



COMMISSION'S ORDER

ON

**TRUE- UP FOR THE FY 2015-16, ANNUAL (MID-YEAR) PERFORMANCE REVIEW
FOR THE FY 2016-17, AGGREGATE REVENUE REQUIREMENT
OF UHBVNL AND DHBVNL AND DISTRIBUTION & RETAIL SUPPLY TARIFF FOR
THE FY 2017-18**

CASE No's: HERC/PRO-39 of 2016 & HERC/PRO-40 of 2016

11th July, 2017

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

www.herc.nic.in

IN THE MATTER OF

Petition for True-up of the ARR for the FY 2015-16, Annual (Mid-Year) Performance Review for the FY 2016-17 and determination of ARR and Distribution and Retail supply tariff for the FY 2017-18 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.

QUORUM

**Shri Jagjeet Singh,
Shri M.S. Puri,
Shri Debashish Majumdar,**

**Chairman
Member
Member**

ORDER

The Haryana Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or HERC), 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 2015-16, Annual (Mid-year) Performance Review for the FY 2016-17, Aggregate Revenue Requirements and distribution and retail supply tariff of UHBVNL and DHBVNL for their Distribution and Retail Supply Business under MYT framework for the FY 2017-18 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 Petition(s) 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 and the reply / comments furnished by UHBVNL/DHBVNL thereto to as well as the suggestions of the SAC Members in the meeting held on 20.03.2017. All other relevant facts, data and information available on record of the Commission have been perused before passing this Order.

CONTENTS

CHAPTER 1	7
INTRODUCTION	7
1.1 BACKGROUND.....	7
1.2 PETITIONS(S) FILED BY UHBVNL AND DHBVNL (DISCOMS)	8
CHAPTER 2	11
PROCEDURAL ASPECTS OF THE ARR PETITION(S)	11
2.1 ARR PETITIONS FILED BY UHBVNL & DHBVNL.....	11
2.2 SUMMARY OF THE PETITIONS FILED BY THE DISCOMS.....	11
2.2.1 ARR of UHBVNL	11
2.2.2 Proposed ARR (UHBVNL).....	17
2.2.3 ARR of DHBVNL	18
2.3 PUBLIC PROCEEDINGS.....	22
2.3.1 Objections from Stakeholders and Discoms Reply thereto	23
2.3.2 Objections filed by Jindal Stainless (Hisar) Limited, ...	23
2.3.3 Objections Filed on DHBVNL ARR petition for FY 2017-18 by Faridabad Industries Association.	54
2.3.4 Comments on True-up petition of DHBVNL for FY 2015-16 before HERC by M/s Faridabad Industrial Association	85
2.3.5 Comments on Additional Surcharge by M/s Faridabad Industrial Association.....	107
2.3.6 Objection filed by Sh. Pankaj Bhalotia	119
2.3.7 Objection filed by IEX	126
2.3.8 Objection filed by Haryana Chamber of Commerce & Society	135
2.3.9 Objection filed by Haryana LOK SARAVHITKARI SOCIETY	137
2.4 STATE ADVISORY COMMITTEE (SAC)	138
2.5 UHBVNL & DHBVNL REVISED ARR OF FY 2017-18	146
CHAPTER 3	150
ANALYSIS OF ARR FILINGS AND COMMISSION'S ORDER	150
3.1 TRUE-UP OF THE ARR FOR THE FY 2015-16	150
3.1.1 O&M Expenses.....	151
3.1.2 Terminal benefits	153
3.1.3 Depreciation.....	153
3.1.4 Interest on Consumers Security Deposit	154
3.1.5 Interest on Capex loans.....	155
3.1.6 Interest on Working Capital loan	156
3.1.7 Interest on UDAY Bonds	157

3.1.8	Cost of raising Finance and Bank Charges	159
3.1.9	Other Debits.....	159
3.1.10	Prior Period Expenses	160
3.1.11	Return on Equity (RoE)	161
3.1.12	Non-tariff Income	161
3.1.13	True-up of Power Purchase Cost	161
3.1.14	Revenue from Sale of Power for the FY 2015-16.....	163
3.1.15	Revised ARR for the FY 2015-16.....	163
3.1.16	True-up of RE Subsidy for the FY 2015-16	164
3.1.17	Fuel Surcharge Adjustment	165
3.2	ARR DETERMINATION FOR THE FY 2017-18	165
3.2.1	Agriculture Tube Well Sales for the FY 2015-16, FY 2016-17 (revised) & FY 2017-18 (projected)	166
3.2.2	True up of AP Sales for FY 2015-16 (True-up of RE Subsidy).....	167
3.2.3	AP Sales Estimation for the FY 2016-17 & FY 2017-18.....	167
3.2.4	Sales Estimation (Metered other than AP Tube-well).....	169
3.2.5	Power Purchase volume.....	171
3.2.5.1	Projections by UHBVNL / DHBVNL.....	171
3.2.5.2	Commission's Estimate of Power Purchase Quantum.....	171
3.2.6	Total Approved Power Purchase Quantum.....	178
3.2.7	Power Purchase Cost.....	178
3.2.7.1	Cost of power from CPSUs (NTPC, NHPC & NPC).....	181
3.2.7.2	Cost of HPGCL power.....	181
3.2.7.3	Cost of BBMB Power.....	181
3.2.7.4	Price of Power Purchased from Other Sources.....	181
3.2.8	Transmission Losses.....	184
3.2.9	Interstate Transmission Charges.....	184
3.2.10	Inter-State sale of Power and Power purchase cost for Distribution licensees	184
3.2.11	Renewable Purchase Obligation (RPO)	186
3.2.12	Intrastate Transmission Charges & SLDC Charges	189
3.2.13	Employee Cost / A&G Expenses.....	190
3.2.14	A & G Expenses.....	192
3.2.15	Repair & Maintenance	192
3.2.16	Terminal Benefits	193
3.2.17	O & M Expenses	193
3.2.18	Depreciation.....	194
3.2.19	Interest on Term Loan	195
3.2.20	Interest on Consumers' Security Deposit.....	195
3.2.21	Interest on Working Capital	195
3.2.22	Interest on UDAY Bonds	196

3.2.23 Total Expenditure	197
3.2.24 Non-Tariff Income	198
3.2.25 Interest on FRP borrowings	198
3.2.26 ARR of UHBVNL & DHBVNL for the FY 2017-18.....	198
3.2.27 Revenue Requirement for the FY 2017-18.....	199
3.3 CAPITAL EXPENDITURE.....	200
3.3.1 True-up of Capital Expenditure for the FY 2015-16.....	200
a) UHBVNL	200
b) DHBVNL	203
3.3.2 Review of Capital Investment Plan for FY 2016-17	207
a) UHBVNL	207
b) DHBVNL	210
3.3.3 Capital investment plan for FY 2017-18.....	214
a) UHBVNL	214
b) DHBVNL	215
3.4 REVIEW OF TECHNICAL PARAMETERS	219
3.5 DISTRIBUTION LOSSES	219
3.6 LOSS REDUCTION TRAJECTORY	222
3.7 DISTRIBUTION TRANSFORMERS (DTs) FAILURE RATE	225
3.8 NON REPLACEMENT OF DEFECTIVE ENERGY METERS BY THE DISTRIBUTION LICENSEES.....	228
3.9 NON-REPLACEMENT OF ELECTRO-MECHANICAL METERS.....	231
3.10 PROCUREMENT OF SINGLE PHASE AND THREE PHASE LT METERS.	232
CHAPTER 4	234
DISTRIBUTION AND RETAIL SUPPLY TARIFF DETERMINATION FOR THE FY 2017-18	234
4.1 TARIFF PROPOSAL FILED BY THE UHBVNL & DHBVNL (DISCOMS)	234
4.2 COST OF SERVICE (CoS)	234
4.3 METHOD TO ADDRESS THE PROJECTED REVENUE GAP	234
4.4 TIME OF USE TARIFF (OPTIONAL)	238
4.4.1 Statutory Provisions	240
4.4.2 ToU Tariff (Optional).....	244
4.5 AGRICULTURE PUMP SET SUPPLY (AP SUPPLY)	246
CHAPTER 5	248
WHEELING CHARGES AND CROSS-SUBSIDY SURCHARGE	248
5.1 WHEELING CHARGES FOR THE FY 2017-18	248
5.2 CROSS-SUBSIDY SURCHARGE (CSS)	248
CHAPTER 6	255

ADDITIONAL SURCHARGE	255
6.1 SUMMARY OF THE PETITION	255
6.2 PUBLIC HEARING.....	257
6.3 COMMISSION’S ANALYSIS & ORDER.....	257
CHAPTER 7	260
DIRECTIVES	260

HERC

Chapter 1

INTRODUCTION

1.1 Background

The Commission, on 5th 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 29th 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.

The Commission by its Order dated 07.11.2016 has amended the MYT Regulations, 2012 by way 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 (1st Amendment) Regulations, 2016. Accordingly, following amendments were made in the Regulation no. 3.16:

“The definition and interpretation under Regulation 3 (3.16) shall be replaced by the following paragraph, namely:-

“Control Period” means a multi-year tariff period fixed by the Commission from time to time. The first control period shall be from 1st April 2014 to 31st March 2018.

Provided that where certain norms / benchmarks are required to be computed using ‘baseline values’ and the ‘base year’ has been defined as the financial year immediately preceding the first year of the control period. In all such cases the ‘base year, for projecting normative values for annual determination of the ARR/Tariff petition(s) for the FY 2017-18

shall be the FY 2015-16 based on the respective audited accounts of the licensees and the generating company.

Provided that in the case of HVPNL/Discoms the O&M expenses for the FY 2017-18 shall be based on the audited accounts for the FY 2015-16 subject to prudence check.

Provided further that in the case of HPGCL, the per MW O&M expenses, shall be worked out by the Commission based on the audited accounts for the FY 2015-16 subject to prudence check. “

Accordingly, in the present Order, the Commission has carried out True-up for the FY 2015-16 ARR. The approved trued-up amount has been included in the ARR for the FY 2017-18. Additionally, the Commission, in accordance with the MYT Regulations, 2012, has also carried 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 Petitions(s) filed by UHBVNL and DHBVNL (Discoms)

The MYT Regulations, 2012, as amended by the Commission vide its Order dated 07.11.2016, provides that the first control period for determination of ARR/Tariff under MYT framework shall be from 1st April 2014 to 31st March 2018. The regulations 4.4 to 4.8 of the MYT Regulations, 2012 are 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 30th 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 DHBVNL and UHBVNL had filed the Petitions no. PRO 39 of 2016 and PRO-40 of 2016 for APR of 2016-17, ARR for FY 2017-18 and True-up of ARR for FY 2015-16 on 30.11.2016.

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.

In the instant Order the Commission has carried out True-up of ARR(s) for the FY 2015-16, Annual (Mid-Year) review for the FY 2016-17 and has determined the ARR(s) for the FY 2017-18 of UHBVNL and DHBVNL for their Distribution and Retail Supply Business.

HERC

Chapter 2

PROCEDURAL ASPECTS OF THE ARR PETITION(S)

2.1 ARR Petitions filed by UHBVNL & DHBVNL

UHBVNL filed its True-up/ APR/ARR/ Petition (HERC/PRO-40 of 2016) for the FY 2017-18 for its Distribution and Retail Supply business in the Commission vide Memo No. Ch- 05/GM/RA/N/F-25/Vol.-64 dated 30.11.2016. However, the same was revised by way of supplementary submission filed by UHBVNL vide memo no. Ch-30/GM/RA/N/F-25/Vol.-64 dated 06.01.2017.

DHBVNL filed its True-up/APR/ARR/ Petition (HERC/PRO-39 of 2016) for the FY 2017-18 for its Distribution and Retail Supply business in the Commission vide Memo No. Ch-10/SE/RA-560 dated 30.11.2016. However, the same was revised by supplementary submission filed by DHBVNL vide memo no. Ch- 18/SE/RA.-560 dated 09.01.2017.

The Petitions filed by UHBVNL and DHBVNL were scrutinised and preliminary observations of the Commission were communicated to the licensees vide Memo No. 8838/ HERC/ Tariff dated 31.01.2017 (UHBVNL) and Memo No. 8821/ HERC/ Tariff dated 27.01.2017 (DHBVNL). Replies in respect of various observations and deficiencies in the ARR petitions communicated to the Discoms were furnished by UHBVNL vide memo No. Ch-33/GM/RA/N/F-25/Vol-65 dated 08.03.2017 and vide memo no. Ch-38/SE/RA-560 dated 06.03.2017 by DHBVNL. The Commission reviewed the replies submitted by the Discoms and sought further information including non-compliance of some of the observations / directives of the Commission.

2.2 Summary of the Petitions filed by the Discoms

2.2.1 ARR of UHBVNL

The Petitioner has prayed to continue with the current levels of tariff and FSA based on which the total ARR gap for the FY 2017-18 has been projected at Rs. 1033.33 Crore to be met through the Operational Funding Requirement (OFR) as available under the UDAY Scheme.

a) Capital Expenditure (Capex)

The Petitioner has submitted that the Commission had approved its proposal in respect of Capex Plan of Rs.1055.97 Crore for the FY 2016-17. The capital expenditure

projected by UHBVNL for the FY 2017-18 is Rs. 753.80 Crore. UHBVNL has further submitted that the funding of capital expenditure in the FY 2016-17 is being arranged by debt from REC, PFC and available equity support as well consumers contribution.

b) Assessment of Energy Sales for the FY 2016-17 and the FY 2017-18

UHBVNL has submitted that the consumer category wise sales for the FY 2016-17 and FY 2017-18 have been arrived by based on CAGR for the previous year's data for connected load, sales and resulting consumer category wise consumption per KW. Agricultural consumption for the FY 2016-17 and FY 2017-18 has been calculated by assuming a growth rate of 5% in sales over FY 2015-16, in line with the methodology adopted by the Commission. Accordingly, energy sales for the FY 2016-17 and the FY 2017-18 have been projected as 14,242.74 MUs and 15,088.13 MUs respectively.

c) Energy Balance and Power Purchase for Haryana for FY 2016-17 and FY 2017-18

The Petitioner has submitted that Month Wise Energy availability for the FY 2016-17 and 2017-18 at the state periphery in MUs has been projected based on the allocated share to Haryana of Central Generating Stations, State Generation and Independent Power Producers and other Stations. The energy availability in Haryana is calculated based on the average PLF of FY 2015-16, FY 2014-15 and FY 2013-14. Share capacity of Haryana from Central Generating Station IPP. The energy availability to UHBVN is calculated by multiplying the total availability with the ratio of drawal of UHBVN and DHBVN.

The Monthly energy sale is determined by distributing the yearly energy sales in the percentage of month wise consumption of FY 2015-16. The energy sales hereby projected has been grossed up with the losses approved under UDAY scheme to reach at the normative energy required at the Discom periphery and then by the intrastate transmission losses to arrive at the normative energy required at the State Periphery.

The Normative energy required at the State is then assumed to be met through energy available from Must Run Plant i.e. plants which cannot be backed down like Hydro Power Plants, Solar Power Plant and Biomass. The remaining demand is met through thermal Power Plant i.e. HPGCL, IPPs and NTPC as per Merit order dispatch based upon the Variable charges as per the actual bills of FY 2015-16.

The Impact of Interstate losses on the Inter State Generating station has already been taken while calculating the availability at the state periphery.

The actual Variable Charges of FY 2015-16 has been escalated at an average rate of 5% per year multiplied with total estimated energy drawn from various generators to arrive at the total variable cost of power generation for FY 2016-17, however for the FY 2017-18 the variable cost has been kept at same levels as that of FY 2016-17. The same has been projected in view of Licensee's attempt for better power purchase planning and load forecasting etc.

Similarly, the fixed charges paid to the generators in FY 2015-16 are escalated at an average rate of 5% to arrive at the fixed charges to be paid for FY 2016-17 and FY 2017-18.

Further, the Hon'ble APTEL in its Judgment dated 7th April, 2016 has allowed certain generators like Adani Power, GMR Kamalganga, Sasan Power Ltd and CGPL recoveries on account of force majeure / change in law / date of COD etc. The Licensee has already submitted the issues in detail vide various submissions namely vide Memo No. Ch-25/GM/RA/N/F-25/Vol-62, Ch-37/GM/RA/N/F-54/Vol-XI, Memo No. CH-55/SE/RA/N/F-24/VOL-XI (A) and Memo No. Ch-66/GM/RA/N/F-54/Vol-XI (A) dated 25.05.2016, 12.07.2016 and 16.09.2016 and 24.11.2016 respectively.

It is submitted that out of the above liabilities of Rs. 1534.76 Cr the Licensee has already made payment of Rs. 368.44 Cr up to 26.10.2016, therefore the liabilities has been included in the power purchase cost of FY 2016-17 and FY 2017-18. Further, the monthly impact based on the bills on account of above works out to Rs. 31.80 Cr, accordingly the licensee has worked out the additional power purchase cost on pro-rata basis for 5 months of FY 2016-17 and full year for FY 2017-18.

Accordingly, the additional power purchase cost due to impact of Hon'ble APTEL's Judgment works out to Rs. 450.55 Cr and Rs. 457.46 Cr respectively which has been added in the overall projected power purchase cost.

Further, the Nigam has projected the Interstate and Intrastate Transmission charges for FY 2016-17 and FY 2017-18 by escalating the actual Interstate and Intrastate Transmission charges paid by the Nigam during FY 2015-16 by 3.32%, which is rate of escalation considered by Hon'ble CERC for escalating the transmission charges.

The total power purchase cost from external and state sources for UHBVN including impact of APTEL Judgment has been assessed at Rs. 10484.20 Crores for FY 2016-17 and Rs. 10,959.56 Crores for 2017-18.

Energy balance for Haryana for FY 2016-17 and FY 2017-18 as proposed by UHBVNL is as under:-

Energy Balance for Haryana for the FY 2016-17 and FY 2017-18

Energy Balance	Units	FY 2016-17	FY 2017-18
Power Purchase at State Periphery	MU	22,750.83	23,253.17
Energy Sales to the Consumers	MU	14,242.74	15,088.13
Distribution loss	%age	25.19%	20.85%
Energy Sales at Discom Periphery	MU	19,039.04	19,062.34
Intra- State Transmission Loss	%age	2.46%	2.46%
Energy Sales at State Periphery	MU	19,519.21	19,543.10
Surplus	MU	3,231.62	3,710.07

The Nigam has assumed that the surplus power available will be sold entirely as 'inter-state sales' throughout FY 2016-17 and FY 2017-18 at 80% of average variable power purchase cost.

d) Transmission Losses

It has been submitted that the inter-state transmission losses and intra-state transmission losses have been considered as 3.82% and 2.46% respectively as approved by the Commission.

e) Distribution Losses

The Petitioner for the FY 2016-17 and 2017-18, the distribution losses of UHBVN have been considered as 25.19% and 20.85% respectively as approved under the UDAY scheme, notified by the Government of Haryana.

f) Interest and Finance Charges

UHBVNL has estimated interest and finance charges (inclusive of repayment of working capital loans and interest on consumer security deposit), net of capitalisation, at Rs.1305.42 Crore and Rs. 1136.94 Crore for the FY 2016-17 and the FY 2017-18 respectively.

g) Depreciation

For the FY 2016-17 and the FY 2017-18, UHBVNL has estimated depreciation charges based on the estimated additions in GFA as per its Capital Investment plan for the FY 2016-17. The transfer of total Capex to the Fixed Asset has been considered as

70%. UHBVNL has considered the Capital Expenditure of Rs 1055.97 Cr as approved by the Commission for FY 2016-17 and for FY 2017-18 the Nigam proposes a Capital expenditure of Rs 753.80 Cr.

For the purpose of projecting depreciation charges for the FY 2016-17 and 2017-18 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. 295.24 Crore and Rs. 339.37 Crore in FY 2016-17 and FY 2017-18 respectively towards depreciation charges.

h) Operation and Maintenance Expenses (O&M)

The Petitioner has submitted that they have calculated the various components of O&M expenses as per the methodology, including the indexation mechanism, as provided in the MYT Regulations, 2012. Accordingly, the Petitioner has claimed Rs. 1246.45 Crore and Rs. 1288.05 Crore (inclusive of Rs. 400 Crore towards terminal benefits in each year) towards O&M expenses for the FY 2016-17 and the FY 2017-18 respectively. The same is inclusive of employee cost of Rs. 651.61 Crore and Rs. 676.35 Crore for the FY 2016-17 and FY 2017-18, respectively. Employee cost for the FY 2016-17 has been calculating with an additional increase of 20% on account of 7th pay commission recommendations. The Petitioner has considered the indexation factor as 3.80% based on WPI/CPI indices for the FY 2015-16 and the FY 2016-17 (upto Sep. 16).

i) Non-Tariff Income

The petitioner has projects the non-tariff income, in line with the actual figures for FY 2015-16. The actual figure of Non Tariff Income of FY 2015-16 is Rs 183 Cr. Non-Tariff Income such as discount for timely payment of Energy Charge and Meter rental services is escalated at the rate equal to rate of increase in sales and No of Consumers. The Petitioner has requested to the Commission to approve non-tariff income of Rs. 190.15 Cr. for the FY 2016-17 and 197.25 Cr. for the FY 2017-18.

j) Return on Equity (RoE)

UHBVNL, in its present Petition, has prayed that the Commission may allow RoE of Rs. 245.38 Crore and Rs. 268.19 Crore, for the FY 2016-17 and FY 2017-18, respectively.

k) Bad and Doubtful Debts

UHBVNL has submitted that as per Regulation 64 of the MYT Regulation, 2012 it has estimated a provision for bad and doubtful debts of Rs 42.39 Cr and Rs 44.82 Cr for FY 2016-17 and FY 2017-18 respectively.

l) True-up of RE Subsidy

In addition to the above, the Petitioner has sought True-up of RE Subsidy based on the actual AP sales data (8905.20 MU i.e. 3936.09 MUs for UHBVN and 4969.10 MUs for DHBVN) based on the Commission's methodology of applying 16% losses on AP Feeder data. The Commission had allowed per unit subsidy of Rs. 7.23/Unit (Rs. 6196.91 Crore divided by 8570.23 MU). Accordingly, the True-up amount for RE Subsidy for both the Discoms (UHBVNL and DHBVNL) has been worked out as Rs. 241.83 Cr. (Rs. 145.10 Crore -UHBVNL and Rs. 96.73 Crore -DHBVNL) for the FY 2015-16.

m) Revenue Estimation

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 2015-16 i.e. as per the category wise actual revenue collected and actual units sold of FY 2015-16. Accordingly, the revenue for Intra-State Sales have been estimated as Rs. 6536.76 Crore and Rs. 6963.68 Crore for the FY 2016-17 and the FY 2017-18 respectively after considering collection efficiency of 99%.

n) Revenue from Inter-State Sales

Revenue from inter-state sales projected for FY 2016-17 and FY 2017-18 has been considered at 80% of average variable power purchase cost.

o) Agriculture Subsidy

UHBVNL has submitted Agriculture Subsidy for the FY 2017-18 have been taken after escalating the approved subsidy of FY 2016-17 by 5%.

p) Revenue from FSA

The Petitioner has submitted that in pursuant to the directive of Commission given vide the tariff order dated 01.08.2016, it has filed replies vide Memo No. CH-55/SE/RA/N/F-24/VOL-XI (A) dated 16.09.2016. The Petitioner has also filed Review petition against the impugned tariff order dated 01.08.2016 vide Memo No. CH-19/GM/RA/N/F-25/VOL-63 dated 19.10.2016. The Nigam has proposed levy of FSA across the categories at the rate determined vide order dated 19.03.2016 against the

confirmed liabilities rising on account of APTEL judgements on Change in Law, CoD and Force Majeure. The Nigam has considered an income of FSA against these liabilities in FY 2016-17 and FY 2017-18 i.e. Rs 1119.13 Cr and Rs 1192.16 Cr.

2.2.2 Proposed ARR (UHBVNL)

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

Summary of ARR for FY 2016-17 & FY 2017-18 of UHBVNL (Rs. Crore)

Summary of Actual ARR		FY 2016-17	FY 2017-18
Sr.	Particulars	Projected	Projected
1	Total Power purchase cost	10,484.20	10,959.56
1.1	Power Purchase Expenses	9,327.64	9,764.60
1.2	Inter State Transmission Charge	495.59	512.05
1.3	Intrastate transmission charges and SLDC charges	660.97	682.92
2	Operations and Maintenance Expenses	1,246.45	1,288.05
2.1	Employee Expense	651.61	676.35
2.2	Administration & General Expense	78.09	81.06
2.3	Repair & Maintenance Expense	116.75	130.64
2.4	Terminal Liability	400.00	400.00
3	Depreciation	295.24	339.37
4	Total Interest & Finance Charges	1,305.42	1,136.94
5	Return on Equity Capital	245.38	268.19
6	Prior Period Expense		
7	Bad and Doubtful Debts	42.39	44.63
8	Other Expense		
9	Total Expenditure	13,619.09	14,037.01
10	Less: Non Tariff Income	190.15	197.25
11	Net Aggregate Revenue Requirement	13,428.94	13,839.75
12	Total Revenue	7,201.64	7,734.03
13	Revenue from Interstate sales	664.88	770.36
14	Revenue from Intrastate sales @current tariff	6,536.76	6,963.68
15	Revenue From FSA From Current Year		
16	Regulatory Gap	(6,227.30)	(6,105.72)
17	Govt. subsidy (excluding FSA subsidy)	3,860.74	3,738.13
18	True-Up of Subsidy FY 2015-16		145.10
19	Regulatory GAP after subsidy	(2,366.55)	(2,222.49)
20	Revenue From FSA	1,276.51	1,192.16
21	FSA of Order Dated 19.03.2015	1,119.13	1,192.16
22	FSA of FY 2014-15 @ 37 Paisa	145.58	
23	FSA of FY 2015-16 @ 03 Paisa	11.80	
24	Net GAP	(1,090.05)	(1,030.33)
25	True up of Expenses of FY 2014-15	671.23	
26	Net Reg. GAP after Considering True-Up of FY 2014-15	(1,761.27)	(1,030.33)

Wheeling and Retail Supply ARR of UHBVN

Summary of Actual ARR				FY 2016-17		FY 2017-18	
Sr.	Particulars	Wheeling	Retail	Wheeling	Retail	Wheeling	Retail
1	Total Power purchase cost	0%	100%	-	10,484.20	-	10,959.56
1.1	Power Purchase Expenses	0%	100%	-	9,327.64	-	9,764.60

1.2	Inter State Transmission Charge	0%	100%	-	495.59	-	512.05
1.3	Intrastate transmission charges and SLDC charges	0%	100%	-	660.97	-	682.92
2	Operations and Maintenance Expenses			619.30	627.15	642.14	645.91
2.1	Employee Expense	48%	52%	312.77	338.84	324.65	351.70
2.2	Administration & General Expense	42%	58%	32.80	45.29	34.04	47.01
2.3	Repair & Maintenance Expense	70%	30%	81.73	35.03	91.44	39.19
2.4	Terminal Liability	48%	52%	192.00	208.00	192.00	208.00
3	Depreciation	82%	18%	242.10	53.14	278.51	61.14
4	Total Interest & Finance Charges			294.99	1,010.43	331.83	805.12
4.1	Interest on Long Term Loan	90%	10%	185.00	20.56	245.40	27.27
4.2	Interest on Short Term Loan	10%	90%	101.61	914.45	76.05	684.47
4.3	Interest on security Deposit	10%	90%	8.38	75.43	10.38	93.38
5	Return on Equity Capital	90%	10%	220.84	24.54	241.37	26.82
6	Prior Period Expense			-	-	-	-
7	Bad and Doubtful Debts	29%	71%	12.29	30.10	12.94	31.69
8	Other Expense			-	-	-	-
9	Total Expenditure	10%	90%	1,389.52	12,229.57	1,506.78	12,530.23
10	Less: Non Tariff Income	11%	89%	20.92	169.24	21.70	175.56
11	Net Aggregate Revenue Requirement			1,368.60	12,060.33	1,485.08	12,354.67
12	Total Revenue			1,895.66	5,305.98	2,019.47	5,714.57
12.1	Revenue from Interstate sales	0%	100%	-	664.88	-	770.36
12.2	Revenue from Intrastate sales @current tariff	29%	71%	1,895.66	4,641.10	2,019.47	4,944.21
12.3	Revenue From FSA From Current Year			-	-	-	-
13	Regulatory Gap			527.06	(6,754.35)	534.38	(6,640.10)
13.1	Govt. subsidy (excluding FSA subsidy)	0%	100%	-	3,860.74	-	3,738.13
13.2	True-Up of Subsidy FY 2015-16	0%	100%	-	-	-	145.10
15	Regulatory GAP after subsidy			527.06	(2,893.61)	534.38	(2,756.87)
16	Revenue From FSA			370.19	906.32	345.73	846.44
16.1	FSA of Order Dated 19.03.2015	29%	71%	324.55	794.58	345.73	846.44
16.2	FSA of FY 2014-15 @ 37 Paisa	29%	71%	42.22	103.36	-	-
16.3	FSA of FY 2015-16 @ 03 Paisa	29%	71%	3.42	8.38	-	-
17	Net GAP			897.24	(1,987.29)	880.11	(1,910.44)

Thus, the Petitioner has estimated the net cash gap in the FY 2017-18 at Rs.1030.33 Crore.

2.2.3 ARR of DHBVNL

(a) Summary of ARR

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 2015-16, Annual Performance Review for the FY 2016-17 and revised ARR for the FY 2017-18. Hence, for the sake of brevity, the same are not being reproduced here.

The Petitioner has prayed to continue with the current levels of tariff and FSA based on which the total ARR gap for the FY 2017-18 has been projected at Rs. 1004 Crore to be recovered through the Operational Funding Requirement (OFR) as proposed under UDAY Scheme.

(b) Energy Balance and Power Purchase for Haryana for FY 2016-17 and FY 2017-18

The power purchase quantum (including Jind Circle) has been projected by the Petitioner at 28,880.77 MUs and 29704.43 MUs at a cost of Rs. 11792.20 Crore and 12409.62 Crore for the FY 2016-17 and the FY 2017-18 respectively inclusive of transmission charges.

Energy Balance for Haryana for the FY 2016-17 and FY 2017-18

Energy Balance	Units	FY 2016-17	FY 2017-18
Power Purchase at State Periphery	Mus	28,880.77	29,704.43
Energy Sales to the Consumers	Mus	19,596.00	20,839.00
Distribution loss	%age	21.70%	17.94%
Energy Sales at Discom Periphery	Mus	25,025.85	25,394.65
Intra- State Transmission Loss	%age	2.46%	2.46%
Energy Sales at State Periphery	Mus	25,657.01	26,035.11
Deficit met through Banking	Mus	382.52	313.53
Surplus	Mus	2,975.64	3,420.68

(c) Transmission Losses

For the FY 2016-17, the Inter-State transmission losses and the Intra-State transmission losses have been considered by DHBVNL as 3.82% and 2.46% respectively as approved by the Commission in its MYT Order for the FY 2016-17.

(d) Distribution losses

DHBVNL has projected Distribution Losses for the FY 2016-17 and the FY 2017-18 at 21.70% and 17.94% respectively.

(e) Non-Tariff Income

The petitioner has projected non-tariff income for FY 2016-17 and FY 2017-18 at escalation rate of 5% based on the actual of FY 2015-16. The Petitioner has requested to the Commission to approve non-tariff income of Rs. 235.68 Cr. for the FY 2016-17 and 247.47 Cr. for the FY 2017-18.

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 may not be considered as part of the income of the Nigam.

(f) Capital Expenditure

The Petitioner has submitted that the Commission had approved its proposal in respect of Capex Plan of Rs.1200 Crore for the FY 2016-17. However, based on the available half yearly details of actual capital expenditure done by DHBVNL and realistic estimate for the second half of FY 2016-17, it is estimated to undertake capital expenditure of Rs. 825 Crore for the FY 2016-17 and Rs. 1200 Crore for the FY 2017-18.

DHBVNL has further projected all other components of the ARR on the same methodology as adopted by UHBVNL. The aggregate revenue requirement for the FY 2016-17 and the FY 2017-18 including its disaggregation into Wheeling and Supply business filed by DHBVNL is as under:-

DHBVNL Proposed ARR for FY 2016-17 and FY 2017-18

Summary of Actual ARR			
Sr.	Particulars	Revised Estimate for FY 2016-17	Projected for FY 2017-18
1	Total Power Purchase Cost	13,316.55	14,010.19
1.1	Power Purchase Expenses	11,792.20	12,409.62
1.2	Inter-state transmission charges	856.40	899.22
1.3	Intra-state transmission charges	667.95	701.34
2	Operations and Maintenance Expenses	1,370.88	1,392.76
2.1	Employee Expense	786.03	815.88
2.2	Administration & General Expense	74.87	77.72
2.3	Repair & Maintenance Expense	109.99	114.16
2.4	Terminal Liability	400.00	385.00
3	Depreciation	236.24	315.80
4	Total Interest & Finance Charges	1,143.08	907.00
5	Return on Equity Capital	215.88	242.42
6	Prior Period Expense		
7	Other Debits	32.49	32.49
8	Total Expenditure	16,315.11	16,900.65

9	Less: Non Tariff Income	235.68	247.47
10	Net Aggregate Revenue Requirement	16,079.43	16,653.18
11	Total Revenue	10,366.09	11,120.88
11.1	Revenue from Interstate sales	613.58	711.76
11.2	Revenue from Intrastate sales	9,752.51	10,409.12
13	Regulatory (Gap)/Surplus	(5,713)	(5,532)
14.1	Govt. subsidy	2,373.42	2,492.09
14.2	True-up of Subsidy FY 2014-15	200.41	
14.3	True-up of Subsidy FY 2015-16		96.73
16	Revenue (Gap)/Surplus after Subsidy	(3,140)	(2,943)
17	Revenue (Gap)/Surplus after FSA	(1,011)	(1,004)
17.1	FSA of Order Dated 19.03.2015	1,823.61	1,939.58
17.2	FSA @ 40 p	305.32	

Wheeling and Retail ARR for FY 2016-17 and FY 2017-18 ARR of DHBVNL

Summary of Actual ARR				FY 2016-17		FY 2017-18	
Sr.	Particulars	Wheeling	Retail	Wheeling	Retail	Wheeling	Retail
1	Total Power purchase cost	0%	100%	-	10,484.20	-	10,959.56
1.1	Power Purchase Expenses	0%	100%	-	9,327.64	-	9,764.60
1.2	Inter State Transmission Charge	0%	100%	-	495.59	-	512.05
1.3	Intrastate transmission charges and SLDC charges	0%	100%	-	660.97	-	682.92
2	Operations and Maintenance Expenses			619.30	627.15	642.14	645.91
2.1	Employee Expense	48%	52%	312.77	338.84	324.65	351.70
2.2	Administration & General Expense	42%	58%	32.80	45.29	34.04	47.01
2.3	Repair & Maintenance Expense	70%	30%	81.73	35.03	91.44	39.19
2.4	Terminal Liability	48%	52%	192.00	208.00	192.00	208.00
3	Depreciation	82%	18%	242.10	53.14	278.51	61.14
4	Total Interest & Finance Charges			294.99	1,010.43	331.83	805.12
4.1	Interest on Long Term Loan	90%	10%	185.00	20.56	245.40	27.27
4.2	Interest on Short Term Loan	10%	90%	101.61	914.45	76.05	684.47
4.3	Interest on security Deposit	10%	90%	8.38	75.43	10.38	93.38
5	Return on Equity Capital	90%	10%	220.84	24.54	241.37	26.82
6	Prior Period Expense			-	-	-	-
7	Bad and Doubtful Debts	29%	71%	12.29	30.10	12.94	31.69
8	Other Expense			-	-		
9	Total Expenditure	10%	90%	1,389.52	12,229.57	1,506.78	12,530.23
10	Less: Non Tariff Income	11%	89%	20.92	169.24	21.70	175.56
11	Net Aggregate Revenue Requirement			1,368.60	12,060.33	1,485.08	12,354.67
12	Total Revenue			1,895.66	5,305.98	2,019.47	5,714.57
12.1	Revenue from Interstate sales	0%	100%	-	664.88	-	770.36

12.2	Revenue from Intrastate sales @current tariff	29%	71%	1,895.66	4,641.10	2,019.47	4,944.21
12.3	Revenue From FSA From Current Year			-	-	-	-
13	Regulatory Gap			527.06	(6,754.35)	534.38	(6,640.10)
13.1	Govt. subsidy (excluding FSA subsidy)	0%	100%	-	3,860.74	-	3,738.13
13.2	True-Up of Subsidy FY 2015-16	0%	100%	-	-	-	145.10
15	Regulatory GAP after subsidy			527.06	(2,893.61)	534.38	(2,756.87)
16	Revenue From FSA			370.19	906.32	345.73	846.44
16.1	FSA of Order Dated 19.03.2015	29%	71%	324.55	794.58	345.73	846.44
16.2	FSA of FY 2014-15 @ 37 Paisa	29%	71%	42.22	103.36	-	-
16.3	FSA of FY 2015-16 @ 03 Paisa	29%	71%	3.42	8.38	-	-
17	Net GAP			897.24	(1,987.29)	880.11	(1,910.44)

Thus, the Petitioner(s) UHBVN and DHBVN have estimated net cash gap in the FY 2017-18 at Rs. 1004 Crore and Rs.1910.44 Crore respectively.

2.3 Public Proceedings

In accordance with the provisions of Section 64 (2) of the Electricity Act, 2003, UHBVNL & DHBVNL published their respective petitions, in abridged form, in order to ensure public participation. The Public Notice was issued by UHBVNL in the Dainik Jagran (Hindi) dated 09.12.2016 & The Tribune (English) dated 08.12.2016 and by DHBVNL in The Tribune (English) on 07.12.2016 and Dainik Bhaskar (Hindi) on 06.12.2016, inviting objections / suggestions / comments from the stakeholders. The petitions were also hosted by UHBVNL & DHBVNL on their respective websites i.e. www.uhbvn.org.in and www.dhbvn.org.in

Subsequently, the Commission issued Public Notice in the Tribune (English) and Dainik Jagran (Hindi) dated 16.02.2017 inviting objections and intimating the date of hearing the Petition(s). The Public Notice was also hosted on the website of the Commission under the heading “Schedule of Hearings”.

Public hearings were held, as scheduled, on 16.03.2017 at 10:30 A.M. in respect of MYT APR/ ARR/Tariff petitions (including additional surcharge) of UHBVNL and 16.03.2017 at 03:00 P.M. in respect of MYT APR/ ARR/Tariff petitions of DHBVNL in the Conference Hall of the Commission. The Discoms 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, replies filed by the Discoms and Commission' view thereto is as under:-

2.3.1 Objections from Stakeholders and Discoms Reply thereto

In response to the Public Notice issued by the Commission in the present case, the stakeholders/general public as listed below filed their objections/comments:-

1. Jindal Stainless Limited, through Sh. R.K. Jain Hisar.
2. Faridabad Industries Association, FIA House, Bata Chowk, Faridabad.
3. Sh. Pankaj Bhalotia.
4. Indian Energy Exchange
5. Haryana Chamber of Commerce & Industry (Regd.), Panchkula.
6. Sh. Rakesh Aggarwal, Chairman, Lok Saravhitkar Society, # 700, Sector-12, Panchkula.

A few stakeholders filed their objections / comments / suggestions after the cut-off date of filing objections as notified by the Commission and they did not forward a copy of the same to the Discoms concerned to enable them to file their reply. Nonetheless, all the objections received in the Commission have been included in the present Order.

A brief summary of the objections and Discoms replies thereto is as under:-

2.3.2 Objections filed by Jindal Stainless (Hisar) Limited,

I. TRUE UP OF FY 2015-16:

DHBVN has submitted its application for truing up the financial results of the year 2015-16. The application 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:-

Parameter	Approved by HERC	Revised by HERC	Actual by DHBVN	Rs. Crore
				Variation (%)
Cost of power purchase	10,159.79	12,306.33	*11,048.63	(-) 8.98
Transmission charges	556.71	1,150.89	1,450.77	26.06
O&M Expenses	888.09	827.05	*1,137.46	37.53

Employees expenses	540.99	518.52	*637.46	22.94
A&G expenses	65.25	60.46	72.13	19.30
R & M Cost	131.85	98.07	35.64	(-)63.66
Interest & Financing cost	609.38	330.16	*1,772.19	487.60
Depreciation	320.29	202.26	199.89	
ROE	-	-	203.83	Not allowed
Net Annual Expenses	12,631.34	13,759.81	15,845.42	
Total Income			12,337.15	
Revenue Gap		667.11	757.47	13.55
CAPEX	867.29	867.29	588.15	(-)32.18

*Parameters which are controllable as per MYT Regulations.

The Utility has approached the Commission to allow a true up of Rs.757.47 Crore, which is nothing but an attempt to camouflage the inefficiency by the Utility and seek relaxations over the figures approved by the Commission. It needs to be appreciated that if such relaxations are 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 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.

Although, Commission had made a special provision of Rs.1100 Crore for purchase of RECs in the ARR of FY 2015-16 but the Licensee did not utilize the same for the reasons best known to them.

While reviewing the CAPEX Plan for the year 2015-16, Commission had observed as under,

3.25.3 Review of capital investment plan for 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.

Similarly while examining the trend of continuing distribution losses, Commission had observed as under,

3.27 Distribution Losses

While reviewing the distribution losses for the year 2015-16 Commission had made the following observations.

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. [Page 163]

Even while considering the provision for Return on Equity as a part of the true up exercise, Commission made following observations,

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.

Another important observation made by the Commission was on the non submission of Cost of Service by the Licensee,

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 submit 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.*

Commission had also taken a serious note of the persistent high feeder losses in the system and even proposed to take action against the concerned officers under S.142,

Feeder with high losses

The Commission on examination of data (for the period April 2014 to September 2014) provided by UHBVNL, observes 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.

The Licensee has come up with a proposal to true up the RE Subsidy for FY 2015-16 and indicated a shortfall of Rs.241.83 Crore. This is based on the assumption that the average losses on rural feeders are 16%. This is a big fallacy which is supported by the observations made by the Commission, as reproduced above. Actual average feeder losses in rural areas are not less than 30% and if we take that figure into account, it would be clear that the RE Subsidy allowed by the State is even higher than the eligible amount. Rather this is one area where the Licensee is covering up its inefficiency and misleading the State Govt. also by way of claiming much higher RE Subsidy than actually receivable.

II. ANNUAL REVENUE REQUIREMENT FOR FINANCIAL YEAR 2017-18:

1. Estimates for the sale of power to various categories of consumers.

Energy Sales projections are one of the most important input for projecting the ARR of the Utility. Every year the Commission carries out a detailed analysis of the sales estimates submitted by the distribution licensees. The future projections are generally made on the CAGR of each category of consumers. It has been noticed that

every year the energy sales figures are exaggerated to get connected benefits and to enhance their Revenue Requirement projections.

Some of the glaring inconsistencies are,

1. As usual the estimates for non-domestic sales are totally off the mark;
2. For HT Industries, the first 6 months sales are 2304 MUs and for the later six months these are projected as 2531 MUs i.e. an increase of nearly 10%. This is also an unsupported assumption.
3. While energy sales to most of the subsidizing categories are shown as going down, only in the Agriculture category the sales have been shown as increased by 16%. The main reason is the absurd assumption of 16% average feeder wise losses. The actual losses, as already said above, are not less than 30% and it would be better to know the facts on ground to make correct assessment of the performance of the Licensee.
4. Even in the present ARR, it has been projected that the agriculture consumption would further increase by 5% over and above the exaggerated sales figures. It would be better to take a realistic view.

2. Estimates for energy availability and cost of power purchase:

The Commission, while considering the revised ARR for the year 2016-17 had approved the total power purchase volume of 28,217.04 MUs for the year 2016-17 with a cost of Rs.106325.48 million or average cost of power Rs.3.90/unit and as per the latest ARR, the corresponding projections are, 28,885.4 MUs and Rs.11,220.91 million with an average cost of Rs.4.31/unit.

It is worth noting that the Utility has mentioned that it will sell the surplus power (estimated as 2976 MUs for the year 2016-17) through inter-State sales at 80% of the average power purchase cost i.e. a direct loss to the Utility and ultimate increase in revenue gap or increase in consumer tariffs. This goes to prove that the power procurement planning of the Utility needs to be improved so as to minimize inter-State sales.

3. Estimates for O&M Expenses:

The Licensee has assumed a flat increase of 3.8% in the O&M expenses. There is need to reduce the expenses and spell out the step taken in this direction.

4. Estimates for Employee Expenses:

Against the approved employee cost of Rs.629.03 Crore for the year 2016-17, the Licensee has projected a figure of Rs.786.03 Crore i.e. an increase of over 25%. There is no effort on the part of the Licensee to reduce the employee cost by resorting to outsourcing of activities or introduction of automation. Extra manpower should be truncated by introducing strict performance reviews.

5. Estimates for R&M Expenses:

Against an actual R&M expense figure of Rs.35.64 Crore reported by the Licensee for the year 2015-16, the provision asked for in FY 2016-17 and 2017-18 is Rs.109.99 Crore and Rs.114.16 Crore respectively. This is one area where the consumers would like the licensee to be more proactive and carry out wide spread repair and maintenance of the distribution systems so that the quality of power supply may improve but there is hardly any attempt and this expenditure always remains the casualty.

6. Estimates for Capital Expenditure:

The Utility has projected CAPEX requirement of Rs. 825 Crore for the year 2016-17 against the approved figure of Rs.1200 Crore i.e. reduction of 32%. The investment allowed to be made must be linked with the resultant targeted improvement in the performance parameters so that the investments are self rewarding. The provision for CAPEX also needs to be related to the past capability of the Licensee to execute the improvement works.

7. Interest & Financing Charges:

Inspite of the fact that Haryana State was one of the first States to accept Ujjawal Discoms Assurance Yojna (UDAY) Scheme notified on 20.11.2006 by the Govt. of India for operational and financial turnaround of power distribution companies under which all debts of Discoms as on 30.09.2015 were to be taken over by the State. The licensee has projected requirement of interest and financing charges of Rs.1143.08 Crore and Rs.907.00 Crore for the years 2016-17 & 2017-18 respectively. Whereas, the corresponding provision approved by Commission for the year 2016-17 was only Rs.189.89 Crore. We presume that there should have been substantial impact on account of UDAY Scheme and it should get reflected in the ARR/ tariff payable by the

consumers. We would urge that only the genuine portion of loans and interest thereon may please be allowed instead of financing for the in-efficiency of the licensee.

8. Return on Equity:

While the Commission has been rightly disallowing the demand for RoE year after year but again the Licensee has projected a demand for RoE of Rs.215.88 Crore and Rs.242.42 Crore for the years 2016-17 and 2017-18 respectively. There is no justification for this provision and we would request that this may be disallowed.

9. Projected Revenue Gap:

It is worth serious consideration that while the Commission had projected a revenue surplus of Rs.954.18 Crore for the year 2016-17, the licensee has maintained a demand for uncovered revenue gap of Rs.1011 Crore. If we go by these figures, it will amount to negative performance of the Licensee by Rs.1965.18 Crore in current year alone. Although no tariff revision has been proposed but it is evident that to meet the revenue gap the Commission may have to take some harsh steps.

III. IMPORTANT ISSUES NEEDING IMMEDIATE ATTENTION OF THE COMMISSION:

There are a couple of issues which are being brought to the kind notice of the Commission as these are resulting in un-necessary burden on the consumers;

1. Recovery of Fuel Surcharge Adjustment in an arbitrary manner:

S.61 of the Electricity Act, 2003 provides for the specifying the terms and conditions for determination of tariff with special reference to various guidelines including the following:-

“(c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;

(e) the principles rewarding efficiency in performance;

(f) multi year tariff principles;

(g) that the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;”

S.62 (4) of Electricity Act, 2003 provides for the manner in which tariffs are to be revised and reads as under,

“(4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.”

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. It reads as under,

“66. Fuel and Power Purchase Cost Surcharge Adjustment (FSA)

66.1 The distribution licensees shall recover FSA amount on account of increase in fuel and power purchase costs from the consumers on a quarterly basis so as to ensure that FSA accrued in a quarter is recovered in the following quarter without going through the regulatory process i.e. FSA for the quarter “July to September” is recovered in the following quarter “October to December”.

66.2 FSA shall be calculated only in respect of approved power purchase volume including short term power purchase cost, if any, for the relevant year from all approved sources. Drawl of power under UI mechanism, if any, shall be allowed only when it is not in violation of grid discipline and shall be subject to a price cap of average revenue realisation from all consumer categories for that year.

Average revenue realisation = (Total revenue assessed for electricity supply in Rs + Government Subsidy in Rs) / Total sales in Units.

In spite of these clear policy guidelines, the distribution licensee is 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.

Even in the last order dated 19.03.15 Commission clubbed all the pending unrecovered gap of all previous FSAs and worked out a figure of Rs.3591.52 Crore to be recovered over next two years. The relevant extract from the order are as follows,

The Commission observes that the consumers of Haryana are already paying for these FSA's as per rates based on different Orders/ Regulations of the Commission and it would not be fair on the consumers to rework the rate of recovery which may end up to the disadvantage of some categories of consumers. The Commission, therefore, Orders that the recovery of these FSA's be continued at the existing rate till such time the total amount as determined above, is fully recovered. However, for ease of accounting purpose the Commission decides to combine the amount recoverable on account of FSA's for different year and also combine the recoveries being made separately for

these FSA's from the consumers. The Commission observes that at the existing rate of recovery, the approved amount along with holding cost is likely to be recovered within two years.

The DISCOMS are directed to file quarterly status of recovery of FSA and stop the recovery once the total FSA along with holding cost is recovered.

Further Commission had admitted the fact that recovery of FSA in DHBVN is faster than UNBVN so the recovery in DHBVN should have been over by now. The observations made by Commission were as follows,

as there is a variation in the mix of consumer in both the utilities, hence the rate of FSA recovery in UHBVNL is lower than the rate of FSA in DHBVNL.

There is a misconception in the mind of the Licensee that FSA is a source of income or part of tariff. The fact is that the FSA was permitted under S.62 (4) of the Act as a stop gap arrangement till the tariffs were revised annually. But this has become a perpetual charge and constitutes a substantial part of the overall tariff for the consumers. When the new tariff order is notified, the previous FSAs must be merged in the tariff. This is how in most of the States FSA, if any, is merged in the revised approved tariff.

2. Need for reduction of cross subsidy surcharge on open access power:

S.42 of the Electricity Act, 2003 lay down duties of distribution licensees and provides as under with regard to levy of surcharge and cross subsidy surcharge,

“Provided that such open access may be allowed on payment of a surcharge in addition to the charges for wheeling as may be determined by the State Commission :

Provided further that such surcharge shall be utilised to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee:

Provided also that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission.”

National Electricity Policy, 2005 lays down emphasis on reducing cross subsidies and to create environment where every consumer pays for the cost of service. Specific Provisions of this Policy are reproduced hereunder,

“5.4 Distribution

9.4.1 *Distribution is the most critical segment of the electricity business chain. The real challenge of reforms in the power sector lies in efficient management of the distribution sector.*

5.4.2 *The Act provides for a robust regulatory framework for distribution licensees to safeguard consumer interests. It also creates a competitive framework for the distribution business, offering options to consumers, through the concepts of open access and multiple licensees in the same area of supply.”*

“5.5 Recovery of Cost of Services & Targetted Subsidies

5.5.1 There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.

5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance without giving tariff shock to consumers. The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually”.

Inspite of these clear Policy guidelines, there is very heavy cross subsidy element in the electricity tariff in Haryana, 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 real under the pressure of heavy cross subsidies burden.

Even the latest Tariff Policy, 2016 notified on 16.01.2016 also addresses these very issues at length and reads as under;

4.0 OBJECTIVES OF THE POLICY

The objectives of this tariff policy are to:

- (a) Ensure availability of electricity to consumers at reasonable and competitive rates;
- (d) Promote competition, efficiency in operations and improvement in quality of supply;
- (g) Evolve a dynamic and robust electricity infrastructure for better consumer services;
- (h) Facilitate supply of adequate and uninterrupted power to all categories of consumers;
- (i) Ensure creation of adequate capacity including reserves in generation, transmission and distribution in advance, for reliability of supply of electricity to consumers.

8.0 DISTRIBUTION

Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates is one of the main objectives of the National

Electricity Policy. The State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers.

Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests. Loss making utilities need to be transformed into profitable ventures which can raise necessary resources from the capital markets to provide services of international standards to enable India to achieve its full growth potential. Efficiency in operations should be encouraged. Gains of efficient operations with reference to normative parameters should be appropriately shared between consumers and licensees.

8.5 Cross-subsidy surcharge and additional surcharge for open access

8.5.1 National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him.

While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

Haryana Commission had been reducing the cross subsidy surcharge over the past many years and it was 40% of the subsidy by the year 2013-14. It was only since the year 2014-15, the cross subsidy was again equated with the subsidy, thus resulting in abrupt increase of the cross subsidy surcharge. This also resulted in making purchase of power through open access much less attractive, which is also against the Policy Guidelines quoted above. Unless the cross subsidy to the subsidized sector is reduced, the resultant burden would continue to be on the subsidizing sector.

We would urge the Commission to address this issue and reduce the cross subsidy surcharge so as to make purchase of power through open access route more competitive and viable.

