b>								
BBMB				2528.44	0.00	0.45	1137.45	1137.45
<b>DVC</b>								
DVC Mejia-B	1000	5890.17	10.00%	538.95	1028.57	2.28	1226.38	2254.96
Koderma DVC	1000	3000	10.00%	274.50	486.30	1.89	518.20	1004.49
DVC Raghunathpur	1200	792	8.33%	60.39	0.00	4.65	280.81	280.81
<b>UMPP</b>								
Mundra UMPP	4000	26628	10.00%	2436.46	2380.98	1.44	3505.66	5886.64
Sasan UMPP	4000	18900	11.25%	1945.52	269.23	1.15	2236.54	2505.77

Others								
Tala, HEP	1020	3312	1.47%	48.44	0.00	2.02	97.62	97.62
PTC GMR	1050	5600	28.57%	1464.00	2049.54	1.09	1595.7	3645.3
PTC Baglihar	450	1400	11.11%	154.78	0.00	3.72	575.77	575.77
PTC Lanco Amarkantak	300		65.00%	1021.50	0.00	2.92	2982.79	2982.79
PTC Karchamwangtoo	1000	4426	20.00%	880.77	0.00	3.40	2994.63	2994.63
IGSTPP, Jhajjar (Aravali)	1500	6500	46.20%	2747.75	7016.96	4.23	1162.29	18639.92
Pragati Gas Bawana	1371	2000	10.00%	194.00	1187.39	3.08	597.21	1784.59
Adani Power Ltd.	4620	32000	30.82%	9024.83		3.23	29132.16	29132.16
Teesta III	1200	47	16.67%	7.79	0.00	4.00	31.18	31.18
MGSTPS, CLP, Jhajjar	1320	7000	90.00%	5764.50	8124.36	3.05	17581.72	25706.08
Bhoruka (renewable)	6		100.00%	34.84	0.00	3.17	110.42	110.42
P&R Gogripur (renewable)	2		100.00%	11.42	0.00	4.71	53.79	53.79
Puri Oil Mill (renewable)	2.8		100.00%	17.30	0.00	3.90	67.47	67.47
Biomass Projects (renewable)	36.33		100.00%	206.86	0.00	6.15	1271.19	1271.19
Cogeneration Plants (renewable)	36		100.00%	110.38	59.47	3.43	379.06	438.53
Solar Projects (renewable)	12.8		100.00%	21.30	0.00	5.67	120.80	120.80
RPO/REC				3691.08		2.98		11000
<b>Total</b>				<b>56070.92</b>	<b>51238.61</b>		<b>154896.17</b>	<b>219053.57</b>

Note:- The Commission while making provisions for power purchase volume and cost of RPO/REC has considered shortfall in solar and non-solar RPO from the FY 2011-12 to the FY 2013-14 (actual) and the FY 2014-15 (actual up to December, 2014 and estimated for the last quarter of the financial year) i.e. 2457.60 MUs. Further, the Commission has calculated the RPO shortfall for the FY 2015-16 as the difference between the RPO targets as per the RE Regulations, 2010 & its subsequent amendments and the volume of power purchased from renewable power projects approved in the table above i.e. 402.10 MUs. Hence, the total RPO shortfall from the FY 2011-12 to the FY 2015-16 works out to 3691.08 MUs. The cost of procurement of such power or REC has been considered at an average rate of Rs. 2.98/kWh, which works out to be Rs.11000 millions and the same has been added to the overall all power purchase cost approved by the Commission for the FY 2015-16.

**In accordance with the source wise volume and cost of power purchase approved by the Commission as indicated in the table above, the total volume of power available in the FY 2015-16 is approved at 56070.92 MUs at a cost of Rs. 219053.57 millions. The average rate of power purchase allowed by the Commission in the FY 2015-16 works out to Rs. 3.907/kWh.**

### 3.6 Transmission Losses

For the purpose of calculating energy available for sale by the Distribution licensees in the FY 2014-15, FY 2015-16 and FY 2016-17, the Commission in its MYT Order dated 29<sup>th</sup> May, 2014, had relied on the latest available figures for inter-state transmission losses. For the intrastate transmission losses, the Commission has retained its benchmark loss level of 2.50 % as determined for the FY 2013-14 and for the FY 2014-15 and has pegged the loss level at 2.48% for the FY 2015-16 and 2.46% in the FY 2016-17.

### 3.7 Inter-State sale of Power and Power purchase cost for Distribution licensees

UHBVNL and DHBVNL have indicated interstate sale of 1986 MUs and 3947 MU respectively for the FY 2015-16 at an average rate of 80% of the average power purchase cost inclusive of interstate transmission charges. The difference between availability of power and projected sales as estimated by the Commission is 7574.32 MUs for the FY 2015-16. Sale of 7574.32 MUs at Average power purchase cost is expected to generate Rs. 2959.29 crores @ Rs. 3.907 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 2015-16 as per the MYT order. Resultantly, the power purchase cost for UHBVNL and DHBVNL is apportioned at Rs. 7791.94 crores and Rs. 11155.44 crores respectively.

**Table 3.35: Energy available for Sale to the Distribution Licensees for the FY 2015-16**

Sr. No.	Particulars	Units	UHBVNL	DHBVNL	Total
1	Gross energy procured from outside the state sources	MUs	9327.34	13353.62	22680.96
2	Interstate sale / banking	MUs	3114.87	4459.45	7574.32
3	Energy procured from outside the state sources net of interstate sale / banking	MUs	6212.47	8894.17	15106.64
4	Inter-state transmission losses	%	3.82%	3.82%	3.82%
5	Inter-state transmission losses	MUs	237.32	339.75	577.07
6	Net energy available from outside the state	MUs	5975.15	8554.42	14529.57
7	Add energy generated within the state	MUs	13731.31	19658.65	33389.96
8	Net energy available for use in Haryana	MUs	19706.46	28213.06	47919.53

9	Intra-state transmission losses	%	2.48%	2.48%	2.48%
10	Intra-state transmission losses	MUs	488.72	699.68	1188.40
11	Energy available for sale to distribution licensee	MUs	19217.74	27513.38	46731.12
12	Distribution loss	%	24.48%	21.96%	23%
13	Distribution loss units	MU	4704.50	6041.94	10746.44
14	Units sold by DISCOMS	MU	14513.24	21471.44	35984.68
15	Net energy available for sale in Haryana (8)	MUs	19706.46	28213.06	47919.53
16	Power purchase cost net of revenue from sale/ banking	Rs. crores	7791.94	11155.44	18947.38
17	Rate of power purchase at Haryana boundary	Rs/ unit	3.954	3.954	3.954

### 3.8 Renewable Purchase Obligation (RPO)

Section 86 (1) (e) of the Electricity Act, 2003 mandates the Commission to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, a percentage of the total consumption of electricity in the area of distribution licensee, for mandatory purchase of electricity from such sources. In accordance with the 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 RPO for FYs 2011-12, 2012-13 and 2013-14 as approved by the Commission are as under:-

**Table 3.36: Renewable Purchase Obligation from the FY 2011-12 to FY 2014-15**

Financial year	Energy Consumption (MU)	%age of overall RPO	Renewable energy (other than solar) required to be purchased as per overall RPO (MU)	%age of solar RPO (as a %age of overall RPO)	Energy required to be purchased as per solar RPO (MU)	Total renewable energy required to be purchased (MU)
2011-12	36075	1.50%	541	0.31%	1.69	543
2012-13	40000	2.00%	800	0.05%*	20	820
2013-14	41086	3.00%	1191.49	0.10%*	41.09	1232.58
2014-15	45028	3.25%	1350.84	0.25%*	112.57	1463.41

\* Solar power purchase obligation is 0.05%, 0.1% & 0.25% of total energy consumption for the financial years 2012-13, 2013-14 & 2014-15 respectively.

As per data provided by the State Nodal Agency for FY 2011-12, FY 2012-13, FY 2013-14 and FY 2014-15 (up to Dec. 2014), the shortfall in meeting the RPO for the aforesaid years has been worked out as under:-

**Table 3.37: Shortfall in meeting RPO (MUs)**

Type of RE source	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15 (up to Dec. 2014)
Solar	0	7.14	32.21	81.76
Non-Solar	143.00	319.89	828.50	721.57
Total	143.00	327.03	860.71	803.33
<b>Total Shortfall up to December, 2014</b>				<b>1606.66</b>

The Commission observes that the Discoms have failed to achieve the RPO target set by the Commission. The Discoms have also not purchased any Renewable Energy Certificates (REC) to fulfil their RPO.

The Commission vide its order dated 20.11.2013 in case no. HERC/RA-04 of 2012, HERC/RA-08 of 2012, HERC/RA-11 of 2013 & HERC/PRO-30 of 2013 allowed the Discoms to carry forward the shortfall, on actual basis, the RPO compliance for FY 2011-12, FY 2012-13 and FY 2013-14 to the next financial year i.e. FY 2014-15 in addition to the RPO for FY 2014-15.

In accordance with the provisions of the amended regulations, the RPO for the FY 2015-16 is 3.50% of the total energy consumption. The approved RPO for FY 2015-16 is as under:-

**Table 3.38: Renewable Purchase Obligation for the FY 2015-16**

Energy Consumption for 2015-16 (MU)	%age of Non solar RPO of energy Consumption	Non solar RPO (MU)	Solar RPO as %age of energy sales	Solar RPO (MU)	Total renewable energy required to be purchased (MU)
46731.12	2.75%	1285.11	0.75%	350.48	1635.59

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 2015-16. Therefore, the volume of renewable energy purchase as approved by the Commission as above shall be adjusted against the total RPO of the Discoms. Further, RPO backlog of 1606.66 MUs shall be part of total power purchase volume approved by the



Commission for the FY 2015-16 and set off against the costliest power in the merit order.

**The Commission directs the Discoms to purchase renewable energy as per RPO targets set for the FY 2015-16 and the shortfall carried forward, on actual basis, for previous years. In case they can purchase the same at a tariff lower than determined by this Commission they may do so, otherwise they must purchase all such power offered to them by the renewable energy power producers at the tariff determined by this Commission.**

The shortfall in meeting the RPO for the FY 2011-12, 2012-13, 2013-14 and 2014-15 as per details given above shall also be met by the Discoms in the FY 2015-16 in addition to the RPO of FY 2015-16.

The Commission observes that the State Nodal Agency i.e. HAREDA has been submitting quarterly status of RPO met by the obligated entities for the last quarter, separately for overall RPO and solar RPO, in accordance with the provisions of regulations 66 (3) of the HERC renewable energy regulations in the format as per table 3.39. They shall continue doing so as per the timeline provided in the ibid Regulations.

**Table 3.39: HERC Renewable Energy Regulation Format**

1.	Name of the obligated entity		
2.	Total Energy Consumption		
3.	Units required to meet total RPO (3.50% of total energy consumption)		
4.	Units required to meet Solar RPO (0.75% of total energy consumption)		
5.	Units required to meet Non-Solar RPO (Total RPO – Solar RPO)		
6.	Actual Energy purchased from Solar Power Plant		
7.	Actual Energy purchased from Non-Solar Power Plant		
8.	Shortfall in Solar RPO		
9.	Shortfall in Non-Solar RPO		

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

The State Agency may suggest appropriate action to the Commission for compliance of the renewable purchase obligation by the obligated entities.

The Discoms are directed to provide requisite information to the State Agency on monthly basis by 10th of every month for the previous month to enable the State Agency to submit quarterly report to the Commission.

### **3.9 Interstate transmission charges**

Interstate transmission charges proposed by UHBVNL and DHBVNL are Rs. 392 crores and Rs. 447 crores respectively i.e a total of Rs. 839 crores. The Commission has assumed the interstate transmission charges as per audited accounts for FY 2013-14 at Rs. 785.45 crores which have been allocated in the ratio of gross power purchase volume of each DISCOM which comes to Rs. 323.01 crores for UHBVNL and Rs. 462.44 crores for DHBVNL.

### **3.10 Intrastate Transmission Charges & SLDC Charges**

The Commission, vide its order on Transmission Tariff and SLDC charges dated 31.03.2015, has approved Transmission tariff and SLDC charges for the FY 2015-16 including the transmission and SLDC charges recoverable from TPTCL. The intrastate transmission charges approved include the unitary charge arising out of transmission project commissioned through Public Private Partnership (PPP) between HVPNL and M/s Jhajjar KT Transco Private Limited. The details including monthly recovery of the transmission and SLDC charges from various beneficiates including the Discoms are given in the ibid order.

### **3.11 Employee Cost / A&G Expenses**

The Employee cost, A&G expense and Repair & Maintenance expenses together comprise the O&M expenses of the Distribution Licensee. The O&M expenses as per MYT Regulations, 2012 are considered as controllable costs except for Terminal Benefits (TBs) which are considered uncontrollable. The O&M expenses as per these Regulations are to be worked out for the Distribution and Retail Supply Business for each year of the control period as under:

“The actual audited O & M expenses for the financial year preceding the base year, subject to prudence check, shall be escalated at the escalation factor of 4% to arrive at the O & M expenses for the base year of the control period. The O&M expenses for the nth year of the control period shall be approved based on the formula given below.

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) * (1-X_n) + \text{Terminal Liabilities}$$

Where,

- R&M<sub>n</sub> – Repair and Maintenance Costs of the Distribution Licensee(s) for the nth year;
- EMP<sub>n</sub> – Employee Costs of the Distribution Licensee(s) for the nth year excluding terminal liabilities;
- A&G<sub>n</sub> – Administrative and General Costs of the Distribution Licensee(s) for the nth year;

The above components shall be computed in the following manner.

(a)  $R\&M_n = K * GFA * INDX_n / INDX_{n-1}$

Where,

- 'K' is a constant (expressed in %) governing the relationship between O&M costs and Gross Fixed Assets (GFA) for the nth year. The value of K will be 1.65% for DHBVN and UHBVN respectively for the entire control period;
- 'GFA' is the average value of the gross fixed asset of the nth year.
- 'INDX<sub>n</sub>' means the inflation factor for the nth year as defined herein after.

(b)  $EMP_n \text{ (excluding terminal liabilities)} + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1})$

Where,

- INDX<sub>n</sub> – Inflation Factor to be used for indexing the Employee Cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year and shall be calculated as under:
- $INDX_n = 0.55 * CPI_n + 0.45 * WPI_n$ .

It has further been provided in these Regulations vide Note 1 appended below Regulation 57.3 that "For the purpose of estimation, the same INDX<sub>n</sub> value shall be used or all years of the control period. However, the Commission shall consider the actual values of the INDX<sub>n</sub> at the end of each year during the annual performance review exercise and true-up the employee cost and A&G expenses on account of this variation."

In the MYT Order dated 29.05.2014 for Distribution Retail Supply Business for FY 2014-15, the Employee Cost (excluding TBs) and A&G expenses for FY 2014-15, FY 2015-16 and FY 2016-17 were worked out based on audited expenses under these heads for FY 2012-13 using an indexation factor (INDX) of 9.21%. However, indexation factor based on WPI and CPI indices for FY 2013-14 and FY 2014-15 (WPI/CPI indices are available upto Jan/Feb, 2015 and for Jan/Feb upto March values as in Jan/Feb have been

assumed) works out to 4.68%. The revised Employee Cost and A&G expenses for FY 2015-16 accordingly have been worked out as under:-

(in Rs.Crore.)

Sr. No.	Particulars	UHBVNL	DHBVNL
1.	Audited Employee Cost excluding Terminal Benefits for FY 2012-13	449.96	455.00
2.	Employee Cost for the Base year FY 2013-14 with 4% escalation	467.95	473.20
3.	Indexation Factor	4.68%	4.68%
4.	Employee Cost excluding Terminal Benefits for FY 2015-16	512.78	518.52

The revised Employee Cost (excluding Terminal Benefits) for FY 2015-16 is approved at Rs. 512.78 cr. and Rs. 518.52 cr. for UHBVNL and DHBVNL respectively.

### A & G Expenses

The revised A&G expenses for FY 2015-16 have been worked out on the same lines as Employee Cost as under:-

(in Rs.Crore.)

Sr. No.	Particulars	UHBVNL	DHBVNL
1.	Audited A&G Expenses for FY 2012-13	64.01	53.00
2.	A&G Expenses for the Base year FY 2013-14 with 4% escalation	66.57	55.12
3.	Indexation Factor	4.68	4.68
4.	A&G Expenses for FY 2015-16	72.95	60.46

Accordingly, the revised A&G expenses for FY 2015-16 are approved at Rs. 72.95 crore. and Rs. 60.46 crore. for UHBVNL and DHBVNL respectively.

### 3.12 Repair & Maintenance

UHBVNL has proposed R&M expenses of Rs. 122.99 cr. in the revised petition, as against Rs. 126.34 cr. approved by the Commission for the FY 2015-16. Based on the estimated capital expenditure for FY 2014-15 and FY 2015-16, the average GFA for FY 2015-16 is estimated as Rs. 6741.28 crore as against Rs.7011.64 crore estimated earlier as per the MYT order and on the revised GFA estimates, the R & M expenditure at 1.65% of average GFA for FY 2015-16 comes to Rs. 111.23 crore as against Rs. 126.34 crore approved in the MYT Order.

For DHBVNL, the average GFA for FY 2015-16, based on the estimated capital expenditure for FY 2014-15 and FY 2015-16, is estimated as Rs. 5943.69 crore as against Rs.7924 crore estimated earlier as per the MYT order. Based on the revised GFA estimates, the R & M expenditure at 1.65% of average GFA for FY 2015-16 comes to Rs. 98.07crore as against Rs. 131.85 crore approved as per MYT order.

### 3.13 Terminal Benefits

The Commission had approved Rs. 314.17 crore as terminal benefit expenses for FY 2015-16 for UHBVNL and Rs. 150 crores for DHBVNL as proposed by the licensees. Based on the audited expenses for FY 2013-14, UHBVNL has revised its estimates of terminal benefits for FY 2015-16 to Rs. 406.39 crore Terminal benefits being uncontrollable may be revised accordingly. For DHBVNL, the same amount may be retained for FY 2015-16 as no change has been proposed by the licensee in the terminal benefit cost.

### 3.14 O & M Expenses

Based on the above calculation, the revised O & M expenses are estimated at Rs. 1103.35 crore as against Rs. 1077.97 crore for UHBVNL and Rs. 861.89 crore as against Rs. 888.09 crore for DHBVNL as per the MYT order. However, the Commission directs the licensee to try to remain within the allowed O&M expenses except for uncontrollable factors because disallowance of controllable expenses on true up would only add to the unfunded losses of the utilities. The details are provided in the table 3.40 and 3.41.