3. Need for reduction/doing away with the levy of Additional Surcharge:

The very basics of calculation of cost of so termed stranded generation capacity need to be examined in depth. The consumers are already paying for the cost of Fixed charges paid to the generating companies in multiple ways, like;

- a) The Fixed Cost is fully booked in the cost of power purchase allowed to the Licensee through the ARR;
- b) The Fixed Demand Charges recovered from the consumers include substantial part of the fixed cost borne by the Licensee;
- c) While allowing True up at the end of the year any part of the unrecovered fixed cost is allowed to the Licensee;
- d) While computing the FSA, any unrecovered gap in the cost of power purchase is fully figured in.

Thus there is no justification for the levy of Additional Surcharge, the amount which is already recovered under different heads.

4. Need for introduction of TOD tariff and allow lower tariff rates in night hours:

It needs to be appreciated that on the one hand Utility is saddled with such huge quantum of surplus power and it is sold over Power Exchange at far lower rates (80% of the Bulk Tariff). If the consumers are given this power at attractive price, this power could be utilized within the State itself.

5. Need for treating the two State Power Distribution Utilities as independent Companies:

Although the State unbundled its power sector in separate Licensees in the year 1999, but till date the two Distribution Utilities are tied with the biblical chord and have same electricity tariffs and Rules & Regulations. It is an admitted fact that the efficiency of two Companies is different and these end up with different revenue gaps/surpluses at the end of each financial years. As per past practice at the end of the year the benefits are divided without any corresponding benefit to the consumers in each

company. It is high time now that these Companies may be treated totally independent and if one is able to generate higher resources or operate better, the benefit should be passed on to the consumers of the area. There should be some incentive for better performing Utility.

6. Need for reduction in electricity tariff for industrial consumers:

As is very well known, the electricity tariffs for industrial consumers in Haryana are one of the highest in the country. The successive increase in tariff has put the State industry at a substantial loss. Many of the industries are already under severe debt trap as they are not able to meet even the cash requirements for day to day operations. Thus there is urgent need for the Commission to come to their rescue and help these industrial units to revive by giving suitable reduction in the electricity tariffs. This sector is highly cross subsidizing the subsidized sector of consumers. According to the national Electricity Policy and the Tariff Policy of the Govt. of India, 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.

In Haryana where the agriculture sector is the biggest subsidized sector of consumers (consuming nearly 20-25% of the total sales) but this subsidy is being borne by the State Govt. The second largest subsidized sector is the Domestic sector (consuming nearly 20-25% of energy sales) and is likely to grow much faster than any other category of consumers. Over the years proportion of power sold to industries is on the decline, which needs to be reversed. This is not at all a healthy sign for the State. Industrial sector is the main contributor to the State revenues in addition to providing employment opportunities and helping development of infrastructure in the State.

7. State Govt. announcement to reduce FSA.

Hon'ble Chef Minister has very recently given a statement that the FSA will be reduced by 50-60 Ps/unit. The Industrial consumers welcome this step as the State Govt. is empowered under S.108 of the Electricity Act, 2003 to give such directions in matter of policy involving public interest.

8. Request for realigning the Domestic Tariff.

That the Commission, in its order dated 15.10.2015 in Petition Nos. HERC/RA-10/2015 and HERC/RA-11/2015, had reduced the tariff of Domestic consumers and had made the following specific observations,

Before parting with this Order, the Commission would like to record that in view of categorical assurance of the Discoms that the impact of these changes in the Domestic tariff/MMC on the ARR for the FY 2015-16 will be offset through efficiency gain by way of cost reduction including O&M expenses, the uncovered revenue gap of Rs. 667.11 Crore for the FY 2015-16 as given in the Tariff Order dated 07.05.2015 shall remain unchanged.

This assurance remained as blank as any other commitments of the Licensees. It needs to be asked from the Licensee that what improvement it has achieved so far in its operations. Such false assurances are bound to load the consumers by way of tariff hike. We would suggest that if the State Govt. wants to give subsidised power to domestic consumers of BPL (below poverty line), it should give appropriate subsidy for this category of consumers. The concessional tariff may be only for BPL consumers. This will help in reducing the burden of cross subsidy surcharge on industrial consumers.

REPLY FILED BY DHBVNL

I. TRUE UP OF FY 2015-16

DHBVN submits that the figures considered for Truing up of FY 2015-16 are as per the audited accounts of FY 2015-16.

- In regard to Capital expenditure for FY 2015-16, it is submitted that the Commission had initially approved a Capital Expenditure of Rs 867.29 Cr. for DHBVN for FY 2015-16 in its order dated 7th May 2015 and revised approval of Rs 614.35 Crores in its order dated August 01, 2016. As per the audited annual accounts of DHBVN for FY 2015-16; the actual Capital Expenditure for DHBVN is Rs. 587.88 Cr. DHBVN.
- In regard to the Distribution losses, It is submitted that the Government of India has notified Ujwal Discom Assurance Yojana (UDAY) scheme for operational and financial turnaround of power distribution companies (DISCOMs), on 20th Nov 2015 under which State shall take over 75% of

Discom debt as on 30th September, 2015 over two years – 50% of Discom debt shall be taken over in FY 2015-16 and 25% in FY 2016-17. It is pertinent to mention that the UDAY projections are based on certain losses considered for operational and financial turnaround of the DISCOMs.

The Nigam submits that, DHBVN is mandated to achieve the loss trajectory as per the UDAY MoU which is as under:

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
AT&C loss (%)	25.22%	22.48%	18.76%	15.00%
T&D loss (%)	24.46%	21.70%	17.94%	14.14%

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

DHBVN submits that the AT&C loss for FY 2015-16 was 26.89% against 25.22% as per UDAY trajectory. However, it is pertinent to mention that intense loss reduction activities under MGJG and LRP have helped us accomplish a loss level of 22.32% against the target of 22.48%. Thus, it is evident that DISCOMs is currently operating under the specified target levels.

- In regard to the voltage wise CoS, Nigam submits that the Commission in line with the APTEL judgment dated 30.05.2011 in Appeal No. 102,103 & 112 of 2010 had adopted the methodology suggested by the Hon'ble APTEL in the ibid judgment dated 30.05.2011 for broadly working out voltage wise CoS for the FY 2015-16. However, the Nigam further submits that for computation of CSS, the Commission has considered the amended National Tariff policy

which has provided a revised CSS formula. In addition, the Nigam submits that once the study for carrying out voltage wise CoS is accomplished, the findings related to the same shall be furnished.

- In regard to audit of feeders with high losses, the Nigam submits that the audit of urban and rural feeders are on priority. Various steps have been taken by the Nigam to reduce the Losses with the specific focus on long term improvement in the power quality and reliability. Various strategies are being adopted in urban and rural areas based on their loss level. The steps taken for reduction of technical and commercial losses are as follows:-
 - High loss Feeder are being identified and the Sanitization work which is under progress and is being monitored regularly. All the Circle (Op) teams have been instructed to speed up in order to complete the pending work so that the loss level would be brought down to normative level.
 - Consumer Indexing for RAPDRP towns, non-RAPDRP towns, & rural areas is under progress which would help the Nigam to calculate the losses from the billing database and further pin point the losses incurred at DT level which will eventually help the Nigam to optimize its resources and making efforts towards effective loss reduction.
 - Feeder Sanitization Activities are carried out geographically as: (1) Urban Feeder Sanitization & (2) Mhara Gaon Jagmag Gaon Scheme for selected RDS feeders. In both the plans, Nigam has focused on the following four major activities:
 - Improving accurate reading of energy meters via replacement of Defective, faulty, Burnt, Glass broken, no display, inconsistent, electromechanical, and old version meters.
 - Minimizing occurrence of theft of energy via relocation of meters which are located inside the Consumer premises and are prone to theft of energy.
 - Preventive measures to eliminate direct theft of energy via replacing ACSR conductors, bare conductors present in theft prone areas with LT AB Cables to eliminate direct theft of energy.

- Releasing of New Connections: Unauthorized colonies, connections with direct theft, pending connections, un-electrified households are being provided a new connection to bring them in to billing net.

As the main focus of loss reduction is on urban feeders the number of urban feeders having loss more than 25% has been substantially reduced from 206 Nos. in the FY 15-16 to 170 Nos. in FY 16-17.

- In regard to the RE Subsidy, the True-up of subsidy is being done based on increase in Agriculture consumption which in turn is calculated based on the methodology and losses approved by the Commission. Moreover, the Nigam emphatically submits that the 16% loss levels on rural feeder used in computation are in line with methodology approved by The Commission.

II. ANNUAL REVENUE REQUIREMENT FOR FINANCIAL YEAR 2017-18:

1. Estimates for the sale of power to various categories of consumers.

Based on the past experience, the current method has proved to be a reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. In light of the above, the Nigam submits that this methodology is adopted for projecting the sales of all the categories, apart from agriculture which follows a different methodology. The adopted methodology is mentioned in the petition. However for ease of reference, the excerpts are reproduced below:

“In order to estimate the respective consumer category wise energy sales of DHBVNL for the FY 2016-17 and FY 2017-18, the Petitioner has relied upon the CAGR of previous year’s data 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 2016-17 have been arrived at. The methodology applied by the petitioner for estimating the metered sales is as under:-

The category-wise connected load and energy sales for the FY 2010-11, FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15 & FY 2015-16 were considered.

The category wise connected load for the FY 2016-17 and FY 2017-18 is arrived at by multiplying full year category wise connected load for the FY 2015-16 with the respective year CAGR of historical data of connected load.

The category wise energy sales of the FY 2016-17 is calculated by multiplying

category wise connected load above for the FY 2016-17 with consumption per kW calculated for FY 2016-17 based on the analysed category wise actual consumption per kW pattern for past 3 years.

The category wise energy sales of the FY 2017-18 is calculated by multiplying category wise connected load above for the FY 2017-18 with consumption per kW calculated for FY 2017-18 based on the analysed category wise actual consumption per kW pattern for past 3 years.

Agriculture consumption for the FY 2016-17 and FY 2017-18 is calculated by assuming a growth rate of 5% in actual sales over the year FY 2015-16 reported by the feeder level data and as per the methodology adopted by the Commission in previous tariff orders.”

2. Estimates for energy availability and cost of power purchase:

DHBN states that there is huge diversity in consumer mix and consumption pattern under its jurisdiction. DHBN further states that thus to meet the diverse demand it has tied up with generator for Long term PPAs. The long term PPAs with central generating station, state generating station and IPPs is as per the bidding guidelines of Ministry of Power and is duly approved by The Commission.

However in regard to the surplus power, it is submitted that the Power purchase is planned to meet the peak hour demand also factoring in the seasonal demands.

Thus during the non peak hours, a portion of tied up energy remains unconsumed. Moreover backing down of such quantum of energy is technically not feasible and thus leaves the utility with the option of selling it through inter-state sales at exchange price.

DHBN reproduces the methodology adopted for projecting the estimates for FY 2016-17 and FY 2017-18.

For FY 2016-17 and FY 2017-18, Month Wise Energy availability at the state periphery in Mu has been projected based on the Allocated Share to Haryana of Central Generating Stations, State Generation and Independent Power Producers and other Stations.

The Energy Availability in Haryana is calculated based on the average PLF of FY 2015-16, FY 2014-15 and FY 2013-14, Share capacity of Haryana from Central Generating Station IPP. The energy availability to DHBN is calculated by multiplying the total availability with the ratio of drawal of UHBN and DHBN.

“The Monthly energy sale is determined by distributing the same in the percentage of month of consumption of FY 2015-16. The energy sales hereby projected has been grossed up with the losses approved under UDAY scheme to reach at the normative energy required at the Discom periphery and then by the intrastate transmission losses to arrive at the normative energy required at the State Periphery.”

3. Estimates for O&M Expenses

DHBVN submits that the O&M expenses are calculated as per the methodology/ procedure notified in the HERC MYT Regulations, 2012. In line to the regulations, considering the inflationary indices, an increase of 3.8% per annum has been factored into the calculation.

Moreover, it is submitted that 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 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.

4. Estimates for Employee Expenses

DHBVN submits that the HERC MYT Regulations, 2012 as amended from time to time have clearly set out the methodology to calculate the O&M expenses for the Distribution and Retail supply business and the O&M Expenses are calculated accordingly. The Nigam further submits that the increase in projection from the earlier approved figures for FY 16-17 is on account of factoring in the impact of 7th pay commission.

5. Estimates for R&M Expenses

The Nigam submits that the Discom has projected R&M expenses, as per the formula defined regulation 57.3 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.

(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 *n*th 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 *n*th year.
- ‘ $INDX_n$ ’ means the inflation factor for the *n*th year as defined herein after.

Furthermore, it is pertinent to mention that the repair and maintenance work has been increased in view of betterment of the operation of the Nigam and thus providing interrupted power supply and lower breakdown. Special power has been given to SDOs operation for two months with special emphasis on maintenance of transformers, to ensure minimal DT failure and smooth power supply during forthcoming summer. Nodal officers have been appointed to implement, monitor and report the maintenance of DTs.

6. Estimates for Capital expenditure

The Nigam submits that the basic need/objective of incurring the capital expenditure is to upgrade the ageing and weak distribution network to desirable standards so as to provide better network reliability and sustainable performance.

The Capital Expenditure also envisaged re-enforcement of the system to provide quality, security and availability of power supply to the consumers, to undertake system development to meet the load growth, achieving the targeted reduction in system losses, undertake automation and other improvement works to enhance customer service.

The Nigam would like to submit that the investment are in various plans and schemes such as AT&C loss reduction plan, Load Growth scheme, R-APDRP schemes and UDAY. The reduced Distribution Loss, higher collection efficiency, no of new connections released and time taken for release of new connections are some of the tangible benefits of capital expenditure which DHBVN has achieved.

7. Interest & Financing Charges

DHBVN submits that the provisions of UDAY have been taken into accounts in a well-thought-out manner. It should be appreciated that the trajectory of Interest & financing charges since the implementation of UDAY is descending.

The major provisions of the UDAY scheme that have been taken into the account while preparing the previous and the current ARR are as follows:

- 75% of outstanding debt as on 30.09.2015 to be taken over in the form of equity / loan / Grant to DISCOMS.
- Take-over in year 1: 50%, Year 2: 25%.
- Take-over assumed at the end of second quarter from year 2.
- The Bonds have been issues at an average coupon rate of 8.19%

Moreover, DHBVN submits that the details regarding the existing working capital loans and other loans have been tabulated in detail in the filing with opening / closing balances and interest charged during the financial year.

8. Return on Equity

DHBVN submits that, the Nigam had provided authentic reasoning behind requesting The Commission to approve the return on equity for FY 2016-17 and FY 2017-18. It is submitted that RoE is the vital source of funding a portion of Capital Expenditure planned by the Utility in order to improve the system and to achieve further loss reduction. Disallowing RoE on the context of financial performance deprives the Discom 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.

9. Projected Revenue Gap

In regard to the revenue surplus of Rs. 954.18 Crores for FY 2016-17, it is submitted that the Commission in the tariff order dated 01.08.2016 has stated that due to the fact that the power purchase cost in the present order was considered based on the data from April 2015 to January 2016 provided by the Discoms. Moreover, the Commission further states that the hike in landed cost of coal including freight, the fuel cost of power being procured by the Discoms is likely to go up. Hence, after accounting the same there may not remain any surplus revenue to be adjusted in the tariff. The Commission has further stated that doing so, at this stage, shall likely create upfront

FSA liability and adjusting the same at later stage may also require allowing carrying cost for the same.

III. IMPORTANT ISSUES NEEDING IMMEDIATE ATTENTION OF THE COMMISSION

9. Recovery of Fuel Surcharge Adjustment in an arbitrary manner

The Fuel Surcharge Adjustment (FSA) in the context of a Discom is essentially a power purchase cost adjustment. Every year the Commission in its order on the Revenue Requirement for the ensuing year estimates the expenditure for the ensuing year under different heads i.e. power purchase cost, employees' cost, administrative expenses, depreciation, interest and finance charges, etc. The tariff for the ensuing year is determined on the basis of the projected expenditure. There is a mechanism of true up for the various items of expenditure in the subsequent ARR, if the actual expenditure is more than the projected expenditure subject to norms of the HERC and prudence check.

The power purchase cost account for almost 80% of the total cost of the DISCOMs and undergoes lot of variation during the year. Waiting for the true up on an annual basis would lead to financial hardship to the DISCOMs as the bills of the generators have to be paid on a monthly / bimonthly cycle. An increase in the power purchase cost for the DISCOMs beyond the approved cost for a year results in a FSA which has to be recovered as per HERC regulations.

Conceptually, FSA in respect of power purchase arises due to any one or more or a combination of the following reasons:-

- i. Higher quantum of power purchase as compared to quantum allowed by HERC.
- ii. Higher per unit cost of power purchase from various sources as compared to cost allowed by HERC.
- iii. Change in the power purchase mix as compared to that allowed by HERC.

Generally, FSA arises as a consequence of combination of above three factors for which the FSA claim is allowed by HERC for recovery from the consumers. FSA is, in fact, the difference in the actual cost of power purchase (calculated as per the norms) and the power purchase cost allowed by the HERC in the ARR / Tariff order.

The Electricity Act 2003 under section 62 provides:

- “62. (1) The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for –
- (4) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.”

The National Tariff Policy provides:

“8.2 Framework for revenue requirements and costs

8.2.1 The following aspects would need to be considered in determining tariffs:

- (1) All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. ...

Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC.”

Earlier the FSA was levied on an annual basis or more but the present HERC regulations (notified in December 2012) has allowed the recovery of FSA from the consumers automatically by the DISCOMs on a quarterly basis as per the formula laid down by the HERC.

In exercise of the powers conferred upon Haryana Electricity Regulatory Commission under Section 181 (zd) and in lines with the Clause 8 of National Tariff Policy, Haryana Electricity Regulatory Commission (HERC) has notified HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

Regulation 66 of the ibid MYT Regulations relating to Fuel Surcharge Adjustment is reproduced as under:-

“66. FUEL AND POWER PURCHASE COST SURCHARGE ADJUSTMENT (FSA)”

66.1 *The distribution licensees shall recover FSA amount on account of increase in fuel and power purchase costs from the consumers on a quarterly basis so as to ensure that FSA accrued in a quarter is recovered in the following quarter without going through the regulatory process i.e. FSA for the quarter “July to September” is recovered in the following quarter “October to December”.*

66.2 *FSA shall be calculated only in respect of approved power purchase volume including short term power purchase cost, if any, for the relevant year from all approved sources. Drawl of power under UI mechanism, if any, shall be allowed only when it is not in violation of grid discipline and shall be subject to a price cap of average revenue realization from all consumer categories for that year.*

Average revenue realization = (Total revenue assessed for electricity supply in Rs + Government Subsidy in Rs) / Total sales in Units.

66.3 *For the purpose of recovery of FSA, power purchase cost shall include all invoices raised by the approved suppliers of power and credits received by the distribution licensees during the quarter irrespective of the period to which these pertain for any change in cost in accordance with tariff approved by any regulator/ government agency mentioned in regulation 59.4. This shall include arrears/refunds, if any, not settled earlier. In case data of the last month in a quarter is not available for calculating FSA to be levied in the following quarter, the licensee shall use an estimate based on available data of the first two months of the quarter. On availability of the actual figures, the difference on this account shall form part of FSA of the subsequent quarter. If the actual data for any quarter is not made available by the licensee before the end of the following quarter for this adjustment, the FSA finally allowed for that quarter based on actual figures supplied after the prescribed date shall be limited to the earlier estimated amount or the amount based on the actual figures, whichever is lower.*

- 66.4 In case of negative FSA, the credit shall be given to the consumers by setting off the minus figure against the positive figure of FSA being charged from the consumers. In other words, credit of FSA shall be given only against FSA being charged so that the base tariff determined by the Commission remains unchanged.
- 66.5 Only the allowed percentage of transmission and distribution losses for the relevant year as per the approved ARR shall be taken into account for working out FSA.
- 66.6 The amount of FSA shall be recovered by each distribution licensee by charging a uniform FSA (per kWh) across all consumer categories in his area of license.
- 66.7 For moderation purposes, the recovery of per unit FSA shall be limited to 10% of the approved per unit 'average power purchase cost' or such other ceiling as may be stipulated by the Commission from time to time. For calculating FSA, variations in quarterly purchase volume from an approved source are allowed subject to an overall ceiling of annual approved volume from that source. In case a portion of the FSA for any quarter is not recovered due to the ceiling of 10%, the under recovered amount shall be added to the FSA for the next quarter.
- 66.8 Per unit rate of FSA (paisa/kWh) shall be worked out after rounding off to the nearest paisa;
- 66.9 The distribution licensee shall submit details relating to FSA recovery to the Commission for each quarter in the following format by the end of the following quarter.

(i)	Approved power purchase volume from approved sources (MU)
(ii)	Approved power purchase cost (Rs. million)
(iii)	Actual power purchase volume (MU)
(iv)	Power purchased (MU) from sources not covered under regulation 66.2 giving source wise details and in case of UI the frequency at which UI draws were made. (disallowed power purchase)
(v)	Actual cost of power purchase from all sources except (iv) (Rs. million)
(vi)	Actual cost of disallowed power purchase relating to (iv) (Rs. million)
(vii)	Total FSA estimated to be recovered for the quarter (Rs. million)
(viii)	FSA per unit (Rs/kWh) being recovered during the following quarter
(ix)	Actual FSA recovered/estimated to be recovered out of estimated FSA till the end of the following quarter (Rs. million)
(x)	Under/ over recovered FSA (vii-ix) (Rs. million)
(xi)	Approved sales (Consumer category wise / month wise) for the quarter (MU)
(xii)	Actual sales (Consumer category wise / month wise) for the quarter (MU)

(xiii)	Estimated sales, consumer category wise, for the following quarter (MU)
--------	---

Note:

1. All the source-wise details should be supported with requisite documentary evidence / invoices raised by the generators / suppliers of the power.
2. Actual sales to AP consumers are to be calculated in accordance with the methodology approved by the Commission in the ARR for the relevant year.

66.10 FSA (Rs/kWh) shall be worked out as per the following formula:

$$\text{Total FSA (Rs million)} = PC + I_{nt} + A_{dJst} Q + (A_{dJst} A/4)$$

$$\text{FSA (Rs / kWh)} = \{PC + Int + AdJst Q + (AdJst A/4)\} \div PS$$

Where

- $PC = \{(\text{Actual average power purchase cost (Rs/kWh) for the quarter}) - (\text{Average power purchase cost (Rs/KWh) approved by the Commission for the relevant year})\} \times PP$
- $PP = \text{Total volume of power purchase during the quarter worked out based on total volume of powers sold to all the consumer categories grossed up by approved T\&D loss. Sales to AP consumers are to be worked out in accordance with the methodology approved by the Commission in the ARR for the relevant year (MU).}$
- $PS = \text{Estimated sales volume for the following quarter with AP sales as approved by the Commission in the ARR for the relevant year (MU).}$
- $\text{Actual average power purchase cost (Rs./KWh)} = (\text{total cost of power purchased during the quarter from approved sources and UI as per regulation 66.2 in Rs million}) / (\text{total volume of power purchased in the quarter from approved sources and UI in MU as per regulation 66.2})$
- $Int = \text{Additional working capital cost allowed on account of FSA amount to be worked out as under:}$
- $I_{nt} = \{(\text{total FSA}/12) \times (\text{interest rate allowed for calculation of working capital in the ARR of the current financial year})\} \text{ in Rs million.}$
- $AdJst Q = \text{Under/over recovered FSA of the previous quarter in accordance with regulation 66.3 and 66.7 in Rs million.}$

- *AdJstA = Annual adjustment amount based on truing up of the FSA of the previous year by the Commission in Rs million.*

66.11 The licensee shall ensure that the Actual/ estimated FSA arising in a quarter is recovered in the following quarter. In case the licensee does not ensure levy of FSA based on the methodology given herein, the licensee shall have no claim to recover the FSA from the consumers in any manner in any subsequent period except in accordance with regulation 66(3) and 66(7). The unrecovered FSA for the previous financial year, details of which are supplied to the Commission by the distribution licensee, may either form part of power purchase cost for the next financial year or may be allowed to be recovered as annual adjustment amount in the quarterly recovery of FSA in the next financial year as the Commission may decide.

66.12 In case Government of Haryana decides to provide subsidy on account of FSA to a particular consumer category, the amount of subsidy equivalent to the FSA recoverable from the concerned consumer category, shall be deposited in advance by the Govt. Otherwise the recovery shall be affected from the consumer through electricity bills. It shall be the responsibility of the distribution licensees to seek prior approval of the State Government in this regard and maintain appropriate record of the same.”

In line with the *ibid* Regulation of HERC, the Distribution Licensees calculates and recover FSA amount on account of increase in fuel and power purchase costs from the consumers on a quarterly basis so as to ensure that FSA accrued in a quarter is recovered in the following quarter without going through the regulatory process.

Moreover, the Nigam further submits that through Order dated 03.03.2017, the Commission, orders that the recovery of these FSA's shall continue at the rate determined above till such time i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter till the total amount as determined in the present Order is fully recovered. The same is being implemented in DHBVN through sales circular D14-2017 dated 28.03.2017

In regard to the FSA of 17 paisa per unit, it is mentioned that the recovery @ 17 paisa per unit has been adjusted by the Commission while calculating the outstanding FSA in its Order dated 19.03.2015.

10. Need for reduction of cross subsidy surcharge on open access power

As per National Tariff Policy (NTP), the Discom can levy cross subsidy up to a limit of +/-20% of the average cost of supply. Furthermore the decision regarding the same is taken by the Commission; also the cross subsidy charges applied are within the limits as defined under NTP. Further, as per HERC tariff order for FY 2015-16, HERC has worked 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. For HT industry the Commission has computed CoS and average revenue realization as 6.27 Rs./kW and 7.84 Rs./kW respectively, henceforth the Cross Subsidy Surcharge (Rs./kWh) has been calculated (7.84-6.27) i.e. 1.57 Rs./kWh which is within the limit of +/-20% of the average cost of supply as per NTP. Further it is submitted that determination of tariff is prerogative of The Commission and the Commission determined tariff after prudence check of Discom submission.

11. Need for reduction/doing away with the levy of Additional Surcharge:

In accordance with the provisions of the Electricity Act 2003, the distribution licensees have an obligation to supply power to all the consumers under the respective areas of supply; and correspondingly they have to enter into long term agreements for purchase power from various generating stations. As such, when these embedded consumers draw power from elsewhere apart from the licensee under open access, the fixed cost of the supply taken by these consumers from elsewhere is still payable by the licensee, making it a stranded capacity for the distribution licensee.

It is submitted that the additional surcharge is payable for the stranded capacity of the distribution licensee. In the event of the open access consumers moving out of the system of the distribution licensee, the distribution licensee has to bear stranding of assets which causes financial loss to the distribution licensees and the same needs to be compensated by way of additional surcharge, as allowed by the Commission vide MYT tariff order dated 29.5.2014.

The Commission vide order dated 14th December, 2016 has allowed an additional surcharge of Rs. 0.87 per unit.

12. Need for introduction of TOD tariff and allow lower tariff rates in night hours:

DHBVN submits that in order to utilize the surplus power available during the night hours, the Nigam has introduced concessional tariff of Rs 6 per kWh (against current landed cost of Rs 7.89 per kWh) for HT industrial consumers on the excess drawl in the month during the night hours (22:00 Hrs to 04:00 Hrs) over and above their normal consumption during the corresponding month of preceding year. The Scheme has been introduced on Pilot basis and was initially in operation till 31st March, 2017. Currently, a petition has been filed before the Commission proposing that the scheme may be extended till 30th Sep 2017.

13. Need for treating the two State Power Distribution Utilities as independent Companies:

DHBVN submits that as per the current practice, the Commission determines tariff for the State. DHBVN is not conferred with the power to decide on this subject.

14. Need for reduction in electricity tariff for industrial consumers:

It is submitted that the tariff of different states cannot be compared vis-à-vis tariff of other states due to difference in power purchase mix, loss levels, Consumer Mix and thereby the Cost of Supply; the comparison of tariff in various states should be judged against respective average power purchase cost as the tariff rationalization is based on the overall approved annual revenue requirement of the DISCOMs, out of which around 80% corresponds to the net power purchase cost. The Commission has a two-sided responsibility to protect the financial interests of the distribution licensees and to balance the interests of various stakeholders. The Tariff for a particular consumer category is determined by the Commission on the basis of the Annual Revenue Requirement approved for a particular year. The vis-à-vis tariff comparison of Haryana and the neighboring states are mentioned below:

Tariff rates (with FSA) per unit to consumer (Rs./KWh)		
HT Industry		
Name of the States	FINANCIAL YEAR	TARIFF/UNIT
Delhi (Large Industrial Supply)	2015-16	10.01
Haryana	2016-17	8.51
Punjab (LIP)	2016-17	7.97
Rajasthan	2015-16	8.31

UP	2016-17	8.60
LT Industry		
Name of the States	FINANCIAL YEAR	TARIFF/UNIT
Delhi (Upto 10 KW)	2015-16	10.31
Haryana (Upto 10 KW)	2016-17	8.00
Punjab (Small Industry)	2016-17	6.51
Rajasthan	2015-16	7.25
UP	2016-17	8.83
LT Industry		
Name of the States	FINANCIAL YEAR	TARIFF/UNIT
Delhi (10 KW to 20 KW)	2015-16	9.64
Haryana (10 KW to 20 KW)	2016-17	8.33
Punjab (Small Industry)	2016-17	6.51
Rajasthan	2015-16	7.25
UP	2016-17	8.83
LT Industry		
Name of the States	FINANCIAL YEAR	TARIFF/UNIT
Delhi (20 KW to 50 KW)	2015-16	9.64
Haryana (20KW to 50 KW)	2016-17	8.41
Punjab (medium Industry)	2016-17	7.29
Rajasthan	2015-16	7.25
UP	2016-17	8.83

However, the powers of the same are conferred upon the Commission and the related matter can be taken up with the Commission.

15. State Govt. announcement to reduce FSA.

DHBVN submits that HERC issued new order on FSA on 03.03.17, thus lowering the existing FSA rates. As per the ibid order, the recovery of these FSA's shall continue at the rate determined above till such time i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter till the total amount as determined in the present Order is fully recovered.

16. Request for realigning the Domestic Tariff.

DHBVN is not authorized to decide the tariff category of consumers based on their usage of electricity. The powers of the same are conferred upon the Commission and the related matter can be taken up with the Commission.

Commission's View

The Commission has taken note of the objections filed by M/s JSL, Hisar as well as DHBVNL's reply thereto. It needs to be noted that this Commission is also bound by its own Regulations. Hence, true-up of the ARR is done strictly as per the provisions of

the Regulations occupying the field and the same is confined to the costs classified as “uncontrollable” that too after applying prudence check. The major cost component of the Distribution and Retail Supply business is the quantum and cost of power. The quantum and cost of power for a given year is determined by the Commission on a projected basis. The actual cost depends on the actual generation of the power plants / sources tied up on a long basis (PPA) and the tariff determined by the CERC in the case of Central Generating Stations, determined by this Commission under section 62 of the Act or adopted under section 63 of the Act. Thus, due to change in mix of power available on actual basis and tariff thereto, particularly fuel cost, the cost of power actually incurred may be at variance. However, any such cost incurred due to higher quantum of power purchase to meet the actual consumer category wise sales due to higher distribution losses than that approved by the Commission is not passed on to the electricity consumers. As far as FSA is concerned, it is also dealt with in accordance with the Regulations in vogue. Hence, after taking into account the FSA amount quantified by the Commission and the amount that has been actually recovered by the Discoms, this Commission vide Order dated 3.03.2017 has substantially reduced the rate of FSA recovery i.e. 65 Paise / kWh up to 30.06.2017 and 37 Paise / kWh thereafter. Regarding FSA recovery of 17 Paise, the Commission observes that while passing FSA Order dated 19.03.2015 the Commission had taken into consideration all the FSAs recovered and going forward quantified the balance FSA to be recovered by the Discoms.

Additionally, the Commission has taken note of other issues raised by the Intervener w.r.t Capex, RoE, O&M etc. these issues have been dealt by the Commission in line with the Regulations in vogue at the relevant paragraphs of the present Order. As far as treating the two Discoms as independent companies it is observed that the two Discoms are separate distribution licensee, however, the tariffs for both the Discoms have been kept the same to balance the inherent consumer mix of the Discoms and the subsidy paid by the State Government has been apportioned commensurate to the respective revenue gap. Even otherwise the practice followed by most of the SERCs is to have a uniform tariff by introducing the differential in the bulk supply rate while in Haryana the PPAs have been allocated between the two Discoms in equal proportion.

2.3.3 Objections Filed on DHBVNL ARR petition for FY 2017-18 by Faridabad Industries Association.

1. Distribution Losses

At 3.5.1 of the petition for FY 2016-17 and FY 2017-18, DHBVNL has considered distribution loss of 21.70% and 17.94% for FY 2016-17 and FY 2017-18 respectively. The following extracts of 3.5 of the HERC order dated 1 August 2016, are given regarding loss trajectory as approved by the Commission:

“The Govt. of India, Ministry of Power vide letter dated 27.04.2015 has approved the following revised AT&C loss trajectory for the two licensees:

Revised AT&C loss trajectory approved by MOP, GOI

Distribution Licensee	2013-14	2014-15	2015-16	2016-17
DHBVNL	38.25	23.96	21.35	18.74
UHBVNL	33.78	31.29	27.88	24.48
Haryana State	36.26	27.55	24.56	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.

Norms for collection efficiency specified by the Commission

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.”

As can be seen, the Commission had approved AT & C loss levels of 18.74 % for DHBVNL and accordingly distribution loss level of 17.91% considering the approved collection efficiency of 99% for FY 2016-17. The Discom has indicated a higher figure for Distribution loss at 21.70 %, which must not be accepted by the Commission as it will be against the tariff regulations 2012, Commission’s own orders dated 7 May 2015 and 1 August 2016 and against the losses approved by Ministry of Power, Government of India. Similarly for FY 2017-18, the Discom has presumed a figure of distribution loss of 17.94% which is not acceptable as it is higher than the previous year approved losses of 17.91%, which completely violates the spirit of efficiency and improvement in power sector and against the legal provisions of tariff regulations and the Commission’s own previous orders.

For FY2017-18, the Commission has come out with Amendment No 1 dated 17 November 2016 to the tariff regulations 2012 extending the control period to 2017-18, as given below:-

“Regulation No. HERC/ 26 / 2012 / 1st Amendment / 2016-

1. Short title and commencement:

1.1 These Regulations may be called 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 (1st Amendment) Regulations, 2016.

1.2 These Regulations shall come into force w.e.f. the date of publication in the Haryana Government Gazette.

1.3 These Regulations shall extend to the whole of the State of Haryana. 2. Amendment to Regulation 3.16 The definition and interpretation under Regulation 3(3.16) shall be replaced by the following paragraph, namely:- “Control Period” means a multi-year tariff period fixed by the Commission from time to time. The first control period shall be from 1st April 2014 to 31st March 2018.”

All the principles of tariff fixation as laid down in Tariff Regulations 2012 shall be applicable for the projection and determination of ARR for the FY 2017-18 also. The Commission, must therefore, set justifiable targets for AT&C Loss, distribution loss and collection efficiency and these can not be worse than the targets for FY 2016-17 under any circumstances as per the provisions of Tariff Regulations 2012 read with Amendment No 1.

Commission is therefore, requested to approve the energy balance considering only the approved levels of distribution losses for the revised estimates of 2016-17 and the fresh estimates for 2017-18 for energy sales and power purchase must be laid down keeping better targets for AT&C Losses, distribution losses and collection efficiency which in any case cannot be less than the targets for 2016-17. The assumptions made by DHBVN against these controllable parameters must therefore, be rejected by the Commission and should not form basis for the projection of ARR for FY 2017-18.

2. Employee Expenses

In Table 8 on page 29 of its tariff petition for FY 2016-17 and 2017-18, DHBVNL has revised the employees expenses for 2016-17 from the approved figures of Rs

629.03 cr to Rs 786.03 Cr and projected a figure of Rs 815 Cr for the FY 2017-18. It has indicated actual employee costs as Rs 645.77 Cr for the year FY 2015-16 as per Table 8. The relevant extracts from the tariff regulations on employee costs are given below:-

$$(b) \text{ EMPn (excluding terminal liabilities) + A\&Gn = (EMPn-1+A\&Gn1)*(INDXn/ INDXn-1)}$$

Where,

INDXn – 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:

$$INDXn = 0.55 * CPI_n + 0.45 * WPI_n.$$

Note 1: For the purpose of estimation, the same INDXn value shall be used for all years of the control period. However, the Commission shall consider the actual values of the INDXn 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.

Note 2: Any variation in employee cost and A&G cost on account of reasons beyond variation in INDXn shall be subject to the incentive and penalty framework specified in regulation 12.”

Employees expenses are the controllable expenses and as can be seen from above, any variation in employee costs from the approved figures is allowed only to the extent of variation in inflation factor.

Further as per table 3.32 of the Commission’s order dated 1 August 2016, the approved employee costs for FY 2014-15 is Rs 599.07. The employee costs for FY 2015-16 as shown by DHBVN in Table 8 of its petition is contested as per comments provided on the true up petition of the Discom on the ground that Discom has not followed the laid down principles of the tariff regulations and no calculation and methodology has been depicted by it to arrive at such costs.

DISCOM needs to work out the inflation factor for the relevant year and apply it scientifically on the approved costs of 2014-15 to arrive at the actual expenses for the year 2015-16, which would require due diligence and scrutiny from the Commission before approving the employee costs for FY 2015-16.

As there is no justification provided for increase in these employee expenses, the increase may not be considered by Commission and the approved figures of

employee expenses as given in Commission's order dated 1 August 2016, may please be taken into account for arriving at the revised estimates of ARR for FY 2016-17.

Further, for projecting the employee cost of Rs 815.88 Cr for FY 2017-18, the Discom has applied an inflation index of 3.8 % on the Revised Estimates for FY2016-17, i.e. Rs 786.03 cr, which itself is disputed as given in the above para of our submissions. Further the new Amendment No 1 dated 17 November 2016 to tariff regulations 2012 provides as below:-

"2. Amendment to Regulation 3.16 The definition and interpretation under Regulation 3(3.16) shall be replaced by the following paragraph, namely:- "Control Period" means a multi-year tariff period fixed by the Commission from time to time. The first control period shall be from 1st April 2014 to 31st March 2018. Provided that where certain norms / benchmarks are required to be computed using 'baseline values' and the 'base year' has been defined as the financial year immediately preceding the first year of the control period. In all such cases the 'base year, for projecting normative values for annual determination of the ARR/Tariff petition(s) for the FY 2017-18 shall be the FY 2015-16 based on the respective audited accounts of the licensees and the generating company. Provided that in the case of HVPNL/Discoms the O&M expenses for the FY 2017-18 shall be based on the audited accounts for the FY 2015-16 subject to prudence check."

In line with these Regulations, the employees expenses for FY 2017-18 shall be projected based on the audited accounts of 2015-16. DISCOM must therefore, rework their projection for FY 2017-18 after taking into consideration the base values, the inflation factor and the efficiency factor.

3. R&M Expenses

In Table 9 on page 30 of its tariff petition for FY 2016-17 and 2017-18, DHBVNL has asked for R&M expenses of Rs 109.99 Cr for 2016-17 and projected a figure of Rs 114.16 Cr for the FY 2017-18. Referring to the true up petition of DHBVNL, DHBVN has incurred R & M expenses of only Rs 35.64 cr against the approved figure of Rs 98.07 cr for FY 2015-16 by the Commission in its tariff order dated 7 May 2015.

DHBVN has given the following for the R&M expenses:

"3.11.2 The petitioner has projected R&M expenses for the FY 2016-17, on the actual average Gross Fixed Assets of DHBVNL for FY 2015-16 escalated with the inflation factor computed as per the methodology specifies by HERC MYT Tariff Regulations, 2012 as tabulated below":

DHBVN has not provided any calculation for the working of R&M Expenses as Rs 109 Cr for 2016-17, though they claimed it as per average GFA and the corresponding inflation factor. Historically they have been spending much less on R&M and during FY 2015-16, it spent only Rs 35.64 cr against the approved figure of Rs 98.07 cr. Even taking an inflation factor of 3.8% as considered by the Discom, the estimated R & M expenses for FY 2016-17 and FY 2017-18 should come out to be about Rs 36.99 cr and Rs 38.40 cr respectively.

The Commission is therefore, requested to re estimate and re-approve the R& M expenses for FY 2016-17 and FY 2017-18 taking into account the actual R & M expenses of FY 2015-16 as given in the true up petition.

4. A & G expenses

At 3.12 of the petition, DISCOM has requested for a revised A & G expenses of Rs 74.87 cr and Rs 77.72 cr for FY 2016-17 and FY 2017-18 respectively against the already approved figures of Rs 73.86 cr for FY 2016-17. They have arrived at this estimate by taking the actual A & G expenses of Rs 72.13 cr for FY 2015-16 and applying inflation factor of 3.8 %.

However, as per our submissions on true up petition for FY 2015-16, Commission needs to approve only Rs 53.52 cr (after capitalization) as the A & G expenses for FY 2015-16, which was approved by the Commission in its tariff order 7 May 2015.

Taking an inflation factor of 3.8% as considered by the Discom, the estimated A & G expenses for FY 2016-17 and FY 2017-18 should come out to be about Rs 55.55 cr and Rs 57.66 cr respectively

The Commission is therefore, requested not to allow any increase in the revised projection of A &G expenses for FY 2016-17 and FY 2017-18 than those given above.

5. Non Tariff Income

As per 3.19 and Table 21 of the petition, the DHBVNL has requested for Non Tariff Income of Rs 235.68 cr and Rs. 247.47 cr for FY 2016-17 and FY 2017-18 respectively. However, the actual Non tariff Income of DHBVNL for FY 2015-16 is Rs 224.46 cr as per its own true up petition which did not include Rs 79.08 cr as the income due to late payment surcharge. As Late payment surcharge is also legitimate NTI, taking it into account, total NTI for FY 2015-16 comes out to be Rs 303.54 Cr.

Hence it is likely to be much more than the Discom estimates as given above for 2016-17 and 2017-18.

Commission is therefore, requested to re-estimate the non tariff income figures of DHBVN for FY 2016-17 and FY 2017-18 taking into consideration the actual figures for FY 2015-16.

Further at 3.19.2 of its petition, DISCOM has indicated that the delayed payment surcharge received from consumers may not be treated as income of the DISCOM and should not be part of non tariff income. MYT regulations however, clearly stipulate that late payment surcharge received from consumers is to be treated as part of non tariff income only and is to be deducted from ARR. Also DISCOM gets benefit of the additional revenue received on account of late payment surcharge as the additional revenue is taken into consideration while calculating AT&C loss and collection efficiency. The contention of DISCOM, therefore not to consider LPSC as part of non tariff income, is not only illogical, devoid of merit but also against the legal provisions as given in tariff regulations 2012.

The Commission must therefore consider LPSC as a part of non tariff income only in ARR.

6. Power purchase costs

At 3.3 of its petition, DHBVNL has revised their estimates of power purchase quantum and cost for various years of the control period as can be seen from Table 3 of the petition. Table 6 on energy balance for Haryana which is produced below, indicates that DHBVNL has considered distribution loss of 21.70 % and 17.94 % for FY 2016-17 and FY 2017-18 respectively which are higher than the Commission approved figure for FY 2016-17 as given in tariff order dated 1st Aug 2016.

Table 6: Energy Balance for Haryana FY 2016-17 and FY 2017-18

Energy Balance	Units	FY 2016-17	FY 2017-18
Power Purchase at State Periphery	Mus	28,880.77	29,704.43
Energy Sales to the Consumers	Mus	19,596.00	20,839.00
T&D loss	%age	21.70%	17.94%
Energy Sales at Discom Periphery	Mus	25,025.85	25,394.65
Intra- State Transmission Loss	%age	2.46%	2.46%
Energy Sales at State Periphery	Mus	25,657.01	26,035.11
Deficit met through Banking	Mus	382.52	313.53
Surplus	Mus	2,975.64	3,420.68

Further referring to Commission's order dated 1 Aug 2016, the following targets for AT&C and distribution losses were laid down:

If the Commission's approved figures of distribution losses are taken into account for calculating energy balance, the quantum of energy projected by the Discom and the power purchase costs associated with this would be much less than estimated by the Discom.

Revised AT&C loss trajectory approved by MOP, GOI

Distribution Licensee	2013-14	2014-15	2015-16	2016-17
DHBVNL	38.25	23.96	21.35	18.74
UHBVNL	33.78	31.29	27.88	24.48
Haryana State	36.26	27.55	24.56	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.

Norms for collection efficiency specified by the Commission

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."

As can be seen, the Commission had approved AT & C loss levels of 18.74 % for DHBVN and accordingly distribution loss level of 17.91% considering the approved collection efficiency of 99% for FY 2016-17. Commission is therefore, requested to take into account only the approved distribution losses of 17.91 % for FY 2016-17 to consider the power purchase quantum and its associated cost and not 21.70% as considered by DISCOM in its tariff petition.

Further the DISCOM has considered a loss target of 17.94 % for FY 2017-18 which is higher than target of 17.91 % set by the Commission for FY 2016-17 which is further deterioration over 2016-17 and is totally unacceptable and against the provisions of tariff regulation 2012 , various orders of the Commission, National Tariff Policy and Indian Electricity Act 2003. The distribution loss for the year 2017-18 should be arrived at by considering further reduction in the 2016-17 loss distribution figures

and the power purchase, energy balance and the associated costs can be arrived at only at the reduced figures for FY 2017-18.

7. Return on Equity

In its petition for FY 2016-17 and FY 2017-18, DHBVNL has also asked for return on equity of Rs 215.88 cr and Rs 242.42 cr for FY 2016-17 and 2017-18 respectively as given below:-

“3.16 Return on Equity

3.16.1 As per Regulation 20.1 of HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012; the rate of return on equity shall be decided on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty.

3.16.2 The computation of return on equity for FY 2016-17 and FY 2017-18 is tabulated below:-

Table 15: Return on Equity for FY 2016-17 & FY 2017-18 Rs. Cr.			
Particulars	Approved	Estimated (FY 2016-17)	Projected (FY 2017-18)
Opening Equity	1439.12	1,472.36	1,611.58
addition	33.24	139.22	240
Closing Equity	1472.36	1,611.58	1,851.58
Average	1455.74	1,541.97	1,731.58
Rate of RoE	14%	14%	14%
Total RoE	203.80	215.88	242.42

3.16.3 DHBVN in its APR and ARR Tariff petition submits that RoE is the vital source of funding a portion of Capital Expenditure planned by the Utility in order to improve the system and to achieve further loss reduction. Disallowing RoE on the context of financial performance deprives the Discom 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.

3.16.4 The petitioner requests The Commission to approve the computation of return on equity for FY 2016-17 and FY 2017-18, as tabulated above. “

However, Commission has approved zero ROE in its earlier orders and also in Tariff order dated 1st August 2016.

The Commission has been consistently denying ROE to the licensee in the past on account of their poor performance and erosion of net worth due to accumulation of losses in its tariff orders. The relevant text from its earlier order are reproduced below:

“3.16 Return on Equity

The accumulated losses of the two distribution licensees i.e. UHBVNL and DHBVNL have completely eroded their net worth including equity capital deployed in the business. The Commission, on several occasions, has emphasized the need for recapitalization of the state owned distribution companies and infusion of fresh equity by the State Government over and above the equity component of the annual incremental capital expenditure to be undertaken by the distribution companies to modernize and augment the distribution system to meet the increasing load and consumer base of the power utilities as well as their obligations to meet the standard of performance specified by the Commission in order to better serve the electricity consumers in Haryana. However, no progress seems to have been made in this direction. The return on equity either comes from the profit earned from the business in the form of dividend or from the accumulated reserves and surplus. In the present case there is neither any profit nor reserves and surplus. Further due to accumulated losses the equity capital stands completely eroded.

In view of the above facts, the Commission does not consider it appropriate to allow any return on equity in the FY 2013-14, as in the past, to the distribution licensees.”

Despite being denied return on equity in the previous tariff orders, the licensee has again asked for return on equity of Rs 215.88 cr and Rs 242.42 cr for FY 2016-17 and 2017-18 respectively without any significant improvement in its performance. 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 tariff regulations 2012 clearly stipulates that return on equity shall be decided by Commission on the basis of overall performance of the licensee, the extract are reproduced below :

“ 20.1The rate of return on equity shall be decided by the Commission keeping in view the incentives and penalties and on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty .”

The matter was thoroughly considered by the Commission in its MYT Order dated 29th May 2014, the relevant extract of which are placed below:

“Return on Equity (ROE):

The Commission is conscious of the fact that the MYT Regulations, 2012 provides for upto 14% return inclusive of MAT/ taxes, if any, on the equity capital deployed in the distribution and retail supply business. However, the Commission finds that the accumulated losses of the two distribution licensees

i.e. UHBVNL and DHBVNL have completely eroded their net worth including equity capital deployed in the business. The Commission, on several occasions, has emphasized the need for recapitalization of the state owned distribution companies and infusion of fresh equity by the State Government over and above the equity component of the annual incremental capital expenditure to be undertaken by the distribution companies to modernize and augment the distribution system to meet the increasing load and consumer base of the power utilities as well as their obligations to meet the standard of performance specified by the Commission in order to better serve the electricity consumers in Haryana. However, the Discoms have attempted to make good the accumulated losses HERC Order on ARR & Tariff of UHBVNL & DHBVNL for D&RS business under MYT framework for the control period FY2014- 15- FY 2016-17 through FRP which provides for takeover of 50% of the short – term liabilities by the State Govt. while servicing of the balance amount is to be done by the Discoms.

The return on equity either comes from the profit earned from the business in the form of dividend or from the accumulated reserves and surplus. In the present case there is neither any profit nor reserves and surplus. Thus ROE is neither available to the Discoms for ploughing back in the business thereby reducing capital expenditure related borrowings and interest cost thereto which is passed on to the electricity consumers of Haryana nor the same is available for appropriation as dividend payable to the equity holder i.e. in this case the State Government. Thus in effect any ROE that could have been allowed would be diverted to funding of losses.

In view of the above discussions, and the fact that there are large number of new connections pending release which would have taken care of about 300 MW of power i.e. the surplus which is being surrendered at a rate even lower than the average cost of power purchase by the Discoms leading to avoidable revenue loss. Further, the Discoms have been allowed the interest cost of Rs. 1000 Crore bonds issued by HVPNL on their behalf to fund the payables to HVPNL and HPGCL as well as the interest cost of the short term liabilities under FRP which the consumers have already paid for. Additionally, the Commission has also taken note of that the Discoms failed to achieve the distribution loss reduction trajectory set by the Commission and on the contrary re-stated the loss – levels on one plea or the other including sales, so far, attributed to discovery of ‘ghost consumers’ i.e. consumers who exists only on the books of the Discoms. In these circumstances, the Commission does not consider it appropriate to allow any return on equity in the FY 2014-15, to the distribution licensees and reiterates that the distribution / AT&C loss trajectory as per the FRP which has in principle approval of the Commission shall not be re-visited.”

In view of the above, we request the Commission to take a judicious decision in the matter and disallow the RoE for FY 2016-17 and FY 2017-18 in consonance with its own earlier tariff orders and the provisions given in the tariff regulations.

8. Supply Voltage wise and consumer category wise distribution and AT&C losses:

As stipulated under regulation 57.1 (f) of HERC regulations 2012, the DISCOMs are required to submit the information on these losses to arrive at wheeling charges, open access charges and other important parameters like collection efficiency and AT&C losses category wise. However, despite repeated directives by the Commission and the clear legal provisions stipulated in the Regulations, both the licensees have not submitted computation of supply voltage wise and consumer category wise distribution and AT&C losses till date.

In the MYT Order dated 29th May 2014 also, the Commission had expressed serious concern on the issue and stated as follows:

“Both the licensees 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.”

However, despite repeated directives from the Commission, the Discom has again failed to comply with its orders and the statutory provisions of the regulation.

In view of the repeated failure of the Discom to comply with the regulatory directive of the Commission and the continuous flouting of the legal provisions as enshrined in the Tariff regulations, Commission may consider taking a serious view of the matter including invoking section 142 of the Electricity Act.

9. Incentivization for industries for going Solar

- (a) As per present orders, the Government is not providing any subsidy to industrial units for going Solar. The only relief presently available to the industry is an incentive of Rs. 0.25 Paise/unit of Solar Power generated and fed through net metering. We request that this incentive for the industry be increased to Rs. 1/unit at par with other stakeholders.
- (b) Net metering presently is not permitted for industries drawing Power through OA. Since the thrust of the Government is to encourage Solar, we recommend that even such industries drawing partial power through OA should be permitted to install net metering to avail the incentive.

10. Fixed Charges

- (a) The fixed charges levied on industrial consumers should be reduced to the extent of Solar plant installed and power consumed through the roof top Systems.
- (b) The fixed charges presently being levied on all consumers should be levied every month based on the maximum Power consumed rather than Contract Demand.

11. Non-compliance to the directives of the Commission

a) Cost of Supply

The Tariff Regulations notified by this Commission casts statutory obligation on the Discoms to conduct CoS and submit the same for consideration of the Commission. However, the DHBVN has repeatedly failed to submit any tariff proposal backed by CoS.

b) AP Subsidy

The DHBVN has failed to submit the details of subsidy released by the State Government on a quarterly basis. As per earlier directions of the HERC, the Nigam was to take up the issue of direct transfer of RE subsidy to the eligible AP Consumers in their Aadhar linked bank accounts. This has not been done and DISCOM has merely stated that this issue falls under State government.

c) Replacement of defective Meters

The Commission has been insisting and giving instructions to the Discom for many years to replace the defective meters and had given the following directive:

“In Commission’s order dated 7th May, 2015, the following targets were assigned to the licensees for replacement of defective energy meters.

- a. Single phase meters: The number of defective energy meters should not exceed 10,000 at any time after December, 2015.
- b. Three phase meters: The number of defective energy meters should not exceed 500 at any time after December, 2015.”

The reply of the Nigam is very vague and open ended. This point has been commented upon by the Commission for the last 10 years. Still the following meters are lying defective as per the submissions of DHBVN:

Single phase: 112321

Three phase: 52072

We strongly feel that unless the supply of meters outstrips the demand, this situation will continue. The Commission should ensure a time bound compliance from the discom as defective meters are a huge burden on the power system and its economics and concerted efforts should be made by the Discom to get it replaced in a time bound manner.

d) Reporting of Circle wise losses

The utilities are required to place on their website the circle wise losses suffered in the respective utilities along with the name (s) and designations(s) of the officers concerned working in the supervisory capacity. Such information should be updated periodically on quarterly basis. The information in respect of total losses incurred in a year should also be made public at the time of filing ARR for information of the consumers. However, despite repeated directives by the Commission, utilities have failed to comply with such an important aspect which can go a long way in managing the acute problem of distribution losses.

e) Non replacement of Electro-mechanical Meters:

Commission in its order dated 07th May, 2015 on ARR petitions of the licensees for FY 2014-15, had directed to replace the Electro-mechanical meters by 31st March, 2016 by making all necessary arrangements. But as per progress report, the number of electro-mechanical meters have reduced only by about 77000 in a span of 9 months.

The licensee was directed to file, within 3 months, the detailed reasons for not complying with the directive of the Commission and with a warning that a failure to do so shall attract penal action as per the Electricity Act, 2003.

In its reply filed in the current ARR, the Discom has again shown the pending replacement of electromechanical meters both in rural and urban areas. This not only flouts the repeated directives of the Commission on the issue but also contravenes the legal provisions of tariff regulations and Electricity Act which prohibits use of electromechanical meters.

f) Issuance of bills and realization of payment thereof in urban areas

Commission had directed the Discom that it will be mandatory for consumers of all categories with a load of 20 KW and above to download their bills from the Discom's

website. However, Discom is still in the process of compiling data and has yet to ensure its implementation.

g) Directive on RPO Obligation

The Commission had directed the Discom to purchase renewable energy or RECs to meet the RPO targets set for the FY 2016-17 and also to make up for the shortfall of RPO compliance carried forward for the previous years, on actual basis. In view of Haryana Government's mandate to promote RE energy especially roof top solar and Waste to Energy, Discom was directed to meet the maximum RPO targets from these sources.

However, despite repeated directives from the Commission, the Discom is terribly short of purchase of renewable energy and meeting the RPO obligations.

h) Power drawl under UI Mechanism

The Discom was directed to manage its UI drawls more efficiently and prudently and the Commission had made it very clear that it will not approve the power purchase cost of such drawls at a rate higher than the average cost of power purchase, and any loss on account of this shall be borne by the Discom.

As can be seen from the data available from the power purchase for FY 2015-16, as submitted by DHBVN in its true up petition, DHBVN has drawn power under UI at an exorbitant rate of Rs 7.02 per unit which is much above the average power purchase price and is an offshoot of ill conceived planning and incompetency of the Discom. This kind of cost should not be allowed to be passed on to the consumers as already directed by the Commission.

It has been observed that the directives issued by Commission are not complied by DHBVN time and again. Directives are essential and integral part of the order issued by the Commission and any non-compliance should be viewed seriously by Commission. As there has been repeated flouting of the directives of the Commission by the DHBVN, Commission must take stringent view and may consider taking punitive action against the concerned official(s) by holding him personal guilty for non-compliance and may also consider imposing penalty by invoking section 142 of the Electricity Act 2003.

12. Standards of performance and reliability indices

As per HERC Regulations 2004 on standards of performance, clause 3.1 stipulates that these standards shall be the minimum standards of the service with reference to the quality, continuity and reliability of the services of distribution company. Further, as per clause 8.1 of these Regulations, every licensee shall furnish the information on these standards and reliability indices (refer clause 8.3) every year. However, no such information has been provided by the licensee.

Further as per schedule 1 of the guaranteed standards of the performance of these Regulations, the period of load shedding shall not exceed 4 hours per day continuously for 4 days and in the event of the failure by the licensee to do so, a penalty has been specified. Further, as per the overall standards of performance as given in schedule II, defective meters shall not exceed 1% of the metered installations as per these standards, though there are still about 1.64 lacs defective meters in the licensed area of the petitioner as mentioned by the Discom in its ARR Petition. In fact, most of these provisions are grossly and blatantly flouted by the licensee. No such compensation has been paid by the Utility against the non-compliance of these standards of the performance, even though there is a provision for automatic payment of compensation as per clause 7.2 of these Regulations.

13. New supply connections

As per Haryana Electricity Regulatory Commission (Duty to supply electricity on request, Power to recover expenditure incurred in providing supply & Power to require security) Regulations, 2005, it is the Duty of Licensee to supply electricity on request. As per clause 3.1 of these regulations, every distribution Licensee shall, on receipt of an application from the owner or occupier of any premises, give supply of electricity to such premises, within one month of receipt of the application, complete in all respects along with the non-refundable application processing fee. A large no of pending requests for new supply connections beyond the permissible time limit is clearly violative of the statutory provisions.

14. Penalty for contraventions

It has been observed that the licensee has not been complying with the various provisions of regulations, supply code, Electricity Act, Conditions of the License and directives issued by the Commission in the past. It has also been found flouting various provisions of applicable regulations and Act as can be seen from the tariff orders of the

Commission and by Discom's own admission in its ARR petition. Though there are provisions in the Act and the regulations, e.g. Sections 142 and 146 of the Act and other regulations in force provide for penal action against the licensee, no penal action is taken against the licensee. Also, Discom has been flouting almost all the provisions of supply code and various standards of performance, neither any compensation is given to the gullible consumers, nor any penal action is ever taken by the commission though, repeated warnings for taking penal actions have been issued by the Commission in vain in its tariff orders and otherwise.

As there has been repeated flouting of these provisions, Commission may take stringent view and may consider taking punitive action against the concerned official by holding him personal guilty for non-compliance and may also consider imposing penalty by invoking section 142 of the Electricity Act 2003.

15. Tariff philosophy

As per National tariff policy, cross subsidy should be reduced every year. Clause 8.3 on tariff policy provides as under:

“

1. In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.
2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within $\pm 20\%$ of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy. For example if the average cost of service is Rs 3 per unit, at the end of year 2010- 2011 the tariff for the cross subsidized categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the cross subsidizing categories should not go beyond Rs 3.60 per unit.”

Further MYT regulations 2012 provide the following provisions for cross subsidy:

“69.1 The distribution licensee’s tariff proposal should reflect the reasonable cost of providing service to each consumer class. In case where tariffs are historically distorted with significant level of cross-subsidy, the aim should be to gradually move to non-cross subsidized tariffs.

69.2 In the annual performance review and tariff application, the distribution licensee shall include a report on how far they have implemented the cross-subsidy reduction trajectory approved by the Commission for reduction of cross-subsidy and the measures being proposed in the current application to implement the plan.”

The Licensees have not submitted any measures or plan to reduce the inter category cross subsidy which is a vital requirement of tariff policy and MYT Regulations.

16. Audit of loss making feeders

In DHBVN, there are a high no of feeders, both urban and rural, on which the losses are consistently above 50%, but the licensee has not bothered to get energy audit of such feeders done and take suitable measures to curtail the same despite numerous directives of the Commission on the issue. The Commission had further viewed this lapse on the part of licensee very seriously and had directed to file report on the status of losses on each of these feeders and also prominently display them on their website within 3 months with detailed reasons for non-compliance of the Commission’s directives.

However, despite all these warnings, nothing has been done by the Discom. Commission must therefore, invoke Section 142 of the Electricity Act, 2003 and take stringent action against the discom.

17. Cost of Industrial power in Haryana

Hon’ble Prime Minister Mr. Narendra Modi had unveiled his plan of “Make in India” and has focused on reviving the manufacturing sector of India which is witnessing stagnancy and de-growth in last 10 years. He has taken the target of 10% industrial growth in next five years; same has also been incorporated by the ruling party’s Haryana Election manifesto.

The Commission would kindly appreciate that as the State industries have to compete in the National/International markets, they need to get assured, cheap, reliable and un-interrupted power at competitive rates. However, during last 3-4 years, the power tariffs in State of Haryana to industry has been enhanced exponentially,

especially for industrial consumers as can be seen from the various orders of the Commission.

The current energy cost of Rs 6.15 per unit of KVA to industry at 11 kV voltage level and taking into consideration the associated costs of fixed charges, PLEC, FSA etc, the overall industrial tariff is amongst the highest as compared to the industrial tariffs of various neighboring states.

The power cost constitutes approx. 10-15% of manufacturing cost on an average for industry and its percentage of manufacturing cost is much higher for power intensive industries. Hence, this higher cost of power is resulting in industry of Haryana state becoming sick, non-competitive as their production cost is higher by 4-5% than other States on an average. The state of Haryana is witnessing very low industrial growth of <1% in recent years as compared to 5-10% being witnessed in the period from 2006-10.

This high cost of power being charged to industry are attributable to various malpractices, mismanagement, inefficiency and incompetency of DHBVN which should not be allowed to be passed on to the consumers of Haryana, and especially the industry which are an engine of economic growth.

It is our considered opinion that to enable industries to operate in Haryana in this competitive environment, there is a strong case to reduce the industrial tariff by a minimum of Rs. 2/- per unit. It is also relevant that as per Media report (PTI dated 4th March 2017) DHBVN has achieved book profit of Rs. 78 Crores in the first half of this fiscal (FY 2016-17) and has projected the saving of Rs. 766 Crores in interest cost on account of UDAY Scheme for FY 2016-17 as the liability has come down to Rs.1005 Crores for this year.

Commission is therefore requested to carry out due diligence of above submissions and take necessary steps to reduce rationalize the charges for industrial power by a minimum of Rs. 2/- per Unit.

18. Unjustified Payment of wheeling charges from OA Consumers for power drawn from energy exchange:

OA Consumers are paying wheeling charges at Rs. 0.71/kWh on Power drawn from energy exchange. They are already paying fixed charges on the entire Contract

Demand. Therefore, there is double recovery from open access consumers and thus wheeling charges should not be levied on OA Power drawn from energy exchange.

19. Refund of Fuel Surcharge (FSA)

The Commission had ordered that the recovery of FSA pertaining to the FY 2014-15 shall be stopped forthwith and in case any FSA amount pertaining to the FY 2014-15 has been recovered after 31.03.2016, the same shall be quantified and intimated to the Commission by the Discom within 15 days from the date of this Order.

In compliance to the above directives, DHBVN has mentioned in its ARR petition that FSA pertaining to FY 2014-15 has been stopped w.e.f. 1.09.2016 vide Sales Circular No. D-27/2016. However, it has yet to refund the FSA of Rs 0.17 per unit which was illegally recovered by the Discoms in the period from November 2014 to March 2015.

We request HERC to give suitable directions to the DISCOM on the subject.

In view of the above, we, the industry of Haryana look forward for your kind intervention in order to save industries from the present stalemate created due to the unwarranted attitude of the DHBVN and provide relief. Commission must therefore, take a judicious, conscious and decisive view of the situation and try to salvage industry out of the rut of power menace. It must consider steps to facilitate the energy supply to industry and solve the various operational issues plaguing the industry.

Discoms Reply

1. Distribution Losses

It is submitted that the Government of India has notified Ujwal Discom Assurance Yojana (UDAY) scheme for operational and financial turnaround of power distribution companies (DISCOMs), on 20th Nov 2015 under which State shall take over 75% of Discom debt as on 30th September, 2015 over two years - 50% of Discom debt shall be taken over in FY 2015-16 and 25% in FY 2016-17. It is pertinent to mention that the UDAY projections are based on certain losses considered for operational and financial turnaround of the DISCOMs. The Nigam submits that, DHBVN is mandated to achieve the loss trajectory as per the UDAY MoU which is as under:-

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
AT&C loss (%)	25.22%	22.48%	18.76%	15.00%
T&D loss (%)	24.46%	21.70%	17.94%	14.14%

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

Moreover, DHBVN AT&C loss for financial year 2016-17 till Dec is 22.32% against the target of 22.48% for FY 2016-17. Thus the Discom is well within the UDAY target.

1. Employee Expenses

The Nigam submits that the employee expenses for FY 2017-18 are computed as per the HERC MYT 2012 regulations. The increase in the employee expense for FY 2016-17 and FY 2017-18 is on the account of impact of 7th pay commission.

Furthermore, the per unit employee expenses, Haryana's per unit employee expense is 0.396 which is relatively less than neighboring states

2. R&M Expenses

The Nigam submits that the Discom has projected R&M expenses, as per the formula defined regulation 57.3 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.

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

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.

- ' $INDX_n$ ' means the inflation factor for the n th year as defined herein after.

Furthermore, it is pertinent to mention that the repair and maintenance work has been increased in view of betterment of the operation of the Nigam and thus providing interrupted power supply and lower breakdown. Special power has been given to SDOs operation for two months with special emphasis on maintenance of transformers, to ensure minimal DT failure and smooth power supply during forthcoming summer. Nodal officers have been appointed to implement, monitor and report the maintenance of DTs.

3. A & G expenses

It is submitted that while estimating the A&G expenses for a particular year, the Discom has to follow the postulates of the HERC MYT Regulations 2012. With regards to A&G expenses of FY 2015-16, it is submitted that the same is based on actual audited accounts of FY 2015-16. Further, during the Truing up exercise 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.

4. Non-Tariff Income

It is submitted that the power supply by a distribution licensee is made for a whole month and then bills are issued after the meter readings are taken. 15 days' time is given to the consumers for making payment of the bills and thus it is almost two months before the payment can be received by the licensee after supplies have started and that the collections of the last two months of the previous year will be collected during first two months of the current year and thus the collections are for a period of 12 months in a year.

The above assertion is vindicated by the judgments passed by various courts of law. The Judgments are as follows:

The Hon'ble APTEL vide its judgment over Appeal No. 223 of 2006 dated October 4, 2007 in the matter of M.P. Electricity Consumers' Society Vs Madhya Pradesh Electricity Regulatory Commission has agreed to the non-inclusion of the Delayed Payment surcharge while calculating the ARR.

Analysis and Decision:

13. On a consideration of contentions of all parties, we are inclined to agree with the decision of the Commission to not include delayed surcharge revenue in the ARR in view of the fact that the working capital amount has been reduced to the

bare minimum, 100% collection is not happening as of now, and therefore, to meet its cash requirements, the Discoms will have to borrow from Banks to compensate for the outstanding payments from consumers.

Further, the Hon'ble Aptel vide its judgment over Appeal No. 153 of 2009 dated 30th July, 2010 in the matter of North Delhi Power Ltd. Vs Delhi Electricity Regulatory Commission has agreed as hereunder:

The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers. The late payment surcharge is only if the delay is more than the normative credit period. For the period of delay beyond normative period, the distribution company has to be compensated with the cost of such additional financing.

Further, the Hon'ble Aptel vide its judgment over Appeal No. 142 & 147 of 2009 dated 12th July, 2011 in the matter of BSES Rajdhani Power Limited Vs Delhi Electricity Regulatory Commission has agreed as hereunder:

Submissions by the Appellant (BSES Rajdhani Power Limited):

4.5. The amount earned on account of late payment surcharge considered as part of revenue: The State Commission has considered the amount of Rs. 31.77 crores earned on account of Late Payment Surcharge as part of revenue while truing up the Annual Revenue Requirement for FY 2007-08. The MYT Regulations allow working capital on a normative basis to take care of normal time taken in payment of bills by the consumers within due date. The Appellants have to arrange additional funds for default in payment by the consumers in actual practice which is not covered in the working capital. According to the Appellant this issue has been covered by this Tribunal's Judgment 2010 ELR (APTEL) 0891 in the matter of North Delhi Power Limited vs. DERC

Judgment by the Hon'ble Tribunal:

14.1. This issue had already been decided by the Tribunal in its Judgment dated 30.7.2010 reported as 2010 ELR (APTEL) 0891 titled as North Delhi Power Ltd. vs. DERC. The relevant extracts of the Judgment are reproduced below:

"Only interest income on surplus funds to the extent of delayed payment surcharge and interest on consumer security in excess of the rates specified by the Commission should be considered as non-tariff income for deduction in ARR. Also the interest income on consumer's share of incentive on over-achievement of AT&C losses need to be deducted from ARR. However, the Appellant has argued that he has factored the interest income while computing the carrying cost on the revenue gap. Consequently, the carrying cost is lower to that extent. When the benefit of the same has already been passed on to the consumer, the same cannot be passed on to them by way of interest cost. However, in order to

*correctly determine the ARR as per the Tariff Regulations, the interest income on delayed payment surcharge and difference in interest rate on consumer security with respect to that specified by the Regulations may be considered as non-tariff income to be deducted from the ARR. Also interest on consumer's share of incentive on over-achievement of AT&C losses has to be deducted from ARR. The Commission will compute the interest income for which credit is to be given to consumer from total interest income. Accordingly, adjustment may be made in carrying cost on the revenue gap claimed by the Appellant to avoid double deduction of the interest income on this account in the ARR. On the remaining surplus fund on Retail Supply Tariff the benefit of interest income is to be retained by the Appellant on account of return on equity earned, overachievement in AT&C losses and efficiency in controllable parameters, working capital, etc. invested in mutual funds/banks. **The State Commission cannot erode the benefit to be derived by the distribution company by considering such interest income as a part of the non-tariff income***

This issue is accordingly decided in favour of the Appellant.

5. Power purchase costs

The reply towards considering the distribution losses has already been submitted in the submissions given for the earlier points and are not repeated here for the sake of brevity.

6. Return on Equity

The norms set by MYT Regulations, notified by the Commission dated 05.12.2012.

The relevant extracts from MYT Regulations, in the concerned matter are as follows:-

20. RETURN ON EQUITY

20.1 The rate of return on equity shall be decided by the Commission keeping in view the incentives and penalties and on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty .

20.2 Return on equity shall be allowed on equity employed in assets in use considering the following and subject to regulation 20.1 above:

i. Equity employed in accordance with regulation 19.1 and 19.2 on assets (in use) commissioned prior to the beginning of the year; plus

II. 50% of equity capital portion of the allowable capital cost for the assets put to use during the year.

Provided that for the purpose of truing up, return on equity shall be allowed from the COD on pro-rata basis based on documentary evidence provided for the assets put to commercial operation during the year.

20.3 Return on equity invested in work in progress shall be allowed from the actual date of commercial operation of the assets.

20.4 There shall be no Return on Equity for the equity component above 30%”.

It is submitted that 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.

7. Supply Voltage wise and consumer category wise distribution and AT&C losses:

Nigam submits that the Commission in line with the APTEL judgment dated 30.05.2011 in Appeal No. 102,103 & 112 of 2010 had adopted the methodology suggested by the Hon'ble APTEL in the ibid judgment dated 30.05.2011 for broadly working out voltage wise CoS for the FY 2015-16. However, the Nigam further submits that for computation of CSS, the Commission has considered the amended National Tariff policy which has provided a revised CSS formula. In addition, the Nigam submits that once the study for carrying out voltage wise CoS is accomplished, the findings related to the same shall be furnished.

8. Incentivization for industries for going Solar

The Nigam submits that, providing incentive to roof top solar plant for industry is as per Government of Haryana's direction. DHBVN is not authorised to increase the current rebate of Rs. 0.25/unit to Rs. 1/unit and the matter pertains to the Commission.

9. Fixed Charges

The Nigam submits that the introduction of fixed charges for certain consumer categories is in line with the two-part tariff principle adopted by almost all the State Electricity Regulatory Commissions (SERCs) across the country. A certain amount of fixed charges has to be charged from consumers as a means of recovering the investment already made by the Discoms assuming a certain minimum demand. Especially for industrial consumers, distribution licensees have to undertake significant investment in the attempt to ensure an adequate system in place to cater to the

collective demand of the industrial units, if need be. Hence, fixed charges on the basis of connected load/contract demand are legitimately essential.

Almost all State Electricity Regulatory Commissions (SERCs) across the country have already made the progressive move to a two-part tariff. This is because fixed charges are essential for allowing recovery of certain costs of fixed nature which are borne by the licensee irrespective of the quantum of energy purchased by end consumers. It is important to note that only a part of the fixed costs incurred by the licensees are recovered through fixed charges/demand charges from consumers.

10. Non-compliance to the directives of the Commission

i) Cost of supply

It is submitted that 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. It is submitted that the non-submission of category wise cost to serve will not invalidate the tariff fixation exercise by the Commission. It is submitted that the Commission is empowered to determine tariff on a suo-moto basis as well.

Moreover, the Discoms seeks to rely on the following judgments towards revision in tariff by the Commission:

- Judgement dated 11.08.2011 in Appeal No. 204 of 2010, FIA & Ors. v. HERC & Ors. – paras 6.8, 7.10 and 7.14 – The State Commission can increase tariff even in a suo moto proceedings.
- Judgement dated 11.11.2011 in OP No. 1 of 2011, Tariff Revision – paras 21, 32-33, 56, 62, 65 (ii) – Commission can do suo-moto determination of tariff in absence of filing of tariff petitions by licensees and can take into account the average cost of supply. Also financial viability of the distribution licensees is to be maintained.
- Judgement dated 17.01.2012 in Appeal No. 11 of 2011, Northern Railways v. HERC & Ors., para 49 – non determination of category wise cost of supply will not make the tariff determination illegal.
- Judgement dated 31st May, 2013 in Appeal No. 179 of 2012, Kerala High Tension and Extra High Tension Industrial Electricity Consumer's Association v. KSERC & Anr. – paras 20,22,24, 30-32, 41-43, 47, 49 – Average cost of supply permissible. Principles reiterated.

- Judgement dated 28.11.2013 in Appeal No. 239 of 2012, Amausi Industries Association & Ors. v. UPERC & Ors. – paras 90-91 – Commission not bound by the figures of the licensee.

ii) **AP Subsidy**

The Nigam submits that, the direct transfer of RE subsidy to AP Consumers in their Aadhar linked bank account is a matter of decision of the State Government.

iii) **Replacement of defective Meters**

All possible efforts are being made by the Nigam to replace the defective meters. The Nigam has replaced substantial single phase meter and three phase meter in the current financial year as well as in the previous financial year as under:-

	Mar-15 to Dec-15		Mar-16 to Dec-16	
Area	Single Phase	Three Phase	Single Phase	Three Phase
Urban	36061	9404	46325	9426
Rural	34315	1734	45200	1416
Total	70376	11138	91525	10842

Moreover, the meters becoming defective and their replacement is an ongoing process.

iv) **Reporting of Circle wise losses**

The Nigam submits that the circle wise losses and other important operational parameters of DHBVN are available on website at the following link <http://www.dhbvn.org.in/web/portal/commercial>. Moreover the figures are updated on quarterly basis. Also the other details of all the concerned officers are also available at the website.

v) **Non replacement of Electro-mechanical Meters:**

The Nigam submits that the meter replacement of Electromechanical meters to electronic meter is one of the main focus under LRP scheme for urban and MGJG under rural area. But it is pertinent to mention here that the quantum of the Electro Mechanical meters are far more in rural area as compared to urban area. Priority of replacing Electro Mechanical meter is for urban area, as meter are replaced more under LRP scheme in the urban area. The comparison of the progress is as under:-

	Electro Mechanical Meter present at the start of the year	Electro Mechanical Meter replaced (Apr-Dec)
FY 2015-16	4,23,345	47,804
FY 2016-17	3,61,853	38,600

vi) **Issuance of bills and realization of payment thereof in urban areas**

The Nigam submits that, the bill of all category can be downloaded from Discom's website and also payment can be done through the same by using payment gateway to facilitate consumer.

vii) **Directive on RPO Obligation**

For the FY 2016-17, the detail of RPO met are as under:

	Target in %	Energy consumption FY 2016-17.	Target in MUs	Target achieved till Feb. 17	Shortfall (-) / Excess (+)
		MUs	MUs	MUs	MUs
Solar	1	46827	468.27	134.42	-334.85
Non-solar	2.75	46827	1288	1793	505*

Justification for Solar RPO shortfall in FY 2016-17

HPPC was not able to meet solar RPO targets for the FY 2016-17 due to the following reasons:

1. 23MW from four developers was expected to be commissioned in the FY 2016-17 through Independent Power Producers selected through competitive bidding which could have generated 38 MUs in a year. HERC vide order dated 4.10.2016 did not approve PPAs. Consequently, the bidders challenged the said order in APTEL which is pending.
2. Further, HPPC issued LOI for 165 MW solar plants but PPAs were not approved by the State Commission which could have generated 270 MUs in a year. HERC vide order dated 4.10.2016 did not approve PPAs. Consequently, the bidders challenged the said order in APTEL which is pending.

Action plan to meet Solar RPO targets

1. HPPC has filed a petition in HERC to purchase 250 MW solar power through SECI under VGF scheme @ Rs. 4.50/kwh.
2. HPPC has filed a petition to purchase 353 MW solar power through bundling with 200 MW thermal power of Singrauli TPP from NTPC.
3. HPPC is going to float NIT to purchase 300 MW solar power through competitive bidding.

4. **HPGCL Projects (65.2 MW) :** HPGCL is planning to have 65.2 MW Solar Power Projects at the waste land of its projects located at Faridabad, Panipat & Hisar Haryana DISCOMs will purchase this power to meet its RPO obligation.
5. **Rooftop Solar power:** HAREDA in its Solar Policy 2016 has envisaged to purchase 1600 MW solar rooftop power till FY 2021-22.

As far as Solar Rooftop is concerned, HAREDA is taking initiative to encourage solar rooftop projects. However, for existing solar rooftop projects, the data regarding RPO is being taken up from CE Commercial of the DISCOMs/ HAREDA.

Non-solar RPO

HPPC has met the Non-solar RPO targets for the FY 2016-17 alongwith 505 MUs against the backlog of 1000 Mus from FY 2011-12 to FY 2014-15

Action plan to meet the Non-solar Targets:

- a. HPPC is going to float NIT to purchase 200 MW wind power through competitive bidding.
- b. M/s K2 Power Gen Pvt. Ltd. has assigned the MOU's during the "Happening Haryana Global Investor Summit" for setting up of 2000 KW Capacity Grid Connected Biomass Gasifier Power Plant proposed in State of Haryana on self-identified basis. The petition to seek in-principle approval to sign PPA with the firm has been filed in the HERC.
- c. M/s RSL Distilleries Pvt. Ltd. offered to sell 3.5 MW power to be generated from 5.5 MW biomass (non bagasse) cogeneration power plant proposed at Karnal, the proposal of firm is under evaluation in HAREDA and the SCPP has approved in –principle to purchase this power.
- d. HPPC has signed PPA with M/s Naraingarh Sugar mill for 25 MW bagasse based power plant and M/s Gemco Biomass based plant for 7 MW.
- e. HAREDA is in the process of floating NIT to purchase 50MW of straw based biomass power which will be purchased by HPPC to meet non-solar RPO.

viii) Power drawl under UI Mechanism

DHBVN submits that it must be noted that the overdrawal of Power under UI occurs sporadically, and the overdrawal occurs only to ensure that the supply to the consumers is not intermittent in nature. However, the Nigam additionally submits that,

to optimize the power scheduling and to minimize Power Purchase Cost, REC Power Distribution Company Limited, a subsidiary of REC has been engaged in creation of a demand forecasting cell.

11. Standards of performance and reliability indices

It is submitted that the Commission had notified the Haryana Electricity Regulatory Commission (Standards of Performance for the Distribution Licensee) Regulations, 2004 dated 16 July 2004 which were further amended vide the Haryana Electricity Regulatory Commission (Standards of Performance for the Distribution Licensee) 1st Amendment, Regulation, 2007 dated 11th September 2007.

The 'standards of performance' regulations provide for payment of compensation to the consumer who faces inconvenience due to discom in delivery of service within the specified time period.

However, it is submitted that unless it is shown that specific standard is violated and that on account of such violation, loss had occurred, the Appellant cannot claim for compensation.

Section 57(2) provides for a case by case determination of compensation. Such compensation has to be paid to the affected person. This will make it clear that the State Commission will have to determine on the basis of allegation that a particular standard of performance had been violated, as to how and what extent the person has been affected due to such violation.

The reading of this provision in its entirety would make it evident that a person who made a prayer for compensation in the petition under section 57(2) of the Act, 2003, has to satisfy two requirements:-

- ix) The licensee has failed to maintain the particular standard of performance prescribed by the State Commission, specified under sub section 1 of Section 57 of the Act, 2003.
- ii) On account of such failure, he has suffered a loss, which needs to be compensated.

In the absence of the any particular case of failure to follow the particular standard of performance, the question of compensation due to such failure will not arise.

12. New supply connections

The Nigam submits that the process of release of new connections is completed within the time period of less than a month provided that the all the prerequisites are complete viz. technical feasibility, clearance from other department, test report submission, Inspection, etc. the prerequisites are as per the Electricity Supply code, regulation 29/2014, issued by The Commission. Until all the prerequisites are checked and completed connection can't be released. However, Pendency of application are on downward trend, with current pending application of 30,269 with load applied 910.69 MW. Furthermore, process re-engineering is underway for speedy release of connections viz. online filling of application for new connections / Load enhancement / Load reduction even for load up to 20 kW. Also, Proper monitoring mechanism shall be put in place to ensure expeditious release of connections.

13. Penalty for contraventions

It is submitted that the Discoms endeavor to comply with the directions of the Commission and consequently, the Discoms have been providing details to the Commission regarding compliance of the directives. However, in case there has been/is required a delay/lag over successful compliance of a directive by the Discoms, the Commission is intimated regarding the same and necessary discussions are done considering the rightful significance of the matter and compliance of the same.

14. Tariff philosophy

It is submitted that for evaluating the cross subsidy levels, the Discoms have already moved towards assessing the category wise cost of supply to various consumer categories which shall be submitted to the Commission as and when the study gets completed with accurate and valid results. Till such time, the Discoms have considered the approved category wise cost of supply details, cross subsidy generated from cross subsidizing categories as evaluated by the Commission for respective years.

15. Audit of loss making feeders

The Nigam submits that the audit of urban and rural feeders are on priority. Various steps have been taken by the Nigam to reduce the Losses with the specific focus on long term improvement in the power quality and reliability. Various strategies are being adopted in urban and rural areas based on their loss level. The steps taken for reduction of technical and commercial losses are as follows:-

- High loss Feeder are being identified and the Sanitization work which is under progress and is being monitored regularly. All the Circle (Op) teams have been instructed to speed up in order to complete the pending work so that the loss level would be brought down to normative level.
- Consumer Indexing for RAPDRP towns, non-RAPDRP towns, & rural areas is under progress which would help the Nigam to calculate the losses from the billing database and further pin point the losses incurred at DT level which will eventually help the Nigam to optimize its resources and making efforts towards effective loss reduction.
- Feeder Sanitization Activities are carried out geographically as: (1) Urban Feeder Sanitization & (2) Mhara Gaon Jagmag Gaon Scheme for selected RDS feeders. In both the plans, Nigam has focused on the following four major activities:
- Improving accurate reading of energy meters via replacement of Defective, faulty, Burnt, Glass broken, no display, inconsistent, electromechanical, and old version meters.
- Minimizing occurrence of theft of energy via relocation of meters which are located inside the Consumer premises and are prone to theft of energy.
- Preventive measures to eliminate direct theft of energy via replacing ACSR conductors, bare conductors present in theft prone areas with LT AB Cables to eliminate direct theft of energy.
- Releasing of New Connections: Unauthorized colonies, connections with direct theft, pending connections, un-electrified households are being provided a new connection to bring them in to billing net.

As the main focus of loss reduction is on urban feeders the number of urban feeders having loss more than 25% has been substantially reduced to 170 Nos this fiscal from 206 Nos in the last fiscal.

16. Cost of Industrial power in Haryana

The Nigam submits that, as the tariff rationalization is based on the overall approved annual revenue requirement of the Discoms, out of which around 80% corresponds to the net power purchase cost. The Commission has a two-sided responsibility to protect the financial interests of the distribution licensees and to

balance the interests of various stakeholders. The utilities have reached to the condition of financial distress owing to the following reason:

- No increase in consumer tariff in spite of continuous increase in cost of power purchase and average cost of supply.

Further, the Commission vide its Order dated 1.08.2016 and Order dated 03.03.2017 has already given relief to the consumers by significantly reducing the FSA for each category of consumers.

17. Unjustified Payment of wheeling charges from OA Consumers for power drawn from energy exchange:

The Nigam submits that, the wheeling charges are being levied on the consumers for the use of distribution network of the Licensee irrespective of the source from where the power is drawn by the open access consumers. Further, the wheeling charges from OA consumers is approved by the Commission.

18. Refund of Fuel Surcharge (FSA)

The Nigam submits that in regard to the said FSA of 17 paise per unit, it is mentioned that the recovery @ 17 paise per unit has been adjusted by the Commission while calculating the outstanding FSA in its Order dated 19.03.2015.

Moreover, the Nigam further submits that through HERC Order dated 03.03.2017, the Commission, orders that the recovery of these FSA's shall continue at the rate determined above till such time i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter till the total amount as determined in the present Order is fully recovered. The same is being implemented in DHBVN through sales circular D14-2017 dated 28.03.2017

2.3.4 Comments on True-up petition of DHBVNL for FY 2015-16 before HERC by M/s Faridabad Industrial Association

1. O & M Expenses

As per 13.2 of MYT regulation 2012:

“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.”

As given at 2.4.5 of the True-up petition of DHBVNL, the comparison of approved O & M expenses by HERC in its order dated 7 May 2015 and actual being claimed by DHBVNL for FY 2015-16 is given below:-

Table 4: O&M Expenses for FY 2015-16 (In Rs. Crores)

Sr.	Particulars	Approved	Actual	Difference
1	Employee Expense	518.52	637.69	(119.17)
2	Administration & General Expense	60.46	72.13	(11.67)
3	Repair & Maintenance Expense	98.07	35.64	62.43
4	Terminal Liability	150	392.00	(242.00)
	Total	827.05	1137.46	(310.41)

It indicates that DHBVN has spent Rs 119.17 cr more on employee expenses and 11.67 more on A & G expenses which need to be disallowed by the Commission as 57.3 of the regulation clearly indicates that:

“

57.3 Operation and Maintenance Expenses

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_n – Repair and Maintenance Costs of the Distribution Licensee(s) for the nth year;

EMP_n – Employee Costs of the Distribution Licensee(s) for the nth year excluding terminal liabilities;

A&G_n – Administrative and General Costs of the Distribution Licensee(s) for the nth year;

The above components shall be computed in the following manner.

(a) $R\&M_n = K * GFA * INDX_n / INDX_{n-168}$ 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_n’ 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_n – 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:

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

Note 1: *For the purpose of estimation, the same INDX_n value shall be used for all years of the control period. However, the Commission shall consider the actual values of the INDX_n 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.*

Note 2: *Any variation in employee cost and A&G cost on account of reasons beyond variation in INDX_n shall be subject to the incentive and penalty framework specified in regulation 12.*

Note 3: *As and when any material price index specific to power sector or a more relevant Index becomes available, the same shall replace the Index used for working out R&M cost.*

Note 4: *Terminal liabilities shall be approved as per actual expenditure incurred by the distribution licensee or established through actuarial valuation for the ensuing year.*

Note 5: *O&M expenses made on account of extraordinary situations (if any) shall be submitted to Commission for its approval. Such expenses shall be filed separately and will not be subjected to incentive and penalty framework. The approved amount by the Commission shall be trued up in the annual performance review.*

Note 6: *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 annual performance review.*

(c) X_n is an efficiency factor for nth year

The Value of X_n will be determined by the Commission in the MYT order for the control period.”

In line with above regulations, the Discom should have given a clear explanation and calculation of expenses of all the components of O & M expenses and a mere mention of this amount in the audited accounts is not enough. They must take a base value of employee expenses, R &M expenses and A &G expenses, apply inflationary index and the efficiency factor to arrive at the expenses which they wish to get approved from the Commission.

In the absence of any calculation and justification, Commission may therefore, allow total O & M expenses of Rs 827.05 as approved in the tariff order dated 7th May 2015 for FY 2015-16 against Rs 1137.46 Cr as claimed by the DHBVN in line with MYT Regulations while considering true up for FY 2015-16.

Further it is observed that actual R & M expenses of DHBVNL are very low at Rs 35.64 cr against the approved figure of Rs 98.07 cr as per the tariff order dated 7 May 2015. It is found that 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 study on “Various power distribution models in India” conducted by CRISIL Infrastructure Advisory for the High level panel (HLP) constituted under the Chairmanship of Shri V.K. Shunglu highlighted that one of the reasons behind better performance of the private distribution licensees has been IT implementation, adequate expenditure on R&M and judicious expenditure on employee cost.

A comparison of these expenses with other government and private distribution companies indicates that while the private distribution licensee have been spending about 25% to 35% of their O&M expense on repair and maintenance of their network, the majority of DHBVN's O&M costs are directed towards employees and administration.

We humbly request the Commission to direct the licensee to work on improving its operational performance by judicious expenditure in O&M cost for supplying quality power to the consumers.

2. RPO Obligation

At 3.4.10 (c) of the distribution tariff order dated 7 May 2015, and the Table 3.33 of this order, the Commission had stipulated the Renewable energy purchase quantum as 402 MUs.

Also as given at Table 3.34 of the order dated 7 May 2015 and and the note below it, Commission had considered the total shortfall in solar and non solar RPO from 2011-12 to 2015-16 as 3691.08 MUs. Commission had further directed that the Discom should meet the solar and non solar RPO as provided in HERC RE Regulations and 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 would be penalized accordingly, which is fully supported by MYT regulations 2012 also. Regulation 59.8 of MYT Regulation 2012 clearly stipulates that distribution license is obliged to follow renewable energy regulations and is to be penalized accordingly in case of any shortfall.

As can be seen from the DHBVN True up petition, there is hardly any energy purchase from renewable energy sources and the DHBVN has miserably failed in its obligation of RPO which has now been repeatedly happening over the years.

The Commission is therefore, requested to treat the violation in accordance with the provisions of regulation 65, 66 and 67 on renewal energy purchase and penalize the DISCOM accordingly.

3. Power purchase Costs

As per 2.3.5 of DHBVN petition, DHBVNL has asked for a true up of power purchase cost of Rs 12500.4 Cr for FY 2015-16. It has indicated the average actual per unit cost of power as Rs 4.57 against the approved average power purchase cost of Rs 4.47 per unit by HERC in its tariff order dated 7th May 2015. DHBVN has attributed the higher power purchase costs to the increase in power costs from various sources and has not given any cogent explanation for the same.

It may be noted that as per MYT regulations 8.3 (b) of 2012, governing the Multiyear tariff frame work, power purchase cost for short term power and 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.

Referring to table 3 of true up petition of DHBVNL, it is observed that its actual per unit power purchase cost for FY 2015-16 has gone up though total power purchase quantum in the state of Haryana has come down by 10903.65 MUs for both DISCOMs during FY 2015-16.

A close scrutiny of Table 3 of true up petition of DHBVNL indicates that higher actual power purchase cost for DHBVNL of Rs 4.57 per unit is mainly on account of drawl under UI at an average rate of Rs 7.02 per unit which is much higher than average price of Rs 4.46 per unit approved by Commission as total average power purchase price.

Further referring to note below table 3.25 of the order dated 7 May 2015, which is reproduced below:-

“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.”

It is clearly stated by the Commission that under no circumstances, power purchase price during drawl under UI Mechanism should exceed the average power purchase price. Also the following clauses of the Commission’s order dated 7 May 2015 clearly lay down the treatment of drawl of power under UI Mechanism:

“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.

“

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.”

“3.5.5 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.”

The Commission had clearly not allowed any short term power purchase or drawl under UI mechanism for estimating power purchase cost of DHBVN for FY 2015-16. Also Regulation 60.3 of HERC Tariff regulation 2012 on short term power requirements, 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. In its

order dated 1 August 2016 also, the Commission had made critical observations on its UI drawl by the DHBVN s as given below:-

“The Commission observes that the Discoms have been drawing power under UI mechanism at a very high rate. In the FY 2014-15 power has been drawn under UI mechanism at a cost of over Rs. 7.50/Kwh. This has been viewed very seriously by the Commission and for the FY 2016-17 the Discoms are directed to manage the UI drawls more efficiently and the Commission may not approve the power purchase cost of such drawls at a rate higher than the average cost of power purchase, any loss on account of that shall be borne by the Discoms.”

In view of the above, it is strongly requested that any overdrawl of power under UI at a rate higher than the average power purchase rate must be disallowed by the Commission in line with its own earlier stand and in line with the statutory provisions as given in the regulations.

The Commission is therefore, requested not to consider and allow any power purchase cost incurred on account of short term power purchase or power under UI for the FY 2015-16. Commission is also requested to disallow any illogical and imprudent procurement of power resulting in trading loss and true up ARR for FY 2015-16 only after adjusting the FSA already collected from the consumers.

It may further be noted that power purchase cost of DHBVNL is considerably higher than that of some other DISCOMs like MP and Rajasthan as a percentage of their total ARRs. Where as in case of DHBVN, it is generally about 80% of the total ARR, it is about 70% of their respective ARRs in M.P and Rajasthan. The Model tariff regulations of Forum of Regulators also have suggested detailed power purchase planning by distribution licensee on long-term, medium-term and short term basis. On its part, Commission also had made the similar observations as given below in tariff order dated 30th March 2013:

“The Commission is of the opinion that excess availability of power is due to mismatch between the availability of power and the ability of the licensees to supply the same to the consumers in an efficient manner in the state. The interstate sale of power should be managed in such a manner so that the consumers of the state are not made to suffer loss due to this inability of the licensee. In case the power procurement planning is done in an efficient manner, the licensees should even be able to subsidise the consumers of Haryana by selling the excess power to consumers outside the state at remunerative rates. ”

The Commission is therefore, 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.

4. Employee Expenses

At 2.5.3 of its petition, DHBVNL has shown actual employee expenses of Rs 637.69 cr for the FY 2015-16 and has requested for the true up of these expenses. However, as per the prevailing regulations 2012 of HERC, Commission may kindly approve only the expenses as approved in its tariff order dated 7th May 2015, which is Rs 518.52 Cr and variation as permissible only to the extent of variation in the inflationary index and efficiency factor.

The relevant extracts from the tariff regulations on employee costs are given below:-

$$(b) \text{ EMPn (excluding terminal liabilities) + A\&Gn = (EMPn-1+A\&Gn1)*(INDXn/ INDXn-1)}$$

Where,

INDXn – 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:

$$\text{INDXn} = 0.55 * \text{CPI}_{n-1} + 0.45 * \text{WPI}_{n-1}$$

Note 1: For the purpose of estimation, the same INDXn value shall be used for all years of the control period. However, the Commission shall consider the actual values of the INDXn 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.

Note 2: Any variation in employee cost and A&G cost on account of reasons beyond variation in INDXn shall be subject to the incentive and penalty framework specified in regulation 12.”

Employee expenses are the controllable expenses and as can be seen from above, any variation in employees costs from the approved figures is allowed only to the extent of variation in inflation factor.

The Discom should have given a clear explanation and calculation of expenses of Rs 637.69 cr for employee expenses and a mere mention of this amount in the audited accounts is not enough. They must take a base value of employee expenses,

apply inflationary index and the efficiency factor to arrive at the expenses which they wish to get approved from the commission.

In the absence of any calculation and justification, Commission may therefore, allow an employee expenses of only Rs 510.43 Cr (after capitalization) as approved in the tariff order dated 7 May 2015 for FY 2015-16 against Rs 637.69 Cr as claimed by the DHBVN in line with MYT Regulations.

5. Administrative & General Expenses

As per 2.7.2 of its true up petition, DHBVNL has requested for approval of net A & G expenditure of Rs 72.13 cr 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 53.52 cr after deducting the expenses capitalized as Rs 6.94 Cr as per its order dated 7 May 2015 and variation as permissible only to the extent of inflationary index and efficiency factor may be permitted.

The Discom should have given a clear explanation and calculation of expenses of Rs 72.13 cr for A & G Expenses and a mere mention of this amount in the audited accounts is not enough. They must take a base value of A & G expenses, apply inflationary index and the efficiency factor to arrive at the expenses which they wish to get approved from the Commission.

In the absence of any calculation and justification, Commission may therefore, allow an A&G expenses of Only Rs 53.52 Cr (after capitalization) as approved in the tariff order dated 7 May 2015 for FY 2015-16 against Rs 72.13 Cr as claimed by the DHBVN in line with MYT Regulations.

6. Efficiency factor

Referring to 57.3 of the tariff regulations, following has been stipulated:

“57.3 Operation and Maintenance Expenses

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,

$R\&M_n$ – Repair and Maintenance Costs of the Distribution Licensee(s) for the nth year;

EMP_n – Employee Costs of the Distribution Licensee(s) for the nth year excluding terminal liabilities;

A&G_n – Administrative and General Costs of the Distribution Licensee(s) for the nth year;

The above components shall be computed in the following manner.

(a) $R\&M_n = K * GFA * INDX_n / INDX_{n-168}$ 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_n’ means the inflation factor for the nth year as defined herein after.

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

INDX_n – 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:

$INDX_n = 0.55 * CPI_n + 0.45 * WPI_n$.

Note 1: *For the purpose of estimation, the same INDX_n value shall be used for all years of the control period. However, the Commission shall consider the actual values of the INDX_n 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.*

Note 2: *Any variation in employee cost and A&G cost on account of reasons beyond variation in INDX_n shall be subject to the incentive and penalty framework specified in regulation 12.*

Note 3: *As and when any material price index specific to power sector or a more relevant Index becomes available, the same shall replace the Index used for working out R&M cost.*

Note 4: *Terminal liabilities shall be approved as per actual expenditure incurred by the distribution licensee or established through actuarial valuation for the ensuing year.*

Note 5: *O&M expenses made on account of extraordinary situations (if any) shall be submitted to Commission for its approval. Such expenses shall be filed separately and will not be subjected to incentive and penalty framework. The*

approved amount by the Commission shall be trued up in the annual performance review.

Note 6: *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 annual performance review.*

(c) X_n is an efficiency factor for n th year

The Value of X_n will be determined by the Commission in the MYT order for the control period.”

It is quite clear from the above that while calculating the O&M Expenses for the distribution licensee, efficiency factor of the licensee is to be applied and O&M Expenses will be calculated accordingly. The Commission has to decide the value of efficiency factor. However, no such value has so far been decided by the Commission and the same has not been taken in to account for calculating these expenses.

It is extremely important to link the expenses of the distribution licensee with the efficiency so as to incentivize his performance. Commission must therefore, decide immediate figures for efficiency factor and reflect them in the allowable costs for O&M Expenses.

7. Interest on working Capital and borrowings

As per 2.10 of true-up petition and table 8 of true up petition, DHBVNL has asked for the total interest and finance cost as Rs 1772.19 cr against the Commission approved figure of Rs 424.17 cr.

As per 8.3 (b) of MYT regulations 2012 notified by the Commission, interest and finance charges are a controllable parameter and cannot be allowed on actual basis. In the Commission's order dated 7 May 2015, the following has been provided by the Commission at 3.18:

“Interest on Working Capital

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.”

Against this approved figure of Rs 186 Cr, the Discom has claimed interest on working capital as Rs 1102.81Cr as per table 8 of the true up petition, which can not be allowed to be passed on and must be disallowed by the Commission.

Also 12.1 of MYT regulations provide for the following:

“12.1 Various elements of the ARR of the generating company and the licensee will be subject to incentive and penalty framework as per the terms specified in this regulation. The overall aim is to incentivize better performance and penalize poor performance, with the base level as per the norms / benchmarks specified by the Commission.”

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 22 of these regulations on working capital, the requirement of working capital is worked out by Commission after due diligence and considering various factors and any excess cost incurred on this is to be subjected to a penalty frame work and treated accordingly.

Hence, The Commission is requested to allow the interest and finance charges to the tune of Rs 424.17 cr only and the balance may be disallowed.

8. Return on Equity

As per 2.14.1 of its true up petition, DHBVNL has claimed a return on equity of Rs 203.80 cr for FY 2015-16. The Commission had not allowed ROE to the licensee on account of their poor performance and erosion of net worth due to accumulation of losses in its various tariff orders over the years. The relevant text from the order dated 30 March 2013 are as follows:

“3.16 Return on Equity

The accumulated losses of the two distribution licensees i.e. DHBVNL and DHBVNL have completely eroded their net worth including equity capital deployed in the business. The Commission, on several occasions, has emphasized the need for recapitalization of the state owned distribution companies and infusion of fresh equity by the State Government over and above the equity component of the annual incremental capital expenditure to be undertaken by the distribution companies to modernize and augment the distribution system to meet the increasing load and consumer base of the power utilities as well as their obligations to meet the standard of performance specified by the Commission in order to better serve the electricity consumers in Haryana. However, no progress seems to have been made in this direction. The return on equity either comes from the profit earned from the business in the form of dividend or from the accumulated reserves and surplus. In the present case there is neither any profit nor reserves and surplus. Further due to accumulated losses the equity capital stands completely eroded.

In view of the above facts, the Commission does not consider it appropriate to allow any return on equity in the FY 2013-14, as in the past, to the distribution licensees.”

Similarly in its tariff order dated 7 May 2015, the Commission had given the following ruling disallowing any RoE:

“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.”

Despite being denied return on equity in the various tariff orders over so many years because of poor performance of the discom, the licensee has again claimed ROE of Rs 203.80 Cr without any improvement in performance. 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 tariff regulations 2012 clearly stipulates that return on equity shall be decided by Commission on the basis of overall performance of the licensee, the extract are reproduced below :

“ 20.1 The rate of return on equity shall be decided by the Commission keeping in view the incentives and penalties and on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty .”

In view of the above, we request the Commission to take a judicious decision in the matter and disallow the RoE for FY 2015-16 in consonance with its own earlier tariff orders and the provisions given in the tariff regulations.

9. Expenditure due to other debts

At 2.16.1 of its True up petition, DHBVNL has claimed an expenditure of Rs 32.49 cr on account of other debts like miscellaneous losses, unrealized surcharge, written off amounts etc.

It may kindly be noted that 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 64 of regulations 2012 which is produced below:

“64 Bad and doubtful debts shall be allowed to the extent the distribution licensee has actually written off bad debts subject to a maximum of 0.5% of sales revenue. However this shall be allowed only if the distribution licensee submits all relevant data and information to the satisfaction of the Commission. In case there is any recovery of bad debts already written off, the recovered bad debts will be treated as other income.”

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 waive off 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 and there is absolutely no legal provision to sustain this claim, the Commission is, therefore, requested not to consider this expense in the ARR while truing up the costs for FY 2015-16.

10. Distribution losses & AT&C Losses

Referring to the 3.5 of the Commission's latest tariff order dated 1 August 2016, against a target of 21.35 % for AT &C Losses, the discom has indicated a figure of 25.23 % for FY 2015-16, which is an under achievement of 3.88%. Referring to the true-up petition of DHBVNL for FY 2015-16, DHBVNL has not indicated any data on the actual distribution loss and the AT &C Loss for FY 2015-16, which is the ultimate benchmark for the health of any distribution utility. This figure may even be higher than given above and DHBVN has not mentioned this figure in its true up petition despite the clear instructions of the Commission in its order dated 1 August 2016 as given below at 3.5:

“As specified under Regulation 12 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, any overachievement and underachievement of the loss trajectory and the collection efficiency specified by 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.”

Therefore, there is a clear cut short fall of minimum 3.88% on account of AT & C losses for the FY 2015-16 which is to be subjected to the penalty framework as stipulated in the 57.1(g) of MYT regulations 2012, which are reproduced below:

“(g) Any overachievement and underachievement of the loss trajectory specified by the Commission in the MYT order shall be subject to incentive and penalty framework specified in regulation 12. The distribution licensee(s) shall provide a statement to this effect in the mid-year performance review and true-up.”

This penalty for under achievement of losses by the DHBVN is to be levied in line with Regulation 12 of the Tariff regulations reproduced below:

“(d) Only for Distribution licensee

(i) Distribution losses - Applicable when actual distribution losses fall below or exceed the level specified by the Commission

(ii) Collection efficiency- Applicable when actual collection efficiency falls below or exceeds the level specified by the Commission

(iii) Recovery of arrears - Applicable when actual recovery of arrears of previous years falls below or exceeds the targets specified by the Commission

12.3 The gains / losses shall be computed item wise separately for each business. The computations shall be based on the data submitted by the generating company and the licensees in the application for mid- year performance review / true – up and audited annual accounts corresponding to the financial year.