**Table 3.40: O &M expenses of UHBVNL for the FY 2015-16**  
(Rs. in crores)

Particulars	FY 2015-16	FY 2015-16	FY 2015-16
	HERC Order	UHBVNL revised filing	HERC revised order
<b>Employee Expense</b>	558.06	547.85	512.78
<b>A&amp;G Expense</b>	79.39	88.41	72.95
<b>R&amp;M Expense</b>	126.34	122.99	111.23
<b>Terminal Liability</b>	314.17	406.39	406.39
<b>Total</b>	<b>1,077.97</b>	<b>1157.11</b>	<b>1,103.35</b>

**Table 3.41: O & M expenses of DHBVNL for the FY 2015-16**  
(Rs. in crores)

Particulars	FY 2015-16		FY 2015-16
	HERC Order	DHBVNL revised filing	HERC revised order
Employee Expense	540.99	851.9	518.52
A&G Expense	65.25	77.99	60.46
R&M Expense	131.85	118.97	98.07
Terminal Liability	150.00	150.00	150.00
<b>Total</b>	<b>888.09</b>	<b>1,198.86</b>	<b>827.05</b>

### 3.15 Depreciation

UHBVNL has proposed depreciation of Rs. 304.06 crore.(Rs. 378.84 Crore as per revised filing) in their ARR petition for FY 2015-16 on the basis of revised approved capital expenditure for FY 2014-15 and FY 2015-16 and also the revised opening balance of GFA as on 01.04.2014. Based on the audited figures, the depreciation for FY 2015-16 for UHBVNL is estimated as Rs. 265.92 crore at the average rate of depreciation of 4.21% based on the audited account of FY 2013-14. The Depreciation on assets funded through to consumer contribution Rs. 33.45 crore is reduced from the above amount to arrive at net depreciation of Rs. 232.46 crore for FY 2015-16 against (Rs. 308.35 crore allowed by the Commission as per the MYT order).

**Table 3.42: Depreciation of UHBVNL for FY 2015-16**  
(Rs. in crores)

Particulars	FY 2015-16	
	UHBVNL proposal	HERC approval
<b>Gross Fixed Assets (GFA)</b>		
Opening GFA	6502.85	6323.55
Add: Trfd from CWIP	1003.78	835.47
Total GFA	7506.63	7159.01
Less: Retirement/Disposal of Assets	236.49	
<b>Closing GFA</b>	<b>7270.14</b>	<b>7159.01</b>
Average GFA	6886.495	6741.28
Opening GFA funded thru consumer contribution/ grants		941.81
Depreciation Rate	5.14%	4.21%
Depreciation amount	334.06	265.92
Less depreciation on assets funded through consumer contribution	30	33.45
Net depreciation for the year	304.06	232.46

DHBVNL has proposed depreciation amount of Rs. 319.84 crore in their ARR petition for the FY 2015-16 based on revised approved capital expenditure for the

FY 2014-15 and the FY 2015-16 including the revised opening balance of GFA as on 01.04.2014. Based on the revised approved capital expenditure for FY 2014-15 and FY 2015-16 and also the revised opening balance of GFA as on 01.04.2014, based on the audited figures, the depreciation for FY 2015-16 for DHBVNL is estimated as Rs. 266.92 crore at the average rate of depreciation of 4.80% based on the audited account of FY 2013-14. The Depreciation on assets funded through consumer contribution Rs. 64.66 crore is reduced from the above amount to arrive at net depreciation of Rs. 202.26 crore for the FY 2015-16 as against Rs. 320.29 crore allowed by the Commission as per the MYT order.

**Table 3.43: Depreciation of DHBVNL for the FY 2015-16**  
(Rs. in crores)

Particulars	FY 2015-16	FY 2015-16
Gross Fixed Assets (GFA)	UHBVNL proposal	HERC approval
Opening GFA	6661.00	5558.91
Add: Trfd from CWIP	1418.00	769.55
Total GFA	8079.00	6328.46
Less: Retirement/Disposal of Assets	44.00	
<b>Closing GFA</b>	8035.00	6328.46
Average GFA	7348.00	5943.69
Opening Assets funded thru consumer contribution/ grants		1544.47
Depreciation Rate	4.80%	4.80%
Depreciation amount	319.84	266.92
Less depreciation on assets funded through consumer contribution	30	64.66
Net depreciation for the year	289.84	202.26

### 3.16 Interest on Term Loan

The UHBVNL has revised its estimates of interest on term loan from Rs. 213.99 crore approved by the Commission in its MYT Order to Rs. 120.74 crore for FY 2015-16. DHBVNL has also revised its estimates of interest on term loan from Rs. 244.28 crore approved by the Commission in its MYT Order to Rs. 134.16 crore for the FY 2015-16. The licensees' revised estimates of interest on term loan being reasonable are approved by the Commission for FY 2015-16.

### 3.17 Interest on Consumer Security Deposits

The Commission had approved 74.55 crore as interest on consumer securities deposits for FY 2015-16 as per the MYT order for UHBVNL which has been revised by

the licensee to Rs. 69.10 crores in its filing on APR for FY 2015-16. As per DHBVNL filing on APR for FY 2015-16, the expenditure on this account is estimated to be Rs. 94.01 crore. As the calculations are in accordance with the MYT Regulations, the same are approved by the Commission.

### 3.18 Interest on Working Capital

The Commission had approved Rs. 173.63 crore as interest on working capital borrowings based on the principal laid down in the MYT Regulation for UHBVNL for the FY 2015-16. Based on the same Regulations, the revised interest on working capital borrowings for FY 2015-16 is estimated to be is Rs. 152.00 crore.

**Table 3.44: Interest on Working Capital Loan of UHBVNL  
(Rs. in Crores)**

<b>Interest on working capital</b>	<b>FY 2015-16</b>
O&M expenses for 1 month	91.95
Maintenance spares 1% of opening GFA	63.24
2 months receivables	1719.39
Uncollected revenue	103.16
<b>Total</b>	<b>1977.73</b>
Less	
ACD	767.00
<b>Net working capital</b>	<b>1210.73</b>
Interest rate	12.50%
<b>Interest cost</b>	<b>152.00</b>

For DHBVNL, the Commission had approved Rs. 146.40 crore as interest on working capital borrowings based on the principal laid down in the MYT Regulation. Based on the same Regulations, the revised interest on working capital borrowings for the FY 2015-16 is estimated to be is Rs. 186.00 crore as per the details provided in the table 3.45.

**Table 3.45: Interest on Working Capital Loan of DHBVNL  
(Rs. in Crores)**

<b>Interest on working capital</b>	<b>FY 2015-16</b>
O&M expenses for 1 month	68.92
Maintenance spares 1% of opening GFA	55.59
2 months recievables	2268.33
Uncollected revenue	136.10
<b>Total</b>	<b>2528.94</b>
Less	



ACD	1044.54
Net working capital	1484.40
Interest rate	12.50%
Interest cost	186.00

### **3.19 Interest on FRP Borrowings**

The Commission had approved 503.23 crore for UHBVNL and Rs. 218.70 crore for DHBVNL as interest on FRP borrowings for FY 2015-16 respectively. The revised estimated expenditure on this account is Rs. 312.71 crore for both UHBVNL DHBVNL for FY 2015-16, as per calculation given in table 3.10.

The actual borrowings and interest thereon by the Discoms to fund the revenue gap if any for FY 2014-15 shall be trued up after the availability of audited accounts for FY 2014-15.

### **3.20 Total Expenditure**

Total expenditure as above comes to Rs. 10477.76 crore as against Rs. 11617.36 crore approved by the Commission for UHBVNL as per the MYT order and Rs. 13759.81 as against Rs. 12631.34 for DHBVNL respectively for FY 2015-16 and as against Rs. 14177.19 crore proposed by UHBVNL and Rs. 16648.10 crores proposed by DHBVNL as part of APR filing for the FY 2015-16.

### **3.21 Non-Tariff Income**

Non tariff income is retained at Rs. 161.45 crore for UHBVNL and Rs. 149.83 crores for DHBVNL as approved by the Commission as per the MYT order for FY 2015-16 as the same has not been revised by the licensees'.

### **3.22 Total Revised ARR of UHBVNL & DHBVNL for the FY 2015-16**

As above the total ARR stands revised to Rs. 10316.31 crores for UHBVNL as against Rs. 11455.90 crore approved by the Commission as per the MYT order and Rs. 14015.74 crore as per the revised proposal of the licensee.

For DHBVNL, the Commission approves a revised figure of Rs. 13609.99 crores as against Rs. 12481.51 crore approved by the Commission as per the MYT order and Rs. 11763.82 crore as per the revised proposal of the licensee.

**Table 3.46: Revised ARR for UHBVNL**

**Rs. in Crores**

S.No.	Particulars	FY 2015-16	FY 2015-16	FY 2015-16
		HERC Order	UHBVNL revised filing	HERC Revised order
	<b>Power purchase cost</b>	<b>9,265.63</b>	<b>10,434.65</b>	<b>8,800.11</b>
1	Power Purchase Expenses	<b>8,738.16</b>		
1.1	Power purchase cost			7791.94
1.2	Interstate Transmission Charges			323.01
1.3	Intrastate transmission charges	522.80		639.03
1.4	SLDC charges	4.68		46.14
2	Operations and Maintenance Expenses	<b>1,077.97</b>	<b>1,165.64</b>	<b>1,103.35</b>
2.1	Employee Expense	558.06	547.85	512.78
2.2	A&G Expense	79.39	88.41	72.95
2.3	R&M Expense	126.34	122.99	111.23
2.4	Terminal Liability	314.17	406.39	406.39
3	Depreciation	<b>308.35</b>	<b>304.06</b>	<b>232.46</b>
4	Interest on term loan	213.99	120.74	120.74
5	Interest on Security Deposit	74.55	69.10	69.10
6	Interest on Working Capital	173.63	1,529.90	152.00
7	Interest on FRP borrowings 2015-16	503.23		
8	Other interest and finance charges		0.00	
9	Repayment of FRP borrowings		299.43	
10	Total Interest and Finance Charges	<b>965.40</b>	<b>2,019.16</b>	<b>341.84</b>
11	Return on Equity Capital		253.68	
<b>A</b>	<b>Total Expenditure</b>	<b>11,617.36</b>	<b>14,177.19</b>	<b>10,477.76</b>
<b>B</b>	<b>Income/Receipts</b>	<b>161.45</b>	<b>161.45</b>	<b>161.45</b>
12	Non Tariff Income	161.45	161.45	161.45
	Income from FSA			
<b>A-B</b>	<b>ARR</b>	<b>11,455.90</b>	<b>14,015.74</b>	<b>10,316.31</b>

**Table 3.47: Revised ARR for DHBVNL**

**(Rs. in Crore)**

S.No.	Particulars	FY 2015-16	FY2015-16	FY2015-16
		HERC order	DHBVNL Revised estimates	HERC revised order
1	Power Purchase Expenses	10,159.79	11,946.83	12,306.33
1.1	Power purchase cost	9,603.08	12,950.93	11,155.44
1.2	Interstate Transmission Charges (Scheduling and Tax Charges )	551.73	447.39	462.44
1.3	Intrastate transmission charges			639.32
1.4	SLDC charges	4.98	556.71	49.13
2	Operations and Maintenance Expenses	<b>888.09</b>	<b>1,198.86</b>	<b>827.05</b>
2.1	Employee Expense	540.99	851.9	518.52
2.2	A&G Expense	65.25	77.99	60.46
2.3	R&M Expense	131.85	118.97	98.07
2.4	Terminal Liability	150.00	150.00	150.00
3	Depreciation	320.29	289.84	202.26
4.1	Interest on Security Deposit	102.06	94.01	94.01
4.2	Interest & Finance Charges ( term loan)	244.28	134.16	134.16
4.3	Interest & Finance Charges ( Working capital)	146.40	1,277.51	186.00

4.4	Interest on FRP funding	218.70	395.29	-
4.5	Other Interest and Finance Charge		67.50	10.00
5	Return on Equity Capital	-	240.00	
<b>A</b>	<b>Total Expenditure</b>	<b>12,631.34</b>	<b>16,648.10</b>	<b>13759.81</b>
<b>B</b>	<b>Income/Receipts</b>	<b>149.83</b>	<b>4,884.28</b>	<b>149.83</b>
6	Non Tariff Income	149.83	150.00	149.83
7	Revenue subsidy from Govt. (excluding FSA subsidy)		3,423.62	
8	Income from FSA		1,310.66	
<b>C</b>	<b>Aggregate Revenue Requirement = (A - B)</b>	<b>12,481.51</b>	<b>11,763.82</b>	<b>13609.99</b>

Note: Interest on FRP borrowings has been dealt in para 3.24 of the present Order.

### 3.23 True-up for FY 2013-14 including holding cost

True up cost for FY 2013-14 for UHBVNL and DHBVNL has been determined in the preceding paragraphs. Accordingly, the Distribution licensees are allowed to recover Rs. 1277.42 crores along with holding cost @ 12.5 % for 18 months in accordance with the MYT Regulations, 2012.

### 3.24 Total revenue requirement for the FY 2015-16

The revised total revenue requirement for the FY 2015-16 are as given in the table 3.48.

**Table 3.48: Revenue requirement for FY 2015-16**  
(Rs. Crores)

Total ARR for FY 2015-16	
UHBVNL	10316.31
DHBVNL	13609.99
Total ARR for FY 2015-16	23926.30
Revenue gap for FY 2013-14	1277.42
Carrying cost on above for 1 year six months	239.52
Interest on FRP borrowings for FY 2015-16	312.71
Total Revenue Requirement for the FY 2015-16	25755.94
Revenue at Current Tariff	17410.00
RE Subsidy	6196.91
Revenue Gap for FY 2015-16 at Current Tariff	2149.03

Note: In addition to the interest on FRP borrowings, there exists interest on FRP bonds of Rs. 2022.00 Crore, till the same was taken over by the State Government. The Commission has not considered the same in the ARR, the Discoms may take up the issue with the State Government.

### 3.25 Capital Expenditure

#### 3.25.1 True up of Capital Expenditure for FY 2013-14

##### 3.25.1.1 UHBVNL

The Commission, in its Order on ARR of the UHBVNL for the FY 2013-14, approved capital expenditure of Rs. 457.49 Crores. However, the licensee in their filing of Annual Performance Review petition FY 2015-16 (including truing up for FY 2013-14) as per MYT mechanism intimated that the actual expenditure incurred is Rs. 546.66 Crores and requested the Commission to approve the same. As no further details were provided, the Commission directed the licensee to submit the work wise details of actual expenditure. The licensee, through their communication dated 12.03.2015 submitted work wise details, which indicated that the actual expenditure is Rs. 443.10 Crores only and not Rs. 546.66 Crores as indicated by the licensee in their Annual Performance Review petition FY 2015-16. The details provided are as below:-

Sr. No.	Name of work	FY 2013-14	
		Investment approved by HERC (Rs. in crores)	Actual expenditure incurred by the licensee (Rs. in crores)
1	Creation of new 33 KV sub-stations		
	(a) New works	15.94	83.47
	(b) Spill over works	32.45	
2	Augmentation of existing 33 KV Sub Stations		
	a) New works	28.83	28.14
	b) Spill over works	8.00	
3	Erection of new 33 KV lines		
	a) New works	6.70	4.79
	b) Spill over works	4.00	
4	Augmentation of existing 33 KV lines		
	• New works	2.38	1.37
	• Spill over works	3.20	
5	Erection of new 11 KV lines		
	a) New works	1.80	3.38
	b) Spill over works	2.20	
6	Bifurcation / Trifurcation of overloaded 11 KV feeders		
	a) New works	24.00	35.41
	b) Spill over works	15.57	

7	R-APDRP (Part-A)	57.00	16.57
8	R-APDRP (Part-B)	25.00	0.00
9	Material required for release of non AP connections and replacement of old assets.	150.00	224.28
10	Release of tube well connections	50.00	14.39
11	Smart grid pilot in Panipat	16.72	0.00
12	AMR on large NDS & LT consumers	10.00	0.00
13	Pilot Projects (Overhead Fault Passage Indicator)	3.70	0.00
	<b>Total</b>	<b>457.49</b>	<b>411.80</b>
14	HVDS Kaithal (Un approved work)	0.00	28.69
15	Priyadarshini Awas Yojna (Un approved work)	0.00	2.61
	<b>Total capital expenditure</b>	<b>457.49</b>	<b>443.10</b>

The above details indicate that the licensee undertook two unapproved works during the year 2013-14 i.e. HVDS system in Kaithal District and Priyadarshini Awas Yojna, without taking any prior approval of the Commission. The amount spent on Priyadarshini Awas Yojna is Rs. 2.61 Crores. In this regard, the Commission would like mention that both the distribution licensees filed a petition (Case No. HERC/RA-4 of 2014) with the Commission, further followed by an interim application dated 27.10.2014, for allowing funds through capital expenditure plan for electrification work of plots allotted under Priyadarshini Awas Yojna. **The Commission after giving a hearing to the licensees in the matter, vide its orders dated 20.10.2014 & 18.12.2014 did not allow the same. The Commission observed that any capex undertaken by the licensee without the approval of this Commission and on the direction of the State Govt., the funding of the same has to come from grant/subvention from the State Govt. and cannot be allowed through ARR/Tariff.**

The above details further indicate that there are wide unexplained variations in item wise expenditure approved by the Commission and that actually incurred by the licensee. On four works, the expenditure incurred is nil. Such deviations defeat the very purpose of item wise expenditure approved and the objective of providing reliable and quality power to the consumers. Such a scenario reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant. **The licensee is directed to explain the methodology they followed in actually undertaking the works that led to significant item wise variations.**

As specified under Regulation 8.3 (b) of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation,

Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, Capital Expenditure is a controllable item. As such the licensee should have exercised proper control over the item wise Capital Expenditure approved by the Commission.

Regulation 9.10 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 further provides as under:-

“In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case may be, shall file an application with the Commission at the end of control period for truing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case to case basis. The true-up application shall contain all the requisite information and supporting documents.

Provided that any additional capital expenditure incurred on account of time over run and / or on unapproved schemes not covered under regulation 9.9 or unapproved changes in scope of approved schemes shall not be allowed by the Commission unless the generating company or the licensee, as the case may be, is able to give adequate justification for the same”.

**The licensees are directed to proceed accordingly.**

### **3.25.1.2 DHBVNL**

The Commission in its Order on ARR of the licensee for the FY 2013-14, approved a capital expenditure plan of Rs. 519.47 Crores. However, the licensee in their filing of Annual Performance Review petition for FY 2015-16 (including truing up for FY 2013-14) as per MYT mechanism intimated that the actual expenditure incurred is Rs. 953.05 Crores and requested the Commission to approve the same. As no further details were provided, the Commission directed the licensee to submit the work wise details of actual

expenditure. The licensee, through their communication dated 13.03.2015 submitted work wise details which are as below:-

Sr. No.	Name of work	FY 2013-14	
		Investment approved by HERC (Rs. in crores)	Actual expenditure incurred by the licensee (Rs. in crores)
1	Metering	30	23.66
2	HVDS	10	0.00
3	Power Factor improvement	24	27.92
4	33 KV substations / lines (New and augmentation)	80	56.30
5	Procurement of material	100	449.08
6	Release of BPL connections under RGGVY	10	
7	Release of tube well connection on turnkey basis	50	
8	Bifurcation of feeders, augmentation of conductor and shifting of connections from AP feeders to DS feeders.	30	
9	Implementation of R-APDRP (Part-A)	50.47	24.39
10	Implementation of R-APDRP (Part – B)	20	0.00
11	Civil works	10	10.00
12	System strengthening under IBRD loan and IBRD equity	100	56.86
13	Customer Care (Subdivision computerization)	5	0.00
	<b>Total</b>	<b>519.47</b>	<b>648.21</b>
	Add: CWIP		273.64
	Add: Interest		86.44
	Minus: Adjustment for Accounts posting		55.23
	<b>Total Expenditure</b>		<b>953.05</b>

The above figures indicate that the licensee has over spent on some works without taking any prior approval of the Commission. There are wide unexplained variations in item wise expenditure approved by the Commission and that actually incurred by the licensee. On three works, the expenditure incurred is nil. Such deviations defeat the very purpose of item wise expenditure approved and the objective of providing reliable and quality power to the consumers. Such a scenario reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant. **The licensee is directed to explain the methodology they followed in actually undertaking the works that led to significant item wise variations.**

As specified under Regulation 8.3 (b) of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, Capital Expenditure is a controllable item. As such the licensee should have exercised proper control over the item wise Capital Expenditure approved by the Commission.

The provision under Regulation 9.10 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 further specifies that in case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case may be, shall file an application with the Commission at the end of control period for trueing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case to case basis. The true-up application shall contain all the requisite information and supporting documents. **Accordingly, at this stage no additional expenditure and CWIP/Interest is being allowed to be carried over to next year.**

### **3.25.2 Review of Capital Investment Plan for the FY 2014-15**

Regulation 9.7 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, specifies that in the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the mid-year performance review and true-up, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the generating company or the licensee vis-à-vis the approved capital expenditure and in case of significant difference between the actual expenditure vis-a-vis the approved expenditure, the Commission may true up the capital expenditure, subject to prudence check, as a part of annual true up exercise on or without an application to this effect by the generation company/licensee. The generating company and the licensee shall submit the scheme-wise actual capital expenditure incurred along with the mid-year performance review and true-up filing.



Accordingly both the distribution licensees, through filing of their Annual Performance Review petitions for FY 2015-16, submitted revised capital investment plan for FY 2014-15. The DHBVNL also sought review of its capital investment plan for FY 2015-16. After examining these the Commission allows following revised capital investment plans.

### 3.25.2.1 UHBVNL

The distribution licensee UHBVNL submitted their Capital Investment Plan for the control period FY 2014-15 to FY 2016-17 amounting to Rs. 4789.34 Crores, along with filing of their MYT petition for the control period. The Commission after assessing the same accorded approval for an amount of Rs. 2493.68 Crores and the year wise allocation was as below:-

FY 2014-15	Rs. 1037.85 Crores
FY 2015-16	Rs. 983.55 Crores
FY 2016-17	Rs. 472.28 Crores

The licensee through their Review Petition indicated that the actual expenditure for FY 2014-15 would be to the tune of Rs. 517.75 Crores. The licensee, however, vide their revised submissions made on 12.03.2015 intimated that during first six months of the year, the actual expenditure has been to the tune of Rs. 212.35 Crores and as such the likely expenditure for FY 2014-15 would be about Rs. 489.94 Crores.. The work wise details provided are as below:-

Sr. No	Name of the work	Investment Approved By HERC for FY 2014-15.	Actual expenditure from April, 2014 to September, 2014.	Likely expenditure from October, 2014 to March, 2015.	Total likely expenditure for FY 2014-15.
		Rs. in Crores	Rs. in Crores	Rs. in Crores	Rs. in Crores
1	Creation of new 33 kV sub-stations	95.45	25.09	36.91	62.00
2	Augmentation existing 33 kV sub-stations	80.06	22.06	40.22	62.28
3	Erection of new 33 kV lines	24.00	5.30	6.70	12.00
4	Erection of new 11 kV lines	8.00	1.01	5.78	6.79
5	Augmentation of existing 33 kV lines	23.91	0.45	5.10	5.55
6	Bifurcation/Trifurcation of overloaded 11 kV	20.00	21.11	5.91	27.02

	feeders				
7	Release of tube well connections	50.00	5.92	15.00	20.92
8	R-APDRP (Part-A)	44.48	7.75	15.50	23.25
9	R-APDRP (Part-B)	432.52	0.00	0.00	0.00
10	Pilot Project (Smart Grid in Panipat)	10.00	0.00	0.00	0.00
11	Material required for release of non-AP connections, replacement of old assets and system improvement	150			221.06
12	Procurement of single phase meters for replacement of defective meters and release of new connections.	17.80	121.06	130.00	20.00
13	Procurement of three phase meters for replacement of defective meters and release of new connections.	9.70			10.00
14	Construction of UHBVNL Office Building at Panchkula	35.00	0.00	0.00	0.00
15	Civil Works	10.00	0.00	0.00	0.00
16	Annual maintenance contract of Automatic Power Factor Correctors	10.00	0.00	0.00	0.00
17	Installation of LT Capacitors on LT side of distribution transformers	10.93	0.00	0.00	0.00
18	Installation of meter on 33 kV Incomers for energy auditing	6.00	2.60	1.07	3.67
	<b>Total</b>	<b>1037.85</b>	<b>212.35</b>	<b>262.19</b>	<b>474.54</b>
19	HVDS Kaithal (unapproved work)	0.00	0.00	15.40	15.40
	<b>Grand Total</b>	<b>1037.85</b>	<b>212.35</b>	<b>277.59</b>	<b>489.94</b>

In the revised capital investment plan, the licensee has considered an expenditure of Rs. 15.40 Crores towards implementation of HVDS scheme in Kaithal circle. The licensee had also incurred an expenditure of Rs. 28.69 Crores on this work in the year 2013-14. The licensee did not propose any expenditure on this work during the years 2013-14 & 2014-15, while submitting their capital investment plans and also did not seek any prior approval of the Commission for this expenditure.

The licensee has further indicated that the expenditure on implementation of R-APDRP (Part-B) scheme would be Nil as they could not start the work during the year 2014-15.

**However, based upon the above details provided by the licensee, the Commission allows revised capital investment plan of Rs. 489.94 Crores to the licensee for FY 2014-15.**

### 3.25.2.2 DHBVNL

The distribution licensee DHBVNL submitted their Capital Investment Plan for the control period FY 2014-15 to FY 2016-17 amounting to Rs. 3572.77 Crores, along with filing of their MYT petition for the control period. The Commission after assessing the same accorded approval for an amount of Rs. 2388.05 Crores and the year wise allocation was as below:-

FY 2014-15	Rs. 959.39 Crores
FY 2015-16	Rs. 867.29 Crores
FY 2016-17	Rs. 561.37 Crores

The licensee through their Review Petition intimated that the actual expenditure for FY 2014-15 would be to the tune of Rs. 857.395 Crores. The licensee, however, vide their revised submissions made on 13.03.2015 intimated that during first six months of the year, the actual expenditure has been to the tune of Rs. 338.71 Crores and as such the likely expenditure for FY 2014-15 would be Rs. 630.08 Crores only. The work wise details provided are as below:-

Name of work	Investment Approved By HERC for FY 2014-15.	Actual expenditure from April, 2014 to September, 2014.	Likely expenditure from October, 2014 to March, 2015.	Total likely expenditure for FY 2014-15.
	Rs. in Crores	Rs. in Crores	Rs. in Crores	Rs. in Crores
<b>AT&amp;C loss reduction plan</b>				
Procurement of single phase meters for replacement of defective meters and release of new connections.	17.8	34.55	14.24	48.79
Procurement of three phase meters for replacement of defective meters and release of new connections.	9.7			
LT Connectivity of already	20	0	0	0

executed HVDS works.				
Power Factor Improvement (Providing automatic power factor correctors).	5	7.29	15.64	22.93
<b>Load Growth schemes</b>				
Creation of new 33 kV sub-stations.	104.88	33.43	21	54.43
Augmentation of existing 33 kV sub-stations.	61.69			
Erection of new 33 kV lines.	26.4			
Erection of new 11 kV lines.	8.8			
Augmentation of existing 33 kV lines.	2.35	1.04	3.27	4.31
Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).	11.27	4.49	18.6	23.09
Material required for release of Non-AP connections & replacement of old assets.	150	91.31	117.82	209.13
Procurement of power transformers and allied equipment such as 33 kV CTS, 33 kV PTs, 33 kV and 11 kV VCBs, 33 kV Control and Realy Panels etc.	20	26.49	12.83	39.32
Release of Tube well connections on turnkey basis	50	4.81	1.55	6.36
Release of BPL connections under RGGVY schemes.	10	0	0.56	0.56
<b>R-APDRP schemes</b>				
Implementation of R-APDRP (Part-A), including SCADA.	40	17.5	30.1	47.6
Implementation of R-APDRP (Part-B).	205	0	0	0
<b>Relocation of energy meters of DS &amp; NDS consumers outside their premises in Meter Pillar boxes.</b>	50	1.4	7.36	8.76
<b>Civil Works</b>	10	3.5	6.5	10
<b>System Strengthening Works under IBRD loan and IBRD equity.</b>				
Under IBRD Loan	70	39.83	11.72	51.55
Under IBRD Equity	17.5	9.96	2.93	12.89
<b>Other Works</b>				
Maintenance free earthing using 'Ground Enhancing Material for Distribution Transformers, Meter Pillar	6.5	1.78	0	1.78

Boxes and H-pole etc.				
Installation of meters on 33 kV Incomers at sub-stations for energy auditing.	5	0	0	0
Providing RF Meters.	12.5	0	0	0
AMR on large NDS & LT consumers having load about 10 kW (IBRD funded work).	45	0	0	0
<b>New work: MGGBY</b>	0	61.33	27.25	88.58
<b>Total</b>	<b>959.39</b>	<b>338.71</b>	<b>291.37</b>	<b>630.08</b>

The licensee has intimated that during the year 2014-15, 3,10,000 single phase meters costing Rs. 41.83 Crores and 35,912 three phase meters costing Rs. 6.96 Crores would be procured and that the expenditure towards implementation of R-APDRP (Part-B) scheme would be Nil as they could not start the work during the year 2014-15.

The licensee has further indicated that an expenditure amounting to Rs. 88.58 Crores would be incurred on Mahatma Gandhi Gramin Basti Yojna (MGGBY) scheme out of which Rs. 61.33 Crores have already been spent upto September, 2014. The licensee states that MGGBY is a flagship programme of Govt. of Haryana under which 100 sq. yard residential plots were provided free of cost to the eligible Scheduled Castes, Backward Classes and BPL families in the villages in Haryana. In order to encourage construction of houses on the land distributed under MGGBY, a new housing scheme called "Priyadarshini Awas Yojna" was launched by the Govt. of Haryana, in which financial assistance on the pattern of Indira Awas Yojna was provided for the construction of houses in the 100 sq. yard plots allotted under MGGBY. The investment is proposed for electrification work of these plots / houses.

In this regard, the Commission would like to mention that both the distribution licensees filed a petition (Case No. HERC/RA-4 of 2014) with the Commission, further followed by an interim application dated 27.10.2014, for allowing funds through capital investment plan for electrification work of plots allotted under Priyadarshini Awas Yojna. The Commission after hearing to the licensees in the matter, vide its orders dated 20.10.2014 & 18.12.2014 did not allow the same. **The Commission observed that any capex undertaken by the licensee without the approval of the Commission and on the direction of the State Govt., the funding of the same has to come from grant/subvention from the State Govt. and cannot be allowed through ARR/Tariff.** As such the amount of Rs. 88.58 Crores included by the licensee towards the

expenditure on this scheme in their revised capital investment plan is not allowed. **The Commission, therefore, allows revised capital investment plan of Rs. 541.50 Crores only to the licensee for the FY 2014-15.**

### **3.25.3 Review of capital investment plan for FY 2015-16**

#### **3.25.3.1 UHBVNL**

The licensee has not sought any revision of their capital investment plan for the FY 2015-16.

#### **3.25.3.2 DHBVNL**

The licensee through their Review Petition also sought revision of their capital investment plan for FY 2015-16. Against capital investment plan of Rs. 867.29 Crores approved by the Commission, the licensee indicated that the likely expenditure for FY 2015-16 would be to the tune of Rs. 1334.22 Crores. However, through their revised submissions made on 13.03.2015, the licensee has intimated that the likely expenditure during FY 2015-16 would be to the tune of Rs. 1000.67 Crores. The Commission feels that it would be very early at this stage to revise the capital investment plan for FY 2015-16 specially looking at the licensee's spending capacity demonstrated in the past as well as during the current year, which has been far below Rs. 1000 Crores. **As such the capital investment plan of the licensee for FY 2015-16 has not been revisited. This would be examined at the time of next review of the licensee's performance.**

**Both the licensees shall execute their capital investment plans for the control period FY 2014-15 to FY 2016-17 as per Regulations 9.7 to 9.12 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.**

### **3.26 Quality and Reliability of supply**

The Commission has reviewed the past performance of the Distribution System of the two distribution licensees i.e. UHBVNL and DHBVNL, based upon the details made available for FY 2014-15 and has also examined the projected performance based upon filing of their Annual Performance Review petition for FY 2014-15

(including revised Annual Revenue Requirement for FY 2015-16) as per Multi Year Tariff mechanism. The observations of the Commission in this regard are as below:-

### 3.27 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 3.49: 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	33.30	22.95
2011 - 2012	31.20	23.71
2012 - 2013	31.26	22.38
2013 - 2014	32.40	23.66

As stated in Commission's order on earlier ARRs of the two distribution licensees including order on ARR for control period FY 2014-15 to FY 2016-17, the position of distribution losses has not improved. This is in spite of the fact that the two licensees have been making huge capital investments every year on various loss reduction measures. In case of UHBVNL, the losses in a span of twelve years i.e. from FY 2001- 02 to FY 2013-14, are almost at the same level. In case of DHBVNL, these have reduced only by 6.95% in a span of eleven years i.e from FY 2001-02 to FY 2012-13. For FY 2013-14, the actual line losses have been reported as 23.66% i.e higher than the losses in the year FY 2012-13 citing reason that Jind circle, which was earlier under the control of UHBVNL, was transferred to DHBVNL in the month of July, 2013. This situation reflects adversely on the working of the licensees.

An examination of the data of 11 KV feeders under UHBVNL made available for the period April 2014 to September 2014, shows that out of total 3656 feeders, 351 (9.60%) feeders were having losses between 25% & 50% and 788 (21.55%) feeders

were having losses above 50%. Instead of showing any improvement over the performance of last year, the number of feeders having losses above 50% have increased from 753 to 788.

Similar data of DHBVNL for the period April, 2014 to September, 2014 shows that out of total 4087 number 11 KV feeders, 916 (22.41%) feeders were having losses between 25% & 50% and 526 (12.87%) feeders were having losses above 50%. In their case also, instead of showing any improvement over the performance of last year, the number of feeders having losses above 50% have increased from 506 to 526.

During public hearing as well as in their written objections, consumers and other stakeholders expressed their concern over high distribution loss levels both in UHBVNL and DHBVNL. They pointed out that cost of service has increased significantly due to unreasonably high distribution loss level and it would be extremely difficult for the licensees to remain financially viable unless immediate effective steps are taken to control the same.

As stated above there are feeders, both urban and rural, on which the losses are consistently above 50%, 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 directed to bring down the number of rural feeders with above 50% losses by 50% at the end of the FY 2015-16 and no urban feeder with above 25% line losses shall exist by the next ARR/APR filing. A failure to comply with the targets set by the Commission shall attract penal action under section 142 of the Electricity Act, 2003 against the XEN and above of the area concerned.**

### 3.28 Loss trajectory

In their Multi Year Tariff filing for control period from the FY 2014-15 to the FY 2016-17, the two companies had submitted the following distribution loss trajectory for the FY 2013-14 and the control period.

**Table 3.50: Distribution Loss trajectory for the distribution licensees**

Licensee	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
DHBVNL	20.30%	19.01%	17.70%	16.70%
UHBVNL	27.50%	25.00%	23.00%	20.90%



These were the same as taken by them in their Financial Restructuring Plan (FRP) approved by the State Government. The Commission accorded it's in principle approval to this FRP vide Memo No. 3078/HERC/Tariff-2 FRP/2013 dated 12.11.2013.

In their Annual Performance Review petition for FY 2014-15 (including revised Annual Revenue Requirement for FY 2015-16) as per Multi Year Tariff mechanism, the two licensees submitted following revised distribution loss trajectory.

**Table 3.51: Discom's Revised Distribution Loss trajectory**

Licensee	FY 2013-14 (Actual)	FY 2014-15	FY 2015-16	FY 2016-17
DHBVNL	23.66%	24.48%	21.96%	Not indicated
UHBVNL	32.40%	28.58%	24.79%	Not indicated

The reason quoted is that for FY 2014-15 and FY 2015-16 the distribution losses have been evaluated based on the AT&C losses notified by the Ministry of Power, Government of India for the State of Haryana. Another reason for revising distribution loss trajectory has been quoted as that Jind circle, which was earlier under the control of UHBVNL, was transferred to DHBVNL in the month of July, 2013. The two licensees did not submit any document from the Ministry of Power, Government of India approving the revised distribution loss trajectory, with their Annual Performance Review petition.

The licensee UHBVNL, however, through their filing dated 20.03.2015, submitted a copy of Ministry of Power, Government of India letter dated 11.08.2014 stating the AT&C loss trajectory of Haryana Discoms upto the year 2021-22. The Discoms also gave their consent for this AT&C loss trajectory to the Ministry of Power, Government of India vide their letter dated 08.09.2014. As per this communication, the AT&C loss trajectory of two Discoms for the control period is as below:-

**Table 3.52: AT&C loss trajectory approved by the MOP, GOI**

Distribution Licensee	2013-14	2014-15	2015-16	2016-17
DHBVNL	26.14	23.96	21.35	18.74
UHBVNL	34.13	31.29	27.88	24.48
Haryana State	30.05	27.55	24.55	21.55

Regulation 57.2 of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 specifies the following norms for collection efficiency for the distribution licensees.

**Table 3.53: HERC Norms for collection efficiency**

Distribution Licensee	2013-14	2014-15	2015-16	2016-17
DHBVNL	98%	98.5%	99%	99%
UHBVNL	98%	98.5%	99%	99%

It has further been specified that any over achievement or under achievement in respect of collection efficiency shall be subject to incentive and penalty framework as specified in Regulation 12.

Based upon actual performance during for FY 2013-14 and that projected for FY 2014-15 and FY 2015-16, the AT&C losses of the two licensees works out as below:-

**Table 3.54: Loss trajectory projected by the Discoms**

	FY 2013-14		FY 2014-15		FY 2015-16	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL	UHBVNL	DHBVNL
Distribution Losses	32.40%	23.66%	28.58%	24.48%	24.79%	21.96%
Collection efficiency	94.84%	99.22%	98.50%	98.50%	99.00%	99.00%
AT&C Losses	35.89%	24.26%	29.65%	25.61%	25.54%	22.74%

From the details provide in the table 3.54, the following inference is drawn:-

a) FY 2013-14

The actual AT&C losses as calculated above in comparison to the AT&C losses approved by the Ministry of Power, Govt. of India indicate that there is over achievement by the DHBVNL (24.26% against target of 26.14%) and under achievement by UHBVNL (35.89% against target of 34.13%).

b) FY 2014-15

The AT&C losses as worked out above are 29.65% against target of 31.29% in respect of UHBVNL and 25.61% against target of 23.96% in respect of DHBVNL. This means that there would be over achievement by UHBVNL and under achievement by DHBVNL.

c) FY 2015-16

The AT&C losses as worked out above are 25.54% against target of 27.88% in respect of UHBVNL and 22.74% against target of 21.35% in respect of DHBVNL. This

means that there would be over achievement by UHBVNL and under achievement by DHBVNL.