12.4 In case of gain

The item wise gain shall be shared between the generating company or the licensee, as the case may be, and their respective beneficiaries in the ratio of 50:50. However, the sharing ratio of 50:50 may be revised to a maximum of 60:40 at the time of true-up during mid-year performance review / true-up. The manner of utilization of the additional 10% gain shall be specified by the Commission from time to time.

12.5 In case of loss

12.5.1 The item wise losses on account of controllable factors in case of a distribution licensee shall be dealt with in the following manner:

(a) The loss to the Distribution Licensee on account of Distribution losses, as may be admitted by the Commission after prudence check, shall be dealt with as under:

(i) One-third of the amount of such loss may be passed on as an additional charge in tariff over such period as may be specified in the Order of the Commission; and

(ii) The balance amount of loss shall be absorbed by the Distribution Licensee.

(b) The item wise losses on account of other controllable factors, unless otherwise specifically provided by the Commission, shall be borne by the distribution licensee. “

Commission is therefore, requested to allow only one-third of the loss on account of losses of DHBVN to be passed on to the consumers and the loss on account of two-third losses shall be absorbed by distribution licensee in line with 12.5.1 (a) ii.

It is also prayed that the Discom must be directed to state the actual and true figures for AT&C Losses, distribution losses and collection efficiency for the FY 2015-16 immediately and Commission must give a ruling on the quantum of penalty for any shortfall on these targets.

11. Collection Efficiency

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:

“ 57.2 Collection Efficiency

The norms for collection efficiency for the distribution licensee(s) shall be as under:

Distribution Licensee	2013-14	2014-15	2015-16	2016-17
DHBVN	98%	98.5%	99%	99%

Besides the collection efficiency, the Commission shall also monitor the recovery of arrears of previous years for which the Commission shall prescribe the targets and shall accordingly assess the performance of the licensee with regard to recovery of arrears.

Any over achievement or under achievement in respect of collection efficiency and recovery of arrears shall be subject to incentive and penalty framework as specified in regulation 12.”

As seen from above, collection efficiency of 99 % was specified by the Commission for FY 2015-16 for DHBVN. However, true up petition of DHBVN

provides no information in the petition regarding revenue billed and the collection efficiency for FY 2015-16. These figures are required to be provided by the licensee which then 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.

Commission is therefore, 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.

12. Non Tariff Income

DHBVN has submitted a non-tariff income of Rs 224.46 Cr for the year FY 2015-16 in its true up petition. It has not included an amount of Rs 79.08 Cr collected as delayed payment surcharge against the receivables of NTI. It has claimed that since these are the receivables from the consumers that are not received in time, and as there is a delay in receiving the revenue, the Nigam has to procure additional working capital. Therefore, the revenue received on account of delayed payment surcharges is not income of the Nigam and hence may not be a part of NTI.

As per MYT regulations 2012 governing the tariff fixation, the following provisions have been laid down:-

“67.1 All incomes being incidental to electricity business and derived by the licensee from sources, including but not limited to profit derived from disposal of assets, rents, delayed payment surcharge, meter rent, income from investments other than contingency reserves, miscellaneous receipts from the consumers, etc shall constitute non-tariff income of the licensee;”

The Commission also has been consistently disallowing deduction of late payment surcharges from Non tariff income time and again. The relevant extracts from the tariff order dated 7th May 2015 are placed below:

“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.”

In view of the above justification and in line with the prevailing tariff regulations 2102 and also the Commission's own tariff orders and pure logic, Commission must disallow the claim of the Discom and the amount of Rs 79.08 Cr collected as late payment surcharge will be considered as income of the Discom and be deducted from the ARR.

Discoms Reply

1. O & M Expenses

DHBVN submits that 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 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 it is submitted that the increase in O&M Expenses are primarily on account of two factors, which is release of accumulated arrears to the employees of the Nigam and accounting of O&M expenses related to Jind. It is highlighted that the as per GoH notification dated 03rd July 2014 Jind was transferred from UHBVN to DHBVN.

2. RPO non compliance

DHBVN submits that HERC vide its Order dated 18.6.2015 has allowed Haryana DISCOMS to meet the backlog of previous years. The said order is reproduced here under:-

Commission, under the provision of Regulation 69 of the HERC RE Regulations, 2010, allows HPPC to carry forward the backlog in respect of compliance of RPO (both non-solar as well as solar) for FY 2012-13 FY 2013-14 and FY 2014-15, on actual basis, to the FY 2015-16 and FY 2016-17. The Commission directs that minimum 50% of the shortfall in RPO compliance (solar as well as non-solar) up to the FY 2014-15 shall be met in the FY 2015-16 along with RPO for the FY 2015-16 as quantified by the Commission in its Distribution and Retail supply Tariff Order dated 07.05.2015. Further, the balance 50% of the shortfall up to the FY 2014-15 shall be met in the FY 2016-17 along with the RPO for the FY 2016-17. In case any shortfall in compliance of RPO target

(including backlog) is anticipated either in FY 2015-16 or in FY 2016-17 as per the targets given above, HPPC shall purchase requisite number of RECs during the corresponding year to meet the shortfall.

RPO Scenario for FY 2015-16

SOLAR RPO TARGETS in FY 2015-16					
	Energy consumption in Mus	SOLAR TARGETS		Actually achieved in FY 2015-16	Net Shortfall in FY 2015-16
		in (%) of energy consumption	in MUS		
1	2	3	4	5	6
*Carried forward from FY 2011-12 to FY 2014-15 to be met in FY 2015-16 & 2016-17			140		
2015-16	46731	0.75	350		
Total Target in FY 2015-16 after adding 50% backlog till 2014-15			420	127.2100	293
Non- SOLAR RPO TARGETS in FY 2015-16					
	Energy consumption in Mus	NON- SOLAR TARGETS		Actually achieved in MUS in FY 2015-16	Net Shortfall in FY 2015-16
		in (%) of energy consumption	in MUS		
1	2	3	4	5	6
*Carried forward from FY 2011-12 to FY 2014-15 to be met in FY 2015-16 & 2016-17			1993		
2015-16	46731	2.75	1285		
Total Target in FY 2015-16 after adding 50% backlog till 2014-15			2282	1172.0	1110

3. Cost of Power drawn through UI is high

DHBVN submits that it must be noted that the overdrawal of Power under UI occurs sporadically, and the overdrawal occurs only to ensure that the supply to the consumers is not intermittent in nature. However, the Nigam additionally submits that, to optimize the power scheduling and to minimize Power Purchase Cost, REC power Distribution Company Limited, a subsidiary of REC has been engaged in creation of a demand forecasting cell.

4. Employee Expense

The reply towards employee expense has already been submitted in the submissions given for the earlier points and are not repeated here for the sake of brevity.

5. A&G Expense

The details of A&G expense for FY 2015-16 are as follows:-

Administrative & General Expenses	FY 2015-16
Rent (including lease rentals)	278.88
Rate & Taxes	58.59
Insurance	32.69
Telephone charges, postage, tele-gram, telex charges & Mtc.of website of internet, new instruments	682.71
Expenditure on Internal Audit carried out by Outsource Agencies	75.21
Legal charges.	437.95
Audit fees	4.49
Consultancy charges.	631.48
Other professional charges & technical Fees	32.09
Service charges for computerization	625.06
Exp. on training to staff for computer	7.14
License fee	0.75
Conveyance & travelling expenses.	1569.33
Printing & Stationery	248.46
Electricity Charges	368.36
Other expenses like watch & ward of building, indexing & scanning of consumer case files and implementation of online computerization etc.	1368.07
Service Tax on Reverse Charge	1062.29
Cash/Secret reward paid to Vigilance and Informer to detect theft of electricity	24.01
Expenditure on GSM modems at DT meters	7.56
Other material related expenses	391.74
Total A&G Expenses	7,906.87
Less:- A&G Expenses Capitalized	693.78
Net A&G Expenses	7,213.09

The Nigam submits that the true petition was filed with the figures as in the audited annual accounts for FY 2015-16.

7. Interest on working capital expenditure

It is submitted that the true up petition has been submitted by DHBVN considering Audited Annual Accounts for the period from 1st April 2015 to 31st March 2016.

It is thereby submitted that the approved figures presented in the true up petition for FY 2015-16 are taken from the HERC Order on Distribution & Retail Supply ARR & Tariff of DHBVN for FY 2015-16, and accordingly, revised actual figures of expenditure are provided for the true up exercise in accordance with the HERC MYT Regulations 2012.

In regard to the Rs. 1172 Cr., the total interest and finance charges incurred during FY 2015-16, it is submitted that this includes the interest cost of 613 Cr on account of transfer of Jind circle related loans to DHBVN book of accounts.

8. Return on equity

DHBVN submits that as per Regulation 20.1 of HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012; the rate of return on equity shall be decided on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty.

Keeping same view of above regulation, DHBVN has claimed the legitimate return on equity in its tariff petition. Further, DHBVN submits that RoE is very vital source of funding a portion of Capital Expenditure planned by the Utility in order to improve the system and to achieve further loss reduction.

Also as per National Tariff Policy, 2006;

“8.2.2. e. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected.”

Disallowing Return on Equity on the context of financial performance deprives the Discom 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.

9. Expenditure due to other debits

The Nigam submits that the Expenditure due to other debits are as per the Audited book of accounts for FY 2015-16. The same shall be examined for allowance after prudence check by The Commission.

10. Distribution losses

The Nigam submits that as per The Commission guidance, the normative loss level of Nigam are as per the Loss trajectory in UDAY, which is as follows:

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
AT&C loss (%)	25.22%	22.48%	18.76%	15.00%
T&D loss (%)	24.46%	21.70%	17.94%	14.14%

It is submitted that DHBVN is continuously in pursuit of reducing line loss under the operation areas. The Nigam submits that it has achieved significant loss reduction

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

Particular	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY (Till Dec.)
Distribution Losses (%)	23	23.47	22.1	25.08	24.21	23.6	21.26
* Losses for FY 15 has been increased due to impact of Jind Circle from UHBVN to DHBVN							

Moreover, it is submitted that, various steps have been taken by the Nigam to reduce the Losses with the specific focus on long term improvement in the power quality and reliability. Various strategies are being adopted in urban and rural areas based on their loss level. The steps taken for reduction of technical and commercial losses are as follows:-

- High loss Feeder are being identified and the Sanitization work which is under progress and is being monitored regularly. All the Circle (Op) teams have been instructed to speed up in order to complete the pending work so that the loss level would be brought down to normative level.
- Consumer Indexing for RAPDRP towns, non-RAPDRP towns, & rural areas is under progress which would help the Nigam to calculate the losses from the billing database and further pin point the losses incurred at DT level which will eventually help the Nigam to optimize its resources and making efforts towards effective loss reduction.
- Feeder Sanitization Activities are carried out geographically as: (1) Urban Feeder Sanitization & (2) Mhara Gaon Jagmag Gaon Scheme for selected RDS feeders. In both the plans, Nigam has focused on the following four major activities:
 - Improving accurate reading of energy meters via replacement of Defective, faulty, Burnt, Glass broken, no display, inconsistent, electromechanical, and old version meters.
 - Minimizing occurrence of theft of energy via relocation of meters which are located inside the Consumer premises and are prone to theft of energy.
 - Preventive measures to eliminate direct theft of energy via replacing ACSR conductors, bare conductors present in theft prone areas with LT AB Cables to eliminate direct theft of energy.

- Releasing of New Connections: Unauthorized colonies, connections with direct theft, pending connections, un-electrified households are being provided a new connection to bring them in to billing net.

11. Collection Efficiency

The Nigam submits that the collection efficiency for DHBVN in the time period of FY 2010-11 to 2016-17 been in the range of 96.89-99.26%. DHBVN emphatically states that sincere efforts are being done to improve the collection efficiency.

12. Non-Tariff Income

The Petitioner further submits that 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 procure additional working capital. Therefore, the revenue received on account of delayed payment surcharges is not an income of the Nigam, rather it's a carrying cost recovered from consumers to pay the interest on the increased portion of working capital which occur because of delay in receiving the revenue. Therefore, it is requested that the revenue from delayed payment surcharge should not be considered as income of the Nigam.

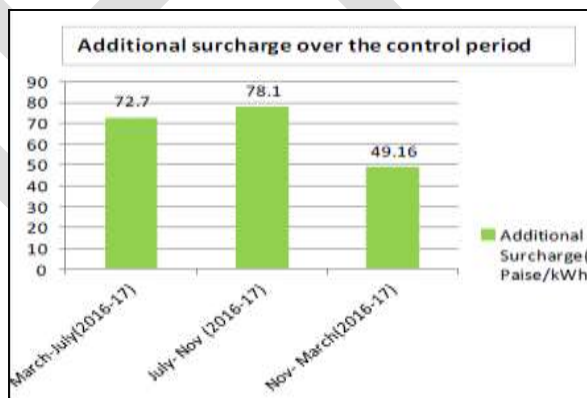
2.3.5 Comments on Additional Surcharge by M/s Faridabad Industrial Association

1. That the contents of proposals submitted by the Petitioner stating that under Regulation 22 of Haryana Electricity Regulatory Commissions (Terms & Conditions for grant of connectivity and open access for intra state transmission and distribution system), regulation 2012, is wrong and denied and is liable to be rejected out rightly. The Petitioner's statement that they have universal obligation to supply power for which they have entered into a long term agreement of purchase of power from various generating systems for meeting the entire demand of the State, as such, when these embedded consumers draw power from any other source under Open Access, the fixed cost of supply taken by these consumers from elsewhere is still payable to the Petitioners. Further, they have also stated that due to this they have proposed an additional surcharge of 1.09 paise per unit from these embedded consumers. In this regard, we would like to make a humble submission to this Hon'ble Commission that additional surcharge defined U/s 42 (4) has been levied in the past as under:-

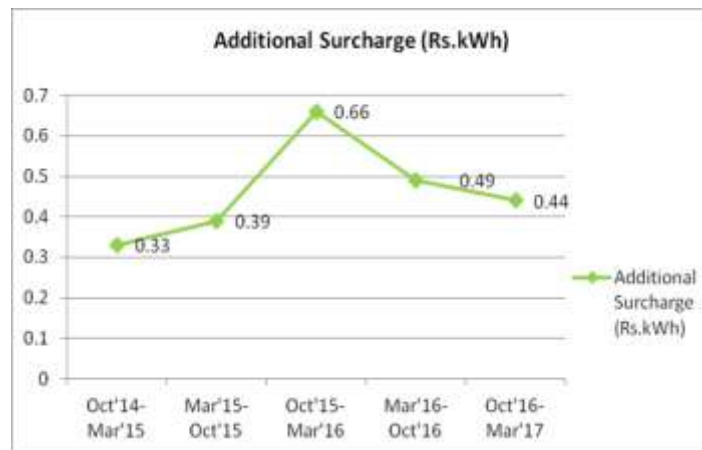
- (a) 2014-15 - 0.84 Paise/unit
(b) 2015-16 - 0.87 Paise/unit

It is submitted that while examining the above it is very much clear that the Petitioner, on their whims and wishes, are increasing year over year all requisite charges liable to be paid U/s 42 of Electricity Act 2003 without any justification or reasoning and the Hon'ble Commission is also failing to appreciate the same which is very much clear from the order passed by the Hon'ble Commission for levy of additional charges under regulation 22 of 2012 in which they allowed the grant of additional surcharge of 84 paise and 87 paise vide order dated 16.11.2015 and 14.12.2016 against the spirit of their own regulations framed by them U/s 181 of Electricity Act 2003. This is nothing but a sheer abuse of power because nowhere in the regulation framed by the Commission it is being mentioned in the statute that Commission can go beyond the terms & conditions mentioned U/s 22 for granting additional surcharge to petitioner on the basis of taking normative figures which are capsulated on the basis of taking into consideration power drawn by the Respondents (consumers) for just two days i.e. Tuesday or Thursday per week.

In fact the neighboring states viz Himachal Pradesh, Odisha and Gujarat are reducing the levy of Additional Surcharge which is evident from below flowcharts .



The graph below depicts how the addition surcharge has varied over the past in Gujarat



We would like to submit that it is very much clear in *Asha Sharma Vs. Chandigarh Administration* that it is a settled canon of administrative jurisprudence that the wider the power conferred, more onerous is the responsibility to ensure that such power is not exceeded in excess of what is required or relevant for the case and decision.

In this regard, we would like to state that there is nowhere written in the Regulation that Hon'ble Commission can allow Discom to take for consideration for yearly average of monthly values based on monthly average for the average quantum in per slot in MW for all the 12 months by taking into consideration only power drawl for all Tuesday and Thursday because it would be a travesty of justice to the consumer because if same is to be considered for the petitioner thereon because on the contrary the Hon'ble Commission should consider also pass appropriate order to petitioner to give data of every slot of each day so as not to violate Section 86 (3) of Electricity Act, that says Commission should ensure transparency and while exercising power and discharging its function further they should also consider the obligation under Section 86 (4) that says while discharging its function State Commission shall be guided by National Electricity Policy, National Electricity Plan and Tariff Policy published U/s 3 of the Act. So, therefore, we would like to submit that in case data has not been provided by the Petitioner in accordance to the law and regulation framed by Hon'ble Commission under Section 42 (5) the same should be rejected.

We strongly oppose/ object the demand of petitioner on the basis of camouflaged / un-detailed / un-transparent data without any support given to it and filed along with this petition which can justify:

- a) Reason with requisite documents that all surrendered power was under avoidable obligation to suffer fixed cost

b) The entire proposal given by the petitioner is illegal because by virtue of regulation 22 /2, licensee has to calculate specifically which power was surrendered under which PPA and must further plead and prove under which PPA there was unavoidable obligation to suffer the fixed costs for the entire six months and not just for taking on their whims and wishes two days per week for calculating the power drawn by the consumer for the whole year. The methodology framed by the petitioner is nothing but sheer

- i) Abuse of power
- ii) Non application of mind and poor planning and forecast
- iii) Taking advantage of the regulations framed to help them to recover those losses which were genuine and in consonance to the law.
- iv) Violation of Section 74 of Electricity Act of not giving proper statistics, data for establishing that their claim is genuine and legal.

c) In their pleadings they have failed to establish that under which PPA the power was surrendered and whether the PPA contained a provision for the payment of fixed costs if power was not purchased.

2. That the computation in the proposal of the Petitioner is on the basis of surrender of power multiplied by an average effective per unit fixed cost; this is not what regulation 22(2) contemplates. In this regard, we would like to submit through example and want to reappraise the fact to the Hon'ble Commission how the money in lieu of this regulation is being extracted by the petitioner from the consumer. Suppose,

- There is capacity of 1000 MW out of which an open access consumer is procuring 20MW (10 MW from the Petitioner and 10 MW from Open Access)

Under the Regulation the said consumer has to pay fixed cost on the entire 20MW even when they have procured power from the outside periphery of the State by paying all requisite charges liable under Section 42 EA Act 2003 to the petitioner they have put an extra burden by way of additional surcharge which in addition to the fixed cost which the consumer is already forced to pay for the entire contract demand. So, it is very evident that the petitioner is, year after year, increasing this charge just to extract money from the consumer without any detail support of documents that can

show genuineness of his claim. The Hon'ble Commission should also appreciate that such illegal demand by the petitioner is increasing day by day because their system of planning and forecast of power purchased since they have failed to effectively strengthen their system and plan/ forecast their purchases in spite of having requisite data of all 96 slots from each OA consumer. ***It is the intention of petitioner*** to make this power unviable to all embedded consumers. This is nothing but a mockery to the judicial process of law.

3. There is no pleading in the petition by the petitioner that what steps are taken by the Petitioner to sell the power in the market and what realization if any could have been recovered from the sale.
4. It is submitted there is no pleading in the proposal on the basis of what or surrendered power was under unavoidable obligation without any pleadings or details.
5. That Commission also failed to appreciate in the last order passed by the Commission on 14.12.2016 that no requisite data as required by the regulation of slot wise data for entire slots by quantum for the period of 6 months were provided and even now the petitioner have not filed the data as required under regulation. In case, Hon'ble Commission continues on the same system while granting additional surcharge to the Petitioner vide this petition, then Commission should also consider what steps have been taken from last three to four years by the Petitioner so that poor planning / insufficient forecast/ in competency to deal with the power purchase and scheduling of the same by the Petitioner can go on and till how much time can Respondent / consumers need to suffer the pain and whether they can survive in the same race in the long run. It is evident that if these types of charges are granted year over year without any justification then the process of transparency which is travelled under section 86 (3) of EA Act will be curtailed and consumer will have to shift their industries and other ancillary services from the State of Haryana which will cause irreparable loss of Revenue to the State and also create unemployment to an extent of 10 lacs to 20 lacs people directly or indirectly associated with these consumers.
6. While examining the current proposal of the Petitioner it is very much evident that they have not given any detail of back down of power and reason of the same on account of open access consumers. They are just playing on gaming

tactics to extract hard earned money of the consumer and have filed this petition without any justification and documents supporting the same so the same is liable to be rejected out rightly.

7. While examining the current proposal of the Petitioner it is very much evident that they are gradually increasing all the charges i.e. CSS, FSA, Fixed Cost, Addl. Surcharge on the consumers without any base and support and just try to curb the availment of open access power which consumer are getting in Haryana. Commission should also appreciate that above referred para 2 (a) we just try to give an example how a consumer is being over burdened by the Petitioner on pretext of fixed cost because in case these additional surcharge is being gradually increased, year after year, clear shows that petitioner is incompetent and inefficient. We have full faith in the competency and power of Hon'ble Commission and request them to give suo moto remedy for granting back the fixed cost which the petitioner are charging on the entire quantum of purchase irrespective if the same is purchased through Petitioner or other person because petitioner are charging requisite charges like CSS, Additional Surcharge from the consumer for the same power with fixed cost also which is nothing but contrary to law and principle of natural justice and against article 14 of Indian Constitution.

Discoms Reply

1. It is submitted that The Section 42 of the Electricity Act, 2003, provides for the levy of charges on the open access consumers. The relevant excerpts of the Electricity Act has been given below:

“(4) Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply”

Also, as per Chapter VI- 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, open access consumers shall be liable to pay following charges:

- “19. Transmission charges and wheeling charges*
- 20. Scheduling and system operation charges.*
- 21. Cross subsidy surcharge.*
- 22. Additional Surcharge.*
- 23. Standby power and standby charges for drawl of power by open access consumer from distribution licensee.*
- 24. Imbalance Charge.*
- 25. Reactive Energy charges*

In order to ensure that only such power surrendered is taken for calculating additional surcharge, which corresponds to power stranded because of open access consumers, the lower quantum of open access power per slot and surrendered power for corresponding slot is taken as quantum of the stranded power for slot due to open access.

Further, the Hon'ble Commission in its Order dated 14.12.2016 has mentioned that the obligation of the distribution licensee(s) to pay fixed cost of power purchase under long term Power Purchase Agreements has been and continues to be stranded. The relevant extract of the Order has been given below:

“... it is conclusively established, from the data submitted for the 2nd half of the FY 2015-16 that the obligation of the distribution licensee(s) to pay fixed cost of power purchase under long term Power Purchase Agreements has been and continues to be stranded. Hence, the Commission Orders that the Additional Surcharge in vogue i.e. Rs. 0.87/Unit shall continue to be in effect till such time the same is revised / amended by the Commission.”

Hence, it is clear that Discoms have been levying Additional Surcharge in accordance with the Regulations duly approved by the Hon'ble Commission.

With regards to contention of non-submission of requisite data, it is submitted that the Licensee in its petition for approval of Additional surcharge filed vide Memo No. Ch-02/GM/RA/N/F-15/Vol-IX dated 24.01.2017, have submitted the calculation of additional surcharge based on 100% data (slot wise) of all days in first half of FY 2016-

17 i.e. April-16 to September-16. Further, Licensee has uploaded the above data on its website also.

Since the Petitioner has a universal obligation to supply power to all the consumers, they have to enter into long term agreements for purchase of power from various generating stations for meeting entire demand of the State. As such, when these Open Access consumers draw power from any other mode under Open Access i.e. through collective transaction or bilateral transaction, the fixed cost of such stranded power is still payable by the Petitioner, while making it a stranded capacity for the petitioner.

The Discoms have calculated slot wise stranded power due to open access and also the total open access power availed in that particular time slot. Further, based on slot-wise quantum eligible for calculation of Additional Surcharge and slot wise total open access power availed, the corresponding slot wise units have been calculated for all the days in first half of FY 2016-17 and thereafter the petitioner has calculated total units in MU, which corresponds to the stranded power due to Open Access and total Open Access units availed for the first half of FY 2016-17. The Hon'ble Commission in its Order dated 14th December, 2016 has also approved the methodology adopted by the Licensee for computation of stranded power on account of open access consumers. The relevant extract is reproduced below:

"b) That due to the change in the declared capacity of the inter-State generator during the day, the change in entitlement of the State from that particular Generator, is automatically accounted for.

c) The above process adopted by the Petitioner for calculating the backing down quantum of power has been checked on sample basis and found to match with the data supplied. It has been further observed that the generating units which are not on bar due to less demand have not been considered and only the running units backing down has been considered for arriving at the stranded cost of power for determination of additional surcharge. (Emphasis Added)

A mere perusal of the above para(s) establishes the fact that only the power which has been backed down due to Open Access has been considered for calculation of additional surcharge

Further, the contention of the stakeholder regarding increase in fixed cost is misleading as there is annual increase in Fixed Cost allowed to be recovered by power generators on account of increase in inflation and various Orders of Hon'ble APTEL/CERC thereby in-turn leading to increase in Additional Surcharge.

2. As per the section 42 of the Electricity Act, 2003 a Discom is required to maintain an effective and efficient distribution system. The relevant excerpts of the Electricity Act, 2003 has been mentioned below:

"It shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act."

In order to cater the demand or load, utility has to develop a healthy distribution network keeping in view the maximum, minimum load and the load which is likely to come in near future. The Demand charges cover electric utilities' fixed costs of providing a certain level of energy to their customers.

The Discoms submit that the open access is aimed to enable the consumer to take advantage of power available at competitive rates in comparison to the Discoms, while protecting the financial interests of the Discoms through cross subsidy surcharge and additional surcharge. The provision of Open Access on Transmission and Distribution on payment of legitimate charges to the Utility has been introduced in the Electricity Act in order to enable number of players utilizing these capacities and transmit power from generation to the load centre. This will mean utilization of existing infrastructure and easing of power shortage with no losses to be borne by the power Discoms, who shall remain revenue neutral towards the movement of consumers from the licensee to a second source of power under the provision of open access.

Additional Surcharge is defined as per unit of charge an open access consumer is obligated to pay in order to meet the fixed cost of Power purchase of the distribution licensee arising out of his obligation to supply.

Further, Hon'ble APTEL in the appeal No. 59 of 2013 (Maharashtra State Electricity Distribution Company Limited vs. Maharashtra Electricity Regulatory Commission & Anr.) and Appeal No. 116 of 2013 (Maharashtra State Electricity Distribution Company Limited vs. Maharashtra Electricity Regulatory Commission &

Ors.) has passed the judgement on Levy of Fixed charges from Open Access consumers. The relevant extracts of the Judgement has been reproduced below

“The open access consumer who maintains full contracted demand with the Distribution Licensee is liable to pay for demand charges which should cover the fixed cost of the Distribution Licensee. In case the Distribution Licensee is not able to recover full fixed cost for the power arranged for such consumer then the Distribution Licensee has liberty to put up a case with supporting Appeal no. 59 of 2013 and Appeal no. 116 of 2013 Page 40 of 41 documents for the recovery of same for consideration of the State Commission to appropriately compensate the Distribution Licensee so that the burden is not passed on to other consumers. Further, the law has provided a remedy for recovery of stranded cost of the Page 22 of 37 distribution licensee out of its obligation to supply to an open access consumer. Therefore, if the Appellant Distribution Licensee finds that it has to bear same fixed cost (stranded cost) due to its obligation to supply to the open access consumer, it can approach the State Commission with supporting data and claim Additional Surcharge in its ARR/tariff. Whenever such claim is raised by the Appellant, the State Commission shall consider the same and decide as per law.”(Emphasis Added)

A perusal of the aforesaid mentioned facts amply clears that the Demand charges and Additional Surcharge are not correlated in any manner and Demand charges are recovered on account of investment in the Distribution network made by the licensee. Whereas, additional surcharge is meant to compensate Discoms for fixed cost of the stranded capacity due to Open Access Consumers and is borne by the licensee.

3. The average approved power purchase cost of the Discoms for the FY 2015-16 was Rs 4.05 per unit. Further, Nigam is scheduling power as per the Merit Order Dispatch which means that usually the power which is backed down is costlier than the average power purchase cost. However, the average market clearing price for FY 2015-16 is Rs 2.73 per unit.

It is may be noted since the market clearing price is lower than the cost of power purchase, in order to minimize the trading loss, licensee is left with no other option except to back down the power.

Further, in order to optimize power purchase cost and give benefit to consumers, the licensee has introduced Concessional Tariff for HT Consumers for the additional consumption during the night hours i.e. 22:00 Hrs to 06:00 Hrs.

4. It is reiterated that in order to ensure that only such power surrendered is taken for calculating additional surcharge, which corresponds to power stranded because of open access consumers, the lower quantum of open access power per slot and surrendered power for corresponding slot is taken as quantum of the stranded power for slot due to open access.

5. The contention of the stakeholder regarding incomplete data is wrong and misleading. The fact that the Licensee has submitted all the relevant data has been taken in record by the Hon'ble Commission in its Order dated 14th December, 2016. The relevant extract of the Order is reproduced below:

*“iii) **Accordingly, the DISCOMs have filed the requisite data**, which has been examined as under:*

*a) **That the Petitioner has worked out backing down quantum day-wise, slot-wise for the corresponding six months of FY 2015-16**, from the implemented schedule and the entitlements as per their last revision, for the particular day, as available on the NRLDC/SLDC websites (www.nrldc.org.in and www.haryanasldc.org.in). **(Emphasis added)***

Further, to optimize the power scheduling and to minimize Power Purchase Cost, REC Power Distribution Company Limited, a subsidiary of REC has been engaged for developing a demand forecasting system.

6. The Discoms in its petition for approval of Additional surcharge filed vide Memo No. Ch-02/GM/RA/N/F-15/Vol-IX dated 24.01.2017 have submitted the calculation of additional surcharge based on 100% data (slot wise) of all days in first half of FY 2016-17 i.e. April-16 to September-16. Further, Licensee has uploaded the above data on its website also.

Further, in order to ensure that only such power surrendered is taken for calculating additional surcharge, which corresponds to power stranded because of open access consumers, the lower quantum of open access power per slot and surrendered power for corresponding slot is taken as quantum of the stranded power for slot due to open access

7. The Licensee has been computing additional surcharge in line with the MYT Regulations 2012. Further, all the charges like Cross Subsidy Surcharge, Fuel Surcharge Adjustment, Fixed Cost, Additional Surcharge etc are being levied on the consumers only after the approval of Hon'ble Commission.

Further, as explained in the earlier paragraphs also, Demand charges and Additional Surcharge are not correlated in any manner and Demand charges are recovered on account of investment in the Distribution network made by the licensee, whereas, additional surcharge is meant to compensate Discoms for fixed cost of the stranded capacity due to Open Access Consumers and is borne by the licensee.

Commission's View

The Commission has taken note of the objections filed by the FIA and DHBVNL's reply thereto. It is observed that the objections are more or less similar to those raised by M/s JSL. The Commission has dealt with the issues, in line with the relevant Regulations, at appropriate paragraphs of this Order. The Commission would like to assure the Interveners that all the directives issued from time to time are monitored and compliance reports are being sought. The Commission has taken note of the suggestion that Open Access consumers should also be allowed to install solar system under net metering Regulations to avail incentive allowed therein. The Commission shall examine the issue and its implications at the time of amending the said Regulations. Regarding wheeling charges payable by the Open Access consumers the Commission observes that none of the stakeholder including the power utilities have come up with a concrete proposal or methodology to address the purported aberrations. The stakeholders may submit a proposal regarding the same for consideration of the Commission so that the same could be considered in the next ARR/Tariff Order separately. As far as efficiency factor built in the computation of O&M expenses i.e. A&G and R&M is concerned the same has not been done as the expenses on these accounts have been below the norm. Hence, while carrying out true-up exercise under MYT Regulations, the benefit of lower expenses vis-a-vis the norm is automatically passed on to the consumers. Further, the Commission has noted the concern raised by the intervener regarding non-implementation of Standard of Performance (SoP) Regulations and compensation to be paid automatically to a consumer in case of any deficiency vis-a-vis guaranteed SoP. The Discom, on the basis of Section 57(2) of the Electricity Act, 2003, has replied that the Commission will

have to determine on the basis of allegation that a particular SoP has been violated. The Commission has perused the reply filed by the Discom and observes that Section 57(2) of the Electricity Act, 2003 empowers the SERCs to specify the SoP and compensation thereto. Accordingly, the SoP as well as scale of compensation, wherever applicable, has been decided by the Commission by framing Regulations i.e. Haryana Electricity Regulatory Commission (Standards of Performance of the Distribution Licensees) Regulations, 2004 including its subsequent amendment. It is implied that the Discoms either of its own knowledge or upon written claim filed by any eligible consumer, is liable to pay compensation as has been determined by the Commission. In case, this is not done by the Discoms, it constitutes non compliance of the said Regulations. The Commission directs the Discoms to upload all the relevant SoP data including reliability indices on their respective websites without any further loss of time. The Commission shall address the issue of non-compliance, if any, separately.

2.3.6 Objection filed by Sh. Pankaj Bhalotia

1. A separate tariff structure for prepaid electricity consumers in place of 5% rebate:

That I have been writing and requesting from quite some time to the Commission that current tariff structure of domestic supply category consumer, which is said as telescopic in nature, is neither maintainable nor implementable in a prepaid electricity meter. So instead of having 5% rebate in tariff for prepaid meter consumers, I request Commission to please have separate tariff structure for prepaid electricity consumers or to have such tariff structure for a domestic supply category consumer which can and is maintainable and implementable in a prepaid electricity meter. A Prepaid Electricity Meter does not work like that firstly it will see consumption is less than 100 or more than 100 and then start charging accordingly. The Category II and Category III of current domestic supply tariff IS NOT maintainable and implementable in a prepaid electricity meter.

So requesting again to the Commission to either (a) prescribed separate tariff structure that is implementable and maintainable in a prepaid electricity meter, instead of 5% rebate in tariff, or (b) design such domestic supply category tariff which is with current 5% rebate is implementable and maintainable in a prepaid electricity meter.

2. Provisions, Rules and Regulations of applicability of Municipal Tax and Electricity Duty:

The Commission while announcing tariff for FY 2017-18, in the footnotes of tariff order, should also mention provisions, rules and regulations of applicability of Municipal Tax and Electricity Duty on various consumers. The Municipal Tax and Electricity Duty may not be applicable and payable by all consumers in all cases and situation. So to not to get charge excessively in the name of Municipal Tax and Electricity Duty when not applicable and payable, I would suggest that the Commission should also describe clearly in tariff structure, the rules and regulations of applicability of Municipal Tax and Electricity Duty and in what all cases both are payable as well as not payable.

3. A separate tariff structure for consumers taking supply through Independent Feeder:

Should there not be separate tariff structure or a discount/ rebate for a single point consumer and Bulk supply consumer who is taking supply of electricity from Discoms of the State through Independent Feeder?

In my view a lower tariff should be payable by a single point consumer and bulk supply consumer who is taking supply of electricity through independent feeder from discoms of the state as Discoms play no role in addressing and redressing grievances, issued, concerns for supply of electricity through independent feeder from point of supply till the place of consumer. Is the discom not saving its operational and other associated cost for independent feeder in same regard, which it should have incurred had the supply not through independent feeder in same regard which it should have incurred had the supply not through independent feeder? And accordingly should pass on all such saving to a single point consumer and bulk supply consumer who is taking supply of electricity through independent feeder from discoms of the state in the form of either lower tariff or by way of discount/ rebate.

4. Applicability of Fuel Surcharge Adjustment from first month itself of a financial year:

Will Fuel Surcharge Adjustment be payable from first month itself of new financial year starting from April 2017 onwards? When commission approves tariff for a financial year does that tariff is not determined and approved by the commission on the basis of right projection of cost and revenue, which results into FSA become payable from first month itself of a financial year? It is understandable that projection may go

wrong at later stage of a financial year due to various unforeseen circumstances but not at first month itself of a financial year and also not at the time of approving tariff of a financial year.

5. Can Fuel Surcharge Adjustment be merged with tariff and not to be payable separately:

I would suggest commission to consider this proposal of merging and combining of FSA with tariff and approve tariff accordingly for FY 2017-18 with clearly mentioning in tariff order that no FSA is applicable and payable for tariff mentioned in tariff order. This will I think save from many of ongoing concern and issue related to FSA.

Discoms Reply

1. A Separate Tariff Structure for prepaid electricity consumers in place of 5% rebate

DHBVN Reply

DHBVN is not authorized to decide the tariff of consumers who are exclusively associated through prepaid meters. The powers of the same are conferred upon the Commission and the related matter can be taken up with the Commission.

2. Provisions, Rules and Regulations of Applicability of Municipal Tax and Electricity Duty

DHBVN Reply

It is hereby submitted that the Municipality Tax (or M Tax) currently being levied on the electricity consumers is in accordance with the Notification issued by Haryana Government dated 16th May, 2000 and further, it is collected by the electricity utility on behalf of the state municipality as a tax and is handed over to the state municipality thereon. Further, to clarify the electricity distribution utility DHBVN plays no role in deciding the amount of M Tax to be levied or on whom to be levied rather its role is limited to collection of M Tax. The Haryana Government Notification dated 16th May, 2000 and the Sales Circular No. D-23/ 2000 pertaining to the Government Notification is attached along for your reference.

However it is submitted that the announcing of tariff determination and review of various charges including rebate is prerogative of the Commission. DHBVN sells energy and collects various charges as determined by Commission.

DHBVN welcome the suggestion of objector and request The Commission to take appropriate view on the same while approving the tariff order for FY 17-18.

3. A Separate tariff structure for consumers taking supply through Independent feeder

DHBVN Reply

DHBVN is not authorized to decide the structure of tariff to provide a different tariff to the consumers who have opted supply through Independent feeder, if they are taking supply through independent or any sort of who are exclusively associated through prepaid meters. The powers of the same are conferred upon the Commission and the related matter can be taken up with the Commission.

However it is pertinent to mention that as per tariff order dated 01.08.2017, 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.

4. Applicability of Fuel Surcharge adjustment (FSA) from first month itself of a financial year

DHBVN Reply

It is submitted that the FSA is legitimate expense this has been computed and submitted before the Commission on the following HERC regulation 66.

Commission predominately check the submission made by DHBVN and approve accordingly.

“...66. FUEL AND POWER PURCHASE COST SURCHARGE ADJUSTMENT (FSA)

66.1 The distribution licensees shall recover FSA amount on account of increase in fuel and power purchase costs from the consumers on a quarterly basis so as to ensure that FSA accrued in a quarter is recovered in the following quarter without going through the regulatory process i.e. FSA for the quarter “July to September” is recovered in the following quarter “October to December”.

66.2 FSA shall be calculated only in respect of approved power purchase volume including short term power purchase cost, if any, for the relevant year from all approved sources. Drawl of power under UI mechanism, if any, shall be allowed only when it is not in violation of grid discipline and shall be subject to a price cap of average revenue realisation from all consumer categories for that year.

Average revenue realisation = (Total revenue assessed for electricity supply in Rs + Government Subsidy in Rs) / Total sales in Units.

66.3 For the purpose of recovery of FSA, power purchase cost shall include all invoices raised by the approved suppliers of power and credits received by the distribution licensees during the quarter irrespective of the period to which these pertain for any change in cost in accordance with tariff approved by any regulator/ government agency mentioned in regulation 59.4. This shall include arrears/refunds, if any, not settled earlier. In case data of the last month in a quarter is not available for calculating FSA to be levied in the following quarter, the licensee shall use an estimate based on available data of the first two months of the quarter. On availability of the actual figures, the difference on this account shall form part of FSA of the subsequent quarter. If the actual data for any quarter is not made available by the licensee before the end of the following quarter for this adjustment, the FSA finally allowed for that quarter based on actual figures supplied after the prescribed date shall be limited to the earlier estimated amount or the amount based on the actual figures, whichever is lower.

66.4 In case of negative FSA, the credit shall be given to the consumers by setting off the minus figure against the positive figure of FSA being charged from the consumers. In other words, credit of FSA shall be given only against FSA being charged so that the base tariff determined by the Commission remains unchanged.

66.5 Only the allowed percentage of transmission and distribution losses for the relevant year as per the approved ARR shall be taken into account for working out FSA.

66.6 The amount of FSA shall be recovered by each distribution licensee by charging a uniform FSA (per kWh) across all consumer categories in his area of license.

66.7 For moderation purposes, the recovery of per unit FSA shall be limited to 10% of the approved per unit 'average power purchase cost' or such other ceiling as may be stipulated by the Commission from time to time. For calculating FSA, variations in quarterly purchase volume from an approved source are allowed subject to an overall ceiling of annual approved volume from that source. In case a portion of the FSA for any quarter is not recovered due to

the ceiling of 10%, the under recovered amount shall be added to the FSA for the next quarter.

66.8 Per unit rate of FSA (paisa/kWh) shall be worked out after rounding off to the nearest paisa;

66.9 The distribution licensee shall submit details relating to FSA recovery to the Commission for each quarter in the following format by the end of the following quarter.

Table 1: Methodology for FSA Calculation as per HERC

Sl No	Description
(i)	Approved power purchase volume from approved sources (MU)
(ii)	Approved power purchase cost (Rs. million)
(iii)	Actual power purchase volume (MU)
(iv)	Power purchased (MU) from sources not covered under regulation 66.2 giving source wise details and in case of UI the frequency at which UI draws were made. (disallowed power purchase)
(v)	Actual cost of power purchase from all sources except (iv) (Rs. million)
(vi)	Actual cost of disallowed power purchase relating to (iv)(Rs. million)
(vii)	Total FSA estimated to be recovered for the quarter(Rs. million)
(viii)	FSA per unit (Rs/kWh)being recovered during the following quarter
(ix)	Actual FSA recovered/estimated to be recovered out of estimated FSA till the end of the following quarter (Rs. million)
(x)	Under/ over recovered FSA (vii-ix) (Rs. million)
(xi)	Approved sales (Consumer category wise / month wise) for the quarter (MU)

Note:

- 1. All the source-wise details should be supported with requisite documentary evidence / invoices raised by the generators / suppliers of the power.*
- 2. Actual sales to AP consumers are to be calculated in accordance with the methodology approved by the Commission in the ARR for the relevant year. ...”*

Therefore, it is submitted that Nigam has claimed FSA as per the FSA regulations, notified by 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. Nigam submits the desired workings along with data pertaining to current FSA as well as for FSA true up, as defined under the regulations.

It is hereby submitted that Nigam only levies the FSA to be recovered from the consumers in line with the methodology notified in HERC (Terms and Conditions for

Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

Moreover, the Nigam further submits that through HERC Order dated 03.03.2017, the Commission, orders that the recovery of these FSA's shall continue at the rate determined above till such time i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter till the total amount as determined in the present Order is fully recovered.

5. Can FSA be merged with tariff and not to be payable separately

DHBVN Reply

DHBVN submits that the very purpose of providing FSA is to compensate the Distribution Licensee for the increase in power purchase costs during the year to keep its financial liquidity intact. In practice, a generator has to make payment for the fuel. Any increase in fuel price will have to be compensated else the generator would not be in position to procure enough fuel to generate. Therefore, the DISCOMs who procures power from the Generators, they would have to pay the generators the increased costs. If DISCOMs are not compensated during the period, their liquidity would be affected.

A part of power procured by the distribution company comes from the Central Sector Generating Companies whose tariff is regulated by the Central Commission and the State owned Generation Companies whose tariff is regulated by the State Commissions. The Commission in its MYT Regulations has already provided a formula for FSA.

Thus from the aforementioned statement, it is evident that merging/combining FSA with tariff would not be a practical solution. However, to clear the air over FSA, HERC through its order dated 03.03.17 has ordered that the recovery of these FSA's shall continue at the rate determined above till such time i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter till the total amount as determined in the present Order is fully recovered.

Commission's View

The Commission has taken note of the objections / suggestions filed by Shri Pankaj Bhalotia and DHBVNL's reply thereto. As far as separate tariff structure for electricity consumers prepaid meter and for consumers on independent feeders are concerned the Commission would consider seeking proposal, with supporting data

including revenue implications, from the Discoms while considering tariff design in future. At this stage, in the absence of requisite information and without holding a wider public consultation including those consumers who are likely to be impacted from such change in the tariff design, it may not be appropriate to accept and proceed with the suggestions of the intervener. On the issue of FSA, it is observed that the Commission has already issued a separate Order dated 3.03.2017 including the date(s) from which the same shall be implemented i.e. 65 paise per unit from 01.04.2017 to 30.06.2017 and @ 37 paise per unit thereafter. However, as FSA is dynamic in nature and may vary from quarter to quarter, while the tariff as per section 62(4) of the Electricity Act, 2003 cannot be ordinarily amended more frequently than once in any financial year, the Commission believes that merging past FSA(s) with tariff may not serve much purpose. Hence, the Commission, as per the Ibid Act considers it appropriate to deal with the FSA in line with the Regulations occupying the field also mentioned by the Nigam in its reply. Further, the Commission observes that M.T. and E.D. is being levied as per notifications of the State Government from time to time as also submitted by DHBVNL, hence, these are beyond the statutory powers of this Commission.

2.3.7 Objection filed by IEX

1. Discrepancies in Calculation of Additional Surcharge:

The Petitioner has requested for approval of Additional Surcharge @ Rs. 1.09 Rs./Unit for first half of FY 2016-17 in line with the methodology devised by the Honorable Commission in its order dated 01.08.2016. However, on perusal of the Petition following deviations have been observed against the methodology adopted by the Commission in its order dated 01.08.2016

- a. The average quantum of power to be considered for Additional Surcharge has not been used instead total quantum has been used.
- b. Effective approved fixed cost considered for calculation of Additional Surcharge is considered on higher side i.e. 1.29 Rs./Unit however the Honorable Commission in its order dated 01.08.2016 has considered 0.92 Rs./Unit which is approved for FY17.

Accordingly, considering the above observations, the following revised calculation of Additional Surcharge may be considered by the Honorable Commission:

Table: Details of backing down owing to Open Access and Open Access units

Months	Average Quantum to be considered for Additional Surcharge in MW	Total Quantum to be considered for Additional Surcharge in MU	Average Quantum of Total Open Access in MW	Total Quantum of Open Access in MU
April-16	252.77	181.99	294.05	211.71
May -16	256.81	191.06	297.52	221.36
June-16	238.45	171.69	309.32	222.71
July-16	290.96	216.48	341.07	253.75
August-16	59.23	44.07	82.41	61.32
September-16	302.56	217.85	333.31	239.98
Grand Total	1400.78	1023.14	1657.68	1210.83
Monthly Average	233.46	170.52	276.28	201.81

Table 2: Calculation of Additional Surcharge for first half of FY 2016-17

Particulars	Units	Amount
Total Units (MUs) of Power to be considered for Additional Surcharge	in MU	170.52
Effective Approved Fixed Cost considered for Evaluation of Additional Surcharge	Rs/ Unit	0.92
Total Additional Surcharge for the first half of FY 2016- 17	In Rs Million	156.88
Open Access Units estimated (considering same open access scenario as in FY 2016-17)	in MU	201.81
Per Unit Additional Surcharge applicable on the same Quantum of Open Access	Rs/ Unit	0.78

2. Adjustment of demand/fixed Charges in Calculation of Additional Surcharge:

- a. It is submitted that on the issue of adjustment of demand/fixed Charges paid by Open Access consumers in the calculation of Additional Surcharge, The Commission vide its order dated 16.11.2015 held as follows:

"The Commission has also considered the submission of the Objectors that Open Access Consumers who are also the Consumers of the Discoms are paying fixed cost / Demand Charges as per the tariff in vogue on their entire sanctioned contract demand besides paying transmission and wheeling charges on the Open Access power. The Commission is of the view that in the present case, the limited issue is to determine Additional Surcharge based on stranded PPAs due to Open Access Consumers. Hence, in the next ARR/Tariff proceedings the Objectors may raise the issue of wheeling charges to be paid by the embedded Open Access Consumers on the power brought from sources other than the Discoms as they are already paying partly or wholly the transmission / wheeling charges as per the tariff Order and the wheeling charges are to be paid by the non- embedded Open Access Consumers. The Commission shall examine the submissions on merit and relief if any, shall be considered accordingly."

- b. In view of the above findings of the Commission, some consumers raised this issue in the ARR proceedings for FY 16-17 same is recorded at para 5.1 of Tariff order dated 01.08.2016. Relevant extract of Tariff Order is reproduced below:

"Accordingly, the wheeling charges payable by the open access consumers work out to Rs. 0.71/kWh. The Commission has noted that some embedded open access consumers during the public hearing on the determination of additional surcharge had submitted that they need to be given some relief in the levy of wheeling charges for open access power as they are also paying wheeling charges in the form of fixed charges through the tariff. The Commission observes that while working out the wheeling charges as above, only the technical losses have been considered whereas the Discoms have submitted that there should be 'in kind' adjustment of scheduled open access power for the approved distribution losses (technical + commercial) as is being done for transmission losses . Accordingly, if the wheeling charges are worked out considering the approved distribution losses, these will work out to be on the higher side. Given the rival contentions and lack of clarity on this issue, the Commission, has considered it appropriate to continue levy of wheeling charges as per the past practice."

Therefore, though The Commission noted the said issue but no direction was issued in Tariff Order regarding relief to the embedded Open Access Consumers with respect to Wheeling Charges against demand/fixed charges paid by them.

- c. Further, it is submitted that The Commission vide its order dated 01.08.2016, while determining Additional Surcharge reiterated the findings of its order dated 16.11.2015 however no relief was provided in Additional Surcharge against demand/fixed charges paid by the embedded open access consumers to distribution licensee.

In view of the above contentions, the Honorable Commission is humbly requested to resolve the matter of adjustment of demand / fixed charges paid by the open access consumers against Additional Surcharge or Wheeling Charges. The Honorable Commission is further requested to decide on this issue in the present ARR proceedings of FY 2017-18 so that appropriate relief may be passed on to the open access consumers in the State of Haryana.

Discoms Reply

1. Replies to objection on discrepancies in calculation of Additional Surcharges

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.*
- (2) 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.*
- (3) 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.*
- (4) 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.*
- (5) 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.*
- (6) 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.*
- (7) 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”.*

Since the Petitioner has a universal obligation to supply power to all the consumers, they have entered into long term agreements for purchase of power from various generating stations for meeting entire demand of the State. When these Open Access consumers draw power from any other source under Open Access i.e. through collective transaction or bilateral transaction, power to that extent gets stranded but the fixed cost of such stranded power is still payable by the Petitioner.

The Discoms, in compliance to the directive of The Commission’s Order dated 14.12.2016 filed petition under section 42 of the Electricity Act 2003 read with Regulations 22 of Haryana Electricity Regulatory Commission (Terms and conditions for grant of connectivity and open access for intra-State transmission and distribution

system) Regulations, 2012 vide Memo No. Ch-02/GM/RA/N/F-15/Vol-IX dated 24.01.2017 for seeking approval of Additional Surcharge. In the said petition the Discoms have submitted the details of working out Additional Surcharge applicable for first half of FY 2016-17 to be recovered from open access consumers. The methodology for computation of Additional Surcharge as explained in the Petition is reiterated below:

- i. In order to ensure that only such power surrendered is taken for calculating additional surcharge, which corresponds to power stranded because of open access consumers, the lower of the two ie quantum of open access power drawn in a slot and the quantum of surrendered power in that slot is taken as quantum of the stranded power for the slot due to open access.
- ii. The Discoms have calculated slot wise stranded power due to open access and also the total open access power availed in that particular time slot. **Further, based on slot-wise quantum of surrendered power eligible for calculation of Additional Surcharge and slot wise total open access power availed, the corresponding slot wise quantum of surrendered power due to Open Access have been calculated for all the days in first half of FY 2016-17 and accordingly the petitioner has calculated total units in MUs, which corresponds to the stranded power due to Open Access.**

Subsequently, the total quantum of Additional Surcharge to be recovered from the Open Access consumers for first half of FY 2016-17 (in Rs. Crores) is calculated by multiplying the Units of stranded Power (in MUs) so arrived at with per unit effective fixed charge.

It is to be noted that the Commission in its Order dated 14.12.2016 has calculated average monthly fixed cost of backed down power due to Open Access and then calculated the Additional Surcharge by dividing the same by projected monthly Open Access Units.

However, the Discoms in their aforementioned petition has provided the slot wise day wise details of power backed down and open access availed for the entire period i.e. first half of FY 2016-17. As the slot wise data of all six months is available, the Discoms have calculated the total fixed cost of backed down power due to Open Access for all the slots in the 6 months i.e. first of FY 2016-17 and then calculated the

Additional Surcharge by dividing the total fixed cost of backing down power due to Open Access by estimated Open Access Units thereby eliminating any error which may occur due to averaging of data. This is in fact a more elaborate way of working out additional surcharge.

Moreover, no particular methodology for calculation of additional surcharge has been specified in any Regulations notified by the Commission or the Electricity Act, 2003.