**The two distribution licensees are directed to explain the reason of under achievement even after re-fixing of their distribution loss level/AT&C loss trajectory by the Ministry of Power Govt. of India.**

As specified in the regulation 12 of the MYT Regulations, 2012, any overachievement and underachievement of the loss trajectory and the collection efficiency specified the Commission shall be subject to incentive and penalty framework and that the distribution licensees shall provide a statement to this effect in the mid-year performance review and true-up.

The Discoms have not submitted the computation of supply voltage wise and consumer category wise distribution and AT&C losses, as required under Regulation 57.1 (f) of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, in spite of issuing the directive in Commission's order on ARR of the two licensees for the control period FY 2014-15 to FY 2016-17.

### **3.29 Distribution Transformers (DTs) failure rate**

The HERC vide its Regulation **(Standards of Performance for Distribution Licensee) Regulations 2004**, has specified the failure rate of distribution transformers as maximum 5% for urban area DTs and maximum 10% for rural area DTs.

In case the maximum permissible failure rate of distribution transformers exceeds the limits specified above, the return on equity shall be reduced as specified under Regulation 65.1 (ii) of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

The year-wise status of damage rate of distribution transformers, as per the information provided by UHBVNL and DHBVNL is given in the table 3.55.

**Table 3.55: Distribution Transformers failure rate**

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 (%)
2009-10	Urban	5.79	4.58	8.95	6.56
	Rural	12.52	9.36	15.84	10.78
	<b>Overall</b>	<b>11.74</b>	<b>8.81</b>	<b>15.06</b>	<b>10.30</b>
2010-11	Urban	7.21	6.09	13.38	9.14
	Rural	12.36	9.46	10.01	6.75
	<b>Overall</b>	<b>11.81</b>	<b>9.09</b>	<b>10.29</b>	<b>6.95</b>
2011-12	Urban	7.21	5.54	10.83	7.76
	Rural	9.98	7.31	10.01	6.38
	<b>Overall</b>	<b>9.71</b>	<b>7.14</b>	<b>10.08</b>	<b>6.49</b>
2012-13	Urban	6.66	5.17	10.83	7.76
	Rural	10.30	7.36	10.01	6.38
	<b>Overall</b>	<b>9.94</b>	<b>7.14</b>	<b>10.08</b>	<b>6.49</b>
2013-14	Urban	8.53	6.5	10.93	7.81
	Rural	10.61	7.14	9.49	6.25
	<b>Overall</b>	<b>10.42</b>	<b>7.08</b>	<b>9.60</b>	<b>6.37</b>
2014-15 (up to Nov. 2014)	Urban	5.08	3.87	7.00	4.55
	Rural	7.68	5.02	7.03	4.34
	<b>Overall</b>	<b>7.43</b>	<b>4.91</b>	<b>7.03</b>	<b>4.36</b>

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 data indicated in the table above shows that in respect of DHBVNL, the DT damage rate both in urban & rural areas is above the prescribed limits in the years 2009-10, 2010-11, 2012-13 & 2013-14. In the year 2011-12, the DT damage rate in urban area is 7.21% which is above the limit of 5%.

In respect of UHBVNL, the DT damage rate, both in urban & rural areas, is above the prescribed limits of 5% & 10% respectively in all the years from 2009-10 to 2012-13. In the year 2013-14, the DT damage rate in urban area is 10.93%. In all these years, the damage rate of DTs in urban areas is much above the limit of 5%.

**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 by ensuring proper maintenance and protection.**

As per Regulation 65.1 (iii) of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations 2012, the distribution licensee shall maintain a proper record of failure of the distribution transformers and submit the same in the quarterly report to the Commission. The licensees, however, have failed to do so in spite of issuing directions in Commission's order on ARR of the two licensees for the control period FY 2014-15 to FY 2016-17. **The licensees are directed to submit these quarterly reports in future.**

### **3.30 Non replacement of defective energy meters by the distribution licensees**

The Discoms, in the public hearing on their present petitions, intimated the below details with regard to defective energy meters. The details are provided in the table 3.56.

**Table 3.56: Status of Defective meters**

<b>Meter category</b>	<b>Defective meters in respect of UHBVNL (ending December, 2014)</b>	<b>Defective meters in respect of DHBVNL (ending December, 2014)</b>	<b>Total defective meters</b>
Single Phase Meters	49011	88169	137180
Three Phase Meters	840	40881	41721
<b>Total</b>	<b>49851</b>	<b>129050</b>	<b>178901</b>

The above figures indicate that backlog of defective meters have reduced from 273409 (ending December 2013) to 178901(ending December 2014) but still there is an appreciable number of defective energy meters existing in the system. As already pointed out, supply of electricity through defective / dead stop meter for a long time, not only results in harassment to the consumer but is also a source of revenue loss for the licensees, on account of improper billing and improper measurement of power supplied. It also results in misuse and wastage of power.

The Commission had been observing the position with concern ever since a long time, but the position did not improve. The Commission, therefore, as per powers conferred to it under Sub-section (3) of Section 55 of the Electricity Act 2003, passed

an order on 10<sup>th</sup> January, 2013, in the matter of non-replacement of defective energy meters by the distribution licensees. Vide this order, both the distribution licensees were directed to replace all the meters lying defective as on 10<sup>th</sup> January, 2013 in the Municipal Areas by 30<sup>th</sup> April, 2013, but the job has not yet been accomplished.

In the public hearings held on 13.02.2015, the licensees stated that they would soon be filing the detailed plan for replacement of defective energy meters but the needful has not been done. **The Commission as such assigns the following targets to the Distribution licensees.**

1. **Single phase meters: The number of defective energy meters should not exceed 10,000 at any time after December, 2015.**
2. **Three phase meters: The number of defective energy meters should not exceed 500 at any time after December, 2015.**

**Failure to comply with the above targets set by the Commission shall attract the penal provision of section 142 of the Electricity Act, 2003 against the XEN and above responsible for the lapse.**

Besides the above, the Electro-mechanical meter, as per details provided in the table 3.57, are yet to be replaced by the two distribution licensees.

**Table 3.57: Details of Electro-mechanical meters yet to be replaced**

Meter category	UHBVNL (ending December, 2014)	DHBVNL (ending December, 2014)	Total
Single Phase Meters	431526	353120	784646
Three Phase Meters	13150	105478	118628
<b>Total</b>	<b>444676</b>	<b>458598</b>	<b>903274</b>

Section-55 (1) of the Electricity Act, 2003 provides that 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. The Authority vide its Regulations notified on 17<sup>th</sup> March, 2006 called as the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, under Section-4 (1) provides that all interface meters, consumer meters and energy accounting and audit meters shall be of static type. As such by March, 2008, the distribution licensees should have replaced all the Electro-mechanical meters with static meters. But even after 7 years of the expiry of appointed

date, more than 9 lakh Electro- mechanical meters (15% of the total energy meters) are still in use. These Electro- mechanical meters being very old may not be recording energy accurately and may be one of the reasons of under assessment of energy sold. **The licensees are directed to replace these Electro-mechanical meters by 31<sup>st</sup> March, 2016 by making all necessary arrangements. The Commission would like to make it clear that all working electro-mechanical meter taken out from the consumers' premises shall be installed at the AP unmetered connections to facilitate energy audit.**

### **3.31 Manpower training:**

**The Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, specifies the following:-**

- i) Safety measures for operation and maintenance of electric plants.**  
**Regulation 6 (3):** Engineers, supervisors and Technicians engaged for operation and maintenance of electric plants should have successfully undergone the type of training as specified in Schedule-I.  
Provided that the existing employees shall have to undergo the training mentioned in sub-regulation (3) within, three years from the date of coming into force of these regulations.
- ii) Safety measures for operation and maintenance of transmission, distribution systems.**  
**Regulation 7 (3):** Engineers, supervisors and Technicians engaged for operation and maintenance of transmission and distribution systems electric plants should have successfully undergone the type of training as specified in Schedule-II.  
Provided that the existing employees shall have to undergo the training mentioned in sub-regulation (3) within, three years from the date of coming into force of these regulations.

The Commission expects that the Discoms are following these safety measures strictly and required training is being provided to the concerned employees, new as well as the existing. The Commission feels that the required trainings as mentioned above would definitely result into safety of the men and material. **A report in this regard shall be submitted to the Commission by 30<sup>th</sup> April, 2016.**

## CHAPTER 4

# DISTRIBUTION AND RETAIL SUPPLY TARIFF DETERMINATION FOR THE FY 2015-16

### 4.1 Tariff Proposal filed by the UHBVNL & DHBVNL (Discoms)

### 4.2 Recovery of Gap

UHBVNL in its Petition has submitted that the cumulative revenue gap from the FY 2013-14 to FY 2015-16 is estimated to be Rs 6449.44 Crore. After taking into consideration the revenue gaps, holding costs and subsidies to be availed, the net cash gap, as estimated by UHBVNL in the FY 2015-16 is Rs 1882.29 Crore.

DHBVNL in its Petition has submitted that the cumulative revenue gap from the FY 2013-14 to FY 2015-16 is estimated to be Rs 5809.47 Crore. After taking into consideration the revenue gaps, holding costs and subsidies to be availed. The net cash gap in the FY 2015-16, as estimated by DHBVNL, is Rs 2016.99 Crore.

To address above mentioned revenue gap, the Discoms have proposed to increase the tariff across the categories by 15% in line with the FRP. Further, in view of the fact that no further funding is available for the FY 2015-16 and also given that repayment of loans are scheduled to begin in the FY 2015-16, the Discoms have proposed to meet the additional funding requirements by scheduled drawl of already approved loans undertaken under FRP.

The Commission vide Memo No. 6098-6099/HERC/Tariff dated 18.03.2015 conveyed to the Discoms, "that the Discoms have not filed any consumer category-wise tariff proposal for the FY 2015-16 including the requisite calculation for determination of cross-subsidy surcharge as provided in regulation 71.1 (iii) and 63.3 respectively of the MYT Regulations, 2012.

In response to the above, UHBVNL, vide Memo No. Ch-25/GM/RA/N/F-25/Vol-56 dated 27.03.2015, on behalf of both the Discoms, submitted as under:-

"It is submitted that the Discoms, vide APR filings for the FY 2014-15 and ARR filings for the FY 2015-16; have prayed for a 15% average tariff increase in line with the FRP projections. An average increase of 15% results in an



additional revenue of Rs.2203 Cr. and the discoms have proposed to meet the balance gap through borrowings available under FRP. The broad tariff proposal is given at Annexure 1 which results in an additional revenue of **Rs.2202 Cr.** which is broadly in line with the APR filings”. The Consumer category wise tariffs proposed by the Discoms for the FY 2015-16 are as under:-

**Table 4.1: Discoms Proposed Tariff for FY 2015-16**

Sl. No.	Category	Discoms Proposed Tariff for the FY 2015-16		Additional Revenue from the proposed increase in Tariff in Rs. Crore
		Energy Charges Rs./Kwh or Rs./KVAh	Fixed Cost/ MMC	
1	<b>Domestic Supply</b>			
	0-100	4.00 / Kwh	MMC 0-2 kW – Rs 250/kW Above 2kW – Rs 150/kW	1146 Crore
	101-500	5.98 / Kwh		
	251-500			
		7.08 / Kwh		
	Above 500 (Non- Telescopic)			
2	<b>Non Domestic Supply</b>			
	Upto 5 kW (LT)	6.11 / Kwh	MMC – Rs 300/kW	311.40 Crore
	Above 5 kW and Up to 20 kW (LT)	6.50 / KVAh	Fixed Charges – Rs 150/kW	
	Above 20 kW upto 50 kW (LT) : 6.50/kVAh		Fixed Charges – Rs 160/kW	
	Existing consumers above 50 kW upto 70 kW (LT)	7.00 / KVAh	Fixed Charges – Rs 160/kW	
	Consumers above 50 kW (HT)	7.00 / KVAh	Fixed Charges Rs. 160/kW	
3	<b>HT industry (above 50 kW)</b>			
	Supply at 11 kV	6.26 /KVAh	Fixed Charges – Rs 170/kVA	333.60 Crore
	Supply at 33	6.16 /KVAh		

	kV			
	Supply at 66 or 132 kV	6.05 /KVAh		
	Supply at 220 kV	5.94 /KVAh		
	Supply at 400 kV	5.89 /KVAh		
	Arc furnaces/ Steel Rolling Mills	6.26 /KVAh		
4	<b>LT Industry – Upto 50 kW</b>			
	Upto 10 kW	6.48 /KVAh	MMC – Rs 185/kW	307.20 Crore
	10 kW to 20 kW	6.73 /KVAh	Fixed Charges – Rs 170/kW	
	20 kW to 50 kW			
	Existing consumers Above 50 kW upto 70 kW (LT)	7.04 /KVAh		
5	<b>Lift Irrigation</b>	6.50/kVAh	Fixed Charges Rs. 170/BHP	
6	<b>Railway Traction</b>		Fixed Charges – Rs 150/kVA	18 Crore
	Supply at 11 kV	6.38 /KVAh		
	Supply at 33 kV	6.27 /KVAh		
	Supply at 66 or 132 kV	6.16 /KVAh		
	Supply at 220 kV	6.05 /KVAh		
7	<b>DMRC</b>			
	Supply at 66 kV	6.16 /KVAh	Fixed Charges – Rs 150/kVA	
	Supply at 132 kV	6.16 /KVAh		
8	<b>Bulk Supply</b>			
	Supply at LT	6.49 /KVAh	Fixed Charges - Rs. 150/kW of connected load or Rs. 150/kVA of contract demand.	61.2 Crore
	Supply at 11 kV	6.33 /KVAh		
	Supply at 33 kV	6.22 /KVAh		
	Supply at 66 or 132 kV	6.11 /KVAh		

	Supply at 220 kV	6.05 /KVAh		
9	<b>Bulk Supply (Domestic) (70 kW and above at 11 kV or above voltage)</b>			
	For total consumption in a month not exceeding 400 units/flat/dwelling unit (DU)	4.20 /KVAh	Rs 100/kW of Recorded demand	
	For total consumption in month between 401-800 units/flat/DU	4.60 /KVAh		
	For total consumption in a month of 801 units or more per flat per DU	5.60 /KVAh		
10	<b>Street Lighting</b>	6.50 /kwh	Fixed Charges – Rs 150/kW	7.2 Crore
11	<b>Independent Hoarding/ Decorative Lighting</b>	7.55 / Kwh	Fixed Charges – Rs 150 /kW	
12	<b>MITC</b>	6.50 /KVAh	Fixed Charegs – Rs 170/BHP	
13	<b>Public Water Works</b>	6.50 /KVAh	Fixed Charges – Rs 170/kW	18 Crore
14	<b>AP Metered</b>	Upto 15 BHP Rs 0.1/ kWh Above 15 BHP Rs 0.08/ kWh	MMC – Rs 200/BHP/ Year	
15	<b>AP Unmetered</b>	Nil	Upto 15 BHP Rs 15/BHP/month above 15 BHP – Rs 12/BHP/month Rs 0.08/ kWh	
16	<b>Total Addl. Revenue</b>			<b>2202.6 Crore</b>

Regarding Cross Subsidy surcharge (CSS) the Discoms have submitted as under:-

*“it is submitted that the Discoms have contended that principally the CSS should be equal to the cross subsidy generated by the respective category. This principle has been followed by the Hon’ble HERC in the Tariff Order for the FY 2014-15 dated 29.05.2014. As such the Discoms pray that CSS should be kept*

*equal to the cross subsidy that may be calculated by the Hon'ble HERC so that there is no revenue loss to the Discoms".*

The Commission has considered the consumer category wise tariff proposal submitted by the Discoms to garner additional revenue of Rs. 2202.6 Crore in the absence of the CoS study filed by the Discoms.

**a. Cost of service (CoS)**

The Hon'ble APTEL in its recent judgement dated 24.03.2015 in Appeal No. 103 of 2012 while dealing with the CSS, set aside the methodology adopted by the Commission. The Hon'ble APTEL in the said judgement referred to their judgement dated 30.05.2011 in Appeal No. 102,103 & 112 of 2010, wherein they have given a broad framework for estimating CoS. The Commission, given the fact that the Discoms are still in the process of finalising CoS, has considered it appropriate to adopt the methodology suggested by the Hon'ble APTEL in their judgement dated 30.05.2011 till the time the Discoms submits a comprehensive voltage wise CoS. **The Commission directs the Discoms to submit Cost of Service study within six months from the date of the present Order.** The Commission has discussed the methodology as per ibid judgement of the Hon'ble Appellate Tribunal for Electricity and adopted by the Commission in the present Order while estimating the Cross-Subsidy Surcharge at para 5.2.

**b. Method to address the Projected Revenue Gap**

The consolidated revenue gap of UHBVN and DHBVN in the FY 2015-16 is as per the details provided in the Table 3.48 of this Order. The Commission has attempted to garner additional revenue by suitable re-aligning consumer category-wise tariff and while doing so the Cross-subsidy limits as provided in the National Tariff Policy vis-a-vis the combined Average Cost of Supply of the Discoms has been kept in view. **The Commission, as per the Financial Restructuring Plan of the Government of India approved by the Government of Haryana and in principle approved by the Commission, envisaged no tariff hike in the FY 2014-15 and 15% tariff hike in the FY 2015-16. However, in order to cushion the tariff hike in the FY 2015-16, the Commission had allowed tariff hike in the FY 2014-15 to garner additional revenue of Rs. 890 Crore. Hence, in the present Order, tariff hike to garner additional revenue of about Rs. 1500 Crore was required in order to affect an**

**overall increase of 15% in tariff (inclusive of the tariff increase in the FY 2014-15) in line with the FRP. Accordingly, the Commission has attempted to garner additional revenue of about 1420 Crore by way of realignment of tariff in the FY 2015-16. Further, some additional revenue will be generated because of the increase in MMC charges wherever applicable. Resultantly, additional revenue of about Rs. 1500 Crore is expected to be generated with the revised tariff for the FY 2015-16 as required.**

#### **c. Consumer Category wise tariff determination**

The Commission, at the outset, observes that the Discoms have again failed to submit an updated consumer category-wise cost to serve study as the same is yet to be finalised by the Consultant appointed by them. However, the Discoms, vide memo no. Ch-25/GM/RA/N/F-25/Vpl-56 dated 27.03.2015, have filed consumer category-wise tariff proposal to bridge the revenue gap to the extent of Rs. 2202.6 Crore as already stated. The tariff proposal filed by the Discoms provide no discussions regarding the methodology followed or for that matter the underlying principles of recasting the distribution and retail supply tariff in Haryana. Thus considering the approved revised ARR of the Discoms for the FY 2015-16, as discussed in the preceding Chapter, the Commission has proceeded to determine and approve the distribution and retail supply tariff of the Discoms i.e. UHBVNL & DHBVNL for various consumer categories for the FY 2015-16 in the paragraphs that follow.