Also, it may be noted that per unit Additional Surcharge calculated using any of the methods, i.e. either by using average quantum of power stranded per month or by using total quantum of power stranded for the entire period of 6 months would work out to be same. Therefore, any of above methods can be used for calculation of per unit additional surcharge to be recovered from Open Access Consumers.

- b. Additional Surcharge is being calculated and recovered from the Open Access consumers in order to recover the fixed cost of backed down power due to Open Access. In case this fixed cost of power backed down due to Open Access is not recovered from the Open Access consumers by levying Additional Surcharge, the same would be loaded on other consumers who are not availing Open Access. The Commission in its Order dated 14.12.2016 has considered Rs 0.92 per unit as the per unit fixed cost of backed down power for the purpose of calculation of additional surcharge. Whereas, Rs 0.92 per unit is the average per unit fixed cost of power purchase of all the power plants which includes plants which are not having two part tariff and which are not even backed down.

However, the Licensee, for the purpose of calculation of fixed cost of stranded power, has considered the fixed cost of power of only those plants which are having two part tariff. The Discoms have considered Rs 1.29 per unit as the per unit average fixed cost of the plants which are having two part tariff and their fixed cost of power purchase to be paid annually has been approved by the Commission and the same has been considered for calculation of Additional Surcharge. In this context it may be noted that in the methodology adopted by the Commission for working out per unit fixed cost of backed down power, the nominator i.e fixed cost corresponds to only the power plants having two part tariff, the denominator i.e. the total energy in Mus correspond to all the power plants including those which are not having two part tariff.

Further with reference to the contention of objector that when The Commission has already approved the per unit fixed cost of 0.92 per unit, why it should be worked out again, it is submitted that the Commission in its Order dated 14.12.2016 has mentioned that Additional Surcharge has been calculated after considering Rs 0.92 per unit as the per unit fixed cost of power purchase for that particular Order only. The relevant extract of the order has been given below:

“While calculating fixed cost for the purpose of estimating Additional Surcharge, DISCOMs have taken fixed cost for the FY 2015-16. Further, they have considered only that much quantum of purchase, which has fixed cost component. Thus, DISCOMs have taken net purchase quantum as 41393.40 MUs i.e. total purchase quantum approved by the Commission for the FY 2015-16 i.e. 56070.92 MUs minus purchase quantum not having fixed cost component– 14677.50 MUs.

*e) The Commission while approving Additional Surcharge, to be levied w.e.f. 01.08.2016, had considered fixed cost approved for the FY 2016-17 i.e. Rs. 5877.111 Crore minus PGCIL transmission charges Rs. 896.73 Crore, divided by approved volume i.e. 5395.817 Crore units i.e. Rs. 0.92 /kWh. **The Commission, for the purpose of the present Order,** has considered it appropriate to continue with the same methodology.” **(Emphasis Added)***

A perusal of aforesaid para amply also clears that the Commission has considered Rs 0.92 as per unit fixed charge for calculation of additional surcharge for that particular order only.

2. Calculation of Demand Charges Fixed Charges in the ARR

It is hereby submitted that the introduction of fixed charges for certain consumer categories is in line with the two-part tariff principle adopted by almost all the State Electricity Regulatory Commissions (SERCs) across the country. In order to cater the demand or load, utility has to develop a healthy distribution network keeping in view the maximum, minimum load and the load which is likely to come in near future. The Demand charges cover electric utilities' fixed costs of catering certain power demand of their consumers. The challenge is that utilities have to maintain enough capacity to satisfy all their customers' energy needs at once (e.g., a hot day in July when every customer runs their AC). This requires the utilities to keep a vast array of expensive equipment on constant standby, including transformers, wires and substations. This capacity is extremely expensive to build and demand charges help the Utility to meet such costs. As per the section 42 of the Electricity Act, 2003 a Discom is required to

maintain an effective and efficient distribution system. The relevant excerpts of the Electricity Act, 2003 has been mentioned below:

“It shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act.”

It is further submitted that a certain amount of fixed charges has to be charged from consumers as a means of recovering the investment already made by the discoms assuming a certain minimum demand. Especially for industrial consumers, distribution licensees have to undertake significant investment in the attempt to ensure an adequate system in place to cater to the collective demand of the industrial units, if need be.

However, Additional Surcharge is defined as per unit of charge an Open Access consumer is obligated to pay in order to meet the fixed cost of Power purchase of the distribution licensee arising out of his obligation to supply.

The Petitioners submit that the 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 section 42 of the electricity Act, 2003 also provides for levying of the Additional Surcharge. The relevant excerpts of the Electricity Act, 2003 have been reproduced below:

“Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply.”

Further, Hon’ble APTEL in the appeal No. 59 of 2013 (Maharashtra State Electricity Distribution Company Limited vs. Maharashtra Electricity Regulatory Commission & Anr.) and Appeal No. 116 of 2013 (Maharashtra State Electricity Distribution Company Limited vs. Maharashtra Electricity Regulatory Commission & Ors.) has passed the judgement on Levy of Fixed charges from Open Access consumers. The relevant extracts of the Judgement has been reproduced below

“The open access consumer who maintains full contracted demand with the Distribution Licensee is liable to pay for demand charges which should cover the fixed cost of the Distribution Licensee. In case the Distribution Licensee is not able to recover full fixed cost for the power arranged for such consumer then the Distribution Licensee has liberty to put up a case with supporting Appeal no. 59 of 2013 and Appeal no. 116 of 2013 Page 40 of 41 documents for the recovery of same for consideration of the State Commission to appropriately compensate the Distribution Licensee so that the burden is not passed on to other consumers. Further, the law has provided a remedy for recovery of stranded cost of the Page 22 of 37 distribution licensee out of its obligation to supply to an open access consumer. Therefore, if the Appellant Distribution Licensee finds that it has to bear same fixed cost (stranded cost) due to its obligation to supply to the open access consumer, it can approach the State Commission with

supporting data and claim Additional Surcharge in its ARR/tariff. Whenever such claim is raised by the Appellant, the State Commission shall consider the same and decide as per law.”

A perusal aforesaid amply clears that the Demand charges and Additional Surcharge are not correlated in any manner and Demand charges are recovered on account of investment in the Distribution network made by the licensee. Whereas, additional surcharge is meant to compensate discoms for fixed cost of the stranded capacity due to Open Access Consumers and is borne by the licensee.

It is further submitted that the Discoms have been recovering the fixed charges and Open Access charges as determined by the Commission.

Commission’ View

The Commission has dealt with computation of Additional Surcharge at length at relevant paragraph of this Order and the same is in line with the methodology adopted in the previous Order(s). For computation of additional surcharge lower of the power backed down / surrendered and open access power is considered as per actual data available for six months and the same is valued at the per unit fixed cost estimated by the Commission. The Commission reiterates that no stakeholder including the interveners have put up a concrete proposal / methodology for adjusting demand / fixed charge while calculating Additional Surcharge for embedded Open Access consumers. They may do so for consideration of the Commission in future.

2.3.8 Objection filed by Haryana Chamber of Commerce & Society

On the behalf of the Haryana Chamber of Commerce & Industry, we are filing our objections as given below:-

1. As the generation cost has been reduced drastically and discoms are purchasing power at a very low cost i.e. Rs. 2.50 to Rs. 2.92/unit. In view of the above existing power generation has also been stopped in Haryana. Why power is still charged from Rs. 11.00 to 25.00 per unit in Haryana industries. This high tariff is resulting in almost closing or shifting of MSME units in Haryana. No State Government would ever prefer to close the industries to protect the power companies, which have such a high establishment costs. Even thefts have not been curtailed by the discoms and losses/theft are at the alarming level of 35% which is very high. All these major losses are in the rural areas of State. If there is any social binding on the discoms/ government then for all these losses

- subsidy should be taken from the government itself and no burden should be put on industrial consumers. Furthermore, discoms must fix a maximum rate between Rs. 12-15 per unit maximum and in no circumstances it should go beyond the highest rate due to fixed charges.
2. Fixed charges on 20-50 KW should be reduced drastically. Because discoms can measure MDI and the fiscal charges are put on 80% of the total connected load. It should be reduced to 50% for sustainability of MSME.
 3. Audit of the electricity bills should be done every month only so that unnecessary backlog or disputed burden should not be put on the industries at a later stage.
 4. To give benefit to the industrial consumers and domestic consumers all the companies of electricity boards in Haryana should be merged in one and the high cost on the infrastructure must be reduced.
 5. As the power is surplus during the night hours and which is being given back to the grid at a very low cost of around Rs. 2 per unit. We demand that this power during the night should be provided to all the industries in the State irrespective of any condition around this low price or with some marginal increase. This will definitely boost the production of the State industries and will make them more competitive in the market. Moreover, by this industries can also be put up within the State by the existing or new industrialists if this facility is given.
 6. As the electricity is surplus in the State so no peak load charges should be charges from the industries.
 7. As the State is having surplus power so the condition to compulsory put roof top Solar Plants is not justified and should be postponed for few years.
 8. FSA (Fuel Surcharge Adjustment) should be totally abolished and no increase in the electricity rates should be done. Rather, the cost on the infrastructure must be reduced to reduce the tariff.
 9. If the industry put up roof top solars then a rebate of up to Rs. 2.50 per unit rebate should be given to the industry and interest free loan should be provided to the industry.
 10. Billing should be made online and the existing cost of billing should be passed on to the consumers moreover this will be also reduce many complications.

11. Two guest houses which are having 30% occupancy only should be closed as it is just incurring the cost only.
12. Cities which are having very less losses/ thefts should be given benefits and the places which are having high losses and thefts must be penalized.

2.3.9 Objection filed by Haryana LOK SARAVHITKARI SOCIETY

Fuel Surcharge Adjustment being charged by the UHBVN is totally un-justified and wrong. In this matter we would like to request you to kindly instruct the UHBVN to get their all calculations and sale purchase and production audited from some third party agency and to submit all these details to HERC also along with the fuel purchase prices for the last 10 years.

We are fully confident that if all these calculations and data is calculated and checked properly then it will come to light that UHBVN was totally un-justified in adding FSA in the consumer bills.

Production of electricity in Haryana state is hardly around 30 percent these days and many a times it is just 20 percent of total consumption. Rest of the electricity was and is being purchased from outside suppliers. More over Haryana UHBVN has been claiming that they have surplus electricity. In this situation charging of FSA is wrong and un-justified. Even the fuel charges in the international markets have come down drastically.

Consumers around 60 lakh in Haryana are being overcharged through FSA to just to cover their losses which is the inefficiency, carelessness and political reasons of UHBVN itself (when UHBVN cannot recover dues from most of villages and cities of Haryana as the consumers do not pay their bills. Even the various governments in the state of Haryana wave off bills of farmers, villagers and defaulters. UHBVN also could not reduce their losses through lines, thefts and establishment charges. All these above losses are being charged by increasing the rates and by adding FSA in the bills.

Why the innocent consumers who have been paying their full bills in time should be burdened with the losses of UHBVN, which is inefficiency and fault of UHBVN only.

We request and demand that UHBVN should be directed to get their complete accounts, calculation, production, sale and purchase etc. audited. In the mean time UHBVN should be directed to stop charging the FSA from consumers.

Commission's View

The Commission has taken note of the aforesaid suggestions. FSA, as already mentioned in the present Order, has been reduced considerably. However, the same cannot be totally abolished till the time the entire FSA amount as quantified by the Commission is recovered. Going forward, incidence of FSA (both negative or positive) cannot be ruled out due to the aberrations in projection of quantum and cost of power from the approved sources which is beyond the control of the Discoms. Moreover, FSA is governed by the MYT Regulations in vogue and the Commission is also bound by its own Regulations. The issue of nighttime surplus including concessional tariff raised by the Intervener has been taken note of. The Commission shall deal with the issue at appropriate paragraphs of the present Order while reckoning with ToU / ToD tariff.

Before proceeding further, the Commission would like to make it clear that the Commission, unless specifically mentioned, does not necessarily subscribe to the replies filed by the Discoms to the objections raised by the interveners herein.

2.4 State Advisory Committee (SAC)

The 16th meeting of the State Advisory Committee (SAC) constituted under Section 87 of the Electricity Act, 2003, was held on 20.03.2017 in the Conference Hall of the Commission at Panchkula is to elicit views / advise of the SAC Members on the MYT APR/ARR/Tariff/ True-up Petitions of all the Power Utilities under consideration of the Commission. The SAC Members mostly confined their comments / suggestion to the performance and the petition filed by the Discoms. The proceedings of the said meeting including views/suggestions of the SAC are reproduced below:-

At the onset, Shri Jagjeet Singh, Hon'ble Chairman, HERC, welcomed the Members of the SAC and other representatives present in the Meeting. The Hon'ble Chairman, HERC, expressed that the Commission has been extending all the necessary support to the Haryana Power Utilities in order to achieve the objectives of economical and reliable power to all sections in a transparent manner. He reiterated that the same shall continue.

Hon'ble Chairman informed the Members of the Committee that the proceedings of the last meeting of the SAC was circulated and as the Commission has not received any comments from any of the Members; the same are accordingly being confirmed and taken as approved.

He further stated that the present SAC meeting has been convened to discuss various issues pertaining to ARR of HPGCL, HVPNL, UHBVNL and DHBVNL and issues emerged during the public hearings of ARR for FY 2017-18 held on 15 and 16 March, 2017. He emphasized that the suggestions of the SAC are important for consistent development of the Power sector in the State.

Shri M.S. Puri, Member, HERC raised the following two important issues that came up during the public hearings on the ARR/Tariff petitions of the Discoms, for the deliberations and views of the SAC:-

- i) The Industrial Consumers are subjected to two part tariff i.e. fixed charge and energy / variable charge. Due to sluggish demand for their products / services leads to lower energy demand and load factor thereby the per unit (Rs / kWh or kVAh) effective tariff paid by them in such cases shoots up exorbitantly to as high as Rs. 15/Unit. Thus, there could be a need for capping the maximum tariff payable by them.
- ii) Double charging of fixed cost - as some part of the fixed cost is also paid by the electricity consumers, subjected to two part tariff, by way of wheeling charges which is not reckoned with while determining Fixed Cost component of tariff. Hence, either the wheeling charges which is worked out on the basis of cost attributed to network establishment and operation cost (8.23% of the net ARR in the FY 2016-17) may need to be looked into or the fixed component of tariff may need appropriate adjustment to avoid the same cost being recovered twice.

Shri Puri, further said that a part of fixed charges are also being recovered through wheeling charges from the embedded Open Access consumers and the issue has been raised number of times during various hearings, however, the utilities hitherto have not responded and have not made submissions over the issue.

Shri Shatrujeet Kapoor, CMD, UHBVN and DHBVN clarified that the effective rate goes up because the contracted load is not fully utilized by the consumers. He further explained that similar situation is faced by the Discoms as well i.e. in case they do not draw power from a particular source under PPA or due to lower demand the drawl of power is reduced, the entire fixed cost is still payable and since the quantum of power drawl is lower the effective per unit (Rs/kWh) rate paid by them to such generator(s) shoots up accordingly. Shri Puri stated that Discoms may suggest

differential fixed charges for industry on single shift and three shifts or differential could be contract demand as being done in Gujrat.

On the second issue i.e. double charging of fixed cost, Sri Kapoor said that he would examine the provisions / Orders of other SERCs including Gujarat and submit a report / proposal to the Commission within two weeks.

Hon'ble Chairman Shri Jagjeet Singh directed Distribution Utilities to analyze the issue and submit their report in the matter within a week's time so as same may be considered while deciding the ARR and tariff for FY 2017-18.

Shri Puri attracted the attention of SAC Members towards a circular issued by the UHBVNL which provides for supply to Dera and Dhanis from agriculture feeders and raised his concerns in the matter. He stated that this is contrary to the policy of feeder segregation on which huge Capex had already been made by the Discoms and if Discoms continues with this practice a situation will soon arise which will necessitate the feeder segregation again.

Replying to the concerns raised by Shri Puri, Shri Shatrujeet Kapoor informed the Committee that electricity connection to un-electrified Dera/Dhanis has been proposed from AP feeders having PAT facility or by installing PAT whereas feasible and where it is not feasible, the connection be released from the nearest RDS feeder. He asserted that the same has been proposed in line with State Policy of using PAT on AP feeders and to avoid intermingling of AP and RDS supply and crossings of electricity lines to ensure safety in operations and to avoid possibility of theft and misuse of electricity by consumers. He further assured to review the ibid sales circular and modify the same if deemed appropriate.

Chairman, Shri Jagjeet Singh raised the issue regarding implementation of Time of Day (TOD) tariff for LT and HT industries. He asserted that Discoms should design TOD program for HT and LT industries to dispense their surplus power during off peak hours and should review peak hours which have not been changed for ages. He further added that TOD tariff considering seasonal demand and peak hours may be designed by the Discoms.

On the issue ToD Tariff, Shri Kapoor apprised the SAC that given the incompatibility of the meters installed at L.T. Industrial consumers i.e. which has no such register to record electricity consumption w.r.t. time, generic ToD cannot be introduced at this stage. However, it may be possible to introduce season differentiated

tariff. in the case of H.T. consumers he said that the same can be examined w.r.t. to peak / off peak demand period. Shri Puri, Member / HERC added that in case a proposal is submitted for ToD, the Peak Load Exemption Charges (PLEC) in vogue will have to be dispensed with. Additionally, Shri Pillai, Chairman / India Smart Grid Forum suggested that while considering 'Time of Use' tariff real time / dynamic pricing of power should also be considered. He further added that in case the Discoms are contemplating replacing consumer meters including that of L.T. consumers the same needs to be replaced by smart meters which will help in improving the existing tariff design.

Shri Vineet Garg, M.D./HVPN agreed to make available to the Discoms any vacant premises owned by HVPNL to the Discoms in case they so required.

Chairman Shri Jagjeet Singh further emphasized the use of battery storage and opined that an incentive can be proposed to promote the storage capacity alongside rooftop solar plants. He also stressed for TOD tariff for stations established for charging of electrical vehicles and directed utilities to analyze the issues and put up a suitable proposal before the Commission. Shri Singh has also emphasized his concerns regarding extensive use of DG sets in marriages and other public arrangements, contributing to environmental pollution. He suggested that process for getting temporary supply tariff be eased and tariff which is currently one and half times of general tariff be reduced to make it more attractive. Representative from the Discoms assured to ease out the process of temporary connection.

Shri Jagjeet Singh further pointed out that even after the lapse of more than two year since the inception of Regulations; Discoms have yet not streamlined billing of consumers having rooftop solar under net metering arrangement and registered his displeasure. He directed the Discoms to make suitable changes in the billing software to ensure proper billing of such connections. He further emphasized the use of smart meters in the area as specified by the Commission. He also pointed out that the purchase cost of energy meter in the State of Punjab is significantly lower as compared to Haryana and as such directed the Discoms to review and furnish their comments in the matter. He further stressed that connections in the name of persons expired/past away should be discouraged and instructions may be issued by the Discoms to curb the practice and facilitating promoting change of name easily.

On the issue of 'temporary tariff' which at present is 1.5 times the normal tariff of the tariff category concerned, Shri Shatrujeet Kapoor suggested that the same may be allowed at the normal tariff while the security amount may be doubled from the existing level.

Sh. Singh raised the issue of installation of smart meters for supply of electricity to the telecom towers and Street Light, and accordingly issue one single bill to the Municipal Authorities / parties concerned. Regarding change of name - consumer meter on demise of a consumer, he suggested that the same may be got done by his lawful successor within three months, a failure to do so should lead to forfeiture of the security amount standing against the said connection and penal tariff at the highest rate must be recovered from such consumer. He further raised the issue of periodicity of issuing electricity bills to A.P. consumers wherein the cost of meter reading, billing, bill delivery and revenue collection may outweigh the amount of revenue collection from them at a highly subsidized rate of about 12 Paisa / Unit. He also highlighted the revenue loss to the distribution utilities on the account of multiple connections in a single premise and suggested Shri Kapoor to look into the matter and suggest appropriate measures to avoid revenue loss on this account. Chairman Shri Singh suggested charging of highest tariff from consumers involved in misuse of illegal multiple connections in a single premise.

Chairman Shri Singh also suggested charging of NDS tariff for AP consumption from the consumers having high agriculture income say more than Rs. 20 lacs/annum, in order to reduce the overall burden of AP subsidy provided by the state Government. He suggested that Discoms may take up the matter with State Government to roll out such scheme. He further suggested for carrying out a comprehensive study to ascertain the actual agriculture consumption/sale vis-à-vis posed for AP subsidy before the Commission. The CMD, UHBVNL & DHBVNL assured to examine the issue and will submit a report to the Commission for its consideration.

Shri Puri further highlighted the issues related to RE Regulations. He raised issues related to allowing of RESCO model for grid connected roof top solar plants covered under HERC Net metering Regulations, third party sale of power generated through roof top solar plants, waiver of all taxes, Cross Subsidies, Additional Surcharge etc. on transaction of solar power along with the RPO trajectory to be considered for Haryana looking into the topography and current power surplus scenario.

Shri D K Chopra, Technical Advisor, HAREDA informed the Committee that Haryana Solar Policy provides for third party sale and banking of power generated from solar plants. He informed that RESCO model is an arrangement between beneficiary and ESCO in which ESCO on mutually agreed terms, conditions set up/commission a renewable energy plant for the use of beneficiary, and HERC Regulations are silent in the matter.

On the issue of agreement with RESCOs for solar power, Shri Debashish Majumdar, Member, HERC pointed out that the possibility of overcharging by the RESCOs from the Consumers who may not be aware with the technicalities can been ignored and as such advocated for proper mechanism to ensure the safeguard the interest of consumers in large. Replying to the concerns of Shri Majumdar, Shri Chopra appraised that the HAREDA is sensitizing the general public by various modes of communication and specifications, list of approved venders along with reference rates are available HAREDA web portal. He further informed the Committee Members that as on date about 40 MW rooftop solar plants have been installed in Haryana.

Chairman Shri Jagjeet Singh emphasized the need of standardization of roof top solar plants with battery storage and directed HAREDA and Discoms to ensure that the roof top solar commissioned in State under Net Metering Regulations are strictly as per the approved specifications. Shri Singh also emphasized the need for installation of rooftop solar plants by the employees of power utilities. He suggested that power utilities may consider framing a policy which provides for mandatory installation of solar rooftop plants by Haryana Power Utilities employees within a definite time frame say six months and in case of failure to do so such employees may be barred from all kind of electricity benefits extended to them by the utilities.

Regarding RE Regulations and related issues of solar policy, Chairman Shri Singh apprised the Committee that the Commission is reviewing its RE Regulations and requested the licensees and HAREDA to comment actively on the draft regulations which will soon be available for comments of stakeholders. He further directed HAREDA and distribution licensees to study the impact of RPO trajectory proposed by MOP and submit report in the matter.

Shri Puri further requested for suggestions of Committee Members on the issue regarding increasing the cumulative limit of rooftop solar capacity to be allowed on distribution transformer, which is currently 30% of peak capacity of distribution

transformer capacity considering the impact of power injection from rooftop solar on the operations of distribution system.

Replying to the query, Shri Pillai apprised the Committee that ISGF had conducted a study on the international experience and regulatory perspectives which can be referred for necessary amendments in the Net metering Regulations. He further stressed upon technical study to ascertain the impact of rooftop penetration on distribution system.

Shri Jagjeet Singh, Chairman emphasized for roll out of smart meters in the cities like Gurgaon, Faridabad, Karnal and Panchkula so as technology be leveraged for better operations. He suggested that energy meters, proper dismantled thereof be utilized properly in rural areas.

The smart Grid project proposed by DHBVNL at Gurugram was discussed. Shri Kapoor, CMD, DHBVNL informed that DPR of the project has been submitted and the Capital expenditure to tune of Rs. 200 crore for 2017-18 has been posed before the Commission for approval. Shri Singh directed Discoms to submit the additional details of the project within seven days so that the same may be considered with ARR.

Issue of restructuring of power utilities was also discussed. It was consented that merging of two Discoms will help in reduction the overall A&G expenses and will lead to efficient management with uniform policies across Haryana. Shri Kapoor was requested to expedite the process and formalities pending at their end in the matter and refer the matter to State Government for the final decision.

Shri Sanjay Varma, Director Tariff, HERC raised the issue of credit to be received from the sales of common pool power from the BBMB generating stations. Representative of HPPC was requested to intimate the status and figures in the matter.

Shri Debashish Majumdar, Member/HERC, raised concern over the sluggish increasing in demand of electricity in the State. He emphasized that the Discoms being commercial entities should take positive and firm steps for actively increasing the demand for power within their market. He emphasized the need for assessing their own performance based not only on fundamental parameters of operational efficiencies and profitability but also consumers satisfaction. Towards this end the Discoms should prepare and submit details plans for a) increasing market size and demand and b) Development of an index for measurement of Consumer Satisfaction.

Chairman Shri Singh emphasized on potential of solar in the Rural areas of Haryana, which at present is deprived of net metering benefits due to limited availability of power. He requested CMD, UHBVNL & DHBVNL to look into the issue and furnish suitable proposal for increasing penetration of rooftop solar areas of Haryana.

Chairman Shri Singh further raised his concerns on the huge defaulting amount yet to be recovered by Discoms, He advised CMD, UHBVNL & DHBVNL to frame suitable action plan for recovery of pending dues.

Chairman Shri Singh further emphasized for consultant of ITI/Diploma/degree trainees for routine maintenance works, meter replacement drives, recovery of pending dues etc.

The issue of Works of License Rules which was to be got notified HVPNL from the State Government was also discussed. Shri Vineet Garg, MD, HVPNL informed the SAC Members that the matter is being discussed with Discoms and shall be finalized soon.

Shri Diwan apprised the Committee Members with the problems being faced by Discoms in accepting payments through Cheque and proposed that payments of electricity bills through check should be discouraged. Hon'ble Chairman, HERC assured that the Commission will look into the matter and impart suitable directions to the Discoms in its ARR Order for FY 2017-18.

Shri Subh Ram Vashista, Secretary apprised the Committee Members that properties of Distribution Licensee are lying abandoned at many places which may be considered for auction if not required. Hon'ble Chairman directed the licensees to look into the matter and initiate suitable action.

Shri Subh Ram Vashista, Secretary further pointed out that the meeting of State Coordination Committee has not yet been convened. Shri Vineet Garg, Managing Director, HVPNL was requested to make necessary arrangements to convene the meeting.

Chairman Shri Singh further emphasized for transparency in the operations of licensee and generating companies and advised all Haryana Power Utilities for consumer friendly web portal and placing all sort of information on their web portal in public domain.

In the end, the Hon'ble Chairman Shri Jagjeet Singh expressed appreciation for each of the SAC Members and other participants for providing their valuable comments/suggestions and requested the Chairman / MDs of the power utilities to expedite compliance of the Orders / Directives issued by the Commission within the timeline specified for the purpose and Commission to be informed accordingly.

2.5 UHBVNL & DHBVNL Revised ARR of FY 2017-18

UHBVNL, vide memo no. Ch-04/GM/RA/N/F-25/Vol-66 dated 29.03.2017 filed supplementary submissions on behalf of both the DISCOMs, submitting as under:-

1. Licensees had, vide the Memo no.Ch-29/GM/RA/N/F-25/Vol-(64) dated 06.01.2017, revised the proposed capital expenditure for FY 2017-18. Accordingly, the APR of FY 2016-17 and Revised ARR for FY 2017-18 as a consequence of change in projected capital expenditure for the FY 2017-18 and other related expenses was submitted before the Commission vide Memo no.Ch-30/GM/RA/N/F-25/Vol-(64) dated 06.01.2017.

2. However, after taking into account the impact of the Commission's Order on the Review Petition dated 13.07.2016, FSA Order dated 03.03.2017 and the directions issued by the Commission during the public hearing held on 16.03.2017, the supplementary submissions for True up of FY 2015-16 and Annual Performance Review (APR) for FY 2016-17 and Annual Revenue Requirement (ARR) for FY 2017-18 has been filed.

3. Power Purchase Cost of FY 2015-16

It has been submitted that:

- a) The Commission vide Order dated 03.03.2017 had approved Rs. 1377.94 Cr as FSA of FY 2015-16. Since, the FSA is being separately recovered in terms of the order dated 03.03.2017, while truing up, the above amount of Rs. 1377.94 Cr has been reduced from the Annual Revenue Requirement of the Discoms of FY 2015-16.
- b) That after going through the details provided in the Review Petition Order dated 13.1.2017, it is noticed that the fixed cost of Rs 164.44 Cr has been reduced from the Power purchase cost of FY 2014-15 on account of the excess amount of fixed cost recovered by HPGCL in FY 2014-15 forms part of Rs. 350.53 Crore (the excess fixed cost recovered by HPGCL during FY 2012-13, FY 2013-14 & FY 2014-15) and whose credit has been given by HPGCL in FY 2015-16. It is also pertinent to mention that the remaining

excess fixed cost recovered i.e. Rs. 164.44 Crore has been reduced by the Commission from the outstanding FSA determined vide Order dated 19.03.2015. It is therefore submitted, as HPGCL has given credit of this reduction to the Discoms in FY 2015-16 and as such the actual power purchase cost of Discoms for FY 2015-16 stands reduced by this amount. The Commission has reduced this amount i.e. Rs 350.53 Cr from the power purchase cost / FSA of the Discoms during FY 2013-14 & 2014-15 which has led to double accounting of same. Similarly, an amount of Rs.10.01 Crore on account of O&M expenses for FY 2013-14 have also been reduced from the power purchase cost of Discoms in FY 2014-15. However, the credit has been given by HPGCL in FY 2015-16 leading to reduction in actual power purchase cost whereas the Commission has already reduced this amount from the actual power purchase cost allowed to the Discoms for FY 2014-15.

4. Power Purchase Cost of FY 2017-18

- a) The Licensees have stated that in the present submissions, the power purchase cost has been projected on the basis of the full year actual for the FY 2015-16 and the latest available data for the FY 2016-17. It is also assumed that any additional liability on account of judgements of APTEL / CERC etc. will be considered at the time of actual payment and shall be addressed through the FSA as per the regulations. Power Purchase Cost proposed for FY 2017-18 has been accordingly reduced.
- b) The revenue at existing tariff for FY 2017-18 has been calculated based on the category wise unit sales projected and connected load and the existing fixed and variable charges, using the HERC methodology, which gives revenue gap of Rs. 2859.06 Crore.
- c) The projected revenue gap as given above is proposed to be partly met through a tariff increase. The Discoms have proposed a seasonal tariff for the first half and the second half of the FY 2017-2018 and submitted that it will result in reduction of revenue gap by Rs. 1311.86 Crore and will be at Rs. 1547.20 Crore.
- d) The net revenue gap of Rs. 1547.20 Crore will be met through efficiency gains of utility and/or Operational financing support as provided under UDAY scheme. The actual gap may be addressed at the time of performance review/True-Up.

- e) The Licensee is also releasing electricity connection to the consumers residing in unauthorised colonies/ dwellings without conferring them any ownership rights on the land / premises. It is submitted that presently these consumers are billed at tariff applicable for temporary connections which is 1.5 times of Energy Charge of relevant category. Further they also are required to pay ACD @ 4 times as applicable to temporary category. It is proposed to create a separate tariff category for consumers of such unauthorised colonies/ dwellings. It is proposed that such consumers shall pay double amount of security being paid by a normal consumer of relevant category for which supply has been sought however the tariff applicable shall be same as that paid by consumers of relevant category. It is further clarified that electricity bill or any other related document of such consumers shall not be in any case treated as proof of legal ownership/occupancy of the land/ premises where such connection has been given or sought for the any other purpose.
- f) In order to encourage online payment, the Discoms propose that the MDR (Merchant Discount Rate or Convenience Fee on digital payments) charges on payments through payment gateway of the Nigams by credit card, debit card, net banking, on Discoms website and swiping of card on POS machines on Discoms counters may be borne by the Discoms. So far the amount of MDR levied on the consumers annually is about Rs. 5 cr which is not very significant. However the amount may increase if the charges are borne by the Discoms. Further it has also been decided by the State Government that in order to promote cashless transactions, a discount of 5% of the bill amount subject to a maximum of Rs. 50/- whichever is less may be given to the consumers for making payment of electricity bill, water & sewerage bills through BHIM App from 1st April 2017 for one year. In order to offset the impact of this expenditure on the Discoms, a proposal would be given separately for imposing certain cash handling charges on consumers opting for payment of energy bills in cash. The charges for payment through e-wallets, mobile wallets, pay TM, m-pesa, etc. will however continue to be borne by the consumers. Further is also proposed that since the Discoms will be bearing the charges of payment through their payment gateway, the incentive of Rs. 5 per bill for digital payments of bills up to Rs. 15000/-

ordered by the Commission in the order dated 01.08.2016 may be withdrawn. Further it is also proposed that payments of bills by cheque be accepted only for bills up to Rs. 10000/-.

Accordingly, the DISCOMs have submitted the revised ARR for the FY 2017-18, as under:-

Summary of Actual ARR		FY 2017-18	FY 2017-18	FY 2017-18
Sr.	Particulars	UHBVN	DHBVN	Haryana
1	Total Power purchase cost	10,959.56 *	14,010.19 *	23,906.55
1.1	<i>Power Purchase Expenses</i>	9,292.21	11,818.81	21,111.02
1.2	<i>Inter State Transmission Charge</i>	512.05	899.22	1,411.27
1.3	<i>Intrastate transmission charges and SLDC charges</i>	682.92	701.34	1,384.26
2	Operations and Maintenance Expenses	1,288.05	1,392.76	2,680.80
2.1	<i>Employee Expense</i>	676.35	815.88	1,492.23
2.2	<i>Administration & General Expense</i>	81.06	77.72	158.77
2.3	<i>Repair & Maintenance Expense</i>	130.64	114.16	244.80
2.4	<i>Terminal Liability</i>	400.00	385.00	785.00
3	Depreciation	339.64	315.80	655.44
4	Total Interest & Finance Charges	1,182.09	907.00	2,089.08
5	Return on Equity Capital	268.19	242.42	510.61
6	<i>Prior Period Expense</i>	-	-	-
7	<i>Bad and Doubtful Debts</i>	40.44	32.49	72.93
8	<i>Other Expense</i>	-	-	-
9	Total Expenditure	14,077.96	16,900.65	29,915.41
10	<i>Less: Non Tariff Income</i>	197.25	247.47	444.72
11	Net Aggregate Revenue Requirement	13,880.70	16,653.18	29,470.69
12	Total Revenue	8,074.25	11,236.93	19,311.18
12.1	<i>Revenue from Interstate sales</i>	770.36	711.76	1,482.12
12.2	<i>Revenue from Intrastate sales @current tariff</i>	7,303.90	10,525.17	17,829.06
13	Regulatory Gap	-5,806.45	-5,416.26	-10,159.50
14.1	<i>Govt. subsidy (excluding FSA subsidy)</i>	3,738.13	2,492.09	6,230.22
14.2	<i>True-Up of Subsidy FY 2015-16</i>	145.10	96.73	241.83
15	Regulatory GAP after subsidy	-1,923.22	-2,827.44	-3,687.46
16	<i>Revenue From FSA relating to previous years as per the order dated 03.03.2017</i>			828.40
17	Net Gap After FSA			-2,859.06

* there is a totalling difference in the Power purchase cost i.e. Power Purchase cost has been overstated by an amount of Rs. 472.39 Crore and Rs. 590.81 Crore, in case of UHBVNL and DHBVNL, respectively.

Chapter 3

ANALYSIS OF ARR FILINGS AND COMMISSION'S ORDER

The Commission, while passing this Order for True-up of the FY 2015-16 Annual (Mid-year) Performance Review of the FY 2016-17 and determination of ARR of the UHBVNL and DHBVNL for the FY 2017-18, has taken into account their respective Petitions, additional information/data provided by them from time to time, revised ARRs, objections / suggestions of the stakeholders, replies of distribution licensees thereto, views expressed by the objectors during the public hearing(s) and the suggestions of the State Advisory Committee.

3.1 True-up of the ARR for the FY 2015-16

The Discoms have submitted that their petition(s) for True-up of the ARR for the FY 2015-16 are based on the audited accounts. The True-up petitions have been examined by the Commission in the light of the MYT Regulations, 2012 and amendment thereof, relevant Orders of the Commission and the audited accounts for the FY 2015-16 made available to the Commission by the Discoms.

Regarding True-up of the ARR, the MYT Regulations, 2012 provide 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”.*

Accordingly, the True-up of each item of expenses is discussed in the paragraphs that follow.

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 provide for the methodology and principles to be considered for calculating the True-up amount. However, as the Jind Circle was transferred vide the State Government Notification dated 3.07.2013 from the licensed area of UHBVNL to DHBVNL in July 2013, the impact of the same has been taken into account by the Commission. Resultantly, the approved expenses for both UHBVNL and DHBVNL have been adjusted to enable an appropriate comparison of actual expenditure with the approved expenditure for True-up exercise for the FY 2015-16.

In line with regulation 57.3 of the HERC MYT Regulations 2012, the Inflation factor for the FY 2015-16, is calculated as under:-

$$\text{INDEX}_n = 0.55 * \text{Consumer Price Index (CPI)} + 0.45 * \text{Wholesale Price Index (WPI)}.$$

Table 3.1 Calculation of Weighted Annual Average Inflation

Index = (0.55 * CPI +0.45 * WPI)	
Index (n) for FY 2015-16	225.2763
Index (n-1) for FY 2014-15	219.4946
Weighted Average Inflation Factor (rounded off)	2.63%

UHBVNL

The Commission had allowed O&M expenses (excluding terminal benefits) amounting to Rs. 645 Crore for the FY 2014-15 as part of True-up in the ARR/Tariff Order for the FY 2016-17. Hence, the same shall now form the base year figures for calculating the admissible Employee and A & G Expenses for the FY 2015-16. The O & M expenses are calculated as per the MYT Regulations i.e. employee and A & G Cost are calculated after accounting for the increase (based on the inflation factor) and R & M cost is calculated based on 1.65% of average GFA of the FY 2015-16. Accordingly, normative O & M expenses, as per the MYT Regulations, works out to Rs.706.24 Crore. However, the actual expenditure incurred by UHBVNL is Rs. 612.12 Crore as per the audited accounts for the FY 2015-16 as against Rs.696.96 Crore approved by the Commission in the MYT Order for the FY 2015-16. **The actual expenditure, therefore, is less than the allowable O & M expenses as per the MYT Regulations and is also less than the expenses already allowed by the Commission for the FY 2015-16. Therefore, Rs. 612.12 Crore is now approved as the revised O&M expense for the FY 2015-16.**

Table 3.2 O&M expenses of UHBVNL for FY 2015-16

(Rs. in Crore)

Particulars	True-up	HERC Approval	UHBVNL (actual as per Audited Accounts)	HERC (revised approval)
FY	2014-15	2015-16	2015-16	2015-16
Employees Expenses (excluding terminal benefits)	512.71	512.78	498.49	498.49
A & G Expenses	76.60	72.95	75.24	75.24
R & M Expenses	55.69	111.23	38.39	38.39
Total	645.00	696.96	612.12	612.12

DHBVNL

The O&M expenses (excluding terminal benefits) of DHBVNL for the FY 2014-15 approved by the Commission was, Rs. 710.34 Crore. Hence, this shall be the base year figures for the purpose of calculating the normative Employee and A & G Expenses for the FY 2015-16. The O & M expenses are calculated as per MYT Regulations i.e. employee and A & G Cost are calculated after accounting for the increase (based on the inflation factor) and R & M cost is calculated based on 1.65% of average GFA of the FY 2015-16. Total allowable O & M Expenses, as per the MYT Regulations, work out to Rs.794.51 Crore as against Rs. 677.05 Crore approved in the MYT Order for the

FY 2015-16 and Rs. 745.45 Crore actual expenditure incurred by DHBVNL as per audited accounts. The Commission observes that though the increase in employee cost is 6.44% over the previous year, the same is considered reasonable in view of the increase in DA for the year. The actual expenditure, Rs. 745.45 crore, being less than the allowable O & M expenses as per the MYT Regulations, is now approved as the revised O&M expense for the FY 2015-16.

Table 3.1 O & M Expenses of DHBVNL for FY 2015-16

Particulars	(Rs. in Crore)			
	Audited expenses	HERC Approval	DHBVNL (as per Audited Accounts)	HERC (revised approval)
	2014-15	2015-16	2015-16	2015-16
Employees Expenses	599.07	518.52	637.68	637.68
A & G Expenses	71.83	60.46	72.13	72.13
R & M Expenses	39.44	98.07	35.64	35.64
Total	710.34	677.05	745.45	745.45

3.1.2 Terminal benefits

Terminal benefits are uncontrollable expenses as per the MYT Regulations, 2012. Hence, the same are trued-up based on the audited accounts of the Discoms i.e. **Rs. 268.27 Crore for UHBVNL and Rs.392.00 Crore for DHBVNL.**

3.1.3 Depreciation

The Commission observes that actual opening Gross Fixed Assets (GFA) as on 1.4.2015 for UHBVNL is Rs. 5919.61 Crore i.e. lower than Rs. 6323.55 Crore estimated by the Commission for calculating depreciation for the FY 2015-16. While in the case of DHBVNL the actual opening GFA as on 1.4.2015 as per audited accounts for the FY 2015-16 i.e. Rs. 6233 Crore is higher than Rs. 5558.91 Crore estimated by the Commission for working out depreciation for the FY 2015-16 in the MYT Order dated 07.05.2015.

In view of the change in the opening balance of GFA and the composition of assets, the average rate of depreciation for FY 2015-16 works out to 4.60% as against 4.80% considered by the Commission for UHBVNL and 4.53 % against 4.80% for DHBVNL in the MYT Order dated 07.05.2015.

The Gross depreciation for the FY 2015-16, as per the audited accounts, is Rs.272.42 Crore and Rs. 282.21 Crore for UHBVNL and DHBVNL respectively. The net depreciation (net of depreciation on assets funded through consumers' contributions/grants) is Rs. 239.83 Crore and Rs. 199.89 Crore respectively for UHBVNL and DHBVNL. Accordingly, the Commission approves the deprecation as per the audited accounts as above, the details are provided in the Table 3.4 and 3.5.

Table 3.2 Depreciation of UHBVNL for FY 2015-16 (Rs. Crore).

Particulars	Approved in the MYT Tariff Order dated 07.05.2015	Actual as per Audited accounts	HERC Revised approval for the FY 2015-16
Opening Gross GFA for the year	6323.55	5919.61	5919.61
Depreciation	265.92	272.42	272.42
Rate of Depreciation	4.21%	4.60	4.60
Less: depreciation on consumer contribution	33.45	32.59	32.59
Net Depreciation	232.46	239.83	239.83

Table 3.3 Depreciation of DHBVNL for FY 2015-16 (Rs. Crore)

Particulars	Approved in the MYT Tariff Order dated 07.05.2015	Actual as per Audited accounts	HERC Revised Approval for the FY 2015-16
Opening Gross GFA for the year	5558.91	6233.10	6233.10
Depreciation	266.92	282.21	282.21
Rate of Depreciation	4.80	4.53	4.53
Less: depreciation on consumer contribution	64.66	82.32	82.32
Net Depreciation	202.26	199.89	199.89

3.1.4 Interest on Consumers Security Deposit

The Commission, vide the MYT Order dated 07.05.2015, had approved interest on consumer security deposit at Rs.69.10 Crore (UHBVNL) for the FY 2015-16, as proposed by the licensee.

UHBVNL has now intimated the actual interest paid on consumers' security deposit as per their audited accounts of the FY 2015-16 is Rs. 57.77 Crore, which is lower than the interest cost already approved by the Commission. However, the Commission observes that the licensee is yet to pay Rs. Rs. 20.70 crores out of this

reflected as incremental amount of interest payable on Consumer Security Deposit. The Commission, therefore, approves only Rs. 37.07 crores (57.77 – 20.70) as interest on consumer security deposit for the FY 2015-16 being the amount actually paid by the licensee. **The Commission directs the licensee to provide details of interest on consumer security deposit that has not been paid inspite of clear directions of the Commission in this regard.**

Similarly, in the case of DHBVNL, the Commission had approved Rs.94.01 Crore as interest on consumer security deposit while the actual expenses, as per the audited accounts, is Rs.15.41 Crore. The actual expenditure of both the Discoms, being lower than that allowed by the Commission in its MYT Order for the FY 2015-16, is therefore, approved for true- up of interest on consumers' security deposit for the FY 2015-16 for both UHBVNL and DHBVNL except for adjustment of Rs. 20.70 crore as above.

The Commission observes that a large number of consumers, during the public hearing, had complained of not receiving interest on consumer security deposit. The Commission, therefore, again directs the Discoms to ensure compliance of the Commission regulations in this regard.

3.1.5 Interest on Capex loans

UHBVNL

The Commission observes that UHBVNL has incurred an expenditure of Rs.513 Crore on additions to capital works as against Rs. 983.55 Crore approved by the Commission for the FY 2015-16 in the MYT Order dated 29.05.2014 which was retained by the Commission vide ARR / Tariff Order dated 7th May 2015. On this account, the actual interest cost on Capex loan incurred by the Discom, is Rs.147.41 Crore as against Rs.120.74 Crore (net of IDC) proposed by the licensee and approved by the Commission in its MYT Order dated 07.05.2015 for the FY 2015-16. However, the Commission, at paragraph 3.3.1 has examined the capital expenditure actually incurred by the licensee during the FY 2015-16 as against that approved by the Commission and observes that actual expenditure amounting to Rs. 16.57 crores has not been approved by the Commission or is in excess of the amount approved. Out of this, Rs. 9 crores, that has been spent on release of tube well connections, is funded out of consumer contribution. Therefore, proportionate interest on balance amount of Rs. 7.57 crores amounting to Rs. 1.06 crores is reduced from the interest cost incurred

for the year. **Consequently, Rs. 146.35 crore out of Rs. 147.41 crore incurred by the licensee on account of interest on Capex loan, shall now form part of the revised ARR for the FY 2015-16.**

DHBVNL

The Commission observes that the licensee has incurred an expenditure of Rs. 587.87 Crore on additions to the capital works in the FY 2015-16 as against Rs. 867.29 Crore approved by the Commission in the MYT Order dated 29.05.2014. The Commission had approved interest on capx loan amounting to Rs. 134.16 crores against which the licensee has incurred an expenditure of Rs. 103.25 crores(net of IDC). The Commission has examined the calculations and observes that the expenditure incurred by the licensee on this account appears to be reasonable and therefore the same is approved for true up for the FY 2015-16. However, the Commission, at paragraph 3.3.1 has examined the capital expenditure actually incurred by DHBVNL during the FY 2015-16 as against that approved by the Commission and observes that actual expenditure amounting to Rs. 54.50 crores has not been approved by the Commission or is in excess of the amount approved. Therefore, proportionate interest on the same, amounting to Rs. 3.35 crores, is reduced from the interest cost incurred for the year. **Consequently, Rs. 99.90 crore out of Rs. 103.25 crore incurred by the licensee on account of interest on Capex loan, shall now form part of the revised ARR for the FY 2015-16.**

3.1.6 Interest on Working Capital loan

As the total approved ARR has undergone a change on account of the true- up of expenses that has been approved by the Commission; the admissible working capital loan and interest thereto has been recalculated accordingly in line with the MYT Regulations. The revised calculation of approved working capital borrowings and Interest cost thereto, for both UHBVNL and DHBVNL, is as under:-

Table 3.4 Interest on Working Capital Loan of UHBVNL (Rs. Crore)

Interest on working capital	FY 2015-16
O&M expenses for 1 month	73.37
Maintenance spares 1% of opening GFA	59.20
2 months receivables	1787.60
Uncollected revenue (1.5% of receivables)	107.26
Total	2027.41
Less	

Advance Consumers Security Deposit during the year	838.04
Net working capital	1189.38
Interest rate	12.5 %
Interest cost (rounded off)	148.67

Table 3.5 Interest on Working Capital Loan of DHBVNL (Rs.Crore)

Interest on working capital	FY 2015-16
O&M expenses for 1 month	94.79
Maintenance spares 1% of opening GFA	62.33
2 months receivables	2384.02
Uncollected revenue (1.5% of receivables)	143.04
Total	2684.18
Less: Advance Consumers Security Deposit during the year	1012.41
Net working capital	1671.77
Interest rate	12.50%
Interest cost (rounded off)	208.97

3.1.7 Interest on UDAY Bonds

Government of India has notified Ujwal Discom Assurance Yojana (UDAY) scheme for operational and financial turnaround of power distribution companies (DISCOMs), on 20th Nov 2015 under which State shall take over 75% of Discom debt as on 30th September, 2015 over two years i.e. 50% of Discom debt shall be taken over in FY 2015-17 and 25% in the FY 2017-18.

The Government of India, the State of Haryana and the DISCOMs of Haryana (Uttar Haryana Bijli Vitran Nigam Ltd. and Dakshin Haryana Bijli Vitran Nigam Ltd.) signed the tripartite Memorandum of Understanding (MOU) under the Scheme UDAY – “Ujwal DISCOM Assurance Yojana” on 11th March 2016 for operational and financial turnaround of the DISCOMs. The implementation of UDAY is expected to lead to changes in the projections of interest and finance charges for the Discoms and have a positive impact on the revenue requirement of the Discoms.

The turnaround is proposed to be achieved through:

- Improving operational efficiencies of DISCOMs (AT&C Losses to be 15% & ACS ARR gap to be eliminated by 2018-2019)
- Reduction of cost of power
- Reduction in interest cost of DISCOMs
- Enforcing financial discipline on DISCOMs through alignment with State finances

Salient Features of UDAY are listed below:

- States shall take over 75% of DISCOM debt as on 30 September 2015 over two years - 50% of DISCOM debt shall be taken over in 2015-16 and 25% in 2017-18
- Government of India will not include the debt taken over by the States as per the above scheme in the calculation of fiscal deficit of respective States in the financial years 2015-16 and 2017-18
- States will issue non-SLR including SDL bonds in the market or directly to the respective banks / Financial Institutions (FIs) holding the DISCOM debt to the appropriate extent
- DISCOM debt not taken over by the State shall be converted by the Banks / FIs into loans or bonds with interest rate not more than the bank's base rate plus 0.1%. Alternately, this debt may be fully or partly issued by the DISCOM as State guaranteed DISCOM bonds at the prevailing market rates which shall be equal to or less than bank base rate plus 0.1%.
- Reduction of cost of power.

The schedule of takeover of loan has been given as under:-

Break up of State Govt Takeover of Loans					
Particulars	FY 16	FY 17	FY 18	FY 19	FY 20
Grant (%)	11.25%	11.25%	11.25%	11.25%	11.25%
Grant (Cr)	3,892.5	3,892.5	3,892.5	3,892.5	3,892.5
Equity (%)	3.75%	3.75%	3.75%	3.75%	3.75%
Equity (Cr)	1,297.5	1,297.5	1,297.5	1,297.5	1,297.5
Debt (%)	35.00%	45.00%	30.00%	15.00%	0.00%
Debt (Cr)	12,109.9	15,569.9	10,379.9	5,190.0	0.0

The Commission observes that the UDAY scheme, if implemented properly, will result in all round benefit, ultimately resulting in lower tariff to the consumers once the State Government completes the committed infusion of funds by way of equity and grant by the end of five years. However, the Commission observes that as per the MoU dated 11.03.2016 the Operational Funding (OFR) has to be provided by the State Government. The interest on the UDAY bonds, as quantified by the Discoms for the FY 2015-16 and the FY 2017-18 adds up to Rs. 9468.9 million.

UHBVNL and DHBVNL have not proposed any interest on UDAY borrowings separately and have included the same as part of their working capital borrowings. However, the Commission is of the opinion that borrowings and interest thereon arising

out of the UDAY scheme are separate from the regular working capital borrowings and as such are to be shown separately when these are proposed for true up in subsequent years. The Commission has retained the working capital borrowings to the normative level and expects the balance to be met from the OFR support available under UDAY. Further, as per the details provided by the Discoms there are some interest liability on the UDAY bonds in the FY 2016-17 as well. As the Commission, in the present Order has restricted itself, in line with the MYT Regulations in vogue, to true-up of the FY 2015-16 and determination of ARR including true-up amount for the FY 2015-16, hence, all the issues related to the FY 2016-17 shall be reckoned with while carrying out true-up of the FY 2016-17 in the FY 2018-19. The interest on UDAY borrowings as filed by the Discoms are as under:-

Table: Interest on UDAY borrowings for the FY 2015-16 (Rs. Crore)

UHBVNL	DHBVNL	Total
1.67	0	1.67

3.1.8 Cost of raising Finance and Bank Charges

The Commission had not allowed any expenditure towards cost of raising finance and bank charges to both the Discoms and the same was to be considered as part of the True-up exercise.

As per the audited accounts, UHBVNL has incurred a cost of Rs. 2.43 Crore while DHBVNL has incurred Rs.1.62 Crore on this account. As it is unavoidable cost required for raising the requisite funds, the Commission allows the same to be trued up.