#### **d. Statutory Provisions**

Section 61 of the Electricity Act 2003, provides that the Commission, is to be guided inter-alia, by the National Electricity Policy, the National Tariff Policy and the following factors, while, determining the tariff as under:-

1. The distribution and supply of electricity are conducted on commercial principles;
2. Encourage competition, efficiency, economical use of resources, good performance, and optimum investment;
3. Safeguarding of consumers interest and at the same time, recovery of the cost of electricity in a reasonable manner;
4. That the tariff progressively reflects the cost of supply of electricity, and also reduces cross subsidies in the manner specified by the Commission;

5. That efficiency in performance is to be rewarded; and
6. That a multi-year tariff framework is adopted.

Section 62(5) of the Electricity Act 2003, empowers the Commission to specify, from time to time, the methodologies and the procedure to be observed by the licensees in calculating the Expected Revenue from the tariff and charges. The Commission had accordingly notified the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 on 5.12.2012 and determines the tariff as per these regulations and various orders / directions issued by this Commission from time to time.

#### **e. Tariff determination approach**

As in the MYT Order dated 29.05.2014 for the control period from the FY 2014-15 to the FY 2016-17, the Commission has considered the following factors for the determination of retail supply tariff:

#### **Tariff Philosophy**

The distribution & retail supply consumers in Haryana covers a wide spectrum of consumers i.e. it ranges from small and marginal domestic consumers including those below the poverty line to large HT consumers including NDS, Railways as well as supply availed by State Government agencies such as Public Water Works, Lift Irrigation as well as Street Light Supply. This fact cannot be denied that all these categories of electricity consumers in Haryana have different ability to pay for the cost of supply of electricity as well as their ability to absorb or pass on the cost of electricity imposed on them. The Industrial/Commercial consumers including the bulk supply and Railways are better positioned to pass on wholly or partly the cost of electricity to their respective consumers which may not be true for the Domestic and small Industrial/Commercial consumers. Thus the small and marginal consumers with limited paying capacity may not be able to pay the full cost of supply, whereas consumers with higher paying capacity would be able to pay the full cost of supply or beyond the full cost of supply i.e. such consumers would be able to cross subsidize the consumers who would be paying less than the cost of supply. Considering the socio-economic conditions in Haryana, the Commission is of the considered view that cross-subsidy as determined within the limits specified in the National Tariff Policy has to continue for

some more time. Hence, the Commission, for the FY 2015-16, decides to continue with the approach of fixing tariff at less than average cost of supply to consumers who are not able to pay the full cost of supply and fixing tariff at more than the average cost of supply to consumers who are able to pay full cost of supply. In the case of AP Consumers including Fisheries and Horticulture, the Haryana Government has been traditionally paying the subsidy to the extent of the difference between the existing tariff and cost to serve for such consumers estimated by this Commission for the relevant financial year taking into consideration the AP sales as allowed by the Commission. Thus in accordance with section 65 of the Electricity Act 2003, Haryana Government shall pay subsidy at the Commission determined tariff.

### **Average Cost of Supply**

The Commission, in all its previous distribution and retail supply Orders including the MYT Order dated 29.05.2014 has, so far, been determining the tariff on the basis of the average cost of supply. The HERC Tariff Regulations, 2012 require the licensees to provide the details of the embedded cost of supply of electricity voltage/ consumer category-wise. In the absence of data on the embedded cost of supply for each category of consumers, the Commission has decided to continue with the average cost of supply of the Discoms after taking into account the voltage wise technical losses submitted by the Discoms while computing voltage wise i.e. LT and HT consumer category wise average CoS for determining tariff for the FY 2015-16. Hence, besides Discoms average CoS the Commission has also seen Consumer Category Wise voltage wise CoS to ensure that the realigned tariff falls within the +/- 20% NTP limits of cross-subsidy. A comparative table is given at para 5.2 of the present Order.

### **Reduction of cross subsidies**

The National Tariff Policy of the Central Government dated 6<sup>th</sup> January 2006, provides for progressively bringing down the cross-subsidy and specifies a target of bringing down the consumer category wise cross-subsidy within plus or minus 20% of the average cost of supply. The Commission has re-visited the issue of Cross-Subsidy Surcharge and reduction thereto in the present Order.

## **Charge on RE Subsidy**

The Commission has considered the submissions of the Discoms on RE Subsidy and is of the view that the RE Subsidy should be equal to the difference in cost to serve of AP consumers (including fisheries and horticulture) as estimated by the Commission for the FY 2015-16 and the concessional tariff allowed as proposed by the State Government and implemented by the Discoms in the FY 2014-15. The Commission has maintained the AP tariff as prevailing in the FY 2014-15. Hence, the RE Subsidy payable by the State Government in the FY 2015-16 i.e. the difference between the revenue to be generated at the combined average cost of supply for the AP sales determined by the Commission in the FY 2015-16 and the AP tariff i.e. Rs. 6196.914 crore. In case the RE Subsidy is not paid by the State Government, the full tariff for AP consumers, as determined by the Commission, in the present Order, shall be the tariff levied by the Discoms for supply of power to the AP consumers including fisheries and horticulture.

### **4.3 Domestic Supply Consumers (DS)**

The revenue recovery from DS consumers through tariff is just about 69 % of the combined average cost of supply of the Discoms as estimated by the Commission. The combined average COS for the two Discoms in the FY 2015-16 works out to Rs. 7.16/kWh. The revenue shortfall in the DS category in the case of both the Discoms at the current tariff is Rs. 22294 million. The Discoms have proposed to garner about Rs. 11460 million by increasing the DS tariff as well as changing the DS tariff slab structure. For the DS consumers the Discoms have proposed to increase the tariff by about 15% and for consumption above 500 Units per month a non – telescopic tariff of Rs. 7.08/kWh as against the prevailing tariff of Rs.5.98/kWh has been proposed. The Commission observes that the available cross-subsidy from a few other consumer categories is also not sufficient to bridge the revenue gap in the DS, category. Further, no subsidy is available for the DS consumers from the State Government in the FY 2015-16. Thus, due to the inadequacy of the available cross-subsidy, the Commission is left with two options i.e. re-align the DS Tariff or garner some additional revenue from other consumer categories so as to bridge the revenue gap to the extent possible in the DS category.



After careful consideration of the options available, the Commission is of the view that 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. marginal and middle class households to affluent households. Hence, in order to protect the interest of the small and marginal DS consumers and to give them further relief, the Commission has increased the DS slab 0-40 Units per month to 0-50 Units per month and has left the tariff unchanged at Rs. 2.70/kWh. Further, in Order to balance the revenue requirement from the DS consumers the slabs have been accordingly revised. In the public hearing it was brought to the notice of the Commission that a large percentage of DS consumers are paying MMC. Hence, to plug the revenue leakages and in view of the now revised tariff, the Commission, has revised the MMC of the DS consumers from Rs. 100/kW/month (upto 2 kW) to Rs.120/kW/month and from Rs. 60/kW/month to Rs.70/kW/month for above 2 kW of the connected load. Even the highest DS tariff for the DS consumers is below the average COS of the Discoms by about 16% as well as the DS category COS. Accordingly, the Commission has considered the telescopic tariff up to 500 units per month and for consumption of 501 unit per month and above the total energy shall be billed at a flat rate of Rs. 6.75/kWh against the average COS of the Discoms Rs. 7.16 / kWh for the FY 2015-16, the balance shall be bridged by way of cross-subsidy generated from other consumer categories except AP. The existing tariff and the tariff approved by the Commission for DS category for the FY 2015-16 is given in table 4.4.

**Table 4.4: Domestic Supply Tariff (DS)**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Domestic Supply</b>				<b>Domestic Supply</b>			
<b>Category I: (Total consumption up to 800 units per month)</b>				<b>Category I: (Total consumption up to 100 units per month)</b>			
0 - 40 units per month	270/kWh	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	0 - 50 units per month	270/kWh	Nil	Rs. 120 up to 2 kW and Rs. 70 above 2 kW
41-250 units	450/kWh	Nil		51-100	450/kWh	Nil	

per month							
				<b>Category II: (Total consumption more than 100 units/month and up to 500 units/month)</b>			
251 – 500 units per month	525/kWh	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	0-250	500/kWh	Nil	Rs. 120 up to 2 kW and Rs.70 above 2 kW
501 - 800 units per month	598/kWh	Nil		251-500	605/kWh	Nil	
<b>Category II: (Total consumption more than 800 units/month)</b>				<b>Category III: (Total consumption more than 500 units/month)</b>			
801 and above units per month  (For total consumption of 801 units and above/month, there shall be single tariff & no slab benefit shall be admissible)	598/kWh  Any consumer who at his own cost installs kVAh meter may opt for kVAh tariff of 538/kVAh i.e. applicable tariff in kWh multiplied by 0.90 (standard power factor)	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	Above 500 units	675/kWh  (flat rate no telescopic benefits)	Nil	Rs. 120 up to 2 kW and Rs.70 above 2 kW

#### 4.4 Non Domestic Supply (NDS)

The Commission observes that this category comprises of business houses, cinemas, clubs, public/corporate offices, schools, hospitals, hotels etc. The NDS consumers are presently paying marginally below the combined average COS of the Discoms as against the +/- 20% limits of average COS prescribed by the National Tariff Policy. Keeping in view the fact that cross-subsidy requirement in the FY 2015-16 and also the need to protect small and marginal NDS consumers the Commission has attempted to garner additional revenue from this category of consumers while keeping in view the limits of Cross-Subsidy as per the National Tariff Policy (NTP). The tariff proposed by the Discoms for the NDS category ranges from Rs. 6.11/kWh to Rs.7.00/kVah (Rs.7.77/kWh converted at the standard power factor of 0.9 for the purpose of comparison). The existing tariff and the tariff approved by the Commission for NDS category for the FY 2015-16 is given in the Table No. 4.5.

**Table 4.5: Non- Domestic Supply Tariff (NDS)**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Non Domestic</b>				<b>Non Domestic</b>			
Upto 5 kW (LT)	585/kWh	Nil	Rs. 200 upto 5 kW and Rs. 185 above 5 kW upto 20 kW	Upto 5 kW (LT)	605/kWh	Nil	Rs. 250/kW up to 5 kW and Rs. 225/kW above 5 kW & up to 20 kW
Above 5 kW and Up to 20 kW (LT)	610/kWh	Nil		Above 5 kW and Up to 20 kW (LT)	675/kWh	Nil	
Above 20 kW upto 50 kW (LT)	650/kWh	150/kW	Nil	Above 20 kW upto 50 kW (LT)	615/kVAh	170/kW	Nil
Existing consumers above 50 kW upto 70 kW (LT)	675/kWh	160/kW	Nil	Existing consumers above 50 kW upto 70 kW (LT)	650/kVAh	170/kW	Nil
Consumers above 50 kW (HT)	635/kWh or 571/kVAh in case consumer opts for kVAh based billing	160/kW	Nil	Consumers above 50 kW (HT)	630/kVAh	170/kW	Nil

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

As per Commission's estimates, the CoS for HT Industry consumer category in the FY 2015-16 is 673 Paisa / kWh as against the combined average CoS of the Discoms of 716 Paisa / kWh. Hence, HT consumers at the current tariff are paying just about 8.16% above the combined average CoS of the Discoms, as estimated by the Commission, as against the NTP limits of 20%. This consumer category has been traditionally subsidizing 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. Given the revenue deficit it is not feasible to eliminate the cross-subsidy entirely as this would require a very high increase in the tariffs of the cross-subsidized consumer categories. 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 rationalized the tariff applicable to the HT consumers. However, while doing so the Commission has kept in mind that about 50 Paise per unit tariff hike was allowed in this category in the FY 2014-15, hence the increase in HT Industrial tariff in

the FY 2015-16 has been kept at the minimum possible level. The tariff proposed by the Discoms for the HT Industry Consumers ranges from Rs. 5.94/kVAh to Rs.6.26/kVAh. The details of existing HT Industrial tariff and the revised tariff is provided in the table 4.6.

**Table 4.6: - HT Industry (above 50 kW) Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
<b>HT Industry (above 50 kW)</b>				<b>HT Industry (above 50 kW)</b>			
Supply at 11 kV	580/kVAh	150/kVA	Nil	Supply at 11 KV	615/kVAh	170/kVA	Nil
Supply at 33 kV	570/kVAh	150/kVA	Nil	Supply at 33 KV	605/kVAh	170/kVA	Nil
Supply at 66 kV or 132 kV	560/kVAh	150/kVA	Nil	Supply at 66 kV or 132 kV	595/kVAh	170/kVA	Nil
Supply at 220 kV	550/kVAh	150/kVA	Nil	Supply at 220 kV	585/kVAh	170/kVA	Nil
Supply at 400 kV	545/kVAh	150/kVA	Nil	Supply at 400 kV	575/kVAh	170/kVA	Nil
Arc furnaces/ Steel Rolling Mills #	580+20 Paisa per kVAh if supply is at 11 kV	150/kVA	Nil	Arc furnaces/ Steel Rolling Mills	645 Paisa per kVAh if supply is at 11 kV (also See note 2 of tariff schedule)	200/kVA	Nil

**# for supply at higher voltages the tariff as applicable for other HT consumes shall apply.**

### **Peak Load Exemption Charges (PLEC)**

The PLEC shall be governed by the relevant regulations of the Haryana Electricity Regulatory Commission (Terms and Conditions for grant of connectivity and open access for intra-State transmission and distribution system) Regulations, 2013 including its subsequent amendments including the dispensations provided in the MYT Order dated 29<sup>th</sup> May, 2014 and the clarification issued by the Commission vide Memo No. 2246-2248/HERC dated 05.09.2014.

#### 4.6 LT Industry up to 50 kW

The LT Industry consumer category was paying about 15% above the average CoS of the Discoms. Hence, the Commission, while rationalising the LT Industry tariff in the FY 2015-16 has attempted to realign the tariff to garner some additional revenue keeping in view the provisions in the National Tariff Policy. 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. As no subsidy or cross-subsidy is available for the LT Industry category, the Commission has realigned the tariff in the FY 2015-16 keeping in view the CSS limits of 20%. Thus, at the revised tariff the LT Industry shall be paying about 10% more than the combined average CoS of the Discoms, thereby contributing about Rs. 125.50 Crore to the Cross-subsidy amount, which shall be utilised to bridge the revenue deficit in a few other consumer categories.

The tariff proposed by the Discoms for the LT Industry category ranges from Rs. 6.48/kVAh to Rs. Rs. 7.04/kVAh. The basis of levying tariff in the case of LT Industrial tariff up to 50 kW has been changed by the Discoms from kWh as per the Commission's Order dated 29<sup>th</sup> May, 2014 to kVAh. The Commission has considered the same. However, while realigning the LT Industry tariff, the Commission has attempted to pass on the minimum possible burden to the small consumers.

The Commission in pursuance of Hon'ble Appellate Tribunal for Electricity decision, in its order dated 07.12.2011 had 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 relief granted has been retained in the present order too. **However, where the MDI meters exists the tariff shall be accordingly charged i.e. based on the recorded demand as per the ibid Order. Additionally Rs. 185 / kW shall be levied as MMC in case in any billing cycle there is no recorded demand.** Thus, for the FY 2015-16 the Commission has re-aligned the tariff to bridge the shortfall in the revenue requirement of the LT Industry category of consumers. **The Discoms may examine the feasibility of introducing PLEC in the LT Industry consumer category and submit the same for the consideration of the Commission.**

The existing tariff and the tariff approved by the Commission for LT industry category for the FY 2015-16 is given in the Table No. 4.7.

**Table 4.7: - LT Industry Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)
<b>LT Industry - upto 50 kW</b>				<b>LT Industry - upto 50 kW</b>			
Upto 10 KW	635/kWh	Nil	Rs. 185/kW	Upto 10 KW	595/kVAh	Nil	Rs. 185/kW
Above 10 KW and upto 20 KW	660/kWh	Nil		Above 10 KW and upto 20 KW	625/kVAh	Nil	Rs. 185/kW
Above 20 kW upto 50 kW	635/kWh or 572/kVAh in case of kVAh metering	170/kW to be levied on 80% of the connected load	Nil	Above 20 KW and upto 50 KW	600/kVAh	Rs.170 /kW to be levied on 80% of the connected load	Nil
Existing consumers above 50 kW upto 70 kW (LT)	600 / kVAh			Existing consumers above 50 kW upto 70 kW (LT)	625/ kVAh		

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

The Commission after careful consideration of the proposed AP concessional tariff by the Discoms / State Government has allowed AP tariff based on size of the motor and metering. The resultant revenue gap shall be borne by the State Government. The Commission for determining AP tariff decides to continue with the same approach in FY 2015-16. The Commission, therefore, in pursuance of provision of the Electricity Act, 2003 determines the following tariff which is equal to the CoS for the AP consumers for FY 2015-16 in respect of the AP consumers. The AP tariff determined by the Commission is given in the table 4.8.

**Table 4.8: AP Tariff Determined by the Commission (FY 2015-16)**

A.P. Metered /unmetered	Rs.7.34/kWh
-------------------------	-------------

As the State Government has committed for providing subsidised supply to the AP consumers, the concessional tariff for AP consumers category for FY 2015-16 taking into account the subsidy as estimated by the Commission and payable by the State Government shall be as given in the Table No. 4.9.

**Table 4.9: Agriculture Pump set Supply-State Govt. Concessional Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Agriculture Tube-well Supply</b>				<b>Agriculture Tube-well Supply</b>			
<b>Metered:</b> (i) with motor upto 15 BHP	10 /kWh	Nil	Rs. 200 / BHP per year	<b>Metered:</b> (i) with motor upto 15 BHP	10/kWh	Nil	Rs. 200 / BHP per year
(ii) with motor above 15 BHP	8 /kWh	Nil		(ii) with motor above 15 BHP	8/kWh	Nil	
<b>Un-metered:</b> (i) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil	<b>Un-metered (Rs. / Per BHP / Month):</b> (i) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil
(ii) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	Nil	(ii) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	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 i.e. Rs. 7.34/kWh which is equivalent to the CoS of the AP consumers for the FY 2015-16 and the revenue that is expected from subsidized tariff works out to Rs. 6196.914 crores 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. The Discoms, vide its memo no. Ch-15/GM/RA/N/F-15/Vol-III dated 21.04.2015, has intimated that the outstanding RE Subsidy payable by the State Government as on 31.03.2015 including carrying cost @ 15% is Rs. 4334.13 Crore.

The Commission observes that the bare amount of RE Subsidy not paid from FY 2009-10 to the FY 2014-15 works out to Rs. 2900.46 Crore. This is in violation of the section 65 of the Electricity Act, 2003. Hence, the State Government must release the outstanding RE Subsidy without any further delay and with carrying cost worked out @ 12.50% per annum on reducing balance method i.e. Rs.1153.91 Crore. Thus the total balance RE Subsidy upto the FY 2014-15 including carrying cost works out to Rs. 4054.37 Crore.