3.1.9 Other Debits

UHBVNL in its ARR for FY 2015-16 as per its True-up petition has included other expenses of Rs. 39.88 Crore as per the details provided in the table below:

Table: Other Expenses UHBVNL (Rs. Lakhs)

1	Provision for bad and doubtful debts	3480.29
2	Compensation for injury , death and damage and penalties	304.49
3	Infructuous Capital Exp. Written Off	27.48
4	Loss on Obsolescence of Stores & Spares	21.78
5	Sundry Debits balances Written Off	55.68
6	Provision for amount recoverable from employees / theft of property	98.48
	Total	3988.20

The Commission has examined the submission of the licensee and observes that part of other expenses includes provisions for bad debts and other losses amounting to Rs.35.79 Crore (Sr. No. 1and 6) which are not admissible for true - up of actual expenditure. **Hence, after excluding these the Commissions allows Rs.4.09 Crore as other debits for True-up.**

DHBVNL has proposed a True-up of other debits of Rs. 32.48 Crore as given in table the table below:

Table: Other expenses DHBVNL (Rs. Lakhs)

	Particulars	Amount (Rs. Lakhs)
1	Shortage on physical verification of stock	56.83
2	Loss of materials by pilferage etc.	78.77
3	Compensation for injuries, death and damage- staff	187.42
4	Compensation for injuries, death and damage- Outsiders	502.72
5	Misc. Compensation	169.98
6	Loss on sale of Fixed Assets	1771.07
7	Sundry debit balance written off	25.91
8	Written of Provision on account of theft of material	455.20
	Total	3247.93

The Commission has examined the above and observes that part of other debits includes shortage on physical verification, pilferage and theft (Sr. No. 1,2 and 8) amounting to Rs.5.91 Crore which are not admissible for True-up of actual expenditure. **After excluding the said amount, the Commission allows Rs.26.57Crore as other expenses for True-up.**

3.1.10 Prior Period Expenses

DHBVNL has filed for True-up of prior period income (net of prior period expenses) amounting to Rs.0.83 Crore respectively. The Commission observes that the amount as per their audited accounts is Rs. 0.51 Crore and is admissible as per the MYT Regulations, 2012. Hence, the same is allowed to be trued-up. However, the true up petition of UHBVNL has not mentioned any prior period adjustment inspite of the audited accounts showing a net prior period income of RS. 25.23 crores. **The Commission, in accordance with the MYT regulations and its earlier orders has reduced the ARR of UHBVNL by Rs. 25.23 crores on account of prior period adjustment as per the audited accounts of UHBVNL for the FY 2015-16.**

3.1.11 Return on Equity (RoE)

UHBVNL and DHBVNL have proposed True-up of return on equity for the FY 2015-16 amounting to Rs. 228.94 Crore and Rs. 203.80 Crore respectively. The Commission observes that True-up has to be necessarily based on the same principles as were applied while approving the ARR/Tariff for the FY 2015-16. **As the Commission had not allowed any RoE in the ARR/Tariff Order dated 29.05.2014, the same cannot be considered as part of the True-up exercise.**

3.1.12 Non-tariff Income

The Commission had approved Rs. 150.91 Crore as non - tariff income for the FY 2015-16 as proposed by the UHBVNL and the actual non - tariff income as per audited accounts is Rs. 248.30 Crore. However, the licensee has now submitted that Rs. 65.31 crores, being delayed payment surcharge from the consumers may not be considered as income of the licensee as the same is towards the cost of additional working capital required when the consumers do not pay on time for the bills raised to them. **Accordingly, the revised non- tariff income for the FY 2015-16 has been approved at Rs. 182.99 Crore (248.30-65.31) as proposed.**

Similarly, in the case of DHBVNL, the Commission had approved Rs. 149.83 Crore as non - tariff income for the FY 2015-16 as proposed by them. The actual non - tariff income as per audited accounts is Rs. 303.53 Crore. The licensee has now submitted that Rs. 79.08 crores, being delayed payment surcharge from the consumers may not be considered as income of the licensee as the same is towards the cost of additional working capital required when the consumers do not pay on time for the bills raised to them. **Accordingly, the revised non- tariff income for the FY 2015-16 has been approved at Rs. 224.46 Crore (303.53-79.08).**

3.1.13 True-up of Power Purchase Cost

The Commission observes that difference in power purchase cost could arise either on account of variation in actual generating source wise quantum or rate of power vis-à-vis those allowed by the Commission on a projected basis. As per the MYT Regulations the Discoms are allowed to automatically recover FSA, without going through the regulatory process, in order to ensure financial viability of the licensees. However, the automatic recovery is subject to a cap and therefore shall necessitate a

True-up. Also, the actual cost for the year can only be determined after the audited accounts are available.

In view of the aforesaid constraints, the actual power procurement cost is to be trued up based on the normative distributions losses approved by the Commission in the ARR / Tariff Order for the relevant year. Transmission losses are allowed as per actual since the Discoms have no control over these losses.

UHBVNL, vide memo no. Ch-04/GM/RA/N/F-25/Vol-66 dated 29.03.2017, submitted that the Commission, in its Order on FSA dated 03.03.2017 had determined the power purchase cost for the FY 2015-16. However, it was observed that certain items of cost relating to power purchased from HPGCL had been accounted for in earlier orders of the Commission for which the credit had been given by HPGCL in the FY 2015-16. Accordingly, the power purchase cost of the Discoms had been reduced by the same amounts at two places which has lead to loss to the Discoms.

The Commission has examined the submission of UHBVNL and has reworked the power purchase cost of HPGCL to be allowed in the FY 2015-16 as below:

TOTAL POWER PURCHASE COST OF HPGCL BOOKED BY HPPC IN THE FY 2015-16 (A)		5,228.57
Adjustments in Power Purchase Cost based on Supplementary Petition filed by UHBVNL		
vide memo no. Ch-04/GM/RA/N/F-25/Vol-66 dated 29.03.2017		
(A) Add amounts already adjusted in ARR in previous years)		
1. Over recovery of Fixed cost by HPGCL	350.53	
2. Reduction in O&M expenses of HPGCL in the review petition of HPGCL.	10.1	
3. Surcharge on late payment	9.44	370.07
Less		
HPGCL surcharge (not to be allowed in the ARR)		329.06
Net Additions to power purchase cost of HPGCL		41.01
TOTAL POWER PURCHASE COST OF HPGCL APPROVED FOR THE FY 2015-16		5269.58

Consequent to the above adjustment, the details of True-up of power purchase cost of the Discoms for the FY 2015-16 is as per the table below.

Table: True-up of Power Purchase Cost (FY 2015-16)

Particulars		UHBVNL	DHBVNL	Total
Sales as per Audited accounts		13459.85	18777.19	32237.04
Less AP sales included in above		3979.70	5196.80	9176.50
Sales as per audited accounts (net of AP sales)		9480.15	13580.39	23060.54
Add AP sales approved by the Commission		3936.09	4970.65	8906.74
Total sales approved by the Commission		13416.24	18551.041	31967.281
Approved Distribution losses	%	24.79%	21.96%	
Sales grossed up for Distribution losses	MU	17838.37	23771.20	41609.57

Particulars		UHBVNL	DHBVNL	Total
Interstate sales and banking	MU	1847.49	3008.48	4855.97
Total power purchase net of Transmission loss	MU	19685.86	26779.68	46465.54
Intrastate & Interstate transmission losses as per audited accounts	MU	904.55	1121.88	2026.43
Approved power purchase volume (Sales grossed up by transmission and distribution losses)	MU	20590.41	27901.56	48491.97
Actual Power Purchase Volume as per Audited accounts	MU	22399.91	27362.98	49762.89
Disallowed Units	MU	1809.50	-538.58	1270.92
Cost of disallowed units at variable cost @2.62 per unit (as per FSA order)				332.98
Two third to be borne by the Discoms				221.91
One third to be borne by the consumers				110.99
Actual power purchase cost including transmission and SLDC charges				22495.21
Add: adjustment for HPGCL				41.01
Less two third cost of losses to be borne by the Discoms				-221.99
Net power purchase cost admitted by the Commission				22314.24
Per unit admitted cost (inclusive of Transmission cost and SLDC charges)				4.60
Power purchase cost		9474.96	12839.28	22314.24

3.1.14 Revenue from Sale of Power for the FY 2015-16

As per audited accounts for FY 2015-16, the two distribution licensees have recovered revenue from sale of power of Rs. 14778.33 Crore as against Rs. 16063.00 Crore estimated by the Commission. The True-up of revenue from sale of power for the FY 2015-16 is as given in the table below.

Table: Revenue from sale of power for the FY 2015-16

(Rs. Crore)

	UHBVNL	DHBVNL	TOTAL
Revenue from Intrastate sale of power (not including FSA)	5687.68	8292.96	13980.64
Fixed charges	563.45	929.69	1493.14
Total revenue from sale within state	6251.13	9222.65	15473.78
Revenue from interstate sale of power	652.74	891.76	1544.50
Total revenue	6903.87	10114.41	17018.28

3.1.15 Revised ARR for the FY 2015-16

In view of the above analysis, the Commission approves the revised ARR for UHBVNL and DHBVNL as per the details provided in the table(s) below.

Table: True-up of UHBVNL for the FY 2015-16 (Rs. Crore)

Particulars	Approved	Actual	Revised ARR for FY 2015-16
Power purchase cost	8800.12	9994.81	9474.96
Operations and Maintenance Expenses	1103.35	880.39	880.39
Depreciation	232.47	239.83	239.83

Net Interest on term loan	120.74	147.41	146.35
Interest on Security Deposit	69.10	57.77	37.07
Interest on Working Capital	152.00	1365.13	148.67
Cost of raising finance and bank charges	0	2.43	2.43
Total Interest and Finance Charges	341.84	1572.74	334.52
Other Debits	0.00	39.88	4.09
Prior period debits/ credits		-25.23	-25.23
Return on Equity Capital	0	0	0
Total Expenditure	10447.57	12702.42	10908.56
Non Tariff Income	-161.45	-248.30	-182.99
ARR	10286.12	12454.12	10725.57

Table 3.14 True-up of DHBVNL for FY 2015-16 (Rs. Crore)

Particulars	Approved	Actual	Revised ARR for FY 2015-16
Power purchase cost	12306.33	12500.41	12839.28
Operations and Maintenance Expenses	827.05	1137.45	1137.45
Depreciation	202.26	199.89	199.89
Net Interest on term loan	134.16	103.25	99.90
Interest on Security Deposit	94.01	15.41	15.41
Interest on Working Capital	186.00	1105.02	208.97
Cost of raising finance and bank charges	10.00	1.62	1.62
Interest on FRP Borrowings	0.00	546.89	0.00
Total Interest and Finance Charges	424.17	1772.19	325.90
Other Debits	0.00	32.49	26.57
Prior period debits/ credits	0.00	-0.51	-0.51
Return on Equity Capital	0.00	0.00	0.00
Total Expenditure	13759.81	15642.94	14528.58
Non Tariff Income	-149.83	-224.46	-224.46
ARR	13609.98	12810.06	14304.12

3.1.16 True-up of RE Subsidy for the FY 2015-16

The Commission had determined RE subsidy of Rs. 6196.91 Crore payable by the State Government to the Discoms for the FY 2015-16 based on an estimated CoS of Rs. 7.34 (CoS on LT supply) per unit for A.P. supply of 8570.73 MU. As the total ARR has now been revised because of the True-up of the FY 2015-16 and the quantum of power supplied to AP consumers during the FY 2015-16 has also been revised, based on actual; the subsidy for AP supply payable by the State Government also needs to be revised to the increase in quantum of sale to the AP tube-well consumers to 8906.74 Mus and to reflect the increase in CoS by 10%.

The final revenue gap, on account of true-up along with carrying cost has been taken forward in the approved ARR for the FY 2017-18. The details are as per table below.

Table: True up for FY 2015-16

		As per ARR Order	As per True- up Order
True up of subsidy and revenue gap			
Revised ARR for UHBVNL	Rs. Crores		10725.57
Revised ARR for DHBVNL	Rs. Crores		14304.12
ARR for FY 2015-16	Rs. Crores	23926.3	25029.70
Interest on FRP borrowings	Rs. Crores	312.71	0
Revenue gap for the FY 2013-14 including Holding Cost	Rs. Crores	1516.94	1516.94
Less FSA determined for the FY 2015-16 vide order dated 03.03.2017	Rs. Crores		1377.94
Total revenue requirement		25755.95	25168.70
Total sales for FY 2015-16	MU	35984.68	31967.28
Average Cost of supply for FY 2015-16	Rs.	7.16	7.87
% increase in average cost of service	%		10.00%
Voltage level cost of service used for calculation of subsidy for the FY 2015-16		Rs. 7.34	7.34
Adjusted Cos based on revised ARR			8.07
AP units sales in FY 2015-16	MU	8570.73	8906.74
True up Subsidy for FY 2015-16 (based on Adjusted CoS as above)	Rs. Crores	6196.91	7044.17
Revenue from sale of power as per audited accounts	Rs. Crores		17018.28
Total revenue including subsidy	Rs. Crores		24062.45
Balance Revenue gap for FY 2015-16 on account of true up to be carried forward	Rs. Crores		-1106.25

3.1.17 Fuel Surcharge Adjustment

The Commissions, in the True- up of the FY 2015-16 has Trued-up the power purchase cost for the FY 2015-16. However, the FSA determined vide HERC Order dated 03.03.2017 for the FY 2015-16 amounting to Rs. 1377.94 crores has been reduced from the true up calculations as the same is already being recovered as FSA and including the same here also would lead to double recovery from the consumers as well as the State Government. Similarly, the revenue from FSA has also been excluded.

3.2 ARR Determination for the FY 2017-18

The ARR for the FY 2017-18 filed by the Discoms have been considered and Commission's analysis and Order on each of the expenditure items are given in the paragraphs that follow.

3.2.1 Agriculture Tube Well Sales for the FY 2015-16, FY 2016-17 (revised) & FY 2017-18 (projected)

The Commission has examined the submissions of the Discoms (UHBVNL and DHBVNL) regarding AP Sales for FY 2015-16, FY 2016-17 and FY 2017-18 as under:-

Sales Projection / Estimation Methodology

Prior to segregation of AP feeders in the FY 2009-10, estimation of AP Sales was being done by the Commission based on the Annual Average Load Factor (ALF) i.e. ALF of metered AP Sales applied to the projected connected load of metered as well as unmetered AP Consumers. However, this methodology suffered from the limitations due to the fact that connected load particularly of the unmetered category was far from accurate thereby distorting the ALF itself. Further, due to the fact that a large number of AP meters were also dead and defective, hence, actual AP Sales claimed by the Discoms and those arrived at by using the ALF methodology were at variance. Thus, upon segregation of AP Feeders at 11 KV, the Commission considered it appropriate to change the methodology of estimating AP Sales as the actual consumption recorded on segregated 11 kV AP feeders during the previous year provided a firm starting point for estimating sales. However, as the sales has to be estimated at the tube-well consumers end and the fact that there are still significant number of un-metered A.P. consumer and reliability of meters installed at the metered AP Consumers tube-well due to a large number of such meters being dead / defective, was doubtful. Hence, the Commission, after analysing the data in entirety, arrived at a loss factor of 16% between the energy recorded at the 11 KV Feeders and point of sales to estimate AP Sales at Consumers' end. The said loss factor has been continued with as it is also corroborated by the difference in input energy on segregated AP feeders and the energy actually billed at the consumers end

Further, as certain numbers of AP connections are added during the year the expected load growth was also built into the AP Sales estimation methodology. As this methodology is more scientific and minimises estimation errors, the Commission has considered it appropriate to continue with the same methodology in the present Order. Further, as far as projected sales for consumer categories, other than AP, is concerned the Commission has considered the CAGR of actual sales for the last three years with some extrapolations and adjustments (jind Circle) as required to complete the data

series for quantifying the actual AP sales of the two distribution licensees true up for the FY 2015-16, revised estimated for the FY 2016-17 and projected for the FY 2017-18 are as given in the following paragraphs.

3.2.2 True up of AP Sales for FY 2015-16 (True-up of RE Subsidy)

On initial scrutiny of the ARR petition (s), the Commission had observed that the month wise data of AP consumptions recorded on segregated AP feeders and consumption of AP consumers fed from other feeders was not provided. Accordingly, the Discoms, vide memo dated 31.01.2017, were asked to submit data on AP consumption along with other information pertaining to ARR filing. The Discoms, subsequently, submitted the complete AP sales data of AP Segregated feeders for the 2015-16, which has been taken into account for the purpose of present estimation.

On perusal of the AP sales data for the FY 2015-16, as submitted by the Discoms, AP consumption of the two licensees has been worked out as under:-

1. AP consumption (MUs)	UHBVN	DHBVN
2. AP units MUs as recorded on segregated AP feeders (In	4650.09	5916.52
3. Loss Factor at Consumers End	16%	16%
4. Net consumption MUs from AP feeders {1X(1-0.16)}	3906.07	4969.86
5. Add AP MUs on other feeders	45.98	106.60
6. Less Consumption MUs of other category consumers on segregated AP feeders	15.97	105.83
7. Total AP consumption MUs (4+5)-6	3936.09	4970.65
8. Total AP consumption MU (UHBVN+DHBVN)	8906.74	
9. Total AP consumption tariff Order dated 01.08.2016	8707	
10. Total AP consumption tariff Order dated 07.05.2015	8571	

Accordingly, the actual consumption of AP consumers of the two Discoms for FY 2015-16 now works out to 8906.74 MUs (say 8907 MUs) as against 8571 MUs approved by the Commission in the ARR/Tariff Order dated 07.05.2015. Increase in AP sales is mainly attributed to DHBVNL. **Consequently, for True-up of RE subsidy of the two Discoms for the FY 2015-16, the trued-up AP consumption has been taken as 8907 MUs.**

3.2.3 AP Sales Estimation for the FY 2016-17 & FY 2017-18

Assuming an annual growth of 5% over the actual AP consumption calculated for

the FY 2015-16, the Discoms, in their Annual Performance Review petitions for the FY 2016-17 (including projected Annual Revenue Requirement for FY 2017-18 and True-up for FY 2015-16) have indicated the AP consumption for the FY 2016-17 and the FY 2017-18 as under:-

Sr. No.	AP sales (MUs)	FY 2016-17	FY 2017-18
1	In respect of UHBVNL	4178.69	4387.62
2	In respect of DHBVNL	5209.05	5469.50
3	Total AP Sales of two Discoms (1+2)	9387.74	9857.12

Whereas, the Commission in its tariff Order dated 01.08.2016 had considered and approved AP sales of both Discoms to the tune of 9094 MUs (4196 MUs for UHBVNL and 4898 MUs for DHBVNL). It is apparent from the table above that the Discoms have projected AP sales during FY 2016-17 and FY 2017-18 on the higher side for the FY 2016-17 vis-a-vis that estimated by the Commission and has further escalated the same by 5% to arrive at the estimated figure for the FY 2017-18.

The Commission has examined the AP Sales data emanating from the 11 KV AP segregated feeders as provided by the Discoms for the FY 2014-15, 2015-16 and 2016-17 respectively for DHBVNL and UHBVNL as provided by them. The AP sales of both Discoms, for the period under reference, have been worked out as under after adjusting with a loss factor of 16% as per the methodology previously mentioned in the present Order as under:-

AP consumption (MUs)	UHBVN (2015-16)	DHBVN (2015-16)
AP units as recorded on segregated AP feeders (In MUs)	4795.75	5950.71
Loss @ 16%	767.32	952.11
Net consumption from AP feeders	4028.43	4998.60
Add AP units on other feeders	56.67	129.59
Less Consumption of other category consumers on segregated AP feeders	18.42	93.05
Total AP consumption	4066.17	4962.25
Total AP consumption of two Discoms (rounded off)	9028	
Total AP consumption approved by Commission in its tariff Order dated 01.08.2016	9094.00	

Accordingly, the Commission has considered it appropriate to revise the AP consumption for FY 2016-17 to 9028 MUs against 9094 MUs approved by the Commission in the ARR/Tariff Order dated 01.08.2016.

The data submitted by the Discoms (from FY 2011 to FY 2016) reveals that the AP load is growing at the CAGR of 6.44 %. However, on the other side, the AP

consumption is growing at the CAGR of 1.83 % and as such AP sales are expected to grow accordingly. The relevant data is as under:-

Period	FY 14-15	FY 15-16	FY 16-17	CAGR
Total AP sales of Discoms (MUs)	8707	8907	9028	1.83%

In view of the above, the Commission considers it appropriate to take into account an annual load growth of 1.83 %, as worked out from the AP consumption data projected by the Discoms for projecting the future AP sales for FY 2017-18. Accordingly, the Commission allows following revised AP sales for the two Distribution Licensees for FY 2016-17 and FY 2017-18.

Sr. No.	AP sales (MUs)	FY 2016-17	FY 2017-18
1	In respect of UHBVNL	4066	4140
2	In respect of DHBVNL	4962	5053
3	Total AP Sales of two Discoms (1+2)	9028	9193

3.2.4 Sales Estimation (Metered other than AP Tube-well)

The Commission had considered the methodology adopted by the Discoms for projecting consumer category wise sale for categories other than AP Tube-well consumers based on CAGR of previous years data from the FY 2009-10 to the FY 2014-15 for connected load, sales and resulting consumer category wise specific consumption (kWh/KW). The Commission observes that the time series considered by the Discoms i.e. up to the FY 2014-15 is too distant in the past, hence, the same given the aberrations in connected load figures and not taking into account the contract demand of certain categories of consumers where applicable, may not reflect the true-picture in the FY 2017-18. Hence, the Commission has considered it appropriate to continue with its methodology as adopted in its previous Order as the same, given the fact that sales are metered and the data is available up to the 1st Half of the FY 2016-17, is likely to yield a more accurate estimation for the FY 2017-18. The methodology is discussed at length in the paragraphs that follow:-

- i) The category-wise energy sales for 1st half and 2nd half of the FY 2012-13 to FY 2016-17 (1st half) as provided by the Discoms (actual figures) were considered.

- ii) The three year category-wise energy sales CAGR for 2nd half is computed as under:-

$$\text{2nd Half Energy Sales CAGR} = \left(\left(\frac{\text{Energy Sales for 2nd half of FY 2015-16}}{\text{Energy Sales for 2nd half of FY 2012-13}} \right)^{\frac{1}{3}} - 1 \right) \times 100$$

- iii) The three year category-wise energy sales CAGR for full year is computed using the following formula:-

$$\text{Full year Energy Sales CAGR} = \left(\left(\frac{\text{Energy Sales for FY 2015-16}}{\text{Energy Sales for FY 2012-13}} \right)^{\frac{1}{3}} - 1 \right) \times 100$$

- iv) The category-wise energy sales for 2nd half of the FY 2016-17 is arrived at by multiplying category-wise energy sales for the 2nd half of the FY 2015-16 with the 2nd half category-wise energy sales CAGR.
- v) The category-wise energy sales for FY 2016-17 is then arrived at by adding the energy sales for 1st half of the FY 2016-17 and sales for the 2nd half of the FY 2016-17.
- vi) The category-wise energy sales for the FY 2017-18 is arrived at by multiplying full year category-wise energy sales for the FY 2016-17 arrived at as above with the full year category-wise energy sales CAGR arrived at as per Sr. No. v.

Accordingly, the Commission approves consumer category wise energy sales for the FY 2017-18 as per the details provided in the table below.

Table: Approved Sales FY 2017-18 (MUs)

Consumer Category	Discoms Projection (MU)		HERC Approved (MU)	
	UHBVN	DHBVN	UHBVN	DHBVN
Domestic (DS)	3059.87	4859	3515.43	5313.18
Non Domestic	1362.83	3167	1431.87	2943.24
HT Industry	4259.98	4895	4238.15	5028.86
LT Industry	1094.01	1025	1082.32	1098.62
Lift Irrigation	27.41	198	72.83	148.18
Agriculture	4387.62	5478	4140	5053
Bulk Supply	287.19	644	323.13	641.63
Railway Traction	162.67	153	196.69	184.86
Street Light	40.66	82	51.89	95
MITC	-	-	6.53	0
Public Water Works	405.89	537	411.89	596.11
Total	15088.13	21038	15470.73	21102.68

The consumer category wise sales approved by the Commission are based on CAGR as previously mentioned. Further, given the surplus power availability in Haryana there may not be any need to purchase short-term power or drawl under UI mechanism in a low grid frequency regime. **However, in case such purchase is required to manage day-to-day operations the power purchase rate should not exceed the average per unit cost of power approved by the Commission in the present Order.**

3.2.5 Power Purchase volume

3.2.5.1 Projections by UHBVNL / DHBVNL

Haryana Power Purchase Centre (HPPC) was set up to manage the bulk power purchases (both intrastate and interstate) and bulk supply functions for two distribution licensees i.e. UHBVNL and DHBVNL. It has been submitted that energy availability at the State periphery has been projected based on the allocated share to Haryana from the Central Generating Stations, State Generation, Independent Power Producers and other Generating Stations. Further, energy availability from all the available sources have been calculated based on the average PLF of the FY 2012-13 to the FY 2015-16. The impact of Interstate losses on the Interstate Generating stations has also been taken while calculating the availability at the State periphery.

Accordingly, the total power availability for the FY 2017-18 from all external and internal sources i.e. NTPC, NHPC, NPCIL, SJVNL HPGCL, BBMB stations, IPPs, Co-generation, renewable energy generation etc. has been projected by the Discoms at 52958.47 MUs as against 47557.66 MUs actual scheduled energy during the FY 2016-17 (up to February, 2017).

3.2.5.2 Commission's Estimate of Power Purchase Quantum

The Commission has considered the methodology for projecting power purchase quantum for the FY 2017-18 by the Discoms and observes that each year the Central Electricity Authority (CEA), in discharge of its statutory functions, carries out a detailed exercise for arriving at the annual generation target. 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. The CEA, for 2017-18, has finalised the generation targets and circulated the same vide its memo no. CEA/GO&D/OPM/PPI/5/1/2017/1128-1282 dated 28.02.2017 which can also be downloaded from their website i.e. www.cea.nin.in.

In order to estimate the power availability in Haryana (both UHBVNL and DHBVNL) in the FY 2017-18, the Commission has considered the following:-

- (a) CEA's generation target for FY 2017-18 for thermal power stations, hydro and nuclear power stations for which generation targets have been determined.
- (b) Allocated share of Haryana in the respective generating stations have been considered for arriving at the quantum of power that is expected to be available to Haryana from various sources.
- (c) Past trend of actual generation achieved vis-a-vis CEA's generation targets.
- (d) HPGCL's generation targets as approved by the Commission for FY 2017-18 vide Order dated 26th April, 2017 in Case No. HERC/PRO-38 of 2016.
- (e) Expected generation targets from new generating stations as proposed by the Discoms.
- (f) CEA's generation targets, wherever considered, has been adjusted for auxiliary energy consumption as per CERC norms.
- (g) As the Power Purchase Agreements have been allocated to UHBVNL & DHBVNL in equal ratio and HPPC procures power on behalf of both the Discoms, the projection of power availability is for Haryana as a whole.

In line with the broad methodology spelt out above, the Commission, for the limited purpose of assessing power availability from various generating stations in the FY 2017-18 has proceeded as follows. It is presumed that the Discoms have a valid PPA duly approved by the Commission for all the proposed sources of power for which approval has been sought. Hence, in no manner the sources, as considered by the Commission, in its present Order, should be construed as approval of PPA unless the

Commission, vide a specific order has accorded approval to the PPAs. The Commission further observes that the Discoms, for estimating the sources of power / quantum in the FY 2017-18, has included generating stations like Pragati Power, Teesta III (Sikkim IPP), Siang Middle HEP, Kameng HEP, NCTPS (Dadri II – where no quantum of drawl has been indicated but fixed charges has been taken into account) etc. without approval of PPA from the Commission. Hence, such sources have not been considered by the Commission. Additionally, it is observed that certain generating stations of NTPC i.e. Anta , Auraiya CCGT etc. have completed their useful life as per CERC Regulations.

The Discoms are directed to examine all such PPAs including the relevant clause w.r.t. validity and CERC's Order on the same regarding balance useful life, if any, and submit a report to the Commission within one month bringing out the quantum of energy scheduled / implemented schedule and cost (fixed and fuel separately) thereto in the FY 2015-16, FY 2016-17 and FY 2017-18 year to date. The Discoms may also examine the need to procure power from yet to be commissioned Central thermal Generating Stations for which PPAs have not been approved by the Commission including yet to be commissioned UMPPs. In case power procurement from such stations are not required the Discoms / HPPC may consider whether the commitments / allocations from such sources could be terminated on valid grounds. A report in this regard should also be submitted to the Commission within one month.

i) Availability of power from HPGCL

The Commission has considered power availability at the bus bar from HPGCL sources as per its Order dated 26th April, 2017 in Case No. HERC/PRO-38 of 2016 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariff for the FY 2017-18. The details of the same are mentioned in the said Order. Hence, for the sake of brevity, they are not being re-produced here.

The power availability (ex-bus energy in MUs) from HPGCL's Power Plants as determined by the Commission in its Order dated ibid Order is presented in the table below:-

Particulars	Discoms Proposal	HERC Approval
HPGCL	11,757.10	17,252.66

ii) Availability of Power from Faridabad CCPP (FGPP)

The Discoms Power Purchase Agreement (PPA) with 432 MW Faridabad gas based power station of NTPC expired on 31.12.2015. On the petition filed by the HPPC the Commission passed the Order dated 5.10.2106 as under:-

“....the Commission considers it appropriate to approve the PPA with Faridabad Gas Power Plant (NTPC) up to 31st December, 2025, as proposed by the HPPC/NTPC subject to the following conditions:-

i) Draft PPA for the above period shall be amended suitably as per the observations communicated by the Commission in the matter.

ii) HPPC/Discoms shall schedule power on APM Gas only.

iii) NTPC shall be free to sell, to a third party outside Haryana, any power that may be generated by NTPC using fuel other than APM Gas. To that extent, the fixed cost liability of HPPC shall be accordingly reduced. The condition 4.0 (para 4) of the PPA shall be modified suitably”.

As FGPP is a generating station dedicated to Haryana, the Commission, based on generation target finalized by CEA, has considered 1213.47 MUs to be available to the Discoms in the FY 2017-18. This approval is subject to the *ibid* Order of the Commission. The Commission's approved volume of power from FGPP is as under:-

Faridabad Gas Power Project (NTPC) (MU)

Particulars	Discoms Proposal	HERC Approval
Faridabad CCGT	1401.81	1213.47

iii) Availability of power BBMB (Bhakra, Dehar & Pong)

The Discoms have share (to the extent of shares owned by HVPNL) 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, 2980.82 MUs were available from BBMB power stations in the FY 2015-16 and the same quantum has been projected for the FY 2017-18. The Commission has considered the CEA's generation targets for the BBMB Stations for the FY 2017-18 available separately for Bhakra & Upratings, Dehar and Pong, Accordingly, the Commission approves as under:-

Power Availability from BBMB (MUs)

Particulars	Discoms Proposal	HERC Approval for the FY 2016-17
BBMB	2980.82	2622.38

iv) Availability of power from NTPC Power Stations

The Commission observes that 3835.01 MU of energy was available from the NTPC sources (except FGPP which had been separately dealt with) in the FY 2016-17 and the Discoms have projected marginally lower availability from these sources in the FY 2017-18 i.e. 3820.81 (excluding FGPP). The Commission has considered the station wise generating targets fixed by the CEA for the FY 2017-18 except in the case of Unchahar III, Auraiya, Dadri and Kahalgaon. Accordingly, corresponding to the allocated share of Haryana in the various power stations of NTPC the Commission approves the quantum of power as per table below.

Power Purchase Volume from NTPC

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
Singrauli STPS	1396.81	1326.66
Rihand I	411.92	434.17
Rihand II	369.08	380.73
Rihand III	362.94	374.39
Unchahar I	63.79	51.73
Unchahar II	133.41	108.19
Unchahar III ¹	69.48	69.48
Anta CCPP	60.90	33.55
Auraiya CCPP ²	18.51	18.51
Dadri CCPP ³	40.37	40.37
Farakka STPS	56.94	85.55
Kahelgaon I ⁴	133.92	133.92
Kahelgaon II	402.96	341.10
Koldam HEP	299.78	299.78
Total	3820.81	3698.13

Note 1 to 4: the Commission has restricted drawl from these sources as proposed by the Discoms.

v) Availability of Power from NHPC Power Plants

The Commission, for projecting power availability from NHPC sources in the FY 2017-18 has relied upon generation targets fixed by the CEA after adjusting the same for auxiliary energy consumption and home State share. The generating station wise details are as under:-

Power purchase volume from NHPC

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
Bairasiul	204.64	182.18
Salal I	484.25	435.57
Tanakpur	19.29	24.93
Chamera I	375.06	318.68
Chamera II	88.01	71.66
Chamera III	67.65	79.42
Uri	151.37	130.20
Uri II	49.70	55.46
Dulhasti	125.42	104.17
Dhauliganga	39.74	54.37
Sewa II	33.13	26.24
Parbati III	45.03	51.45
Total	1683.29	1534.33

vi) Availability of Power from NPCIL sources

The Commission observes that the CEA has now finalised the generation targets for the FY 2017-18, hence the power availability from NPCIL (NAPP and RAPP) to the Discoms have been accordingly calculated in table below.

Power Purchase Volume from NPCIL

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
NAPP	175.81	180.11
RAPP (3,4,5,6)	593.49	469.24
Total	769.30	649.35

vii) Power Purchase from Other Sources

(a) Power Procurement from a few other sources proposed by the Discoms include CGPL, Mundra (UMPP), Sasan UMPP, APCL, DVC (Mejia B, Koderma & Raghunathpur), Adani Power Ltd., Mundra, THDC, MGSTPS (CLP), Lanco Amarkantak, Teesta III etc. The Commission has considered the CEA generation targets for the FY 2017-18 wherever available. In cases where generation targets are not available the proposals of the Discoms have been accepted.

(b) The Commission has not considered the power from Pragati Gas Power Plant, Bawana, Delhi being costly on the merit order and also the PPA, so far, has not been approved by the Commission. Further power availability from Teesta III HEP (Sikkim) has not been considered due to many folds cost overrun and extended force majeure. The Discoms / HPPC may file the details in this regard including admitted capital cost and tariff determined by the Hon'ble CERC in this regard. The source wise details are as per table below:-

Power Purchase from Other Sources

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
CGPL, Mundra	2318.34	2435.73
Sasan UMPP	2999.10	3088.13
Pragati Gas Bawana	309.55	0
Aravali Power (IGSTPS)	1824.94	1824.94
DVC Raghunathpur	0	152.50
DVC – Mejia B	473.46	473.46
DVC – Koderma	288.67	473.51
Adani Power Ltd.	9780.38	9780.38
MGSTPS (CLP) Jhajjar	3913.67	3294.00
THDC Tehri Stage I	184.45	180.08
THDC Koteswar HEP	57.76	43.19
SJVNL (Nathpa Jhakri) HEP	311.36	250.43
SJVNL Rampur HEP	43.17	66.46
Teesta III HEP	464.85	0
Tala HEP	47.90	51.34
Total	23017.60	22114.15

viii) 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, PTC Karcham Wangtoo and Lanco Amarkantak etc. The Commission has ESTIMATED availability of power from these sources as per the generation targets fixed by CEA. In case the same is not available for any generating station(s) the same has been taken as per Discoms projections. The generating station wise details provided are as per table that follows.

Availability of Power from PTC

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
PTC J&K (Baglihar HEP)	309.10	269.20
PTC Lanco Amarkantak TPS (Unit – 2)	1840.07	1840.07
PTC JSW Karcham Wangtoo HEP	764.46	764.46
PTC GMR Kamalanga TPS	2102.41	2102.41
Total	5016.04	4976.14

ix) Availability of Power from Renewable Energy Sources

The Commission is committed to encourage cogeneration and non-conventional fuel based generation including solar generation projects. Hence, the power purchase volume from such sources has been determined keeping in view the power availability from renewable sources in the FY 2017-18 for which the Commission has approved PPAs. The Discoms should, however, meet the solar and non-solar RPO as provided in the HERC RE Regulations in vogue. The power availability from renewable energy sources approved by the Commission is per details provided in table no. 3.23.

Availability from Renewable Energy Sources

Particulars	Discoms Proposal (MU)	HERC Approval (MU)
P&R Gogripur HEP	9.72	9.72
Bhoruka Power HEP	29.15	29.15
Puri Oil Mills HEP	13.64	13.64
Biomass Power Projects	143.06	143.06
Cogeneration (Bagasse)	271.94	271.94
SECI (Solar)	133.16	133.16
HPGCL Solar	17.50	17.50
Solar Power Projects (JNNSM & Siwana)	21.27	21.27
Total	639.44	639.44

3.2.6 Total Approved Power Purchase Quantum

Based on the above source wise approvals of quantum of power expected to be available in the FY 2017-18, the Commission determines power availability both from inter-state and intra-state generators of 54,700 MUs (rounded off) as against 52,958.47 MU estimated by the Discoms which included un-approved sources like Siang Middle HEP, Kameng HEP, Tipaimukh, Subansari ER NHPC, Pragati Gas etc.

3.2.7 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 Department of Atomic Energy, Government of India, 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 Discoms largely based on the actual variable charges of the FY 2015-16 escalated at an average rate of 5% per year multiplied with the total energy drawn from various sources to arrive at the total variable cost of power generation for the FY 2016-17. For the FY 2017-18 the variable

cost has been kept at the same level. Similarly, the fixed charges paid to the generators in the FY 2015-16 have been escalated at an average rate of 5% to arrive at the fixed charges to be paid in the FY 2016-17 and the FY 2017-18. **Accordingly, the variable charges has been projected by the Discoms at Rs. 137618.60 million and the fixed charges (including PGCIL Transmission) has been projected at Rs. 87173.60 million i.e. total charges of Rs. 224792.20 million.**

The Commission has considered the methodology adopted by the Discoms for projecting cost of power for the FY 2017-18 and observes as under:-

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 read with the 1st Amendment Regulations provides as under:-

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 as under:-

i) Generating Station wise fixed cost of power is based on the actual fixed cost incurred by the Discoms from April 2016 to February 2017 (eleven months) extrapolated for further one month.

ii) Generating Station wise Fuel / Variable Cost is based on the average of the actual variable charges / energy charges incurred by the Discoms from April, 2016 to February, 2017.

iv. In the case of Adani Power Ltd. the cost of power has been considered as per the Power Purchase Agreement.

v. The cost of power purchase from HPGCL has been considered as per the Commission's Generation Tariff Order dated 26th April, 2017 in Case No. HERC/PRO-38 of 2016 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariff for the FY 2017-18. .

A brief description of the methodology adopted by the Commission is as under:-

3.2.7.1 Cost of 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 2016-17 from April 2016 to February, 2017 i.e. the latest period for which data was made available by the Discoms.

3.2.7.2 Cost of 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 the FY 2017-18 vide its order dated 26th April, 2017. The approved station wise rates in the ibid Order have been considered for determining the cost of power from HPGCL stations in the FY 2017-18.

3.2.7.3 Cost of BBMB Power

HVPNL, as per the transfer scheme notified by the Government of Haryana, has ownership interest to the extent of equity shares in 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 2016-17 (up to February, 2017).

3.2.7.4 Price of Power Purchased from Other Sources

The Commission has relied upon the average power purchase rate as per the FY 2016-17 invoices (from April 2016 to February 2017) raised by the generators. For RE sources where PPAs have been approved tariff has been determined / adopted by the Commission for the FY 2017-18, the same has been considered for projecting the cost of such power.

The details of approved power purchase rates (Rs/kWh), cost (Rs.Million) and quantum (Million Units), from various sources for the FY 2017-18 are presented in the table below.

Approved Volume, Rate & Cost of Power (FY 2017-18)

	Estimated Quantum (MU)	Annual Fixed Charge(Rs)	Variable charges (Rs/kWh)	Annual Variable Charge (Rs Million)	Total Charge (Rs Million)
NTPC					
Singrauli STPS	1326.66	838168316.73	1.434	1902.428	2740.597
Rihand I	434.17	366064381.09	1.623	704.654	1070.718
Rihand II	380.73	333205088.73	1.607	611.836	945.041
Rihand III	374.39	566863870.91	1.590	595.274	1162.138
FGTPS Unchhahar I	51.73	61090637.45	2.876	148.764	209.855
FGTPS Unchhahar II	108.19	131949522.55	2.870	310.507	442.456
FGTPS Unchhahar III	69.48	106481876.73	2.871	199.477	305.959
Anta CCGT	33.35	118761444.00	2.561	85.406	204.167
Auraiya CCGT	18.51	141738654.55	3.322	61.490	203.229
Dadri CCGT	40.37	157297747.64	2.799	112.996	270.293
Faridabad CCGT	1213.47	2278626392.73	2.590	3142.887	5421.514
Farakka STPS	85.55	62621389.09	2.474	211.661	274.283
Kahalgaoon I	133.92	170852658.55	2.374	317.926	488.779
Kahalgaoon II	341.10	516348621.82	2.275	776.002	1292.351
Kol Dam HEP	299.78	498500000.00	2.990	896.342	1394.842
NHPC					
Salal I	435.57	953800000.00	0.566	246.532	1200.332
Bairasiul	182.18	238265349.82	0.984	179.261	417.527
Tanakpur	24.93	45293165.45	1.481	36.922	82.216
Chamera I	318.68	308291085.82	1.036	330.153	638.444
Chamera II	71.66	89669138.18	0.978	70.084	159.753
Chamera-III	79.42	209121109.09	2.123	168.614	377.735
Dhauliganga	54.37	89304964.36	1.496	81.340	170.645
Dulhasti	104.17	304720217.45	2.294	238.971	543.692
Uri	130.20	121367212.36	1.139	148.296	269.663
Uri-II	55.46	218619870.55	2.241	124.284	342.904
Sewa II	26.24	76416530.18	2.294	60.202	136.618
Parbati-III	51.45	136107374.18	3.525	181.352	317.459
SJVNL HEP	250.43	468813698.18	1.422	356.106	824.920
Rampur HEP (SJVNL)	66.46	156746792.73	1.613	107.200	263.947
THDC					
Tehri Stage I HEP	180.08	633065547.27	2.915	524.937	1158.002
Koteshwar HEP	43.19	97636728.00	1.955	84.429	182.065
NPCIL					
NAPP	180.11	0.00	2.576	463.964	463.964
RAPP (3-4)	308.77	195938.64	3.071	948.224	948.420
RAPP (5-6)	160.47	100938.09	3.071	492.798	492.899
HPGCL	17252.66	17642250000.00	3.16	54510.987	72153.237
Shared Project				0.000	0.000
BBMB HEP	2622.38	0.00	0.541	1418.708	1418.708
DVC				0.000	0.000
DVC Mejia-B	473.46	1250900000.00	2.260	1070.020	2320.920
Koderma DVC HEP	473.51	708127092.00	2.147	1016.631	1724.758
DVC Raghunathpur TPP	152.50	231699139.64	2.156	328.790	560.489
UMPP					
CGPL Mundra UMPP	2435.73	2352024584.73	1.313	3198.113	5550.138
Sasan UMPP	3088.13	505662788.73	1.495	4616.747	5122.410
Others					
PTC Tala, HEP	51.34	0.00	2.025	103.962	103.962

	Estimated Quantum (MU)	Annual Fixed Charge(Rs)	Variable charges (Rs/kWh)	Annual Variable Charge (Rs Million)	Total Charge (Rs Million)
PTC GMR Kamalanga TPS	2102.41	1612300000.00	1.020	2144.458	3756.758
PTC Baglihar HEP	269.20	0.00	3.720	1001.434	1001.434
PTC Lanco Amarkantak	1840.07	2290922818.91	1.591	2927.551	5218.474
PTC Karchamwangtoo JSW HE	764.46	0.00	3.550	2713.833	2713.833
IGSTPP, APCPL (Aravali)	1824.94	7944658020.00	3.238	5909.156	13853.814
Pragati Gas Bawana	0.00	1004400382.91	2.520	0.000	1004.400
Adani Power Ltd. Mundra TPS	9780.38	11828100000.00	2.310	22592.678	34420.778
Teesta III HEP	0.00	838800000.00	1.71	0.000	838.800
MGSTPS, CLP, Jhajjar	3294.00	7750854039.27	3.194	10521.036	18271.890
Bhoruka HEP	29.15	0.00	3.330	97.070	97.070
P&R Gogripur HEP	9.72	0.00	4.790	46.559	46.559
Puri Oil Mill HEP	13.64	0.00	4.460	60.834	60.834
Biomass Projects	143.06	0.00	7.560	1081.534	1081.534
Cogeneration Plants	271.94	0.00	4.048	1100.813	1100.813
Solar Projects (JNNISM & Siwana)	21.27	0.00	5.670	120.601	120.601
HPGCL Solar	17.50	0.00	4.880	85.400	85.400
SECI Solar	133.16		5.500	732.380	732.380
PGCIL Transmisison		14016218448.00			14016.218
Total	54700	80473023577.09	2.42	132320.612	212793.636

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 2017-18 is approved at 54700 million units (kWh) (rounded off) at a fixed cost, including PGCIL transmission charges, of Rs. cost of Rs.80473.02 millions and variable cost of Rs.132320.61. Hence, the allowed total cost of power purchase in the FY 2017-18 is pegged at Rs. 212793.636. **The average rate of power purchase (APPC) allowed by the Commission in the FY 2017-18 works out to Rs. 3.89/kWh.**

The Licensee(s) is directed to ensure that power is procured only from those sources for which the Commission has approved PPA's. Additionally, any power from Central Generating Stations, beyond the quantum for which the PPA has been signed and specifically approved by the Commission must be surrendered in case the Discoms have to backing down any approved long-term source of power. It is made clear that any power procured from sources not specifically approved by the Commission and/ or excess quantum vis-à-vis the approved PPA purchased by the Discoms shall be disallowed by the Commission.

In addition to the above and keeping in view the surplus power availability scenario obtaining in Haryana, the Commission directs that the Discoms shall not procure any additional power over and above the quantum approved in the PPA that

may be available to it from the un-allocated share / share relinquished by any other State in the Central Generating Power Stations. The Commission thereto shall disallow all such power procurements and the cost thereto.

3.2.8 Transmission Losses

For calculating energy available for sale by the Distribution licensees, the petitioners have retained the transmission losses approved by the Commission for the FY 2017-18. As the Distribution licensees do not have any control over the either transmission losses inter or intra, the transmission loss levels as proposed by the licensees have been retained for working out energy available for sales to the two Discoms in the FY 2017-18.

3.2.9 Interstate Transmission Charges

Interstate transmission charges proposed by UHBVNL and DHBVNL are Rs. 682.92 Crore and Rs. 899.22 Crore respectively i.e. a total of Rs 1582.14 Crore. However, as per the Commission's estimate, the same is likely to be Rs. 1401.6218 Crore based on the actual charges incurred by the two Discoms for the first ten months of the FY 2016-17. The approved amount, shown separately in the table that follows, shall form part of the combined power purchase cost of the Discoms for the FY 2017-18.

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

UHBVNL and DHBVNL have indicated interstate sale of 3710.07 MUs and 3420.68 MU respectively for the FY 2017-18 and revenue from interstate sales has been considered at 80% of the average variable power purchase cost, excluding transmission charges, at Rs. 2.60/Unit for the FY 2017-18.

The Commission has considered the above and is of the considered view that any loss on account of interstate sale of power for FY 2017-18 ought not to be passed on to the electricity consumers of Haryana.

The Commission, in its earlier Orders, had directed the licensee to explore the possibility of the surrendering expensive long-term power that is in excess of its requirement. In case the licensee is unable to sell its contracted power at the rate of its

energy cost, it is expected to back down the units to that extent so that the loss on account of power purchase is minimised. It has been observed that, at times, the Licensees are forced to back down its contracted long term power due to less demand whereas the licensees have been agreeing to the additional allocation done by the Ministry of Power out of the unallocated portion of the Central Generating Stations which is not at all justified. Any such allocation must be surrendered at the earliest and a compliance report be filed in the Commission within one month. However, the Commission observes that no such report has been filed by the licensee. The Commission reiterates its directions and expects the licensee to comply with all directions at the earliest.

Regarding trading loss on account of sale of surplus power it is worthwhile to note the observations of the Hon'ble Aptel's Judgement dated 28th April, 2016 in Appeal No. 269 of 2014 is as under:-

41.3) We are happy to note that the State Commission in a separate review order dated 14.07.2014, seeking review of an earlier tariff order dated 30.03.2013, has expressed its concern that the Discoms have already tied up with power which is in excess of requirement for at least 5 to 7 years without having a system of power procurement planning and for load optimum power cost and accordingly the State Commission has rejected the relief sought by the Discoms for recovering its trading loss from the consumers.

As per Commission estimates, the availability of energy is considerably in excess of the estimated requirement during the FY 2017-18. In view of the above observation, the Discoms must gear up its power purchase procurement planning and strengthen its trading activities for disposal of surplus power. It would be appropriate for the licensee to closely monitor, on daily basis, the surplus capacity, which could neither be backed down nor sold off even at variable cost and is therefore leading to trading losses. The Discoms must fine tune its projection model and ensure that surplus energy available is disposed of in cost effective manner.

Energy available for Sale to the Distribution Licensees (FY 2017-18)

Sr. No.	Particulars	Units	UHBVNL	DHBVNL	Total
1	Gross energy procured from outside	MUs	9284.58	12215.42	21500.00

	the state sources				
2	Interstate sale / banking (Balancing Figure)	MUs	3356.18	4415.62	7771.80
3	Energy procured from outside the state sources net of interstate sale / banking	MUs	5928.40	7799.80	13728.20
4	Inter-state transmission losses	%	3.82%	3.82%	3.82%
5	Inter-state transmission losses	MUs	226.46	297.95	524.42
6	Net energy available from outside the state	MUs	5701.93	7501.85	13203.78
7	Add energy generated within the state	MUs	14337.12	18862.88	33200.00
8	Net energy available for use in Haryana/ Total energy at Haryana Boundary	MUs	20039.05	26364.73	46403.78
9	Intra-state transmission losses	%	2.46%	2.46%	2.46%
10	Intra-state transmission losses	MUs	492.96	648.57	1141.53
11	Energy available for sale to distribution licensee	MUs	19546.09	25716.16	45262.25
12	Distribution loss	%	20.85%	17.94%	19.20%
13	Distribution loss units	MU	4075.36	4613.48	8688.84
14	Units available for sale by DISCOMS/ Discom approved sales	MU	15470.73	21102.68	36573.41
15	Total energy purchase	Rs. Mil	23621.70	31078.30	54700.00
16	Power purchase cost	Rs. Mil	91893.15	120900.85	212794.00
17	Average rate	Rs.	3.89	3.89	3.89
18	Less revenue from interstate sale of power at variable cost @Rs. 2.42/ unit	Rs. Mil	8121.96	10685.80	18807.76
	Net power purchase cost	Rs. Mil	83771.19	110215.05	193986.24
	Per unit cost for energy purchased for sale within Haryana	Rs./kWh	4.13	4.13	4.13

3.2.11 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, 2013-14, 2014-15, FY 2015-16 and FY 2016-17 as approved by the Commission are as under:-

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
2015-16	41202	2.75%	1133.05	0.75%*	309.01	1442.06
2016-17	46827	2.75%	1287.74	1.00%*	468.27	1756.01

* Solar power purchase obligation is 0.05%, 0.1%, 0.25%, 0.75% & 1.00% of total energy consumption for the financial years 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17, respectively.

As per data provided by the State Nodal Agency vide memo 232 dated 25.02.2017, the shortfall in meeting the RPO for the aforesaid years has been worked out as under:-

Type of RE source	50% backlog till FY 2015-16	Shortfall FY 2016-17	Total Shortfall
Solar	70	307	377
Non-Solar	420	0	420
Total	490	307	797

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 had allowed the Discoms to carry forward the shortfall in the RPO compliance for the FY 2011-12, FY 2012-13 and FY 2013-14, on actual basis, to the next financial year i.e. The shortfall should be met in the FY 2014-15 in addition to the RPO for FY 2014-15. Thereafter in the ARR/Tariff Order of the FY 2015-16 the Commission directed the Discoms to purchase renewable energy as per the RPO targets 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 the Commission. It was further directed that the shortfall in meeting the RPO for the FY 2011-12, 2012-13, 2013-14 and 2014-15 shall also be met by the Discoms in the FY 2015-16 in addition to the RPO of FY 2015-16. In accordance with the provisions of the amended regulations, the RPO for the FY 2017-18 is 4% of the total energy consumption of the Discoms. The approved RPO for the FY 2017-18 is as under:-

Energy Consumption for 2017-18 (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)
39209.18*	2.75%	1078.25	1.25%	490.11	1568.37

* Energy available for sale by DISCOMs excluding energy purchased from RE sources and Hydro.

The volume of energy to be purchased from renewable energy sources as per above table is the total RPO of the Discoms for the financial year 2017-18. 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 up to 31st March 2017 shall be part of total power purchase volume approved by the Commission for the FY 2016-17 and set off against the costliest power in the merit order.

The Commission has noted from the submissions of HPPC during the public hearing that they have made some progress regarding meeting the RPO targets set by the Commission, hence the shortfall as indicated above, especially for non-solar RPO, has reduced. The Commission directs the Discoms to purchase renewable energy or RECs to meet with the RPO targets set for the FY 2017-18 and also to make up for the shortfall of RPO compliance carried forward for the previous years, on actual basis. In view of Haryana Government's mandate to promote RE energy especially roof top solar and Waste to Energy, Discoms are directed to meet the maximum RPO targets from these sources.