**The Calculation of Subsidy to be paid by the state government for the FY 2015-16 is given in table 4.10.**

**Table 4.10: Calculation for AP subsidy (FY 2015-16)**

	<b>Subsidy calculation for AP supply</b>	<b>unit</b>	<b>value</b>
1	Total units supplied to AP	MU	8571
2	Cost/ Tariff per unit = 2/1	Rs/kWh	7.34
3	Estimated cost of service	Rs. Million	62911.14
4	Revenue at subsidized tariff	Rs. Million	942
5	Subsidy required to keep the tariff at current levels = 2-4	Rs. Million	61969.14

In the event the State Government does not release the subsidy in accordance with Section 65 of the Electricity Act, 2003 then the Discoms shall demand and collect from the AP consumers tariff as decided by the Commission in this order i.e. equivalent to CoS for AP consumers in FY 2014-15 i.e. Rs. 7.34 / kWh converted in to Rs/BHP per month in the case of unmetered supply.

**The Commission reiterates that due to delay in payment of subsidy committed by the State Government as well as poor collection efficiency of revenue billed at the subsidized tariff, the burden in the form of additional working capital requirement is passed on to the other consumers. Hence, the Commission decides that the Discoms shall enforce all the measures including disconnection of AP consumers on the same lines as is done in the case of other consumers. However, if for any policy reasons the Discoms fail to do so then the cost of such additional working capital shall be borne by the State Government.**

#### **4.8 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 tariffs in the case of such consumers have been re-aligned within the cross-subsidy limits of NTP.

The details of the existing tariff(s) and the revised tariff approved by the Commission for FY 2015-16 are presented in the Table No. 4.11.

**Table 4.11: Public Water Works, Lift Irrigation, MITC & Street Light Supply Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)
Public Water Works	650/kWh	170/kW	Nil	Public Water Works	690/kWh	180/kW	Nil
Lift Irrigation	650/kWh	170/BHP	Nil	Lift Irrigation	690/kWh	180/BHP	Nil
MITC	650/kWh	170/BHP	Nil	MITC	690/kWh	180/BHP	Nil
Street Lighting	650/kWh	Nil	Rs. 180/kW	Street Lighting	690/kWh	Nil	Rs. 180/kW

#### 4.9 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  $\pm 20\%$  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 the Government 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 were lower than the average CoS of the Discoms as against cross subsidy limits of  $\pm 20\%$  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 circulars and guidelines of Ministry of Power, Government of India issued in 1991 or so in support of lower tariff does not lend much credence as after 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 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 needs some realignment. Accordingly, the Railway (Traction) Tariff has been re-aligned. The Discoms, for supply to the Railways (traction) has proposed energy charges at Rs. 6.16/kVAh and a fixed charge of Rs.150/kVA. The details of the existing tariff(s) and the revised tariff approved by the Commission for the FY 2015-16 are presented in the Table No. 4.12.

**Table 4.12: Railways Traction Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Railway Traction</b>				<b>Railway Traction</b>			
Supply at 11 KV	575/kVAh	140/kVA	Nil	Supply at 11 KV	610/kVAh	160/kVA	Nil
Supply at 33 KV	570/kVAh	140/kVA	Nil	Supply at 33 KV	600/kVAh	160/kVA	Nil
Supply at 66 or 132 kV	560/kVAh	140/kVA	Nil	Supply at 66 or 132 kV	590/kVAh	160/kVA	Nil
Supply at 220 kV and above	555/kVAh	140/kVA	Nil	Supply at 220 kV	580/kVAh	160/kVA	Nil

#### 4.10 Metro (DMRC) Tariff

The Commission has noted the objections filed by the DMRC that their tariff ought to be equal to the bulk supply rate of the Discoms as per the MOU signed with the State Government and observes that the MOU with Haryana Government referred to by the DMRC has not been approved by this Commission. Hence, in case the Haryana Government desires to introduce any concessional tariff for DMRC then they will have to compensate the Discoms for the loss of revenue vis-a-vis the tariff approved by the Commission. The Commission, keeping in mind the average CoS of the Discoms and the cross-subsidy limits prescribed by the NTP, has revised the tariff applicable to DMRC as under:-

The details of the existing DMRC tariff and the revised tariff are presented in the Table 4.13 .

**Table 4.13: DMRC Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
<b>DMRC</b>				<b>DMRC</b>			
Supply at 66 kV	530/kVAh	140/kVA	Nil	Supply at 66 kV	590/kVAh	160/kVA	Nil
Supply at 132 kV	530/kVAh	140/kVA	Nil	Supply at 132 kV	590/kVAh	160/kVA	Nil

#### 4.11 Bulk Supply Tariff

The Bulk Supply consumers are currently paying marginally lower than the average cost of serve of the Discoms. Thus, the Commission has re-aligned the tariff(s) as per the table 4.14 keeping in view the limits set by the NTP.

The details of the tariff approved by the Commission for FY 2014-15 for bulk supply consumers are presented in the Table No. 4.14.

**Table 4.14: - Bulk Supply Tariff & Bulk Supply (Domestic) Tariff (FY 2015-16)**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Bulk Supply</b>				<b>Bulk Supply</b>			
Supply at LT	590/kVAh	150/kW	Nil	Supply at LT	610/kVAh	160/kW or 160/kVA as applicable (see note 4 of the tariff schedule)	Nil
Supply at 11 kV	575/kVAh	150/kW	Nil	Supply at 11 kV	600/kVAh		Nil
Supply at 33 kV	565/kVAh	150/kW	Nil	Supply at 33 kV	590/kVAh		Nil
Supply at 66 or 132 kV	555/kVAh	150/kW	Nil	Supply at 66 or 132 kV	580/kVAh		Nil
Supply at 220 kV	550/kVAh	150/kW	Nil	Supply at 220 kV	575/kVAh		Nil
<b>Bulk Supply (Domestic) (70 kW and above at 11 kV or above voltage)</b>							
For total consumption in a month not exceeding 400 units/ flat/dwelling unit (DU).	420 /kWh	Rs. 80 /kW of the recorded demand	Nil	For total consumption in a month not exceeding 500 units/ flat/dwelling unit (DU).	470 /kWh	Rs. 100 /kW of the recorded demand	Nil
For total consumption in a month between exceeding 401-800 units/flat/ DU.	460 /kWh			For total consumption in a month exceeding 500 units/flat/ DU.	585 /kWh		
For total consumption in a month of 801 units/ flat/DU.	560 /kWh						

#### 4.12 Independent Hoardings / Decorative Lighting

In view of the non-essential nature of supply and the rising average cost of supply the Commission had revised the energy charges in this category to 830 Paisa / kWh. Additionally, the fixed charge shall be Rs. 180/kW of the connected load to take care of the increase in fixed cost component of the cost to supply.

#### 4.13 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 temporary tariff schedule shall also be applicable for the consumers who are not taking supply under a proper agreement.**

The details of the existing tariff(s) and the revised tariff approved by the Commission for the FY 2015-16 for above categories of consumers are presented in the Table No. 4.15.

**Table 4.15: - Independent Hoardings / Decorative Lighting and Temporary Metered Supply Tariff**

Tariff for 2014-15				Tariff for 2015-16			
Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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)	MMC (Rs. per kW per month of the connected load or part thereof)
<b>Independent Hoarding / Decorative Lighting</b>	745/kWh	150/kW		<b>Independent Hoarding / Decorative Lighting</b>	830/kWh	180/kW	Nil
<b>Temporary Metered supply</b>	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			<b>Temporary Metered supply</b>	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		

**Distribution & Retail Supply Tariff approved by the Commission for the FY 2015-16 (applicable w.e.f. 01.04.2015)**

Sr. No.	Tariff for 2014-15				Tariff for 2015-16			
	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / 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	MMC (Rs. per kW per month of the connected load or part thereof)
1	<b>Domestic Supply</b>				<b>Domestic Supply</b>			
	<b>Category I: (Total consumption up to 800 units per month)</b>				<b>Category I: (Total consumption up to 100 units per month)</b>			
	0 - 40 units per month	270/kWh	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	0 - 50 units per month	270/kWh	Nil	Rs. 120 up to 2 kW and Rs. 70 above 2 kW
	41-250 units per month	450/kWh	Nil		51-100	450/kWh	Nil	
					<b>Category II: (Total consumption more than 100 units/month and up to 500 units/month)</b>			
	251 – 500 units per month	525/kWh	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	0-250	500/kWh	Nil	Rs. 120 up to 2 kW and Rs.70 above 2 kW
	501 - 800 units per month	598/kWh	Nil		251-500	605/kWh	Nil	
	<b>Category II: (Total consumption more than 800 units/month)</b>				<b>Category III: (Total consumption more than 500 units/month)</b>			
	801 and above units per month  (For total consumption of 801 units and above/month, there shall be single tariff & no slab benefit shall be admissible)	598/kWh  Any consumer who at his own cost installs kVAh meter may opt for kVAh tariff of 538/kVAh i.e. applicable tariff in kWh multiplied by 0.90 (standard power factor)	Nil	Rs. 100 up to 2 kW and Rs. 60 above 2 kW	Above 500 units	675/kWh  (flat rate no telescopic benefits)	Nil	Rs. 120 up to 2 kW and Rs.70 above 2 kW
2	<b>Non Domestic</b>				<b>Non Domestic</b>			
	Upto 5 kW (LT)	585/kWh	Nil	Rs. 200 upto 5 kW and Rs. 185 above 5 kW upto 20 kW	Upto 5 kW (LT)	605/kWh	Nil	Rs. 250/kW up to 5 kW and Rs. 225/kW above 5 kW & up to 20 kW
	Above 5 kW and Up to 20 kW (LT)	610/kWh	Nil		Above 5 kW and Up to 20 kW (LT)	675/kWh	Nil	
	Above 20 kW upto 50 kW (LT)	600/kWh	150/kW	Nil	Above 20 kW upto 50 kW (LT)	615/kVAh	170/kW	Nil

	Existing consumers above 50 kW upto 70 kW (LT)	675/kWh	160/kW	Nil	Existing consumers above 50 kW upto 70 kW (LT)	650/kVAh	170/kW	Nil
	Consumers above 50 kW (HT)	635/kWh or 571/kVAh in case consumer opts for kVAh based billing	160/kW	Nil	Consumers above 50 kW (HT)	630/kVAh	170/kW	Nil
3	<b>HT Industry (above 50 kW)</b>				<b>HT Industry (above 50 kW)</b>			
	Supply at 11 kV	580/kVAh	150/kVA	Nil	Supply at 11 KV	615/kVAh	170/kVA	Nil
	Supply at 33 kV	570/kVAh	150/kVA	Nil	Supply at 33 KV	605/kVAh	170/kVA	Nil
	Supply at 66 kV or 132 kV	560/kVAh	150/kVA	Nil	Supply at 66 kV or 132 kV	595/kVAh	170/kVA	Nil
	Supply at 220 kV	550/kVAh	150/kVA	Nil	Supply at 220 kV	585/kVAh	170/kVA	Nil
	Supply at 400 kV	545/kVAh	150/kVA	Nil	Supply at 400 kV	575/kVAh	170/kVA	Nil
	Arc furnaces/ Steel Rolling Mills	580+20 Paisa per kVAh if supply is at 11 kV	150/kVA	Nil	Arc furnaces/ Steel Rolling Mills	645 Paisa per kVAh if supply is at 11 kV (see note 2 below)	200/kVA	Nil
4	<b>LT Industry - upto 50 kW</b>				<b>LT Industry - upto 50 kW</b>			
	Upto 10 KW	635/kWh	Nil	Rs. 185/kWh	Upto 10 KW	595/kVAh	Nil	Rs. 185/kW
	Above 10 KW and upto 20 KW	660/kWh	Nil		Above 10 KW and upto 20 KW	625/kVAh		
	Above 20 kW upto 50 kW	635/kWh or 572/kVAh in case of kVAh metering	170/kW to be levied on 80% of the connected load	Nil	Above 20 KW and upto 50 KW	600/kVAh	Rs.170 /kW to be levied on 80% of the connected load	Nil
Existing consumers above 50 kW upto 70 kW (LT)	600 / kVAh			Existing consumers above 50 kW upto 70 kW (LT)	625/ kVAh			
5	<b>Agriculture Tube-well Supply</b>				<b>Agriculture Tube-well Supply</b>			
	<b>Metered:</b> (iii) with motor upto 15 BHP	10 /kWh	Nil	Rs. 200 / BHP per year	<b>Metered:</b> (iii) with motor upto 15 BHP	10/kWh	Nil	Rs. 200 / BHP per year
	(iv) with motor above 15 BHP	8 /kWh	Nil		(iv) with motor above 15 BHP	8/kWh	Nil	
	<b>Un-metered:</b> (iii) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil	<b>Un-metered (Rs. / Per BHP / Month):</b> (iii) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil
(iv) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	Nil	(iv) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	Nil	

6	<b>Public Water Works</b>	650/kWh	170/kW	Nil	<b>Public Water Works</b>	690/kWh	180/kW	Nil
7	<b>Lift Irrigation</b>	650/kWh	170/BHP	Nil	<b>Lift Irrigation</b>	690/kWh	180/BHP	Nil
8	<b>MITC</b>	650/kWh	170/BHP	Nil	<b>MITC</b>	690/kWh	180/BHP	Nil
9	<b>Street Lighting</b>	650/kWh	Nil	Rs. 180/kW	<b>Street Lighting</b>	690/kWh	Nil	Rs. 180/kW
10	<b>Railway Traction</b>				<b>Railway Traction</b>			
	Supply at 11 KV	575/kVAh	140/kVA	Nil	Supply at 11 KV	610/kVAh	160/kVA	Nil
	Supply at 33 KV	570/kVAh	140/kVA	Nil	Supply at 33 KV	600/kVAh	160/kVA	Nil
	Supply at 66 or 132 kV	560/kVAh	140/kVA	Nil	Supply at 66 or 132 kV	590/kVAh	160/kVA	Nil
	Supply at 220 kV and above	555/kVAh	140/kVA	Nil	Supply at 220 kV	580/kVAh	160/kVA	Nil
11	<b>DMRC</b>				<b>DMRC</b>			
	Supply at 66 kV	530/kVAh	140/kVA	Nil	Supply at 66 kV	590/kVAh	160/kVA	Nil
	Supply at 132 kV	530/kVAh	140/kVA	Nil	Supply at 132 kV	590/kVAh	160/kVA	Nil
12	<b>Bulk Supply</b>				<b>Bulk Supply</b>			
	Supply at LT	590/kVAh	150/kW	Nil	Supply at LT	610/kVAh	Rs. 160/kW or Rs.160/kVA as applicable  (see note no. 4 below)	Nil
	Supply at 11 kV	575/kVAh	150/kW	Nil	Supply at 11 kV	600/kVAh		Nil
	Supply at 33 kV	565/kVAh	150/kW	Nil	Supply at 33 kV	590/kVAh		Nil
	Supply at 66 or 132 kV	555/kVAh	150/kW	Nil	Supply at 66 or 132 kV	580/kVAh		Nil
	Supply at 220 kV	550/kVAh	150/kW	Nil	Supply at 220 kV	575/kVAh		Nil
13	<b>Bulk Supply (Domestic) (70 kW and above at 11 kV or above voltage)</b>							
	For total consumption in a month not exceeding 400 units/ flat/dwelling unit (DU).	420 /kWh	Rs. 80 /kW of the recorded demand	Nil	For total consumption in a month not exceeding 500 units/ flat/dwelling unit (DU).	470 /kWh	Rs. 100 /kW of the recorded demand	Nil
	For total consumption in a month between exceeding 401-800 units/flat/ DU.	460 /kWh			For total consumption in a month exceeding 500 units/flat/ DU.	585 /kWh		
	For total consumption in a month of 801 units/ flat/DU.	560 /kWh						
14	<b>Independent Hoarding / Decorative Lightning</b>	745/kWh	150/kW		<b>Independent Hoarding / Decorative Lightning</b>	830/kWh	180/kW	Nil
15	<b>Temporary Metered supply</b>	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			<b>Temporary Metered supply</b>	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		



Notes:

1. Energy charges in case of Domestic consumers are telescopic in nature up to the consumption of 500 Units / month. In case of consumption more than 500 units/month, no slab benefit shall be admissible and tariff applicable will be 675 paisa/kWh for total consumption.
2. In case of Arc furnaces/ Steel Rolling Mills for supply at 33 kV and above, the HT Industrial tariff at the corresponding voltage level shall be applicable.
3. Fixed charges for HT Industrial supply and Bulk Supply category are in Rs./kVA of Contract Demand. For Railways and DMRC, the fixed charges are in Rs./kVA of the billable demand.
4. In case of Bulk Supply Consumers (other than Bulk Supply – DS), the fixed charges are in Rs./kW of the connected load where contract demand is not sanctioned and in Rs./kVA of contract demand where contract demand is sanctioned.
5. 80% of the connected load shall be taken into account for levying fixed charges where leviable in case of LT industrial Supply. In case of LT industry above 20 kW where MDI meter is installed the fixed charges shall be Rs. 170/kW/month of recorded demand if it is in kW or 153/kVA/month of recorded demand if the same is in kVA.
6. Fixed charges for unmetered AP consumers, MITC and Lift Irrigation category are in Rs. / BHP / month.
7. Fixed charges for Bulk Supply Domestic are in Rs. / kW of the recorded demand.
8. Under Bulk Supply (Domestic) category no benefit of lower slab shall be admissible in the higher consumption slabs. Total consumption shall be charged at a single tariff depending upon the average consumption/flat/residential unit for that month.
9. In case of single point supply as per HERC (Single Point Supply to Employers' Colonies, Group Housing Societies and Residential or Commercial cum Residential Complexes of Developers) Regulations, 2013, Bulk Supply (Domestic Supply) tariff shall be applicable. A rebate of 4% in case of supply at 11 kV and 5% in case of supply at higher voltage in the energy consumption as recorded at Single Point Supply meter shall be admissible. NDS load, if any,

beyond the prescribed limit as per schedule of tariff, the NDS tariff shall be applicable on monthly consumption corresponding to the NDS load as detailed in the said Regulation. The Bulk Supply (Domestic) Tariff shall apply only to the consumer categories covered by the Single Point Supply Regulations notified by the Commission

10. In addition to the tariff as above, the Discoms shall levy FSA as per HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012
11. The above tariff does not include Electricity Duty, Municipal Tax and FSA.
12. In case of Health and Educational Institutions having a total load exceeding 20 kW, these shall be treated as non-domestic category where the entire load is NDS. However if there is mixed load or there is some other category's load (other than Industrial) in the total load and if such other load exceeds 10 % of the total load then Bulk Supply tariff shall be applicable.
13. The Electricity Duty, Municipal Tax and FSA shall be charged at kWh.
14. The Schedule of tariff for supply of electricity by the Discoms shall get modified accordingly.