The State government is promoting generation of solar power in the state through various initiatives. However, it is observed that the Discoms and HAREDA are unable to realise the potential of solar generation in the State in the absence of proper infrastructure. The Discoms are directed to submit an action taken report in furtherance

of the latest solar policy issued by the State Government within three month of this order.

The State Nodal Agency i.e. HAREDA shall continue 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 the table below:-

1.	Name of the obligated entity		
2.	Total Energy Consumption		
3.	Units required to meet total RPO (3.75% of total energy consumption)		
4.	Units required to meet Solar RPO (1.0%) 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 non-compliance of the renewable purchase obligation by the obligated entities.

The Discoms and other obligated entities 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.

3.2.12 Intrastate Transmission Charges & SLDC Charges

The Commission, vide its Order dated 31.05.2017 on HVPNL's Transmission Tariff and SLDC charges for the FY 2017-18, had approved Transmission tariff and SLDC charges for the FY 2017-18 to be recovered by HVPNL from UHBVNL and DHBVNL. 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 beneficiaries including the Discoms are given in the ibid order. Hence, the same is not being reproduced here. The transmission and SLDC Charges, as determined by the Commission in the ibid Order, shall form part of the ARR of the Discoms for the FY 2017-18.

3.2.13 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 the 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_n – Repair and Maintenance Costs of the Distribution Licensee(s) for the nth year;
- EMP_n – Employee Costs of the Distribution Licensee(s) for the nth year excluding terminal liabilities;
- A&G_n – 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_n’ means the inflation factor for the nth year as defined herein after.

$$(b) \text{ EMP}_n \text{ (excluding terminal liabilities)} + \text{A\&G}_n = (\text{EMP}_{n-1} + \text{A\&G}_{n-1}) * (\text{INDX}_n / \text{INDX}_{n-1})$$

Where,

- INDX_n – 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:
- $\text{INDX}_n = 0.55 * \text{CPI}_n + 0.45 * \text{WPI}_n$.

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_n value shall be used or all years of the control period. However, the Commission shall consider the actual values of the INDX_n 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%. The projected employee cost and A&G expenses as proposed by UHBVNL and DHBVNL for the FY 2017-18 are based on audited cost for the FY 2015-16 and escalated by indexation factor of 3.80% per annum. Further, UHBVNL and DHBVNL have assumed an increase of 20% and 15% respectively on account financial impact of 7th pay Commission report.

The Commission has examined the calculation of indexation factor used by the Licensees and finds it appropriate. However, the Commission has assumed an increase of 15% over the audited expenses for the FY 2015-16 to account for the impact of 7th Pay Commission Report, in order to have uniformity in projections for both the Discoms. However, any variation in the employees cost because of either the inflation or on account of the impact of implementation of the 7th Pay Commission recommendations shall be allowed to both the Discoms separately at the time of True-up.

Accordingly, the Employee Cost for the FY 2017-18 has been worked out as under:-

Approved Employee Cost for FY 2017-18 (Rs.Crore.)

Sr. No.	Particulars	UHBVNL	DHBVNL
1.	Employee Cost excluding Terminal Benefits for the FY 2015-16 as per Audited Accounts	498.50	637.68
2.	15% increase to account for financial impact of 7 th Pay Commission Report	74.78	95.65
3.	Indexation Factor for FY 2016-17 & FY 2017-18	3.80%	3.80%
4.	Employee Cost excluding Terminal Benefits for FY 2017-18	617.66	790.12

The employee cost (excluding Terminal Benefits) for the FY 2017-18 is approved at Rs.617.66 Crore for UHBVNL and Rs.790.12 Crore for DHBVNL.

3.2.14 A & G Expenses

The A&G expenses for FY 2017-18 have also been worked out based on the inflation indexation factor of 3.80% per annum on the same lines as Employee Cost as under:-

Approved A&G Expenses for FY 2017-18 (Rs.Crore.)

	Particulars	UHBVNL	DHBVNL
1.	A&G expenses for FY 2015-16 as per Audited Accounts	75.24	72.13
2.	Indexation Factor for FY 2016-17 & FY 2017-18	3.80%	3.80%
3.	A&G Expenses for FY 2017-18	81.06	77.72

Accordingly, the A&G expenses for FY 2017-18 are approved at Rs. 81.07 Crore and Rs. 77.72 Crore, as proposed for UHBVNL and DHBVNL respectively.

3.2.15 Repair & Maintenance

UHBVNL and DHBVNL have proposed R&M expenses of Rs. 130.64 Crore and Rs. 114.16 Crores respectively for the FY 2017-18 @ 1.65% of average GFA for the FY 2017-18 based on the estimated capital expenditure for FY 2016-17 and the FY 2017-18 in accordance with the MYT Regulations.

The Commission has restricted the proposed capital expenditure for the FY 2016-17 and FY 2017-18 for UHBVNL in view of the reasons recorded in the present Order at relevant paragraph. The resultant calculations of R&M expenses are also on the lower side. The R&M expenses for DHBVNL are approved as proposed i.e. Rs. 114.16 Crores.

The approved R&M expenses for the FY 2017-18 are as given below:

Particulars	UHBVNL	DHBVNL
Opening GFA as approved by the Commission	7065.04	
Closing GFA as approved by the Commission	7837.21	
Average GFA for the FY 2017-18	7451.12	
R&M expenses @ 1.65% of average GFA	122.94	
R&M expenses after indexation @ 3.80% p.a.	127.62	114.16

3.2.16 Terminal Benefits

The Commission approves the expenditure towards terminal benefits for the FY 2017-18 as proposed by UHBVNL and DHBVNL respectively at Rs. 400 Crore and Rs. 385 Crores, as the proposed expenditure is considered reasonable.

3.2.17 O & M Expenses

Based on the above calculation, the O & M expenses approved by the Commission for FY 2017-18 are Rs. 1225.09 crore as against Rs. 1288.05 crore proposed by UHBVNL and Rs. 1367 crore as against Rs. 1392.76 crore proposed by DHBVNL in accordance with the methodology as prescribed by the MYT regulations. **However, the Commission directs the licensee ensure that the actual O&M expenses for the FY 2017-18 are within the O&M expenses approved by the Commission.** The details of O&M expenses of UHBVNL and DHBVNL are provided in the tables that follow.

O & M expenses of UHBVNL for the FY 2017-18

(Rs. Crore)			
Particulars	Audited expensed For the FY 2015-16	UHBVNL filing	HERC order
Employee Expense	498.49	676.35	617.66
A&G Expense	75.24	81.06	81.06
R&M Expense	38.39	130.64	127.62
Terminal Liability	268.27	400.00	400.00
Total	880.39	1288.05	1226.34

O & M expenses of DHBVNL for the FY 2017-18

(Rs. Crore)			
Particulars	FY 2017-18	FY 2017-18	FY 2017-18
Particulars	Audited expensed For the FY 2015-16	DHBVNL filing	HERC revised approval
Employee Expense	637.68	815.88	790.12

A&G Expense	72.13	77.72	77.72
R&M Expense	35.64	114.16	114.16
Terminal Liability	392.00	385.00	385.00
Total	1137.45	1392.76	1367.00

3.2.18 Depreciation

UHBVNL has proposed depreciation of Rs. 339.37 crore in their ARR petition for FY 2017-18 based on opening balance of GFA as on 01.04.2016 and its projections of capital expenditure for FY 2015-16 and FY 2017-18.

The Commission, as previously noted, has restricted the Capital expenditure for UHBVNL for the FY 2016-17 and FY 2017-18 in view of the reasons recorded at the relevant paragraphs of this order. Based on the audited average rate of depreciation of 4.60% for FY 2015-16 and the approved capital expenditure for FY 2015-16, FY 2016-17 and FY 2017-18, the depreciation for FY 2017-18 for UHBVNL is approved at Rs. 325.13 crore. The Depreciation on assets funded through consumer contribution Rs. 14.96 crore is reduced from the above amount to arrive at net approved depreciation of Rs. 310.17 crore for FY 2017-18. As per its audited accounts for the FY 2015-16, the licensee has transferred to DHBVNL grant amounting to Rs. 394.82 crores equivalent to its share of Jind Circle which has resulted in the reduction of depreciation on assets funded through consumer contribution.

Depreciation of UHBVNL for FY 2017-18

(Rs. in crore)

Particulars	FY 2017-18	FY 2017-18
Gross Fixed Assets (GFA)	UHBVNL proposal	HERC approval
Opening GFA	7430.42	7065.04
Opening GFA funded through consumer contribution/ grants	692.09	325.04
Depreciation Rate	5.03%	4.60%
Depreciation amount	373.44	325.13
Less depreciation on assets funded through consumer contribution	34.07	14.96
Net depreciation for the year	339.37	310.17

Similarly, DHBVNL has proposed depreciation of Rs. 388.80 crore in their ARR petition for the FY 2017-18 based on opening balance of GFA as on 01.04.2016 and its projections of capital expenditure for FY 2015-16 and FY 2017-18. Based on the audited average rate of depreciation of 4.53% for FY 2015-16 and the approved capital expenditure for FY 2015-16, 2016-17 and FY 2017-18, the Commission approves Rs.

361.87 crore as depreciation for FY 2017-18 for DHBVNL. The Depreciation on assets funded through consumer contribution Rs. 73 Crore is reduced from the above amount to arrive at net approved depreciation of Rs. 288.87 crore for the FY 2017-18 as given in table below:-

Depreciation of DHBVNL for the FY 2017-18

Particulars	(Rs. Crore)	
	FY 2017-18 DHBVNL proposal	FY 2017-18 HERC approval
Gross Fixed Assets (GFA)		
Opening GFA	7881.07	7992.50
Opening Assets funded through consumer contribution/ grants	1708.31	1708.31
Depreciation Rate	4.93%	4.53%
Depreciation amount	388.80	361.87
Less depreciation on assets funded through consumer contribution	73.00	73.00
Net depreciation for the year	315.80	288.87

3.2.19 Interest on Term Loan

The UHBVNL and DHBVNL have proposed to recover Rs. 119.98 crore and Rs. 122.06 crore as interest on term loan for the FY 2017-18. The Commission has examined the calculation of term loan interest proposed by the Licensees and finding them reasonable, approves the same.

3.2.20 Interest on Consumers' Security Deposit

The Commission, in its earlier Orders has directed the licensees to ensure that the interest on consumer security deposit is duly paid on time. The Consumer security deposit is a source of cheap working capital finance for the licensee and adequate security ensures consumer compliance in timely payment of bills. Therefore, it is imperative that the interest due on these deposits, if not paid on time, does not become a source of dissatisfaction for the consumers. The Commission approves Rs. 103.75 crores for UHBVNL and Rs. 93.02 crores for DHBVNL as interest on consumer security deposit for the FY 2017-18, as proposed by them.

3.2.21 Interest on Working Capital

Working capital borrowings have been calculated in accordance with the methodology prescribed in the MYT regulations. However, the rate of interest has been derived from the filings of the licensee; being the average rate of interest on working capital borrowings for the FY 2017-18 which is lower on account of conversion of

borrowings into bonds under the UDAY scheme. The average rate of interest as per filings is 8.80% for UHBVNL and 8.74 % for DHBVNL. The Commission, in accordance with the MYT Regulations, approves the interest on working capital borrowings for the FY 2017-18 as under:-

Approved Interest on Working Capital Loan of UHBVNL

(Rs. in Crore)

Interest on working capital	FY 2017-18
O&M expenses for 1 month	102.19
Maintenance spares 1% of opening GFA	70.65
2 months receivables	1835.65
Uncollected revenue	110.14
Total	2118.62
Less	
ACD	838.04
Net working capital	1280.59
Interest Rate	8.80%
Interest cost (rounded off)	112.72

Approved Interest on Working Capital Loan of DHBVNL

(Rs. Crore)

Interest on working capital	FY 2017-18
O&M expenses for 1 month	113.92
Maintenance spares 1% of opening GFA	79.92
2 months receivables	2308.57
Uncollected revenue	138.51
Total	2640.93
Less	
ACD	1200.26
Net working capital	1440.67
Interest rate	8.74%
Interest cost	125.91

3.2.22 Interest on UDAY Bonds

As per the financial arrangement under UDAY scheme, 75% of the borrowings as on 30.9.2015 were to be taken over by the State Government within 5 years by

conversion into equity and grant. Until such time the arrangement is completed, the interest is to be borne by the Distribution licensees.

The Discoms have proposed to recover all their interest costs from the consumers by way of interest on borrowings for capital expenditure and the balance through interest on working capital borrowings inclusive of UDAY bonds. However, the Commission observes that the interest cost borne by the licensee is recovered from the consumers of the state by way of interest on borrowings for capital expenditure, interest on working capital borrowings; interest on Advanced Consumption Deposit and also some interest is recovered as part of FSA. The interest being recovered as part of FSA has not been accounted for by the licensees while calculating the financial burden of interest as part of the UDAY scheme. The revised approved interest on UDAY borrowings is as under:-

Interest on UDAY borrowings for the FY 2017-18

As per the information provided by the Discoms the interest payable for UDAY bonds for the FY 2017-18 is as under:-

Rs. Crore			
Interest to State Govtt. for UDAY Bonds	UHBVNL	DHBVNL	Total
	548	397.22	945.22

The total cost for the FY 2015-16 and FY 2017-18 adds up to Rs. 946.89 Crore. The same shall be met out of OFR available under the UDAY.

3.2.23 Total Expenditure

As per the item wise expenditure approved by the Commission the total expenditure works out to Rs.11211.10 Crore (UHBVNL) and Rs. 14098.89 Crore for (DHBVNL) for the FY 2017-18 as against Rs. 14037.03 Crore proposed by UHBVNL and Rs. 16900.65 Crore proposed by the DHBVNL respectively.

Additionally, the Commission observes that, so far, no RoE has been allowed to the Discoms because of the Equity being eroded due to accumulated losses. The Commission, in view of the UDAY, is of the considered view that in the present Order distribution loss trajectory has been pegged at per that agreed upon in the said scheme as well as not allowed any additional working capital loan and interest thereto on account UDAY. Further, fresh Equity is expected to be infused in the Discoms under

UDAY. Hence, in order ensure financial turnaround of the Discoms in line with the objectives of UDAY, the Commission has considered it appropriate to allow 10% RoE in the FY 2017-18 i.e at the same rate as allowed to HPGCL and HVPNL. Consequently, RoE amounting to Rs. 364.72 Crore for both the Discoms shall be recovered along with the revenue gap in the FY 2017-18.

3.2.24 Non-Tariff Income

Non-tariff income is approved as proposed by the discoms at Rs. 197.25 Crore for UHBVNL and Rs. 247.47 Crore for DHBVNL respectively.

3.2.25 Interest on FRP borrowings

The Distribution licensees have signed tripartite MOU dated 11.03.2016 with the Government of India and Haryana State Government under the Ujjawal Discom Assurance Yojna (UDAY) of the Government of India. As per the MoU, 75% of the borrowings of the Discoms, as on 30.9.2015, are to be taken over by the State Government. The Discoms have not provisioned for any interest on the FRP borrowings as the objective of the UDAY is to ensure that the electricity consumers are not burdened with the interest cost of past borrowings. Accordingly, the Commission has not considered the interest cost on FRP borrowings in the ARR of the two Discoms in the FY 2017-18

3.2.26 ARR of UHBVNL & DHBVNL for the FY 2017-18

In view of the above, the total ARR stands approved at Rs. 11013.85 Crore for UHBVNL as against Rs. 13839.51 Crore proposed by UHBVNL and Rs. 13851.42 crores for DHBVNL as against Rs. 16653.18 Crore proposed by it.

ARR of UHBVNL for the FY 2017-18

Rs. in Crore			
S.No.	Particulars	UHBVNL Proposal	HERC Approval
1	Power Purchase Expenses	10959.57	9146.57
1.1	Power purchase cost	9764.60	8377.12
	Intra state transmission charges	512.05	-
1.2	Interstate transmission charges & SLDC Charges	682.92	767.02
1.3	SLDC charges		2.44
2	Operations and Maintenance Expenses	1288.05	1226.33

2.1	Employee Expense	676.35	617.66
2.2	A&G Expense	81.06	81.06
2.3	R&M Expense	130.64	127.62
2.4	Terminal Liability	400.00	400.00
3	Depreciation	339.64	310.17
4	Interest Cost		
4.1	Interest on Consumer Security Deposit	103.75	103.75
4.2	Interest & Finance Charges (term loan)	119.98	119.98
4.3	Interest & Finance Charges (Working capital)	232.13	112.72
4.4	Interest on UDAY Bonds	681.09	
11	Return on Equity Capital	268.19	191.56
A	Total Expenditure	14037.03	11211.10
B	Income/Receipts		
12	Non Tariff Income	197.25	197.25
C	Aggregate Revenue Requirement = (A - B)	13839.51	11013.85

ARR of DHBVNL for the FY 2017-18 (Rs. Crore)

S.No.	Particulars	DHBVNL Proposal	HERC Approval
1	Power Purchase Expenses	14010.18	11925.87
1.1	Power purchase cost	12409.62	11021.51
1.2	Interstate transmission charges	899.22	-
1.3	Intrastate transmission charges & SLDC Charges	701.34	901.50
	SLDC charges		2.86
2	Operations and Maintenance Expenses	1392.76	1367.00
2.1	Employee Expense	815.88	790.12
2.2	A&G Expense	77.72	77.72
2.3	R&M Expense	114.16	114.16
2.4	Terminal Liability	385.00	385.00
3	Depreciation	315.80	288.87
4.1	Interest on Security Deposit	93.02	93.02
4.2	Interest & Finance Charges (term loan)	122.06	122.06
4.3	Interest & Finance Charges (Working capital)	688.92	125.91
4.4	Interest on UDAY Bonds		
	Cost of raising finance	3.00	3.00
11	Return on Equity Capital	242.42	173.16
	Other Debits	32.49	
A	Total Expenditure	16900.65	14098.89
B	Income/Receipts		
12	Non Tariff Income	247.47	247.47
13	Income from FSA		
C	Aggregate Revenue Requirement = (A - B)	16653.18	13851.42

3.2.27 Revenue Requirement for the FY 2017-18

The total ARR of the two Discoms for the FY 2017-18 is as given in the table below. The revenue surplus/ gap for the FY 2017-18 is as per the table below:-

Revenue Gap for FY 2017-18 at Current Tariff (Rs. Crores)

Total ARR for FY 2017-18	Revenue gap at current tariff
UHBVNL	11013.85
DHBVNL	13851.42
Total ARR for FY 2017-18	24865.27
Revenue gap for FY 2015-16 (non AP consumers)	1106.25
Carrying cost on above for 2 years @ 8.8% p.a.	194.70
Total Revenue requirement for FY 2017-18	26166.22
Revenue at current tariff (calculated at projected consumer category wise sales and consumer category wise average connected load / contract demand for FY 2017-18)	18603.79
Total Sales for FY 2017-18 (MU)	36573.41
COS at LT level (not considering the impact of UDAY bonds)	7.25
AP Sales for the FY 2017-18 (MU)	9193
Subsidy for AP supply at LT COS (less revenue from AP tariff)	6550.86
Total revenue including RE Subsidy	25154.65
Revenue Gap for FY 2017-18 at current tariff	1011.57

3.3 Capital Expenditure

3.3.1 True-up of Capital Expenditure for the FY 2015-16

a) UHBVNL

The Commission, in its Order on Annual Performance Review petition of UHBVNL for the FY 2015-16, had approved a capital expenditure of Rs. 457.34 Crore. However, the licensee in their filing of Annual Performance Review petition for the FY 2016-17 (including truing up for FY 2015-16) as per MYT Regulations, intimated that the actual expenditure incurred was Rs. 368.52 Crore and has prayed that the Commission may approve the same. As UHBVNL had not provided the complete details of the same, hence, the Commission directed the licensee to submit the work wise details of actual capital expenditure incurred by them. Accordingly the licensee submitted work wise details. A perusal of the same revealed that the actual expenditure incurred by UHBVNL was Rs. 368.52 Crore. The details of the Capex approved by the Commission for the FY 2015-16 vis-a-vis actual Capex incurred by UHBVNL is as under:-

Sr. No.	Name of Scheme/Work	Investment approved by HERC for FY 2015-16	Actual expenditure incurred by the UHBVNL FY 2015-16	
1	2	6		
1	Creation of new 33 kV sub-stations	226.14	62.11	181.13
2	Augmentation of existing 33 kV sub-stations		51.39	
3	Erection of new 33 kV lines		10.04	
4	Erection of new 11 kV lines		7.81	
5	Bifurcation/Trifurcation of overloaded 11 kV feeders		49.78	
6	Release of tube well connections	0.00	9.00	
7	Installation of meters on 33 kV Incomers for energy auditing	0.00	2.85	
8	Material required for release of non-AP connections, replacement of old assets and system improvement.	176.00	143.42	
9	Shifting of meters in pillar boxes	0.00		
10	Procurement of single phase meters for replacement of defective meters and release of new connections.	0.00		
11	Procurement of three phase meters for replacement of defective meters and release of new connections.	0.00		
12	Procurement of power T/F and allied equipment such as 33 kV CTs (current transformers), 33 kV PTs (potential transformers), 33 kV and 11 kV VCBs (Vaccum Circuit Breakers), 33 kV Control and Relay Panels etc.	0.00		
13	R-APDRP (Part-A)	47.00	19.18	
14	R-APDRP (Part-B)	0.00	0	
15	Pilot Project (Smart Grid in Panipat)	0.00	0	
16	Construction of UHBVNL Office Building at Panchkula.	0.00	0	
17	Civil Works	8.20	11.65	
18	Annual maintenance contract of Automatic Power Factor Correctors.	0.00	0.00	
19	Installation of LT Capacitors on LT side of distribution transformers.	0.00	0.00	
20	Revamping of existing M&T (Meter Testing) labs at Kaithal, Yamunanagar, Karnal, Dhulkote & Rohtak.	0.00	0.00	
21	Maintenance free earthing using 'Ground Enhancing Material' for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	0.00	0.00	
22	AMR on large NDS & LT consumers on Loads above 10 kW	0.00	0.00	
23	Augmentation of existing 33 kV lines	0.00	1.27	
	Total	457.34	368.52	

On perusal of the Capex details indicated above that the actual capital expenditure for FY 2015-16 is 75% of the revised capital investment approved, there exists wide unexplained variations in item wise expenditure approved by the Commission and that actually incurred by the licensee. For work mentioned at Sr. No. 17 i.e. Civil Works, the investment approved was 8.2 Crore, but the licensee has

incurred an expenditure of Rs. 11.65 Crore. For works at Sr. No. 13 RAPDRP Part-A the investment was approved of Rs. 47 Crore, however, the expenditure is Rs. 19.18 Crore only. Such deviations reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant as well as making any comparison of the Capex allowed and actual incurred futile. Further, the licensee also undertook some unapproved works i.e. at Sr. No. 6, 7 & 23 without the prior approval of the Commission.

Regulation 9.9 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 as under:-

“In case the capital expenditure is required due to Force Majeure 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 Majeure 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”.

However, the licensee did not obtain any prior approval of the Commission and proceeded to incur expenditure on this unapproved work.

Further, as per 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 specifies 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 licensee is directed to proceed accordingly.**

b) DHBVNL

The Commission in its order on Annual Performance Review petition of the licensee for the FY 2015-16, approved a revised capital expenditure plan of Rs. 614.35 Crore. However, the licensee in their filing of Annual Performance Review petition for the FY 2016-17 (including truing up for FY 2015-16) as per MYT mechanism intimated that the actual expenditure incurred was Rs. 588.15 Crore and requested the Commission to approve the same. The work wise detail is as under:-

(Expenditure in Crore)

Sr. No.	Name of Scheme/work	Investment approved by HERC for FY 2015-16	Actual expenditure for FY 2015-16
1	2	3	4
	AT&C loss reduction plan		

Sr. No.	Name of Scheme/work	Investment approved by HERC for FY 2015-16	Actual expenditure for FY 2015-16
1	Procurement of single phase meters for replacement of defective meters and release of new connections.	27.00	25.06
2	Procurement of three phase meters for replacement of defective meters and release of new connections.	5.00	4.82
3	LT Connectivity of already executed HVDS works.	17.00	3.23
	Load Growth schemes		
4	Creation of new 33 kV sub-stations	40.00	105.4
5	Augmentation of existing 33 kV sub-stations	24.00	
6	Erection of new 33 kV lines	15.00	
7	Erection of new 11 kV lines	9.00	
8	Augmentation of existing 33 kV lines	13.00	
9	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR)	38.00	52.49
10	Material required for release of Non-AP connections & replacement of old assets	175.00	198.75
11	Release of Tube well connection on turnkey basis	100.00	72.95
12	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 Relay Panels etc.	17.00	16.07
13	Release of BPL connections under RGGVY schemes	0.00	0.00
14	Mahatma Gandhi Gramin Basti Yojna	2.00	3.29
	R-APDRP schemes		
15	Implementation of R-APDRP (Part-A)	48.00	15.23
16	Implementation of R-APDRP (Part-B)	0.00	0.00
17	Relocation of energy meters of DS & NDS consumers outside their premises in Meter Pillar boxes.	27.35	36.11
18	Civil Works	5.00	4.61
	System Strengthening Works under IBRD loan and IBRD equity		
19	Under IBRD Loan	40.00	35.34
20	Under IBRD Equity	10.00	8.4
	Other works		
21	Revamping of existing Meter Testing labs. at Dadri, Sirsa, Hisar, Faridabad & Gurgaon	0.00	0.00
22	Maintenance free earthing using 'Ground Enhancing Material' for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	2.00	0.19
23	Providing RF Meters.	0.00	0.00
24	AMR on large NDS & LT consumers having load about 10 kW (IBRD funded work).	0.00	0.00

Sr. No.	Name of Scheme/work	Investment approved by HERC for FY 2015-16	Actual expenditure for FY 2015-16
25	Other works for system improvement – procurement and software	0.00	6.21
	Total	614.35	588.15

The actual expenditure for FY 2015-16 of Rs 588.15 Crore against the approved expenditure of Rs. 614.35 Crore. A perusal of the Capex detail indicate that the licensee has not submitted the detail of work wise expenditure for the works mentioned at Sr. No. 4 to 8, the expenditure has been clubbed which defeat the very purposes of item wise Capex approved for specific purpose and benefit there to. Further there exist wide unexplained variations in item wise expenditure approved by the Commission and that actually incurred by the licensee.

The above details indicate that the licensee under took some unapproved works. Such as works for system improvement as mentioned at Sr. No. 25 above. The amount spent on this work is Rs 6.21 Crore. Regulation 9.9 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 as under:-

“In case the capital expenditure is required due to Force Majeure 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 Majeure 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”.

However, the licensee did not obtain any prior approval of the Commission and proceeded to incur expenditure on this unapproved work.

Capital expenditure details reveals that the licensee on schemes mentioned at Sr. No. 9, 10, 14 and 17 has incurred expenditure higher than the capital expenditure approved by the Commission. Licensee has not specified any reason for these deviations.

The Commission reiterates that 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 further reveals lack of proper planning and adhocism on the part of the licensee thereby rendering Cost Benefit analysis redundant.

Further, as per 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 specifies 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 licensee is directed to proceed accordingly.**

3.3.2 Review of Capital Investment Plan for FY 2016-17

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 2016-17 and subsequent submissions, submitted revised capital investment plan for FY 2016-17. After examining these, the Commission allows following revised capital investment plans.

a) UHBVNL

The licensee through their Annual Performance Review Petition indicated that the likely expenditure for FY 2016-17 would be to the tune of Rs. 316.47 Crore against the approved expenditure of Rs. 1055.97 Crore. The licensee has intimated that during first six months of the year, the actual expenditure has been to the tune of Rs. 259.70 Crore and as such the likely expenditure for FY 2016-17 would be Rs. 316.47 Crore only. The work wise details provided are as below:-

(Expenditure in Crore)

S. No.	Name of the Scheme	Approval granted by HERC in ARR order for FY 2016-17	Actual Progress during April 2016 to September 2016	Likely Progress during October 2016 to March 2017	Total Likely Progress during FY 2016-17
1	2	3	4	5	6
1	Creation of new 33 kV sub-stations	60.00	32.32	7.14	39.47
2	Augmentation of existing 33 kV sub-stations	56.55	24.03	2.95	26.98
3	Creation of new 33 kV lines	24.00	89.68	3.60	12.57
4	Augmentation of existing 33 kV lines	26.45	44.59	0.00	4.46
5	Creation of new 11 kV lines	14.00	67.57	4.00	10.75
6	Bifurcation/Trifurcation of overloaded 11 kV feeders	13.76	9.64	0.00	9.64
7	Shifting of 33 kV dangerous Lines (CM Announcement)	20.00	0.00	0.00	0.00
8	Shifting of 11 kV dangerous Lines (CM Announcement)	20.00	0.00	0.00	0.00
9	Works to be carried out under DDUGJY scheme for system strengthening including SAGY	15.00	0.00	0.00	0.00
10	Works to be carried out under IPDS scheme for system strengthening	15.00	0.00	0.00	0.00
11	Mahatma Gandhi Gramin Basti Yojana (MGGBY)	80.00	4.50	0.80	5.30
12	Pilot Project (Smart Grid in Panipat) NEDO funded Nigam's expenditure 3 Cr. (MoP)	40.00	0	0.01	0.01
13	R-APDRP (Part-A) including DT Metering	0	1.66	1.67	3.33
14	AMR of DS and NDS consumers between 20 KW to 50 KW	18.58	0.00	0.00	0.00
15	Compulsory Feeder and Distribution Transformer metering	200.00	0.00	0.00	0.00
16	Consumer indexing and GIS mapping	58.04	0.00	0.00	0.00
17	Construction of UHBVNL Office Building at Panchkula	29.23	0.00	0.00	0.00
18	Civil Works	34.00	3.79	6.60	10.39
19	Release of tube well connections (Nos.) (To be released on HT connections)	46.28	0.00	0.00	0.00
20	Procurement of power T/F and allied equipments such as 33 kV CTS (current transformers), 33 kV PTs (potential transformers), 33 kV and 11 kV VCBs (Vacuum Circuit Breakers), 33 kV Control and Relay Panels etc.	120.00	163.55	30.00	193.55
21	Material required for release of non-AP connections, replacement of old assets and system improvement	55.00			

S. No.	Name of the Scheme	Approval granted by HERC in ARR order for FY 2016-17	Actual Progress during April 2016 to September 2016	Likely Progress during October 2016 to March 2017	Total Likely Progress during FY 2016-17
	Budget				
22	Procurement of single phase meters for replacement of defective meters and release of new connections. (Nos.)	2.07			
23	Procurement of three phase meters for replacement of defective meters and release of new connections. (Nos.)	10.71			
24	Relocation of energy meters of DS & NDS consumers outside their premises.(Procurement of MCBs and 2cx10 mm ² LT PVC armoured/ un-armoured cables	3.00			
25	Procurement of LT AB Cables for loss reduction plan	14.30			
26	Re conducting / augmentation of 11kV lines/ LT lines with 100mm ² in urban areas and 80/50 mm ² in rural areas in kms (in addition to quantity covered in serial number 16, following quantity is required)	26.00			
27	Setting up of a new testing lab for materials, i.e. cable, conductors, transformer oil, distribution transformers, etc. at Karnal	10.00	0.00	0.00	0.00
28	Revamping of existing M&T (Meter Testing) labs at (Kaithal, Yamunanagar, Karnal, Dhulkote & Rohtak)	34.00	0.00	0.00	0.00
29	Site testing of DS, NDS consumers upto 20 KW in urban area - 49678 Nos	10.00	0.00	0.00	0.00
Total		1055.97	259.70	56.77	316.47

From the above figures it is concluded that the licensee has not been able to start ten works during the year and the expenditure on these works would be nil. This is very dismal performance. What is the use of asking for the capital expenditure when the licensee cannot take up the works as planned? Further in respect of the works mentioned at Sr. No. 1 to 5, the likely expenditure would be much less than the approved expenditure. The details of work wise expenditure have not been provided in respect of the work mentioned at Sr. No. 20 to 26. As already stated, such a scenario

reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant.

The licensee had not given any reasons/justification for only 30% expenditure of the approved expenditure for FY 2016-17. It is a matter of concern that the licensee has not been able to utilize the capital expenditure even when the focus is preliminary on system strengthening and loss reduction under sought UDAY scheme. Such deviations defeat the very purpose of item wise expenditure approved and the objective of providing reliable and quality power to the consumers. This also reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant. As such the licensee should have exercised the proper control over the item wise expenditure approved by the Commission.

The licensee has stated that an expenditure Rs. 5.30 Crore would be incurred on Mahatma Gandhi Gramin Basti Yojna (MGGBY) during the FY 2016-17. The licensee states that MGGBY is a flagship programme funded by Govt. of Haryana. **As already stated in Commission's order dated 07th May, 2015 on APR petition of the licensee for FY 2014-15, for 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. 5.30 Crore included by the licensee towards the expenditure on this scheme in their revised capital investment plan is allowed subject to the condition that funding for the same has to come from the State Government.

Based upon the above details provided by the licensee, the Commission allows revised capital investment plan of Rs. 316.47 Crore to the licensee for FY 2016-17.

b) DHBVNL

The licensee through their Annual Performance Review Petition indicated that the actual expenditure for FY 2016-17 would be to the tune of Rs. 825 Crore against Rs. 1200 Crore approved by the Commission. The licensee has not intimated that the actual expenditure for the first six months of the FY 2016-17, and the likely expenditure for last six month of FY 2016-17. However, during discussions with the licensee's officers on 22.03.2017 it was intimated that the likely expenditure for FY 2016-17 would be Rs. 637.94 Crore only.

The work wise details provided are as below: -

(Expenditure in Rs. Crore)

Sr. No.	Name of Scheme/work	Investment approved by HERC FY 2016-17	Actual expenditure during April, 2016 to September, 2016.	Likely expenditure during October, 2016 to March, 2017	Total likely expenditure during FY 2016-17
AT&C loss reduction plan					
1	Procurement of single phase meters for replacement of defective meters and release of new connections.	88.47	14.15	20.85	35.00
2	Procurement of three phase meters for replacement of defective meters and release of new connections.	46.00	2.84	3.16	6.00
3	LT Connectivity of already executed HVDS works.	8.00	0.54	1.00	1.54
4	Power factor improvement (providing automatic power correctors)	15.00	0.00	3.69	3.69
Load Growth schemes					
5	Creation of new 33 kV sub-stations	110.00	96.36	67.64	164.00
6	Augmentation of existing 33 kV sub-stations	30.00			
7	Erection of new 33 kV lines	15.00			
8	Erection of new 11 kV lines	10.00			
9	Augmentation of existing 33 kV lines	15.00			
10	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR)	74.00	18.83	5.00	27.83
11	Material required for release of Non-AP connections & replacement of old assets	200.00	64.97	85.70	150.67
12	Release of Tube well connection on turnkey basis	100.00	65.73	35.00	100.73
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 Relay Panels etc.	25.00	6.07	11.93	18.00
14	Release of BPL connections under RGGVY schemes	13.00	0.00	1.00	1.00
R-APDRP schemes					
15	Implementation of R-APDRP (Part-A)	60.00	4.19	6.00	10.19
16	Implementation of R-APDRP (Part-B)	45.00	0.00	0.00	0.00
17	Relocation of energy meters of DS & NDS consumers outside their premises in Meter Pillar boxes.	50.00	7.98	4.54	12.52
18	Civil Works	12.00	2.23	1.77	4.00

Sr. No.	Name of Scheme/work	Investment approved by HERC FY 2016-17	Actual expenditure during April, 2016 to September, 2016.	Likely expenditure during October, 2016 to March, 2017	Total likely expenditure during FY 2016-17
System Strengthening Works under IBRD loan and IBRD equity					
19	Under IBRD Loan	90.00	22.00	30.14	52.14
20	Under IBRD Equity	22.50	5.33	7.53	12.86
Other works					
21	Revamping of existing Meter Testing labs. at Dadri, Sirsa, Hisar, Faridabad & Gurgaon	1.00	0.00	0.00	0.00
22	Maintenance free earthing using 'Ground Enhancing Material' for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	7.00	0.02	0.20	0.22
23	Installation of meters on 33 KV incomers at sub-station for energy auditing	2.00	0.00	0.00	0.00
24	AMI on large NDS & LT consumers having load about 10 kW (IBRD funded work).	34.00	0.00	0.00	0.00
	Total	1072.97			
25	Setting up of a new testing lab for materials i.e. cable, conductors, transformer oil, distribution transformers etc. at Hisar	2.07	0.00	0.00	0.00
26	Strengthening of 11 kV & LT Network of Bhiwani & Jind Towns (Total project Cost Rs. 75 Crore. To be funded from world bank	45.00	0.00	0.00	0.00
27	Shifting of 33 kV lines passing over authorized/un-authorized colonies (CM Haryana announcement)	26.16	0.00	2.00	2.00
Works under Ujjwal Discom Assurance Yojana					
28	Providing of metering arrangements on feeders (4535 numbers).	4.53	0.00	0.00	0.00
29	Providing of AMR meters on DTs in left out urban areas (Approx. 5009 DTs) i.e areas not covered RAPDRP Part-A scheme.	4.00	0.00	0.00	0.00
30	Providing of boundary meters for Villages (7296 meters in 3648 villages).	38.00	0.00	0.02	0.02
31	Providing of meters on DTs in rural areas (to be provided for reduction of AT&C losses to 30%.	10.00	0.00	0.00	0.00
32	Engagement of IT firm for Roll out of R-APDRP Application to Non R-APDRP Areas. (Procurement and installation of IT hardware at end locations of Sub-Divisions, Providing MPLS connectivity at end location).	17.00	0.00	0.00	0.00
33	Consumer indexing and GIS mapping of losses	19.00	0.00	0.00	0.00
34	Replacement of bare conductor with LT-AB cable in theft prone areas	84.76	7.30	22.77	30.07

Sr. No.	Name of Scheme/work	Investment approved by HERC FY 2016-17	Actual expenditure during April, 2016 to September, 2016.	Likely expenditure during October, 2016 to March, 2017	Total likely expenditure during FY 2016-17
35	Replacement of defective meters and Relocation of energy meters of DS&NDS consumers outside their premises in MCBs (Procurement of 1X1 & 4X1 MCBs for 1 Ph Meters, 1X1 MCBs for 3 Ph Meters, 2cx10 mm ² and 4cx16 mm ² LT PVC armoured/un-armoured cables and meters).	85.25	3.91	4.50	8.41
36	Other works for system improvement – procurement of IT equipment and software	0.00	0.00	1.05	1.05
	Total capital expenditure	1408.74	322.45	315.49	637.94
	Approved capital expenditure for FY 2016-17	1200			637.94

The above details indicate that there are wide unexplained variations in item wise expenditure approved by the Commission and that actually incurred by the licensee. Moreover, the licensee has not been able to utilize the capital expenditure sought for UDAY and loss reduction related activities/schemes, which is a matter of concern. The licensee has cited the reasons of delay in finalization of tenders, delay in award of works for incurring less capital expenditure than approved by the Commission. The reason for under achievement cited by the licensee does not seem to be convincing and reflects adversely on the functioning of the licensee. Such deviations defeat the very purpose of item wise expenditure approved and the objective of providing reliable and quality power to the consumers. This also reveals lack of proper planning and adhocism on the part of the licensee making the cost benefit analysis redundant. As such the licensee should have exercised the proper control over the item wise expenditure approved by the Commission.

The Commission considered and allows the capital expenditure of Rs. 2.0 Crore incurred on the works for shifting of 33 kV dangerous lines over the buildings and other areas in view of the directions of State Government under Section 108 of Electricity Act, 2003.

Subject to the above, the Commission allows revised capital investment plan of Rs. 637. 94 Crore for the FY 2016-17.

3.3.3 Capital investment plan for FY 2017-18.

Control period under the MYT Regulations has been increased further for one year i.e. upto 2017-18. Accordingly the licensees have submitted their capital investment plan for FY 2017-18. The licensees through their annual performance review petition for FY 2016-17, projected capital investment plan for FY 2017-18, however, revised the same in their subsequent submissions. The details are as under:-

a) UHBVNL

The licensee in his preliminary submission proposed a capital investment plan of Rs. 753.8 Crore for FY 2017-18, however, later revised to Rs. 963.41 Crore vide its subsequent submissions to APR/ARR. The details of capital investment plan proposed by the UHBVNL for FY 2017-18 are as under:-

Proposed capital Investment Plan for FY 2017-18 (Expenditure in Crore)

Sr. No.	Name of scheme / work	Proposed expenditure for FY 2017-18.
1	Creation of new 33 kV sub-stations (Nos. 25)	57.50
2	Augmentation of existing 33 kV sub-stations (Nos. 66)	65.00
3	Creation of new 33 kV lines	19.75
4	Augmentation of existing 33 kV lines	6.45
5	Creation of new 11 kV lines	8.00
6	Shifting of 33 kV dangerous Lines (CM Announcement)	2.00
7	Shifting of 11 kV dangerous Lines (CM Announcement)	10.00
8	Bifurcation/Trifurcation of overloaded 11 kV feeders	25.00
9	Release of tube well connections (To be released on HT connections)	30.00
10	Construction of UHBVNL Office Building at Panchkula	10.00
11	Civil Works (Sub-division office Munak, Amin, Pundri, Gharaunda, Division office Naraingarh & Circle Office Kurukshetra, Panipat, Sonapat, 2 nd Office Building at Rohtak, Renovation of M&T Lab & TRW/Store, Cash Collection Centers, Boundary Wall.)	10.00
12	Works to be carried out under DDUGJY scheme for system strengthening including SAGY New 33 kv line - 62 kms New 11 kv line - 374.06 kms Augmentation of 11kV Lines - 119.32 kms New DTs - 3372 Augmentation of DTs - 324 Augmentation of LT Lines - 39.44 kms Provision of LT AB Cables - 984.44 kms	35.00

Sr. No.	Name of scheme / work	Proposed expenditure for FY 2017-18.
	Replacement/relocation of Meter - 17243 Nos.	
13	Works to be carried out under IPDS scheme for system strengthening New 11kv line - 69.90 kms Augmentation of 11kV Lines - 188.75 kms. New DTs - 281 Augmentation of DTs - 278 New LT Feeder - 271.3 kms Augmentation of LT Lines - 383.6 kms Replacement/relocation of Meter - 36415 Nos.	25.00
14	Mahatma Gandhi Gramin Basti Yojana (MGGBY)	5.00
15	Procurement of power T/F and allied equipments such as 33 kV CTS (current transformers), 33 kV PTs (potential transformers), 33 kV and 11 kV VCBs (Vacuum Circuit Breakers), 33 kV Control and Relay Panels etc.	16.72
16	Material required for release of non-AP connections, replacement of old assets and system improvement Budget	200.00
17	Procurement of single phase meters for replacement of defective meters and release of new connections. (Loss Reduction Activities)	34.80
18	Procurement of three phase meters for replacement of defective meters and release of new connections. (Loss Reduction Activities)	17.53
19	LRP works to be carried out under MGJG scheme and urban feeder sanitisation Scheme on Turn Key Basis	350.00
20	Rural Feeder Monitoring System (AMR of new Rural Feeders) Being implemented by RECPDCL	0.66
21	Pilot Project (Smart Grid in Panipat) NEDO funded Nigam's expenditure 3 Cr. (MoP) (Loss Reduction Activities)	2.00
22	R-APDRP (Part-A) including DT Metering	31.00
23	Engagement of IT firm for Roll out of R-APDRP Application to Non R-APDRP Areas, Procurement and installation of IT hardware at end locations of Sub-Divisions, Providing MPLS connectivity at end location	2.00
	Total	963.41

b) DHBVNL

The licensee in his preliminary submission proposed a capital investment plan of Rs. 1200 Crore for FY 2017-18, however, later revised to Rs.1260 Crore vide its subsequent submissions to APR/ARR. The details of capital investment plan proposed by the DHBVNL for FY 2017-18 are as under:-

Proposed capital Investment Plan for FY 2017-18

(Expenditure in Crore)

Sr. No.	Name of work	Proposed expenditure for FY 2017-18.
1	AT&C loss reduction plan	
a	Procurement of single phase meters for replacement of defective meters and release of new connections.	34.78
b	Procurement of three phase meters for replacement of defective meters and release of new connections.	16.80
c	LT Connectivity of already executed HVDS works.	3.62
d	Power Factor Improvement (Providing automatic power factor correctors)	6.40
2	Load Growth schemes	
a	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	82.03
b	Augmentation of existing 33 kV sub-stations	15.00
c	Augmentation of existing 33 kV lines	6.00
d	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR) and segregation of Rural Urban load	105.19
e	Material required for release of Non-AP connections & replacement of old assets	116.16
f	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	80.00
g	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 Relay Panels etc.	20.00
h	Release of BPL connections under RGGVY schemes	9.60
3	R-APDRP schemes	
a	Implementation of R-APDRP (Part-A) including SCADA	8.00
b	Implementation of SCADA under R-APDRP (Part-B) in Faridabad town	0.00
4	System Strengthening Works under IBRD loan and IBRD equity	0.00
	Under IBRD Loan	0.00
	Under IBRD Equity	0.00
5	Other works	0.00
a	Setting up of a new testing lab for materials i.e. cable, conductors, transformer oil, distribution transformers etc. at Hisar.	6.11
b	Revamping of existing Meter Testing labs. at Dadri, Sirsa, Hisar, Faridabad & Gurgaon	1.42
c	Maintenance free earthing using 'Ground Enhancing Material' for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	2.65
d	Installation of meters on 33 kV Incomers at sub-stations for energy auditing.	3.20
e	Relocation of energy meters of DS & NDS consumers outside their premises in Meter Pillar boxes.	6.84
f	Civil Works	16.08
g	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of DHBVN.	13.20

Sr. No.	Name of work	Proposed expenditure for FY 2017-18.
h	Improvement works under loss reduction plan , replacement of iron pole and providing of PAT	26.93
i	Mahara gaon jagmag gaon scheme for rural area and feeder sanitization for Urban area	300.00
j	Other works for system improvement - Procurement of IT Equipment & Softwares	8.00
k	Smart City Gurgaon	200.00
l	Door Step Services for Ease of Doing Buisness under DHBVN jurisdiction	10.00
m	Implementation of SMART GRAM- an initiative of HE President of India	10.00
6	CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)	
a	Compulsory Feeder and Distribution Transformer metering Feeder meters have been provided on 100% feeders. AMR is already implemented on 1078 feeders. AMR on 4535 Number feeders is to be provided	1.60
b	DT meters with AMR have been provided on DTs in areas under RAPDRP Part - A for 17535 meters. DT Meters for left out urban areas is to be provided approx. 2000 DTs	8.80
c	Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	30.40
d	DT Meters for rural areas is to be provided for reduction of AT&C losses to 30%	16.00
e	Engagement of IT firm for Roll out of R-APDRP Application to Non R-APDRP Areas, Procurement and installation of IT hardware at end locations of Sub-Divisions, Providing MPLS connectivity at end location	24.00
f	Consumer indexing and GIS mapping of losses	
g	# Upgrade or change of transformers / meters etc. (The activities under this scheme have already been covered under Sr No 1a, 1 b, 2g & 3a)	
h	Replacement of bare conductor with LT- AB cable/LT XLPE armored cable in theft prone areas	35.20
i	Replacement of defective meters and Relocation of energy meters of DS & NDS consumers outside their premises in MCB(Procurement of 1X1 & 4X1 MCBs for 1 Ph Meters, 1X1 MCBs for 3Ph Meters, 2cx10 mm ² and 4cx16 mm ² LT PVC armoured/ un-armoured cables and meters).	24.00
j	Smart metering of consumers consuming above 200 units AMI Project for smart meters already under implementation in Gurgaon and Faridabad City for about 100000 consumers and is expected to be completed by December 2017 (under World Bank Project). Further Roll out will be based on the results. Expected Cost for the project is around Rs 105 Crore)	12.00
	Total	1260.00

Licensees have not submitted details regarding financial arrangements, work orders, NITs/ tenders and activities undertaken to incur the huge capital expenditure demanded for FY 2017-18.

In respect of licensee UHBVNL, who have proposed a capital expenditure plan of Rs. 963.41 Crore, the Commission feels that it is very much on higher side looking at their spending capacity in the past. As UHBVNL had only able to incur an expenditure of RS. 488.13 Crore and Rs. 368.52 Crore during FY 2014-15 and FY 2015-16 respectively and expected to incur an expenditure Rs. 316.47 Crore only during FY 2016-17. The Commission, however, recognizes that huge capital expenditure shall be required in order to meet the targets envisaged under UDAY scheme and to strengthen the distribution system. The Commission also observes that expenditure to tune of 350 Crore alone (at sr. no. 19) has been proposed for MGJG scheme and considers it on higher side. Regarding capital expenditure proposed for works shifting of 11 kV and 33 kV dangerous lines over the buildings and other areas, the licensees should take up the matter with the State Government to provide necessary funds. **As such, in respect of UHBVNL, the Commission approves a overall capital expenditure plan of Rs. 800 Crore only for FY 2017-18.**

In case of DHBVNL the actual capital expenditure for FY 2015-16 and revised capital expenditure for FY 2016-17 is in the tune of Rs. 588.15 Crore and Rs. 637.94 Crore respectively. For the FY 2017-18, DHBVNL has posed a capital expenditure of Rs. 1260 Crore which includes Rs. 200 Cores towards the first phase of Smart Grid of Gurgaon. The total outlay on the Smart Grid of Gurgaon Project has been proposed as 1382.36 Crore, out of which 273.20 Crore is admissible under PSDF grant. The expenditure of Rs. 300 Crore for MGJG scheme and Rs. 105.19 Crore for bifurcation/trifurcation of feeders seems to be on the higher side. The Commission, however, recognizes that huge capital expenditure shall be required in order to meet the targets envisaged under UDAY scheme and to strengthen the distribution system. **Considering the above, the Commission approves the overall capital expenditure plan of Rs. 1100 Crore only for FY 2017-18.**

Discoms are directed to revise their capital expenditure plan accordingly and submit the scheme wise details of proposed expenditure to the Commission within one month from the data of issue of this Order.

Both the licensees are further directed that they shall regulate their capital expenditure plans for FY 2016-17 and FY 2017-18 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.

3.4 Review of Technical Parameters

The Commission has reviewed the performance of the distribution system of the two distribution licensees i.e. UHBVNL and DHBVNL, based upon the details made available for FY 2015-16 & FY 2016-17 and has also examined the projected performance based upon filing of their Annual Performance Review petition for FY 2015-16, Revised Annual Revenue Requirement of 2016-17 & proposed Annual Requirement for FY 2017-18 including subsequent submissions thereof as per Multi Year Tariff mechanism. The Commission observes as under:-

3.5 Distribution Losses

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

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
2014 – 2015	30.58	24.47
2015 – 2016	31.49	24.47
2016 – 2017	30.08	21.99
2017 – 2018 (Projected)	20.85	17.94

The Commission observes that in spite of making huge capital expenditure on loss reduction, system strengthening/up gradation, energy meters, IT interventions etc, the distribution licensees have failed to achieved the distribution loss targets as stated in Commission's Order on earlier ARR of the two distribution licensees including Order on ARR for control period FY 2014-15 to FY 2016-17. The Commission noted that the distribution losses of Haryana are very high as compared to losses in neighbouring States like Punjab, Himachal Pradesh and Gujarat etc. This reflects adversely on the operations and working of the distribution licensees of Haryana.

In case of UHBVNL, the losses in a span of eleven years i.e. from FY 2005- 06 to FY 2016-17, are almost at the same level and hovering around 30%, which is unacceptable by any standard. In case of DHBVNL, these have reduced only by 7.91% in a span of last eleven years. The Commission observes that the distribution losses reduction is one of the key factors for financial revival of Licensees. The Commission expect from licensees to make all out efforts and to achieve the targets as prescribed by the Commission. The Commission, however, appreciates the efforts being made by DHBVNL to bring down the losses significantly during the FY 2016-17 as compared to FY 2015-16.

The year-wise position of the line losses on 11 kV rural and urban feeders of the licensees, as per the information provided by UHBVNL and DHBVNL, is given in the table below:-

Distribution Licensee	Total Number of feeders (all category) ending FY 2016-17	Urban Feeders (Nos.)			Rural Feeders (Nos.)		
		Total Number of Urban feeders ending FY 2016-17	Feeders with losses more than 25% ending FY 2015-16	Feeders with losses more than 25% ending FY 2016-17	Total Number of rural DS feeders ending FY 2016-17	Feeders with losses more than 50% ending FY 2015-16	Feeders with losses more than 50% ending FY 2016-17
UHBVNL	4580	684	271	193	861	813	793
DHBVNL	5094	726	206	170	882	539	563

An examination of the data of 11 KV feeders under UHBVNL made available for the period April, 2016 to March, 2017, shows that out of total 4580 feeders, 193 (4.21%) feeders in urban areas were having losses above 25% and 813 (17.75%) feeders in rural areas were having losses above 50%. Similar data of DHBVNL for the

period April, 2016 to March, 2017 shows that out of total 5094 feeders, 170 (3.433%) feeders in urban areas were having losses above 25% and 563 (10.92%) feeders in rural areas were having losses above 50%. The Commission observes that Discoms have been only managed to decrease the number of feeders with high losses in both urban and rural, however, still far behind the targets set by the Commission in this respect.