#### **4.14 Other conditions**

**All other terms and conditions other than those explicitly dealt within the present Order shall remain unchanged i.e. as per the MYT Order dated 29<sup>th</sup> May, 2014 and shall be applicable till changed or amended by the Commission.**

#### **4.15 Revenue gap at revised tariff for the FY 2015-16**

Based on the revised tariff the Commission estimates that the Discoms will be able to generate additional revenue of about Rs. 1500 Crores. Consequently, the revised projections of revenue gap are as under:-

<b>Total ARR for FY 2015-16</b>	<b>Revenue gap at current tariff (Rs. Crore)</b>
UHBVNL	10316.31
DHBVNL	13609.99
Total ARR for FY 2015-16	23926.30
Revenue gap for FY 2013-14	1277.42

Carrying cost on above for 1 year six months	239.52
Interest on FRP borrowings for FY 2015-16	312.71
Total Revenue requirement for FY 2015-16	25755.94
Revenue at revised tariff	18,892.22
Subsidy for AP supply	6196.91
Total Revenue	25,088.83
Revenue Gap for FY 2015-16 at the revised tariff	<b>667.11</b>

**The revenue gap to the extent of Rs. 667.11 Crore left unaddressed in the present Order shall be funded from the borrowings available to the Discoms under the FRP. The Commission would like to make it clear that the revenue gap left un-covered is on account of the FRP and hence shall not be considered as Regulatory Asset.**

## CHAPTER 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 and cross - subsidy surcharge. The Commission observes that in the present Petition, the Discoms have worked out the wheeling charges and regarding Cross-Subsidy Surcharge (CSS) calculation, they have submitted that principally CSS should be equal to the cross-subsidy generated by the respective consumer category. It has further been stated that this principle was followed by the Commission in its MYT Order dated 29<sup>th</sup> May, 2014 and the same methodology for working out CSS may be continued.

The Commission notes that in their present Petition the Discoms have proposed 9% of the net ARR of the distribution licensees for working out the wheeling tariff. The Commission has accordingly estimated the wheeling charges for the FY 2015-16 as under:-

#### 5.1 Wheeling charges

**Table 5.1: Calculation of wheeling charges for the FY 2015-16**

1 Network expenses (per kWh)		Rs. Crore
a.	Network establishment and operation cost (9% of the net ARR of the distribution licensees for the FY 2015-16 (million)	23180.35
b.	Allowed gross volume of power purchase by the distribution licensees MU	46731
c.	Expenses (Rs / kWh) (a/b)	0.50
2. Cost of losses in the system		
a.	%age distribution system losses (technical)	7.55%
b.	Losses (MU) (1bx2a)	4233
c.	HERC approved average cost of power purchase (Rs. / kWh)	3.954
d.	Total cost of losses (2bx2c) Rs. million	16737
e.	Cost per unit of losses (Rs. / unit) (2d/1b)	0.36
3. Wheeling charges (Rs. / kWh) (1c+2e)		0.85

## 5.2 Cross-subsidy Surcharge

Regulation 63 of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution and Retails Supply under Multi Year Tariff Framework) Regulations, 2012, 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. Cross-subsidy surcharge shall also be payable by such Open Access consumer who receives supply of electricity from a person other than the distribution licensee in whose area of supply he is located, irrespective of whether he avails such supply through transmission/distribution network of the licensee or not.

The consumers located in the area of supply of a distribution licensee but availing Open Access exclusively on inter-State transmission system shall also pay the cross subsidy surcharge as determined by the Commission.

Section 42 of the Electricity Act, 2003 provides that the surcharge and the cross-subsidies shall be progressively reduced. The National Tariff Policy provides as under-

*“.....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 Commission observes that the Hon’ble Appellate Tribunal for Electricity in its recent judgement dated 24.03.2015 in Appeal No. 103 of 2012 has held as under:-

*“74. In the circumstances of the present case where only overall average cost of supply of the distribution licensee is available, it would be prudent to determine the cross subsidy surcharge for FY 2012-13 as the difference of the average tariff of the Appellant’s category (based on average revenue realization from the Appellant’s category) and the average cost of supply for the distribution licensee on the basis of which the retail supply tariffs have been determined by the State Commission. This will also not be contrary to the Regulations as both tariff of the*

*Appellants category and cost of supply are based on the same parameter viz. the average cost of supply of the distribution licensee.*

*75. In the impugned order the average revenue per unit for the Appellant's category is Rs. 6.02 per unit and the average cost of supply for the distribution licensee on the basis of which the retail supply tariff was determined is Rs. 5.33 per unit. Therefore, the cross subsidy surcharge for the Appellant would be Rs. 0.69 per unit (6.02-5.33) and not Rs. 0.92 per unit as determined in the impugned order”.*

The Commission observes that the Hon'ble Appellate Tribunal for Electricity, while rendering its judgement in the Appeal No. 102,103 and 112 of 2010, has suggested that a reasonable accurate CoS can be estimated by apportioning the power purchase cost at different voltage levels taking into account the distribution losses at the relevant voltage level and the upstream system to facilitate determination of reasonably accurate voltage wise cost of supply. The relevant part of the said judgement is as under:-

*“32. Ideally, the network costs can be split into the partial costs of the different voltage level and the cost of supply at a particular voltage level is the cost at that voltage level and upstream network. However, in the absence of segregated network costs, it would be prudent to work out the voltage-wise cost of supply taking into account the distribution losses at different voltage levels as a first major step in the right direction. As power purchase cost is a major component of the tariff, apportioning the power purchase cost at different voltage levels taking into account the distribution losses at the relevant voltage level and the upstream system will facilitate determination of voltage wise cost of supply, though not very accurate, but a simple and practical method to reflect the actual cost of supply”.*

*“34. Thus Power Purchase Cost which is the major component of tariff can be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for the relevant voltage level and upstream system. As segregated network costs are not available, all the other costs such as Return on Equity, Interest on Loan, depreciation, interest on working capital and O&M costs can be pooled and*

*apportioned equitably, on pro-rata basis, to all the voltage levels including the appellant's category to determine the cost of supply. Segregating Power Purchase cost taking into account voltage-wise transmission and distribution losses will be a major step in the right direction for determining the actual cost of supply to various consumer categories. All consumer categories connected to the same voltage will have the same cost of supply (emphasis supplied). Further, refinements in formulation for cost of supply can be done gradually when more data is available”.*

Regarding the formula given in the NTP for working out cross-subsidy surcharge, the Commission observes that in the revised draft of the NTP prepared by the Ministry of Power, Government of India and circulated for comments of the stakeholders, the formula for working out cross-subsidy surcharge has been revised, keeping in view certain discrepancies in implementing the formula pointed out by different SERCs. In case the NTP formula is followed, the CSS shall work out to be negative while in actual the HT Industrial consumers are contributing to the cross-subsidy. The Commission has therefore considered it appropriate to work out the cross-subsidy surcharge based on the voltage wise calculation of CoS by apportioning the power purchase cost at different voltage levels taking into account the distribution losses at the relevant voltage level and the upstream system, as suggested by the Hon'ble Appellate Tribunal for Electricity, till the time voltage wise consumer category wise CoS is submitted by the Discoms.

The Commission observes that UHBVNL vide its letter dated 24.04.2015 and DHBVNL vide memo no. Ch.127/SE/RA-500 dated 23.04.2015 including subsequent submissions, have provided the calculations for voltage wise technical losses. A summary of the same is reproduced below:-

<b>Voltage Levels</b>	<b>UHBVNL</b>	<b>DHBVNL</b>	<b>Combined</b>
33 kV line losses	0.48%	0.53%	
33 kV Transformation Losses	0.27%	0.21%	
11 kV line losses	7.22%	6.51%	
11 kV Transformation Losses	1.13%	1.10%	
LT Line Losses	7.87%	6.60%	
Total Losses upto LT Level	15.80%	14.95%	15.29%
<b>Losses upto 11 kV level</b>	<b>7.97%</b>	<b>7.25%</b>	<b>7.55%</b>

From scrutiny of the above voltage-wise loss calculations submitted by the Discoms, the Commission observes that it is possible to work out the total losses up to

11 kV level and overall losses at LT levels. However, working out losses at different HT voltage levels i.e. 66 kV, 132 kV, 220 kV etc. is not possible till the time similar data is made available at these voltages by the Utilities. Hence, for calculating voltage wise losses, the Commission has broadly considered only two categories i.e. HT (11 kV level and above) and LT voltage levels.

In line with the broad framework suggested by the Hon'ble Appellate Tribunal for Electricity in its judgement dated 30.05.2010 (supra), the Commission has considered the aggregate technical and commercial losses in the entire distribution system for FY2015-16 as determined in the present Order i.e. 23%. Thereafter, the distribution system losses are segregated into i) technical loss and ii) commercial losses i.e. theft/pilferage etc. Based on the voltage wise technical loss calculations submitted by the Discoms, the technical losses ,for UHBVNL and DHBVNL combined, work out to 15.29% at LT voltage level and upstream system and at 7.55% at HT (11 kV and above) voltage level and upstream system. The difference between technical losses so determined and actual total distribution system losses are considered to be on account of reasons other than technical losses and are therefore taken as commercial losses. The commercial losses so determined have been apportioned between HT and LT voltage levels in proportion to annual gross energy consumption at these voltage levels. The annual gross energy consumption at the given voltage levels has been taken as the sum of energy consumption of all consumer categories connected at that voltage plus the technical distribution losses corresponding to that voltage level as worked out in the voltage wise loss calculations. Accordingly, the voltage wise CoS is worked out as under:-

	HT Consumers	LT Consumers	Total
<b>Energy Sales (MUs)</b>	10958.77	25025.91	35984.68
Technical Losses (%)	7.55%	15.29%	
Grossed up Sales (MUs)	11853.77	29543.19	41396.96
Technical Losses (MUs)	895.0	4517.28	5412.28
<b>Distribution Losses @ 23% (MUs)</b>			10746.44
<b>Commercial Losses (10746.44 MUs – 5412.28 MUs)</b>			5334.16
<b>Commercial Losses apportioned to HT and LT in the ratio of grossed up sales</b>	1527.40	3806.76	5334.16
Energy at Discoms periphery (MUs)	13381.17	33349.94	46731.12
<b>Energy Allocator (%)</b>	28.63%	71.37%	
Energy Cost (Rs. millions)	56503.8	140824.5	197328.3



Cost per unit (Rs/kWh)	5.16	5.63	5.48
<b>Balance Cost (Rs millions)</b>			60231.1
Allocated on Gross energy basis	17246.8	42984.3	60231.1
Cost per Unit (Rs/kWh)	1.57	1.72	1.67
CoS (Total) Rs/kWh	6.73	7.34	7.16

The above loss allocation is reflected in the energy allocators at HT and LT voltage levels i.e. lower cost attributed to the HT consumers and higher cost attributed to the LT Consumers. Thus, the Cost of Service in the case of HT Consumers is comparatively lower than that of the consumers receiving electricity supply at LT voltage. The CSS has been worked out as the difference between the average consumer category-wise average revenue realisation per unit and the voltage-wise CoS of HT or LT as the case may be. The Cross-subsidy surcharge for the FY 2015-16 shall be as per the table 5.2.

**Table 5.2: Cross-subsidy surcharge for FY 2015-16 (Rs/kWh)**

		CoS (Rs./kWh)	Average revenue realization (Rs./kWh)	Cross Subsidy Surcharge (Rs./kWh)
		1	2	3= 2-1
1	HT industry	6.73	7.66	0.93
2	Bulk Supply (other than DS)	6.73	8.27	1.54
3	Railways (Traction)	6.73	6.85	0.12
4	LT Industry	7.34	7.91	0.57
5	NDS (HT)	6.73	8.19	1.46

The consumer category wise % age cost recovery at the revised tariff vis-a-vis the average cost of supply of the Discoms in the FY 2015-16 with reference to the NTP limits of +/- 20% is as under:-

Consumer Categories	Cost Recovery at the revised tariff to Average CoS (FY 2015-16) in %	Cost Recovery at the revised tariff to consumer category wise CoS (FY 2015-16) in %
Domestic ( for consumption of 0-100 Units per month)	47.78%	46.59%
Domestic (Others)	82.50%	80.45%
Non Domestic	105.06%	105.06%
HT Industry	107.02%	113.82%
LT industry	110.51%	107.77%
Lift irrigation	118.20%	115.26%
Railway traction inc DMRC	95.70%	101.78%
Bulk supply HT	115.54%	122.88%
Bulk Supply LT	84.11%	82.02%
Street Light	96.40%	94.01%
PWW	106.32%	103.68%

The Commission observes that the cost recovery to the average CoS of the Discoms is falling outside the +/- 20% limits of NTP only in the case of DS Consumers (for consumption of 0-100 Units per month). However, when compared to the consumer category wise voltage wise CoS Bulk Supply (HT) is paying about 22.88% as against 20% NTP limits. The Commission shall, while reviewing the consumer category wise tariff(s) in the subsequent years, attempt to realign in the tariff for the Bulk Supply (HT) consumer categories within the cross-subsidy limits of the NTP. Further, the AP tariff determined by the Commission is the same as the CoS worked out for LT consumers. Hence, the cost coverage for AP consumer category is 100%.

### **5.3 Additional Surcharge**

Regulation 22 of the "Haryana Electricity Regulatory Commission (Terms and conditions for grant of connectivity and open access for intra-State transmission and distribution system) Regulations, 2012. provides as under:-

*"Additional Surcharge:-*

- 1. An open access consumer, receiving supply of electricity from a person other than the distribution licensee of his area of supply, shall pay to the distribution licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet out the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act.*

*Provided that such additional surcharge shall not be levied in case open access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use.*

- 2. This additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. However, the fixed costs related to network assets would be recovered through*

*"Wheeling charges:-*

- 3. The distribution licensee shall 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 shall scrutinize the statement of calculation of such stranded fixed costs submitted by the distribution licensee and determine the amount of additional surcharge.*

*Provided that any additional surcharge so determined shall be applicable to all the consumers availing open access from the date of determination of same by the Commission.*

- 4. The consumers located in the area of supply of a distribution licensee but availing open access exclusively on inter-State transmission system shall also pay the additional surcharge.*
- 5. Additional surcharge determined on per unit basis shall be payable, on monthly basis, by the open access customers based on the actual energy drawn during the month through open access”.*

The Discoms have filed the petition along with the supporting details on 04.03.2015 vide memo no. Ch-12/GM/RA/N/F-15/Vol-III dated 04.03.2015 wherein the Discoms , based on the fixed cost paid by them for the stranded capacity due to scheduling of Open Access power by the embedded Open Access consumers, have proposed an additional surcharge of Rs. 0.80 per unit to be paid by such consumers.

As the proposed levy of additional surcharge shall affect a large number of electricity consumers, the Commission has considered it appropriate to hold a public hearing before finalising the same. Accordingly, the Commission shall schedule a hearing of the stakeholders and other interested persons and after hearing their objections / comments as well as the reply of the Petitioners thereto, shall pass an appropriate Order in the matter.

## CHAPTER 6

### CONCLUSION

The Commission observes that Discoms have moved a step ahead in improving their efficiency and commercial viability however, there is still huge scope for improvement. Discoms should endeavour to achieve the targets/benchmarks set by the Commission in order to make their operations commercially viable, efficient, and economical and consumer friendly to accomplish its Mission of providing affordable and quality service power to the consumers. The Commission, on several occasions in the past including while giving in-principle approval to FRP had emphasized the need to change the business model i.e. deployment of franchisee in the retail supply business, time bound replacement of dead, defective, slow meters, inventory & receivable management, managing surplus power during off-peak hours instead of under-drawing at a meager UI and selling to Inter-State entities at a price much lower than cost of such power etc. in order to reduce financial losses. However, the compliance of directives/advice has not been entirely satisfactory on one pretext or the other. In order to improve the efficiency, economies of operation and customer satisfaction, the Commission on respective issues observes and directs Discoms as under:-

#### **Power Purchase Cost & PPA**

The Commission observes that the single largest cost component of the Discoms ARR accounting for more than 80% of the cost of supply is the cost of power purchased by them from the power generating/trading companies. Thus, power available to Haryana needs to be prudently managed in order to optimise the power purchase cost and reduce the trading losses. Given the fuel cost of gas based power plants of NTPC, these stations are un-dispatchable even if one were to assume some decline in gas prices. Further, in some of the power plants e.g. Aravali, the cost of 750MW Haryana's share is excessive. Hence, there is a need for Discoms to review all such PPAs and for time being, after working out the economics of paying fixed charges, the Discoms should substitute drawl from such expensive sources with the power available from less expensive sources. Power Purchase Centre of Discoms should also explore and examine options for banking and trading of power so that average cost of power purchase can be optimised as well as optimum utilization of HPGCL stations can be achieved considering techno-economic principals. While scheduling power from

various other Gencos and issuing dispatch instructions to respective generating stations principles of merit order dispatch should be followed. Further, in order to minimise trading losses on account of inter – state sale of surplus power, the Discoms are directed to examine the feasibility of extending supply to the HT consumers at a concessional rate of say 80% of the energy charges for power drawn by them during off-peak hours in excess of their normal consumption during the corresponding billing period in the preceding year. In case of any load extension, the base energy consumption beyond which the concessional tariff shall apply would be increased on pro – rata basis. The Discoms are directed to submit a detailed report / proposal on the same within one month from the date of this Order so that the issue of losses on account sale of surplus power are reduced to the extent possible.

The Commission is of the considered view that in case of any application or petition by Genco or Trader seeking enhancement or revision of capacity charge or tariff against the existing PPA with the state Discoms, the Power Purchase Centre of Discoms shall examine such matters considering legal issues, financial implications on Discoms and financial liability on consumers in future. In case, after detailed examination by the Power Purchase Centre and negotiating with Genco/Trader any variation in terms and conditions of PPA is required, it should be brought before the Commission expeditiously in order to protect the interest of consumers.

### **Recovery of long overdue/Receivables**

Commission observes that Utilities have accumulated huge receivables mainly because of defaulting amount of various categories consumers which are adversely affecting the financial health of Utilities. Commission directs the Discoms to conduct age wise audit of its receivables and submit a report to the Commission within three months from the date of passing of this Order including an action plan to liquidate the outstanding receivables within six months. The electricity connections of all such defaulting consumers, unless a stay has been granted by a Court of competent jurisdiction, shall be immediately disconnected. The Commission shall not allow Discoms any additional working capital and interest thereto (if any) on this account. In the public hearing the issue of theft of power / tampering of energy meter by the employees of the power Utilities was also raised. The Commission directs the Discoms to submit details of such cases along with action taken regarding the same within two months from the date of this Order.

Further, in case of Government employee defaults in making payment of its electricity bill or if found indulged in theft/unauthorised use of electricity then such arrears or penalty shall be recovered from the employee's salary for which utilities may write to his/her department to initiate action in this regard. In the case of electricity connections to Government quarters, at the time of change in occupant takeover/handover report shall be sent to concerned sub-division office so that dues can be settled and legal compliance is made. In case of non-compliance of above temporary supply tariff shall be applicable to such premises.

### **Replacement of Energy Meters, Revenue collection efficiency, economic sustainability of the DISCOM(S)**

The Commission observes that the mainstay of revenue generation and accounting i.e. energy meters, have never been sharply focused by the Discoms. There are still large numbers of dead/defective meters as well as electro-mechanical meters which over the years have become slow and hence not accurately recording the electricity consumed.

In the public hearings held on 13.02.2015, the Discoms stated that they would soon be filing the detailed plan for replacement of defective energy meters but the needful has not been done. The Commission as such assigns the following targets to the Distribution licensees:-

1. **Single phase meters:** The total number of defective energy meters in each of the Discoms should not exceed 10,000 at any time after December, 2015.
2. **Three phase meters:** The total number of defective energy meters in each of the Discoms should not exceed 500 at any time after December, 2015.

Failure to comply with the above targets set by the Commission shall attract the penal provision of Section 142 of the Electricity Act, 2003 against the officer/official responsible for the lapse i.e. XEN and above. Regarding charging of the consumers' in case of dead/defective/burnt meters, there is provision in the Electricity Supply Code that the consumer should not be continued to be billed on average basis beyond two billing periods and in the meanwhile the meter should be replaced. The Discoms are directed to ensure compliance of this regulation, a failure to do so shall attract penal

action under Section 142 of the Electricity Act, 2003 against the officer(s) i.e. XEN and above responsible for this lapse.

The licensees are further directed to replace all the Electro-mechanical meters by 31<sup>st</sup> March, 2016 by making all necessary arrangements.

The Commission observes that the Discoms have not been effective in plugging the revenue leakages on account of theft and pilferages including direct tapping of the distribution lines. The Vigilance Cell needs to be restructured & strengthen and made further accountable. Vigilance Cell models of other States where these are working effectively may be studied and suitable administrative and financial restructuring shall be implemented in order to improve the efficiency and effectiveness of Vigilance Cell of Discoms.

In order to encourage the consumers in making advance payment for the electricity drawn by them and also to reduce the high cost working capital loans of the Discoms, the Commission in its Supply Code Regulations, 2014 allowed an interest on such advance payments at the saving bank rate of State Bank of India as on 31<sup>st</sup> March. The credit of interest is given when the advance paid is reduced to zero or on 31<sup>st</sup> March whichever is earlier. In order to further popularize, the advance payments by consumers with a view to reduce high cost working capital loan of the Discoms, the Commission, as proposed by the Discoms vide memo No. Ch-/CGM dated 4.05.2015, has decided to give 4 % discount on energy charges to all consumers who will deposit advance payments made online through RTGS / NEFT or through Cheque in the banks authorised by the respective Utilities equivalent to 120% of energy charges paid in the previous year within one month of this Order. However, this rebate shall be available only till the entire advance is adjusted and thereafter no rebate shall be given. The Discoms shall ensure wide publicity of this provision to attract maximum consumers.

### **Solar energy promotion**

Given the limited potential for promoting Wind/Hydel as well as Biomass based renewal energy projects in Haryana, the Commission is of the considered view that Rooftop Solar Power System hold considerable potential as well as an effective step towards bringing additional generation capacity in the system. Further, the installation of grid connected Rooftop Solar Power System would not only support the grid but also reduce T&D loss and lower capital investment on local distribution system

augmentation. Discoms shall endeavour to promote the installation of grid connected Solar Rooftop System and to facilitate its consumers who intend to install such system. The Commission, in order to promote Rooftop Solar Power System under net-metering regulations, shall consider Generation Based Incentive. The details of the incentives to be provided shall be determined by a separate Order in due course of time.

The Discoms may also explore the possibility of incentivising the applicants for new tube-well connections as well as existing tube-well connections to migrate to solar pumps. Commission is of the view that, priority may be given to the farmers who have taken loan from banks/other financial institutes for installation of new tube-well connections. The Discoms should suitably cover this in the DSM schemes/plan and also explore the possibility of State Government extending some capital subsidy for the same as the same will ultimately reduce the RE subsidy burden of the State.

#### **Release of pending connections/load**

The Commission has taken serious note of the fact that on the one hand the Discoms are projecting surplus power while on the other hand there are pending applications for release of new connections. From the data provided by the UHBVNL, the Commission observes that up to end February, 2015 the number of pending applications were 25630 with applied load of 275359 kW. Similarly, in DHBVNL the number of pending application, as on end February 2015 was 32123 with an applied load of 742451 kW. Thus, in both the Discoms, the total pending release of load works out to 1017810 kW or 1017.81 MW. This could have taken care of the surplus power available to the Discoms to a certain extent, which they propose to sell in the inter-State market at 20% below the average cost of power purchase and in turn adding to the financial losses on account of trading of surplus power. The Commission would like to make it clear that such trading losses shall not be passed on to the electricity consumers of Haryana. The Commission further directs the Discoms to expedite the release of pending applications for new connections as well as load enhancement. The backlog should be removed within three months from the date of this Order and the Discoms shall submit a quarterly progress report on the same. Status of consumer applications shall also be hosted on website of respective Discoms.

The Commission also observes that Single Point connection application remains pending for release of connections, such requests need to be disposed-off immediately



with zero pendency and connections to be released within time frame specified in the Supply Code Regulations, 2014. The Commission further directs the Discoms to implement the Haryana Electricity Regulatory Commission (Single Point Supply to Employers' Colonies, Group Housing Societies and Residential or Commercial cum Residential Complexes of Developers) Regulations, 2013 including its subsequent amendments.

The Commission, from the feedback received from consumers, observes that the Discoms are reluctant to provide electricity connections to the dwelling units located near the tube-wells. The Commission directs the Discoms to release DS connections to such dwelling units as per the policy and charge them accordingly.

### **Renewable Purchase Obligation (RPO)**

The Commission observes that the Discoms have failed to achieve the RPO target set by the Commission. The Discoms have also not purchased any Renewable Energy Certificates (REC) to fulfil their RPO.

The Commission directs the Discoms to purchase renewable energy as per RPO targets set for the FY 2015-16 and the shortfall carried forward, on actual basis, for previous years. In case they can purchase the same at a tariff lower than determined by this Commission they may do so, otherwise they must purchase all such power offered to them by the renewable energy power producers at the tariff determined by this Commission.

### **Intimation / bill through e-mail and SMS**

Commission feels that Utilities shall also develop a mechanism for delivery/intimation of electricity bill to the consumer (who opts for this) through e-mail/SMS in order to envisage the concept of paper less billing. Consumer who opts for bill/intimation of bill through e-mail/SMS shall not be loaded with any extra cost, however, consumer opts for billing through both paper and electronic mode i.e. e-mail/SMS shall be charged an additional fee of Rs. 10/- per bill.

Further, commercial viability and suitability of expending the spot billing concept to other areas be explored and report be submitted by 30.06.2015.

## **Meter Reading**

Roaster system be prepared and strictly followed for meter reading. Areas of meter readers need to be changed periodically in order to reduce the manipulations in meter reading. Strict action such as termination/removal from the job be taken against the meter reader for wrong/erroneous reading. Provisions be made for termination of contract and blacklisting of agency where discrepancy in meter readings reported more than a prescribed limit.

The Commission feels that human interventions in meter reading need to be avoided as far as possible. As such, it is suggested that implementation of Automated Meter Reading in phased manner be explored and report in this reference be submitted by 30.06.2015.

The Commission directs Discoms to examine the possibility of providing the option of self-reading to its consumer enabling them to submit their meter reading through email/SMS etc. to their respective sub-division offices, in order to restrict malpractices by meter readers. Feasibility report in this regard be submitted within two months from the date of this Order.

## **Interest on security deposit**

During the public hearing, interveners informed that Discoms are not paying interest on security deposits regularly. The Commission directs the Discoms to ensure that the yearly interest on consumer security deposits shall be allowed and adjusted in the consumers' bill for the first billing cycle of the ensuing financial year as specified under Supply Code Regulations, 2014.

## **Payment of due and other charges**

The Commission observes that Utilities have extended the facilities of online payments of electricity bills to its consumers in their respective area of supply. In order to increase the avenues of revenue collection to optimize economy and ensure safety in bill collection process, the Commission had advised the Discoms to negotiate with State Bank of India/ Corporative Banks/Gramin Banks. Payments of dues shall only be accepted through instruments other than cash i.e. RTGS/NEFT, online payments etc. However, Cheques shall only be accepted at the banks authorised by the respective Utilities and payments above Rs. 1 lakh shall be accepted through RTGS/NEFT only.

Further, any payments to be made by the Utilities to its employees shall be done by way of directly crediting the amount in the bank account of the employee concerned. It was also directed that the cadre of Cashiers may be considered as diminishing cadre and they may be deployed elsewhere as per requirement. As such, the Discoms are again directed to take necessary action to gradually phase out bill/revenue collection at their offices by exploiting the options available i.e. collections through banks/post offices/agencies/vendors at competitive rates. The Discoms shall report progress achieved regarding this within two months from the date of this Order.

### **Energy Efficiency & Demand Side Management**

With an objective of 'peak cutting' and 'valley filling' as well as promoting end use energy efficiency, the Commission has notified DSM Regulations, 2014 on 19.11.2014. As per the Regulations, the Discoms were required to constitute DSM Cell within one month. The Discoms were further required to establish technical potential for DSM in the State, initiate action for Load and Market Research, development of baseline data and to prepare comprehensive DSM plan within six months from the date of notification of the said Regulations. The Commission notes with concern that the Discoms, so far, have not complied with the provisions of the said Regulations. The Commission directs the Discoms to submit technical potential report, Load and Market Research Design and development of baseline data aslong with comprehensive DSM plan latest by 30.06.2015. The Discoms shall submit a report regarding initial DSM program which can be implemented in its area of supply on the basis of the data and studies conducted by the Bureau of Energy Efficiency (BEE) by 31.05.2015. However, in the initial phase the Discoms may select low cost and high potential schemes out of the DSM programme identified by BEE. The Commission further directs the Discoms to conduct a specific study to examine all aspects relating to 'Time of Use' and accordingly prepare a comprehensive plan for implementing 'Time of Use' tariff in a selected area on a pilot basis and submit a proposal to the Commission by 30.06.2015.

### **Consumer services & on line application**

In order to facilitate consumers and to bring transparency in the services, Commission directs Utilities to promote on line applications for new connections, extension/reduction of load, change of name, change of category etc. by making the process simple and hassle free. Suitable changes in the online process shall be made

to have a consumer friendly interface. Commission, further directs Utilities that Applicant/Consumers who intend to submit online application be facilitated at Division/sub-division offices by charging Rs. 50/- per application as nominal facilitation charges. Utilities shall also ensure that the S/Division wise status of various consumer applications be displayed and updated regularly on its web portal.

### **Consumer Complaints**

The Commission directs Utilities to strengthen the complaints handling mechanism by continuous monitoring and feedback from the consumers. Mechanism may also be developed and put in practice to pay penalty to the affected consumers in case the Discoms fail to adhere to the Standard of Performances. Report of action taken in this regard shall be submitted by 30.06.2015.

### **Strengthening of CGRF**

Commission directs Utilities that employees with highest integrity, with no pending disciplinary proceedings, excellent service record with diverse experience be deputed in CGRF for a minimum period of three years.

### **Shifting of School, Educational Institutions, Hospitals, Government Offices, Dispensaries, Public Water Works to Urban Feeders.**

The Discoms are directed to shift all Educational Institutions, Schools, Hospitals, Govt. Offices, Dispensaries, Nursing Homes and other essential services from Rural Feeders to Urban Feeders. However, the same may be done in a phased manner covering consumers with load more than 30 kW and above initially.

### **Subsidised tariff for Gaushalas**

During public hearing, intervener sought subsidised tariff for Gaushalas. Intervener pleaded, that the Gaushalas having indigenous breed (for e.g. Sahiwal, Red Sindhi, Hariana, Gir, etc.,) are a mainstay of Agrarian economy and hence subsidized tariff at par with AP be levied on such Gaushalas. Commission observed that the issue of subsidy relates to State Government and the Discoms may consider levy of subsidised tariff at par with the AP tariff, in consultation with State Government, provided such subsidies are paid upfront by the State Government.

## **Transparency in procurement process & inventory management**

### **E-Tendering**

Commission in its previous order dated 29.05.2014 on ARR for distribution & retail supply business for control period FY 2014-15 to FY 2016-17 had directed Utilities to implement e-procurement to bring transparency in the process of procurement. It was also directed to publish NITs with short description in newspapers to exercise economy. However, Commission observed that except centralized purchases through their MM wings, process of e-tendering has not yet been followed by other offices. Commission, further observes that descriptive NITs are being published by some offices leading to wasteful expenditure. Commission directs Utilities to implement e-tendering across the utility and no tender/purchase shall be decided without following the process of e-tendering. It is suggested that a centralized cell be created for floating and processing of tendering for requisite purchases/turnkey works/ hiring of vehicles/engagement of services/etc. after getting requirement from the concerned sections in order to have uniformity, transparency, quality, participation and efficiency in the process. Further, to attract larger participation in the competitive bidding process, NIT should be published in two leading national dailies.

### **Inventory Management**

From the audited Annual Report for FY 2013-14, Commission observes that the inventory of distribution Utilities has increased significantly. Minimum level of inventory is to be maintained to have economy. Large inventory results into financial losses on account of additional borrowings and increase in administrative cost in managing high level of inventory. Commission directs Utilities to take suitable measures to bring down the inventory level to minimum optimum. Commission's order on Management of Inventory date 12.07.2012 may be referred and be followed expeditiously.

The Commission also observed that large number of damaged DTs, poles etc. are laying in the area of distribution licensee unattended/without any protection leading to decay and pilferages of public assets. Commission directs distribution Utilities to prepare suitable guidelines for timely returning and accounting of public property in their stores/workshops so that same can be further attended and utilized or disposed off. Report in this reference be submitted by 30.06.2015.

The Commission further directs to take necessary measure and conduct the periodic stock verification of its inventories in the stores departmentally and submit report to the Commission.

### **Distribution Transformer Repair Workshops (TRWs)**

The Commission directs Utilities to carry out Cost Benefit Study regarding repair of transformers departmentally in their Transformer Repair Workshops and submit report. The Discoms should also submit a report regarding performance of repaired transformers by 30.06.2015.

### **Implementation of distribution Franchise**

The Commission directs Utilities to adopt and implement Franchisee Model at the earliest. Utilities shall invite Expression of Interest (EOI) for implementation of Franchisee Model by 31.07.2015 and to finalize the same on priority. Progress in the matter be reported by 30.09.2015.

### **Feeder with high losses**

The Commission on examination of data (for the period April 2014 to September 2014) provided by UHBVNL, observes that that out of total 3656 feeders, 351 (9.60%) feeders were having losses between 25% & 50% and 788 (21.55%) feeders were having losses above 50%. Instead of showing any improvement over the performance of last year, the number of feeders having losses above 50% have increased from 753 to 788. Similar data of DHBVNL for the period April, 2014 to September, 2014 shows that out of total 4087 number 11 KV feeders, 916 (22.41%) feeders were having losses between 25% & 50% and 526 (12.87%) feeders were having losses above 50%. In their case also, instead of showing any improvement over the performance of last year, the number of feeders having losses above 50% have increased from 506 to 526.

As stated above there are feeders, both urban and rural, on which the losses are consistently above 50%, 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 directed that the number of rural feeders with line losses above 50% as on 31.03.2015 be brought down to half by the end of the FY 2015-16**

**and losses of all urban feeders be brought down below 25% by the next ARR/APR filing. A failure to comply with the targets set by the Commission shall attract penal action under section 142 of the Electricity Act, 2003 against the official concerned i.e. XEN and above.**

### **Pension and Pay**

The Commission directs Utilities to explore the possibilities of constituting a common Pay & Pension section for Utilities in order to have economy and uniformity. Report in this regard shall be submitted by 31.07.2015.

### **Out Sourcing of services**

The Commission through its order dated 29<sup>th</sup> May, 2014 had expressed its concern regarding high and ever increasing employees cost of the Nigam and suggested outsourcing of works wherever possible. Hence, all non-technical posts lying vacant for the last three years in the Utilities were required to be abolished except the posts where the contract/outsourced staff have been engaged and to apprise the Commission accordingly. However, no information has been supplied in this regard. Utilities are directed to submit the status of non-technical posts lying vacant for more than last three years at the time of above said orders, number of contract/outsourced staff engaged on such posts and the number of such vacant post abolished so far within 30 days.

In order to improve the operational efficiency as well as consumer services, the Commission had approved recruitment against vacant technical posts. The Discoms are directed to submit the status of such recruitment within one month from the date of this tariff order.

### **Rented accommodation**

Regarding the directions given by the Commission in respect of Rest Houses/Guest Houses maintained by the licensee in the MYT Order dated 29.05.2014, it is observed that Commission, on a petition filed by UHBVNL and DHBVNL regarding the directions given in respect of Guest houses maintained by the licensee, has passed order dated 20.10.2014 wherein it has been decided that *“in case the occupancy of any guest house has been below 30% in FY 2013-14, such guest house shall be closed with immediate effect. In case the building has been taken on the rent, the same shall*

*be surrendered to the owner and the lease terminated with immediate effect. In case the accommodation is owned by the licensee, the same shall be used for some other productive purpose.”*

The UHBVNL and DHBVNL is directed to follow the directions as given in the above order in respect of Guest Houses/Rest houses maintained by them.

## **Training**

The Commission observed that the Discoms are making regular expenditure on account of training to its officers/officials in house as well as outside at other institutions/facilities. The Commission observes that HVPN has constructed a building for Haryana Power Training Institute (HPTI) at Madanpur, Panchkula. The Commission is of the view that a common training facility be made functional at HPTI Madanpur immediately to meet the training requirement of the power Utilities as per the training policy. The other buildings rented or otherwise being utilized by the respective Utilities for the purpose be vacated and may be used for other requirements. Licensees shall endeavour to establish a common Training Centre and pool of trainers to have effective learning and maximize economy.

Training facility at other locations, if any, shall be closed and shifted to Training Centre at Madanpur, Panchkula.

## **Consumer Identification**

To have a traceability of consumers and in order to reduce ghost consumers, 'Consumer Identification' exercise should be carried out and Know Your Consumer (KYC) scheme may be implemented to register Aadhar No./PAN No. of concerned consumer. KYC is mandatory for any new consumer connection and details shall be collected for existing consumers in Six months.

Such database will also help in introducing schemes for crediting the subsidy directly to the beneficiary, if implemented by Government in line with already implemented direct subsidy scheme for domestic gas supply (LPG) in the country. Discoms in consultation with State Government may formulate a road map for direct subsidy to AP consumers in order to have transparency and efficacy.



## **Inter-utility dispute resolution**

It has been observed that large number of inter-utility disputes and litigations are pending before various courts/tribunals and as the power Utilities in Haryana is presently owned by the state government, options need to be explored for either conciliation or alternative dispute resolution mechanism so that all such disputes can be resolved expeditiously, on merit in consultation with the parties concerned.

Discoms are also directed to review all the earlier directions /Orders passed by the Commission and submit a report to the Commission within a month including reasons for non-compliance, if any. It is reiterated that non – compliance of Commission’s directions/Orders shall attract the penal provisions under section 142 of the Electricity Act, 2003. Further, all sales/commercial circulars issued by the Discoms which have been set aside by the Commission should be immediately withdrawn and no sales /commercial circulars having any financial implications should be issued without prior approval of the Commission.

**The revised Tariff for Distribution & Retail Supply of electricity in Haryana by the distribution licensee(s) i.e. UHBVNL & DHBVNL shall be applicable from 1<sup>st</sup> April, 2015 and shall remain effective till these are revised / amended by the Commission.**

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on May 7, 2015.

**Date: 7<sup>th</sup> May, 2015**  
**Place: Panchkula**

**(M.S. Puri)**  
**Member**

**(Jagjeet Singh)**  
**Chairman**