The above data from the licensees present a grim picture of the line losses on 11kV feeders. The losses on some urban feeders are as high as 90% and on rural Domestic Supply feeders as high as 95%, which by any means are not justified. The Commission also noted with concern that even after implementation of Mhara Gaon Jagmag Gaon (MGJG) scheme on rural RDS feeders, the number of rural feeders with losses above 50% has not marked any significant reduction.

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.

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.

The distribution licensees in their explanation has submitted that rampant theft, electromechanical meters in the system, meter inside the consumer premises etc. are the reasons for high losses and informed about the efforts made in this regard. Licensees however, have submitted that various loss reduction initiatives such as implementation of MGJG scheme, sanitation of feeders, replacement of defective/Electro-mechanical meters, relocation of meters, replacement of bare conductor with AB Cable, distribution system augmentation to remove overloading, DSM initiatives, IT implementation, theft detection drives are being exercised to reduce the losses.

The Commission in its Order dated 07.05.2015 on revised ARR of two licensees for FY 2015-16 had directed the licensees to bring down the total number of rural feeders with line losses above 50% as on 31.03.2015 to half by the end of the FY 2015-16 and to bring down the losses of all urban feeders below 25% by the time of next ARR/APR filing. However, the targets envisaged above have yet not achieved and only depicts marginal improvement.

The distribution licensees are directed to file, within 3 months, detailed reasons for not achieving the targets determined by the Commission in its tariff Order dated 07.05.2015. The Commission also directs the distribution licensees to bring down the total number of rural feeders with line losses above 50% as on 31.03.2017 to half and to bring down the losses of all urban feeders below 25% by the time of next ARR/APR filing. The distribution licensees are further directed to file report on the status of losses on each of these feeders and also prominently display them on their website.

3.6 Loss Reduction trajectory

In their Multi Year Tariff filing for control period FY 2014-15 to FY 2016-17, the two licensees had submitted the following distribution loss trajectory for FY 2013-14 and the control period.

Distribution Loss trajectory for the Discoms

Licensee	FY 2013-14	FY 2014-15	FY 2015-2016	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.

The Govt. of India, Ministry of Power vide letter dated 27.04.2015 has approved the following revised AT&C loss trajectory for the two licensees.

Revised AT&C loss trajectory approved by MOP, GOI

Distribution Licensee	2013-14	2014-15	2015-16	2016-17	2017-18

DHBVNL	38.25	23.96	21.35	18.74	16.10
UHBVNL	33.78	31.29	27.88	24.48	22.00
Haryana State	36.26	27.55	24.56	21.55	19.05

In their Annual Performance Review petitions for FY 2015-16 (including revised Annual Revenue Requirement for FY 2016-17) as per Multi Year Tariff mechanism, the two licensees submitted following revised distribution loss trajectory considering the MOU agreement under UDAY . Distribution Loss trajectory projected by the Discoms during ARR filing for FY 2016-17 is reproduced below:-

Licensee	FY 2014-15 (Actual)	FY 2015-16 (Actual)	FY 2016-17	FY 2017-18
DHBVNL	24.47%	24.47%	21.70%	19.14%
UHBVNL	30.58%	33.10%	25.19%	20.85%

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.

Norms for Collection Efficiency specified by the Commission

Distribution Licensee	FY 2013-14	FY 2014-15	FY 2015-16	FY 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.

From perusal of information on Collection Efficiency submitted by the distribution licensees in their Annual Performance Review petitions for FY 2015-16 (including revised Annual Revenue Requirement for FY 2016-17) as per Multi Year Tariff mechanism, the Commission observes that both the licensees have failed to achieve the normative level of Collection Efficiency during FY 2015-16. The Collection Efficiency in some of the rural area and urban has been reported as low as 60% and 89% respectively which by no means is justified and attributing to financial losses on account of addition borrowings by the licensees to meet their revenue shortfall.

Based upon actual performance during for FY 2015-16 and FY 2016-17 and that projected for FY 2017-18, the AT&C losses of the two licensees works out as below:-

Loss trajectory projected by the Discoms

	FY 2015-16		FY 2016-17		FY 2017-18	
	DHBVNL	UHBVNL	DHBVNL	UHBVNL	DHBVNL	UHBVNL
Distribution Losses	24.47%	31.50%	21.99%	30.08%	19.94%	20.85%
Collection efficiency	97.83%	96.52%	100.42%	99.11%	99.00%	99.00%
AT&C Losses	26.11%	33.88%	21.66%	30.71%	18.76%	21.64%
AT&C Loss trajectory as per UDAY (MoU)	25.22%	31.61%	22.48%	25.94%	18.76%	21.64%

From the above values, following conclusion is inferred:-

a) FY 2015-16

The AT&C losses as calculated above in comparison to the AT&C losses as envisaged under UDAY indicate that there is under achievement by both the licensees. In respect of UHBVNL, the actual AT&C losses are 33.88% against target of 31.61%. In respect of DHBVNL, the actual AT&C losses are 26.11% against target of 25.22%.

b) FY 2016-17

From the data it is evident that DHBVNL achieved the AT&C targets as envisaged under UDAY scheme whereas UHBVNL has failed to achieve the same. UHBVNL during FY 2016-17 has only achieved a reduction of 3.71% in AT&C losses as compared to previous FY 2015-16, against the target reduction of 7.94% envisaged under UDAY. The under achievement of AT&C targets by UHBVNL will adversely impact the benefits envisaged under the UDAY scheme.

c) FY 2017-18

The AT&C losses have been pegged in line with the losses envisaged under UDAY scheme. Considering the past performance huge efforts shall be required to meet the AT&C loss targets pegged by the Licensees.

The distribution licensees are directed to explain the reason of under achievement even after re-fixing of their AT&C loss trajectory envisaged under UDAY scheme.

As specified under Regulation 12 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, any overachievement and underachievement of the loss trajectory and the collection efficiency specified by 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 Distribution licensees as stipulated 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 and as per the directive in Commission's Order on ARR of the two licensees for the control period FY 2014-15 to FY 2016-17 and also in Order on their Annual Performance Review Petition for FY 2014-15 have to submit the computation of supply voltage wise and consumer category wise distribution and AT&C losses. However, in compliance to above, the distribution licensees have submitted the voltage wise losses only. The Commission is of the considered view that a scientific methodology needs to be developed to calculate voltage wise and category wise losses so as the COS of respective category could be calculated precisely.

Accordingly, licensees are directed to finalize the methodology for Cost of supply (CoS) / voltage wise and category wise cost of services and submit the proposal to the Commission for its approval within three months from the date of issue of this Order.

3.7 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 (RoE) 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 below:-

Distribution Transformers failure rate

Sr. No.	Year		DHBVNL		UHBVNL	
			Failure Rate including transformers damaged within warranty period (%)	Failure Rate excluding transformers damaged within warranty period (%)	Failure Rate including transformers damaged within warranty period (%)	Failure Rate excluding transformers damaged within warranty period (%)
1	2009-10	Urban	5.79	4.58	8.95	6.56
		Rural	12.52	9.36	15.84	10.78
		Overall	11.74	8.81	15.06	10.30
2	2010-11	Urban	7.21	6.09	13.38	9.14
		Rural	12.36	9.46	10.01	6.75
		Overall	11.81	9.09	10.29	6.95
3	2011-12	Urban	7.21	5.54	10.83	7.76
		Rural	9.98	7.31	10.01	6.38
		Overall	9.71	7.14	10.08	6.49
4	2012-13	Urban	6.66	5.17	10.83	7.76
		Rural	10.30	7.36	10.01	6.38
		Overall	9.94	7.14	10.08	6.49
5	2013-14	Urban	8.53	6.50	10.93	7.81
		Rural	10.61	7.14	9.49	6.25
		Overall	10.42	7.08	9.60	6.37
6	2014-15	Urban	7.15	5.22	9.87	6.31
		Rural	10.53	6.65	9.59	5.63
		Overall	10.22	6.52	9.62	5.68
7	2015-16	Urban	5.63	3.98	7.18	4.46
		Rural	9.70	6.14	9.3	5.38
		Overall	9.32	5.94	9.13	5.38
8	2016-17	Urban	4.96	3.26	4.62	1.69
		Rural	10.53	6.67	7.53	3.67
		Overall	9.95	6.31	7.27	3.50

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 Commission considered it appropriate to consider the total damage DT irrespective of damaged within warranty or not. The high level of transformer damage rate not only affect the continuity of supply but also reflects upon poor monitoring and maintenance of distribution system which in turn also impact the finances of the distribution licensees adversely.

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 all the years

since 2009-10. In the year 2014-15 and 2015-16 also, the DT damage rate in urban area is 7.15% and 5.63% respectively which is above the limit of 5%. Similarly, the DT damage rate for rural area in the year 2014-15 and 2016-17 i.e. 10.53 % also exceeds the prescribed limit. Whereas, DHBVNL in rural area during year 2015-16 has maintained the DT damage rate marginally below the limits of 10%. Moreover, the overall damage rate of DT has increased marginally in comparison to previous year, which is matter of concern and calls for appropriate step to contain the damage rate of DTs .

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 years 2013-14, 2014-15 and 2015-16, the DT damage rate in urban area is 10.93%, 9.87% and 7.18 % respectively, which is significantly higher than the prescribed limit. In all these years, the damage rate of DTs in urban areas is also much above the limit of 5%. However, during FY 2016-17, the licensee has registered a significant improvement by reducing the overall damage rate to 7.27% in FY 2016-17 from 9.13% in FY 2015-16.

The Commission noted it with concern that licensees have failed to achieve the damage rate within limits prescribed by the Commission considering the fact that the prescribed limits are far relaxed in comparison of international standards and even standards achieved by Tata Power and other power utilities in India.

The licensees have reported that measures such as routine checking, load balancing, regular checking of oil level, proper earthing of DTs, installation of proper size of fuse at HT and LT side, maintaining of LT lines to ensure proper working of DTs, augmentation of overloaded DTs, mandatory visit to field by senior officers etc. are being taken to reduce the damage rate of DTs. However, in spite of observations of the Commission in its Order dated 01th August, 2016 on APR petition of the licensees for the FY 2015-16 and revised ARR for FY 2016-17, licensees have not examined and reported the cause of damage of DTs in the areas attributing higher damage rate. **The Commission again directs the licensees to 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. Further, the reasons for excessive damage**

of DTs which are in warranty period be examined separately and intimated to the Commission along with the action taken thereof in the matter.

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. However, DHBVNL has failed to do so in spite of issuing directions in Commission's Order dated 01st August, 2016 on their APR petitions for FY 2016-17. **The Discoms are again directed to ensure that quarterly reports be submitted regularly without fail.**

3.8 Non replacement of defective energy meters by the distribution licensees

The two companies, during the public hearing on their Annual Performance Review petition for FY 2016-17 (including revised Annual Revenue Requirement for FY 2017-18), intimated the following details with regard to defective energy meters.

Status of Defective meters

Meter category	No. of defective meters (ending March, 2016)			No. of defective meters (ending March, 2017)		
	Rural	Urban	Total	Rural	Urban	Total
In respect to UHBVNL						
Single Phase Meters	38970	5460	44430	56523	6861	63384
Three Phase Meters	603	447	1050	1309	961	2270
Total	39573	5907	45480	57832	7822	65654
In respect to DHBVNL						
Single Phase Meters	98097	15835	113932	104101	9133	113234
Three Phase Meters	46287	4970	51257	49753	3826	53579
Total	144384	20805	165189	153854	12959	166813
Grand Total	183957	26712	210669	211686	20781	232467

The Commission observes that the total number of defective meters of two licensees have increased to 232467 (ending March, 2017) from the last year figures of 210669 (ending March, 2016) numbers. In respect of UHBVNL these were 65654 and in respect of DHBVNL these were 166813 nos. The latest information shown in the

table above indicates that total number of defective meters in the system have increased in both the Discoms instead of going down. This status indicates that the licensees have not made any concrete efforts to clear the backlog of defective meters. This is a matter of great concern and reflects badly on the operations and functioning of the Licensees.

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 also lead to leakage of revenue 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 10th 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 10th January 2013 in the Municipal Areas by 30th April 2013, but the job has not yet been accomplished.

The Commission's Order dated 07th May 2015, further assigned the following targets to the licensees for replacement of defective energy meters.

- a) Single-phase meters: The number of defective energy meters should not exceed 10,000 at any time after December, 2015.
- b) Three phase meters: The number of defective energy meters should not exceed 500 at any time after December, 2015.

The licensees vide Commission's Order dated 07th May, 2015 were also informed that 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. However, both the licensees failed miserably in achieving the targets for replacement of defective meters set by the Commission.

The licensees vide Commission's Order dated 01st August, 2016 were again, directed to submit a detailed report within two months from the date of issue of Order, indicating the detailed reason for not meeting with the targets assigned failure to do so shall attract penal action as per the Electricity Act, 2003.

The Licensees in their reply has submitted that the replacement of meter is an ongoing/continuous process and substantial meters have been replaced during the current year as well as in the previous year. It was also informed that crack teams at sub-division level have been formed for immediate action on the identified cases of meter replacement. DHBVNL has informed that thrust have been made in urban area and defective meters are being replaced under feeder sensitization scheme under which meters are being relocated and defective meter is being replaced. Whereas, in rural areas defective meters are being replaced under Mhara Gaon Jagmag Gaon Scheme (MGJGS). Licensee have also sought relaxation in the ceiling limits of defective meters targets and urged for defining the in terms of percentage say 5% or 10% of total installed electricity meters.

The Commission is not satisfied with progress made by both the distribution licenses for replacement of defective meters during year 2015-16 and year 2016-17. The Commission observes that Standard of Performance Regulations notified on 16th July, 2004 provides for normative level of defective energy meter as 1% of total energy meters and the licensees have even failed to achieve the same. The Regulations further provides for replacement of defective meters within 7 days after the same is established defective on checking and delay in doing so attracts penalty of Rs.100 for each day of delay subject to a maximum of Rs 3000/-.

The Commission feels that sincere efforts are not made instead for replacement of defective energy meters. The licensees should ensure availability of energy meters at Nigam's stores, empower its officials and plan its actions suitably in order to achieve the targets.

Accordingly, the licensees are, therefore, once again directed to submit a detailed report within two months from the date of issue of this Order, indicating the detailed reason for not meeting with the targets assigned along with future course of action to achieve the targets, failure to do so shall attract penal action as per the Electricity Act, 2003. The licensees are also directed to intimate the average time taken for replacement of defective meter along with area wise and age wise defective meters pending for replacement.

3.9 Non-replacement of Electro-mechanical meters

Besides the defective energy meters, following Electro-mechanical meters are yet to be replaced by the two distribution licensees.

Details of Electro-mechanical meters yet to be replaced

Meter category	Electro-mechanical meters in respect of UHBVNL (ending March, 2017)			Electro-mechanical in respect of DHBVNL (ending march, 2017)			Total Electro-mechanical meters
	Rural	Urban	Total	Rural	Urban	Total	Total
Single Phase Meters	393416	9240	402656	232553	35567	268120	670776
Three Phase Meters	233	133	366	50333	10552	60885	61251
Total	393649	9373	403022	282886	46119	329005	732027

Total number of Electro-mechanical meters pending for replacement as on September, 2015 as per the ARR Order dated 01.08.2016 were 825978 nos. i.e. 429040 nos. and 396938 nos. with respect of UHBVNL and DHBVNL respectively. It reveals that merely 93951 nos. Electro-mechanical meters were replaced by both the licensees since from October, 2015 to March, 2017.

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 Central Electricity Authority. The Central Electricity Authority vide its Regulations notified on 17th 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 9 years of the expiry of appointed date, more than seven (7) lakh Electro- mechanical meters (13% 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.

In Commission's Order 07th May 2015 on APR petitions of the licensees for FY 2014-15, the licensees were directed to replace these Electro-mechanical meters by 31st March 2016 by making all necessary arrangements. Further, not satisfied with the progress reported during the ARR filing of previous year, the Commission vide in its

ARR Order for FY 2016- 17 directed the licensees to file, within 3 months, the detailed reasons for not complying with the directive of the Commission.

In this respect, the licensees however, have informed that most of the EM meters are located in rural area where they have to face lot of resistance in replacing the EM meters. DHBVNL in its reply has further emphasised that being located in rural area these EM meters contributes only 7 - 8% of total revenue and due to practical reasons focus is preliminary on urban areas. But as per reported progress, large numbers of EM meters are still pending for replacement even in urban areas.

The Commission is not satisfied with the progress and the reasons imparted by the distribution licensees and therefore again directs the licenses to replace the existing EM meters in following manner:-

- 1. All the EM meters exist in the urban areas should be replaced by December, 2017.**
- 2. 50% of EM meters exist in rural areas should be replaced by December, 2017. The licensee should endeavour to replace the EM in a systematic manner by taking a specific area/circle at a time.**

The distribution licensees are also directed to submit the detailed action plan for replacement of defective meters and electromechanical meters consistent with the time lines set by the Commission in the matter.

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 official/officer responsible for the lapse.

3.10 Procurement of single phase and three phase LT meters.

The Commission observes that the licensees are still procuring normal static meters. The technical specifications for smart meters already stand issued by the Central Electricity Authority. The revised Tariff Policy, 2016 stands issued by the Govt. of India vide Notification dated 28th January, 2016. This Tariff Policy specifies that the Commission shall mandate for smart meters for consumers having monthly consumption above 500 units at the earliest but not later than 31.12.2017 and for consumers having monthly consumption above 200 units by 31.12.2019.

The Commission in its ARR Order dated 01st August 2016 directed the licensees to procure smart meters only in future so as the targets set under the NTP, 2016 can be realised. The Licensees in this respect has informed that the smart metes technology is in nascent stage and their fitness in the system is being assured by implementing pilot projects at Panipat city and Gurugram.

The Commission feels that use of smart meters as envisaged under NTP, 2016 is imperative to avoid human interface in meter reading and has the potential to generate huge information/ data which can efficiently be utilized for the system strengthening, theft detection, system planning, best utilization of resources, implementation of DSM schemes etc. **The licensees are, therefore, directed to plan their requirement for the smart meters, which can be configured both for pre-paid and post-paid functions, so as the time lines as envisaged under NTP, 2016 for roll out of smart meters across mentioned categories can be met.**

Chapter 4

DISTRIBUTION AND RETAIL SUPPLY TARIFF DETERMINATION FOR THE FY 2017-18

4.1 Tariff Proposal filed by the UHBVNL & DHBVNL (Discoms)

UHBVNL, in its present Petition, has submitted that the ARR including revenue gap of FY 2016-17 and the FY 2017-18 have been projected based on actual of the FY 2015-16 at the current level of tariff and FSA. It has been further submitted that the resultant revenue gap with the current level of tariff and FSA shall be met through the Operational Funding Requirement (OFR) as available under UDAY.

4.2 Cost of Service (CoS)

In the absence of a comprehensive consumer category wise CoS filed by the Discoms, the Commission, in line with the APTEL's judgement dated 30.05.2011 in Appeal No. 102,103 & 112 of 2010 had adopted the methodology suggested by the Hon'ble APTEL in the ibid judgement dated 30.05.2011 for broadly working out voltage wise CoS for the FY 2017-18. However, the amended National Tariff Policy, 2016 has provided for a revised CSS Formula. Hence, the Commission has considered it appropriate to estimate Cross-Subsidy Surcharge in line with the National Tariff Policy, 2016.

4.3 Method to address the Projected Revenue Gap

The Commission observes that largely on account of true-up of the FY 2015-16 ARR including un addressed revenue gap of the FY 2013-14, as per the MYT Regulations, carried over to the ARR of the FY 2017-18, revenue gap at current tariff has emerged.

Additionally, the Commission, as previously mentioned, has allowed RoE to the Discoms in the FY 2017-18 at the same rate as allowed to HPGCL and HVPNL. Consequently, RoE amounting to Rs. 364.72 Crore for both the Discoms shall be recovered along with the revenue gap of Rs. 646.85 Crore for the FY 2017-18. Resultantly, the tariff is required to be realigned to garner about Rs. 1011 Crore considering 9 months of recovery period during the current financial year) While doing

so the Commission has ensured that the revised tariff remains within +/- 20% of the average cost of supply as per the National Tariff Policy.

The revised tariff shall be as under. Additionally, the Commission has introduced Time of Use Tariff.

Sr. No.	Tariff for 2016-17				Tariff for 2017-18 (W.E.F 01.07.2017)			
	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	Domestic Supply				Domestic Supply			
	Category I: (Total consumption up to 100 units per month)				Category I: (Total consumption up to 100 units per month)			
	0 - 50 units per month	270/kWh	Nil	Rs. 115 up to 2 kW and Rs. 70 above 2 kW	0 - 50 units per month	270/kWh	Nil	Rs. 115 up to 2 kW and Rs. 70 above 2 kW
	51-100	450/kWh	Nil		51-100	450/kWh	Nil	
	Category II: (Total consumption more than 100 units/month and up to 800 units/month)				Category II: (Total consumption more than 100 units/month and up to 800 units/month)			
	0-150	450/kWh	Nil	Rs. 120 up to 2 kW and Rs.90 above 2 kW	0-150	450/kWh	Nil	Rs 125 upto 2 kW and Rs.75 above 2 kW
	151-250	500/kWh	Nil		151-250	525/kWh	Nil	
	251-500	605/kWh	Nil		251-500	630/kWh	Nil	
	501-800	675/kWh	Nil		501-800	710/kWh	Nil	
	Category III: (Total consumption more than 500 units/month and upto 800 Units)				Category III:			
	801 Unit and above	675/kWh (flat rate no telescopic benefits)	Nil	Rs. 120 up to 2 kW and Rs.90 above 2 kW	801 Unit and above	710/kWh (flat rate no telescopic benefits)	Nil	Rs. 125up to 2 kW and Rs.75 above 2 kW
2	Non Domestic				Non Domestic			
	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	Upto 5 kW (LT)	635/kWh	Nil	Rs. 235/kW
	Above 5 kW and Up to 20 kW (LT)	675/kWh	Nil		Above 5 kW and Up to 20 kW	705/kWh	Nil	
	Above 20 kW upto 50 kW (LT)	615/kVAh	170/kW	Nil	Above 20 kW and upto 50 KW (LT)	660/kVAh	160 / kW	Nil
	Existing consumers above 50 kW upto 70 kW (LT)	650/kVAh	170/kW	Nil	Existing consumers above 50 kW upto 70 kW (LT)	695/kVAh	160 / kW	Nil
	Consumers above 50 kW (HT)	630/kVAh	170/kW	Nil	Consumers above 50 kW (HT) New	675/kVAh	160 / kW	
3	HT Industry (above 50 kW)				HT Industry (above 50 kW)			
	Supply at 11 KV	615/kVAh	170/kVA	Nil	Supply at 11 KV	665/kVAh	170/kVA	Nil
	Supply at 33 KV	605/kVAh	170/kVA	Nil	Supply at 33 KV	655/kVAh	170/kVA	Nil
	Supply at 66 kV or 132 kV	595/kVAh	170/kVA	Nil	Supply at 66 kV or higher	645/kVAh	170/kVA	Nil
	Supply at 220 kV	585/kVAh	170/kVA	Nil	Supply at 220 kV	635/kVAh	170/kVA	NIL
	Supply at	575/kVAh	170/kVA	Nil	Supply at	625/kVAh	170/kVA	NIL

	400 kV	Arc furnaces/ Steel Rolling Mills	645 Paise per kVAh if supply is at 11 kV (See note 3 below)	190/kVA	Nil	400 kV	Arc furnaces/ Steel Rolling Mills also applicable to Open Access	695 Paise per kVAh if supply is at 11 kV (See note 2 below)	190/kVA	Nil
4	LT Industry - upto 50 kW					LT Industry - upto 50 kW				
	Upto 10 kW	595/kVAh	Nil	Rs. 185/kW	Upto 10 kW	635/kVAh	Nil	Rs. 185/kW		
	Above 10 kW and upto 20 kW	625/kVAh	Nil	Rs. 185/kW	Above 10 kW & upto 20 kW	665/kVAh	Nil	Rs. 185/kW		
	Above 20 kW and upto 50 kW	600/kVAh	Rs.160 /kW to be levied on 80% of the connected load	Nil	Above 20 kW and upto 50 kW	640/kVAh	Rs 160 on 80% of CL	Nil		
	Existing consumers above 50 kW upto 70 kW (LT)	625/ kVAh			Existing consumers above 50 kW upto 70 kW (LT)	665/kVAh	Rs 160 on 80% of CL	Nil		
5	Agriculture Tube-well Supply					Agriculture Tube-well Supply				
	Metered: (i) with motor upto 15 BHP	10/kWh	Nil	Rs. 200 / BHP per year	Metered: (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			
	Un-metered (Rs. / Per BHP / Month): (i) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil	Un-metered (Rs. / Per BHP / Month): (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		
6	Public Water Works	690/kWh	180/kW	Nil	Public Water Works / Lift Irrigaion / MITC / Street Light	735/kWh	180/kW or BHP except street Light	Nil		
7	Lift Irrigation	690/kWh	180/BHP	Nil						
8	MITC	690/kWh	180/BHP	Nil						
9	Street Lighting	690/kWh	Nil	Rs. 180/kW						
10	Railway Traction					Railway Traction & DMRC				
	Supply at 11 KV	610/kVAh	160/kVA	Nil	Supply at 11 KV	655/kVAh	160/kVA	Nil		
	Supply at 33 KV	600/kVAh	160/kVA	Nil	Supply at 33 KV	645/kVAh	160/kVA			
	Supply at 66 or 132 kV	590/kVAh	160/kVA	Nil	Supply at 66 or 132 kV	635/kVAh	160/kVA			
	Supply at 220 kV	580/kVAh	160/kVA	Nil	Supply at 220 kV	625/kVAh	160/kVA			
11	DMRC					DMRC				
	Supply at 66 kV	590/kVAh	160/kVA	Nil	Supply at 66 kV or 132 kV	635/kVAh	160/kVA			
	Supply at 132 kV	590/kVAh	160/kVA	Nil						
12	Bulk Supply					Bulk Supply				
	Supply at LT	610/kVAh	160/kW or Rs. 160/kVA as applicable (see note 4)	Nil	Supply at LT	650/kVAh	160/kW or Rs. 160/kVA as applicable (see note 4)	Nil		
	Supply at 11 kV	600/kVAh		Nil	Supply at 11 kV	640/kVAh		Nil		
	Supply at 33 kV	590/kVAh		Nil	Supply at 33 kV	630/kVAh		NI		
	Supply at 66	580/kVAh		Nil	Supply at 66	620/kVAh		Nil		

	or 132 kV Supply at 220 kV	575/kVAh		Nil	or 132 kV Supply at 220 kV	615/kVAh		Nil
13	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 not exceeding 500 units/flat/dwelling unit (DU).	525 /kWh	Rs. 100 /kW of the recorded demand	Nil
	For total consumption in a month exceeding 500 units/flat/ DU.	585 /kWh			For total consumption in a month exceeding 500 units/flat/ DU.	620 /kWh	Rs. 100 /kW of the recorded demand	Nil
14	Independent Hoarding / Decorative Lightning	830/kWh	180/kW	Nil	Independent Hoarding / Decorative Lightning	854/kWh	180/kW	Nil
15	Temporary Metered supply	Energy charges 1.5 times the energy charges of relevant category for which temporary supply has been sought plus fixed charges/ MMC at normal rates of relevant consumer category			Temporary Metered supply	Energy charges 1.5 times the energy charges of relevant category for which temporary supply has been sought plus fixed charges/ MMC at normal rates of relevant consumer category.		

Notes:

1. Energy charges in case of Domestic consumers are telescopic in nature up to the consumption of 800 Units / month. In case of consumption more than 800 units/month, no slab benefit shall be admissible and tariff applicable will be 710 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.
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 surcharge of 30 paise/ per unit arc furnace/ steel rolling mills shall also be applicable on Open Access power.
14. The fixed charge for HT industrial consumers with contract demand of 4 MVA and above shall be Rs. 180/ kVA/month.
15. The incentive on installation of solar system shall be Rs. 1/- per unit only for all DS consumers up to 31.03.2018.
16. The Electricity Duty, Municipal Tax and FSA shall be charged at kWh.
17. The Schedule of tariff for supply of electricity by the Discoms shall get modified accordingly.
18. The consumers who will deposit advance payment online through RTGS/NEFT in the banks authorized by the Discoms equivalent to 120% of energy charges paid in the previous year, within one month of this Order, shall be given a discount of equivalent to Savings Bank rate till the time entire advance is adjusted.

4.4 Time of Use Tariff / Time of Day (ToD) Optional

The distribution and retail tariff approved by the Commission for different categories of consumers is uniform throughout the day i.e. the rate is uniform and not time differentiated. However, Time of Use (ToU) tariff, already introduced by quite a few

SERCs, is a tariff structure wherein different tariff rates are applicable for different time of the day. The tariff rates for time blocks of the day is fixed keeping in view the system load conditions as also Discom(s) per unit power purchase cost over different time blocks of the day. It is an established fact, evident from the system load curve, that demand is low during certain time blocks like during night hours; similarly, during certain time blocks the system demand is at its peak.

The transmission/distribution system, in order to ensure reliability and continuity of supply, is generally designed to meet the peak demand even if it occurs for a few hours. This compulsion makes the system costlier and uneconomical, as during off peak / normal demand hours they remain under-utilised. This is apparent from the fact that the peak system demand in Haryana, as per 24X7 Power for All document dated December, 2015, the State would “see an increase in peak demand from 9152 MW in the FY 2014-15 to 12112 MW in the FY 2018-19” with corresponding increase in energy requirement. The peak demand and the peak demand met in Haryana were of the order of 9262 MW that occurred during July, 2016 and the same declined to a low of 6642 MW in November, 2016. Further, the State has a typical demand variation between paddy season (June to September) and rest of the year. It is worthwhile to note that during paddy season the demand touches its maximum but reduces to less than half during rest of the time. In addition to the seasonal variation in demand there also exists intraday variation. Thus, in the considered view of the Commission there is a need to put in place a ‘price signal’ to even out the demand curve so as to strike a trade – off between capital intensive augmentation of the transmission and distribution system including tie-up of additional power and a tariff design that would shift demand from peak periods to off-peak / normal periods and thereby minimise investment requirement as well as surplus power and trading losses thereto.

Hence, in order to optimise financial resources, it is essential to ‘shave peak’ and ‘fill the valley’ instead of pumping in fresh investments or the Discoms imposing restrictions on drawl of power by the consumers during peak load hours so as to contain the system demand during peak load hours and to avoid tripping on account of overloading.

4.4.1 Statutory Provisions

In order to achieve the aforesaid objectives by introducing ToU tariff, the Commission has examined the statute occupying the field as under:-

i) Section 62(3) of the Electricity Act, 2003 provides as under:-

“The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer’s load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.”

As per the ibid provision, the Commission while determining tariff, can differentiate accordingly to the time at which supply is required i.e. accordingly to time of use. Thus, the Commission can implement ToD tariff for categories of consumers where it is felt that differentiation based on time of use will be most effective and feasible.

ii) The provision 5.4.9 of the NEP also advocate the ToU tariff as under:-

“5.4.9 The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of pre-paid meters. In the first instance, TOD meters for large consumers with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements”.

iii) Further, clause 8.4 of the NTP explicitly lays emphasis on ToD / ToU Tariff. The said clause is reproduced below:-

“8.4 Definition of tariff components and their applicability

1. Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures”.

In view of above provisions of the Electricity Act, 2003, the National Electricity Policy and the National Tariff Policy framed by the Central Government, the Commission is under statutory obligation to introduce ToU / ToD tariff.

The cost variations warrants and metering is cost-effective in Haryana, seasonal and time-of-use tariffs can be instituted for electricity consumers in Haryana. It is expected to encourage changing the way end consumers use electricity. Time of Use tariff will allow customers some flexibility to choose when they use electricity. Electricity consumed in the Low Rate period (off peak period) will be cheaper than usage in the High Rate period. When choosing a Time of Use Tariff, consumers need to consider the time and application of power usage in order to achieve the lowest cost option.

In Haryana, the cost differences during different time blocks over a period of 24 hours are currently large enough to warrant time differentiated prices for electricity. Such a change in tariff design would increase the efficient use of electricity in Discoms service territory i.e. UHBVNL & DHBVNL. Further, the Grid Frequency based UI charges in the Northern Region also establishes the fact that in 96 time blocks of 15 minutes each the UI rates shows wide intra-day variations.

As previously noted, prices for electricity that reflect differences in cost as much as possible are usually more efficient. This is particularly true in the case of seasonal and ToU tariffs. It is desirable that Time of Use (TOU) tariffs are instituted in those consumer categories where it is feasible to begin with and where adequate metering exists for this purpose.

The ToD tariff introduced by a few other SERC's were examined. **DERC** (Delhi FY 2015-16) defined peak load hours from 1300 Hrs to 1700 Hrs and 2100 Hrs to 2400 Hrs. Consumption during these peak demand hours were subjected to a surcharge on

Energy Charges of 20%. The off Peak Hours were defined as 0300-0900 Hrs and a rebate of 20% on Energy Charges was allowed for consumption during these off peak hours. Further, for consumption during other than Peak and Off – Peak hours normal Energy Charges were made applicable. Additionally, a rebate of 2.5% on the Energy Charges for supply at 33/66 kV and 4% for supply at 220 kV was made applicable. The ToD option was available to all consumers except Domestic Supply consumers with sanctioned load / MDI is 25 kW / 27 kVA and above. Similarly, PSERC (Punjab FY 2016-17) during the defined peak and off peak hours allowed a surcharge / rebate on Energy Charges.

GERC (Gujarat FY 2016-17, HTMD – I) identified two peak demand hours i.e. 0700 Hrs to 1100 Hrs and 1800 Hrs to 2200 Hrs and introduced a surcharge on Energy Charges in a graded manner i.e. Rs. 0.65 / Unit for billing demand up to 500 kVA and Rs. 1.0 / Unit for billing demand above 500 kVA.

UPSERC (FY 2016-17 KESCL Large and Heavy Power for supply at 11 kV) identified peak demand hours as 1700 Hrs to 2200 Hrs and levied a surcharge on Energy Charges @ 15%. While during the off peak hours i.e. 2200 Hrs to 0600 Hrs rebate of 7.5% was allowed. In the case of induction furnace / rolling / re-rolling Mill the rebate was extended to 20%.

WBERC (West Bengal FY 2015-16 for WBSEDCL) introduced two ToD tariff scheme i.e. normal ToD and prepaid ToD eg. For Industries (11 kV) the applicable energy charges during summer months was Rs. 6.85 / kWh, Rs. 6.86 / kWh during monsoon months and Rs. 6.85 / kWh during winter months and Rs. 320 / kVA / month was the demand charge. In this case normal ToD was allowed and tariff rate (instead of rebate / surcharge) was determined i.e. from 0600 Hrs to 1700 Hrs the rates were summer months Rs. 6.81 / kWh, Rs. 6.80 / kWh during monsoon months and Rs. 6.79 / kWh during winter months. From 1700 Hrs to 2300 Hrs the tariff during summer months was Rs. 9.53 / kWh, Rs. 9.52 / kWh during monsoon months and Rs. 9.51 / kWh during winter months. Further, from 2300 Hrs to 0600 Hrs the tariffs during the summer months was Rs. 4.50 / kWh, Rs. 4.49 / kWh during monsoon months and Rs. 4.48 / kWh during winter months. The demand charge continued to be Rs. 320 / kVA / month i.e. the same as in the case of normal tariff scheme.

To begin with, the Commission has attempted to introduce ToU tariff as an option to gauge the elasticity of demand vis-a-vis tariff and its impact on the revenue of

the Distribution licensee(s). **The option shall be available to the H.T Industry including Furnace, L.T. Industry, H.T. Non-Domestic, Bulk Supply consumers (Excluding Bulk DS), Public Water Works & Lift Irrigation.** The ToU charge shall consist of two time periods, peak and off-peak. The peak, off peak and normal demand period during these months are as under:-

Peak Demand Hours	6.30 P.M to 10.00 P.M
Off Peak Demand Hours	10 P.M. to 05.30 A.M (next day)
Normal Demand Hours	05.30 A.M. to 6.30 P.M.

The Commission has taken note of the fact that during the months of October to April (next year) the aforesaid classification is evident from the load profile. However, during the months of June to September the load classified as off peak in the table do not hold good as the load at night is high and shows little variation vis-a-vis peak demand hours leading to the inference that during these months there are no off peak hours as such. Additionally, it is observed that during evening hours June to September the evening peak is largely influenced by introduction of Lighting and Cooling load and not by Industrial or commercial load as such. Further, from the months of June to September, the load seeks lower levels i.e. it drops down from an average of about 7500 MW to an average of about 5000 MW as against maximum demand met by the Discoms of about 9150 MW. Thus, the possibility of shifting some Industrial load during the night hours cannot be denied. However, these issues require further examination including role of regulated supply to A.P. tube-well consumers.

In view of the above, the Commission has considered it appropriate to introduce following ToU tariff from the month of October to March 2017.

Further, the peak and off-peak hours may vary to a certain extent across Haryana. Hence, to mitigate such variations, the SE / XEN of the area concerned shall, where there may be significant variations of more than 30 minutes, re-determine the peak hours of supply and accordingly notify the eligible consumers of his area regarding the same.

In all such cases where the eligible consumer opts for ToU Tariff the Peak Load Exemption Charge (PLEC), if presently applicable, on the consumption

during the peak load hours shall not be applicable. However, for the Open Access consumers, for the power procured from outside the State during the peak load hours, the surcharge as per the peak demand hours shall be levied on the energy brought in under open access mechanism.

As per the information available in the Commission, the electronic meters presently installed for HT Consumers have the facility of recording consumption in different time segments. In case the same is not available the eligible consumer can install ABT meter at its own cost. In such cases, the requisite meter can be procured by the consumer and handed over to the Discom concerned for testing / sealing and installing. The Discom, in no case, shall delay the process beyond ten days from the day (inclusive) the meter is handed over by a consumer.

4.4.2 ToU / ToDTariff (Optional)

Given the fact that marginal cost pricing is considered to be 'optimal' and it sends appropriate signal to consumers as how to behave with regard to usage of electricity. As the intraday demand picks up, different fuels are introduced depending on intensity of demand and fuel costs i.e. beginning with the least (cheapest) expensive to comparatively more expensive sources in an increasing Order. It is evident from the intraday implemented schedule for Haryana that during peak hours power is scheduled mostly from gas based thermal power stations by the Discoms to meet the peak demand. Thus, the average fuel cost of power purchase as per the present Order is Rs. 2.43 / Kwh. As against this the weighted average fuel / variable cost of most expensive power that is scheduled as the demand increases is about Rs. 2.89/kWh i.e. about 19% higher at the margin.

In addition to the above approximation, as per the tariff Order dated 29.05.2014 and clarification dated 5.09.2014, the HT consumers are paying Peak Load Exemption Charges (PLEC) of Rs. 1.0 / kVAh over and above the normal tariff if the consumption is within the permissible limit i.e. up to 50% of the CD and for any consumption beyond the permissible limit, the consumer is charged Rs. 1.50 / kVAh over and above the normal tariff. While in the case of energy drawn through Open Access the applicable rates are 0.50/KVAh in case energy drawn is in excess of 20% of the CD and Rs.

1.50/kVAh on the balance energy during peak load hours in a month beyond 50% of the CD.

The Commission has carefully weighed the above two options and given the simplicity in implementation as well as calculation of fuel cost at the margin as fixed cost is payable to the Generator by the Discoms regardless of the actual energy drawl / implemented schedule. Hence, by avoiding drawl from expensive sources only fuel cost is saved, the Commission has considered it appropriate to put in place the following dispensation as an option to the eligible consumers.

Charge		Time
Off-Peak (October to March)	15 % rebate on the normal energy charges as approved by the Commission.	From 10 P.M to 05.30 A.M
Peak (October to March)	19% premium over the energy charges determined by the Commission	From 06.30 P.M hours to up to 10.00 P.M
Normal demand Hours (October to March)	Normal Tariff	From 05.30 A.M to 06.30 P.M
Demand Charges	As determined by the Commission - shall be the same for all categories of consumers including ToU. PLEC shall continue to be applicable for Open Access Power.	

Since the Commission has introduced ToU tariff as an option, once electing to be charged at the Time of Use Tariff, the consumer / applicant opting for the same shall be charged for a period of not less than six months from the date the Discoms, on an application submitted by a consumer, allows the same. The Discoms shall in no case delay approval / consent beyond three working days from the date of receipt of application from a consumer.

All other charges except PLEC on power purchased from the Discoms during the ToU period shall be applicable for the electricity consumer opting for ToU Tariff. But during the non ToU period PLEC shall continue to be levied. Also PLEC shall continue to be levied for Open Access Power during ToU period as well as non-ToU period. Based on the response from the consumers and impact on the revenue of the Discoms, the Commission shall review the dispensation on ToU Tariff for the FY 2018-19.

The ToU compatible meter, as per specifications of the Discoms / CEA shall be procured by the Consumers opting for ToU Tariff. The Discoms shall

test, seal and install the same within ten days counted from the day a consumer hands over the meter to the Discoms.

The Discoms are directed to file data regarding the following:-

- a) Category wise number of consumers opting for ToU Tariff and their connected load / contract demand.
- b) Comparative statement of quantum of power drawn by such consumer during peak hours, off peak hours and normal demand hours pre and post ToU month wise for corresponding six months i.e. October, 2017 to March, 2017 and October, 2016 to March, 2017.
- c) Revenue realised from such consumers during the corresponding six month periods.
- d) Quantum of power drawn by such consumers under Open Access mechanism and average cost (Rs/kWh) thereto during the corresponding six month periods.
- e) Details of power surrendered / under drawn / disposed off on short-term basis and the per unit revenue realised / UI received or paid by the Discoms during the said period.

4.5 Agriculture Pump Set Supply (AP Supply)

For the A.P. consumers, the tariff, in the FY 2016-17 was determined equal to the CoS of L.T. Supply. In line with the previous Order of the Commission the AP tariff determined by the Commission for the FY 2017-18 shall be as under:-

Table 4.1: AP Tariff Determined by the Commission (FY 2017-18)

A.P. Metered /unmetered	Rs. 7.25/ kWh
-------------------------	---------------

As the State Government has been traditionally providing subsidised supply to the AP consumers, the concessional tariff for AP consumers' category for the FY 2017-18 taking into account the subsidy as estimated by the Commission and payable by the State Government, shall continue at the exiting rates.

As a consequence of retaining the existing subsidised tariff for supply of power to AP consumers, the subsidy payable by the State Government calculated as the difference between the revenue at approved tariff i.e. Rs. 7.25 /kWh which is equivalent

to the CoS of L.T. Supply for the FY 2017-18 and the subsidy for the FY 2017-18 shall be as per table below. 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 i.e. in advance. **The Calculation of Subsidy to be paid by the State Government for the FY 2017-18 as earlier stated is as per table 4.2.**

Table 4.2 : Calculation for AP subsidy (FY 2017-18)

	Subsidy calculation for AP supply	unit	value
1	Total units supplied to AP	MU	9193
2	Cost/ Tariff per unit	Rs/kWh	7.25
3	Estimated cost of service	Rs. Crores	6664.93
4	Revenue at subsidized tariff	Rs. Crores	114.07
5	Subsidy required to keep the tariff at current levels = 3-4	Rs. Crores	6550.86
6	Arrears of RE Subsidy for FY 2015-16	Rs. Crore	847.26
8	Total A.P. Subsidy payable for FY 2017-18	Rs. Crores	7398.12

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 2017-18 i.e. Rs.7.25 / kWh converted in to Rs/BHP per month in the case of unmetered supply. **The Discoms are directed to take up the issue of any unpaid subsidy vis-a-vis that determined by the Commission in its tariff Order or FSA Order under intimation to the Commission.**

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 interest on 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 in case of non payment of bills 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.

Chapter 5

WHEELING CHARGES AND CROSS-SUBSIDY SURCHARGE

5.1 Wheeling Charges for the FY 2017-18

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 the network establishment and operation cost as distinct from retail supply business including the power purchase cost is about 9.32% of the net ARR of the Discoms. Accordingly, the same has been considered by the Commission for working out the wheeling tariff for the FY 2017-18 as under:-

Table 5.1: Approved Wheeling Charges for the FY 2017-18

1 Network expenses (per kWh)		
a.	Network establishment and operation cost [9.32% of the net ARR (Rs. 248652.7 Million)]of the distribution licensees for the FY 2017-18)	2317.44
b.	Allowed gross volume of power purchase by the Discoms at State Periphery (MUs) excluding inter-state sales and losses.	46403.78
c.	Expenses (Rs / kWh) (a/b)	0.50
2. Cost of losses in the system		
a	Approved Energy available for sale to Discoms (MU)	45262.25
b	Distribution system losses (technical) %	8.40%
c	Losses (MU) (2a X 2b))	3802.20
d	Bulk supply power purchase rate for the Discoms (Rs. / kWh)	4.13
e	Total cost of losses (2dx2c) Rs. million	15703.09
f	Cost per unit of losses (Rs. /unit) (2e/1b)	0.34
3. Wheeling Charges (Rs. / kWh) (1c+2f) rounded off		0.84

Accordingly, the wheeling charges payable by the open access consumers, except for the Solar and Wind energy procured from the State of Haryana (which shall be exempted), work out to Rs. 0.84/kWh.

5.2 Cross-Subsidy Surcharge (CSS)

The MYT Regulations, 2012 (regulation 63) 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 Commission has worked out CSS in line with the formula provided in the National Tariff Policy, 2016. The National Tariff Policy dated 28.01.2016 provides as under:-

“SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable”.

The above is subject to the proviso that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

The Commission has considered the methodology prescribed by the National Tariff Policy dated 28.01.2016, while working out cross-subsidy surcharge in the present Order. The relevant provision of the NTP is reproduced below:-

“ Surcharge formula:

$$S = T - [C / (1 - L/100) + D + R]$$

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation.

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation.

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level.

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level.

*R is the per unit **cost of carrying regulatory assets (emphasis added)**.*

Above formula may not work for all distribution licensees, particularly for those having power deficit (emphasis added), the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the **surcharge shall not exceed 20% (emphasis added)** of the tariff applicable to the category of the consumers seeking open access.

Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall **exempt levy of cross subsidy charge on the Railways**, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.

8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisation.

8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the consumer is located. In case of two licensees supplying in the same area, the licensee from whom the consumer was availing supply shall be paid the amounts collected”.

The Commission has carefully examined the formula for working out cross-subsidy surcharge and observes as under:-

The voltage wise technical losses filed by the Discoms and that estimated by the Commission for working out voltage wise CoS is as under:-

Table No. 5.2 – Voltage level losses

Voltage Levels	Discoms Estimates	
	*UHBVNL (%)	# DHBVNL (%)
33 kV line losses	0.40	0.45

Voltage Levels	Discoms Estimates	
	*UHBVNL (%)	# DHBVNL (%)
33 kV Transformation Losses	0.23	0.20
11 kV line losses	6.95	8.40
11 kV Transformation Losses	0.96	0.93
LT Line Losses	5.62	4.70
Total Losses upto LT Level	13.57	14.68

* Memo No. Ch-02/SE/RA/N/F-211 dated 5.04.2017

memo No. Ch-49/SE/RA-560 dated 03.04.2017

The Commission observes that above voltage level losses calculated by the Discoms and that of the Commission are marginally different to that estimated by the Discoms in the FY 2016-17 and accepted by the Commission for working out voltage wise CoS. As against 13.22 % (UHBVN) total losses upto LT Level now estimated is 13.57% and the same in the case of DHBVN has been now estimated at 14.68% as against 14.45% estimated in the previous year. The Commission, for the purpose of estimating voltage wise CoS has considered the voltage wise losses as estimated by the Discoms for the FY 2017-18.

Based on the voltage-wise loss calculations based on the data submitted by the Discoms, 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 such 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 National Tariff Policy, the Commission has calculated the voltage wise CoS and Cross Subsidy Surcharge.

Based on the voltage wise technical loss calculations submitted by the Discoms, the technical losses ,for UHBVNL and DHBVNL combined, work out to 14.22% at LT voltage level as against 13.93% estimated in the previous year and upstream system and at 8.40% (rounded off) at HT (11 kV and above) voltage level and upstream system as against 8.15% estimated for the previous year. 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 sales at these voltage levels. The annual gross energy sales 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 as per the details provided in the table below:-

Calculation of Voltage wise losses for the FY 2017-18

		UHBVNL	DHBVNL	Total
1a	HT sales	4830.80	6003.53	10834.33
1b	LT sales	10639.93	15099.15	25739.08
1	Total Sales	15470.73	21102.68	36573.41
2	Losses %			
2a	HT	7.58	9.05	
2b	LT	13.57	14.68	
3	Loss units			
3a	HT	396.21	597.38	993.59
3b	LT	1670.53	2597.93	4268.46
4	Sales grossed up by Technical losses (1+3)			
4a	HT	5227.01	6600.91	11827.92
4b	LT	12310.46	17697.08	30007.54
5	Combined Technical losses			
5a	HT			8.40%
5b	LT			14.22%
5	Total			12.58%
6	Total Distribution Losses	4075.36	4613.48	8688.84
7	Total Commercial losses (6-3)	2008.62	1418.16	3426.79
8	Commercial losses allocated to HT and LT based on grossed up units (4)			
8a	HT	598.67	385.27	983.93
8b	LT	1409.96	1032.90	2442.86
9	Total Voltage level distribution losses (3+8)			
9a	HT	994.87	982.65	1977.52
9b	LT	3080.49	3630.83	6711.32
10	Combined Technical and Commercial losses at Distribution level			
10a	HT			15.44%
10b	LT			20.68%
10	Total			19.20%
11	Sent out Units after accounting for Technical and commercial losses			
11a	HT	5825.67	6986.18	12811.85
11b	LT	13720.42	18729.98	32450.40
	Total	19546.09	25716.16	45262.25
12	Transmission Losses			
	Inter State	226.46	297.95	524.42
	Intra State	492.96	648.57	1141.53
	Total Transmission Losses	719.43	946.52	1665.95
13	Transmission Losses allocated to HT and LT based on grossed up Units (4)			
	HT	214.42	257.14	471.56
	LT	505	689.39	1194.39
14	Total Losses (Transmission and Distribution)			

		UHBVNL	DHBVNL	Total
	HT	1209.30	1239.79	2449.08
	LT	3585.49	4320.22	7905.71
	Total	4794.79	5560	10354.79
	Total Units Purchased + transmission losses			
	HT	6040.10	7243.32	13283.41
	LT	14225.42	19419.37	33644.79
	Total	20265.52	26662.68	46928.20
16	Voltage wise total Loss (%)			
	HT	20.02%	17.12%	18.44%
	LT	25.20%	22.25%	23.50%
	Total	23.66%	20.85%	22.07%

Accordingly, based on the voltage level distribution losses as worked out above, the calculations for CSS as per National Tariff Policy formula for the FY 2017-18 are as under:-

Table No. 5.3 – Calculations of CSS

	Cost of Service as per National Tariff Policy	
	Elements of cost of service	
1	Per Unit Weighted average cost of power per unit at State periphery	413
2	Aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level	
	Intrastate Transmission cost at consumers end (Paise/kWh) (Transmission and SLDC cost/ sales)	46
	Distribution (net of power purchase cost) and Wheeling cost at consumers end (5094 X 10/36573.4) (Paise/kWh)	139
3	Aggregate of transmission distribution and commercial losses applicable to the relevant voltage level	
	HT	18.44%
	LT	23.50%
	Cost of Service	
	$C/(1-L/100)+D+R$	
	HT (Paise / kWh)	691
	LT (Paise/kWh)	725

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 2017-18 as per the NTP formula shall be as per the table that follows:-

Table 5.4: Cross-subsidy surcharge for FY 2017-18 (Rs/kWh)

		CoS (Rs./kWh)	Average revenue realization (Rs./kWh)	Cross Subsidy Surcharge (Rs./kWh)	Limited to 20% of Tariff
		1	2	3= 2-1	
1	HT industry	6.91	8.54	1.63	1.63
2	Bulk Supply (other than DS)	6.91	7.10	0.19	0.19
3	Railways (Traction)	6.91	7.49	0.58	0.58
4	LT Industry	7.25	7.91	0.66	0.66
5	NDS (HT)	6.91	8.64	1.73	1.73

The applicable CSS worked out above is within 20% (+/-) limit in accordance with the National Tariff Policy.

Chapter 6

Additional Surcharge

6.1 Summary of the petition

In compliance to HERC Order dated 14.12.2016 against Case No. HERC/PRO-14 of 2016 wherein the Commission has advised DISCOMs to take timely action for submission of supporting data/details for next six months and host the same on its website, UHBVNL has vide memo no. Ch-02/GM/RA/N/F-15/Vol-IX dated 24.01.2017 (filing no. 21 of 2017), filed the data on behalf of both the DISCOMs, relating to Additional Surcharge for the period from April 2016 to September 2016 providing the station wise / source wise details, regarding quantum of stranded power as well as costs thereto.

UHBVNL submitted the methodology adopted for computation of Additional Surcharge, on the basis of 100% data of all days in the first half of the FY 2016-17 i.e. April, 2016 to September 2016, as under:-

- a) In order to ensure that only such surrendered power is taken for calculating Additional Surcharge, corresponding to stranded power as a result of power drawn by the consumers under Open Access mechanism, the lower of the quantum of Open Access power per slot and surrendered power for corresponding slot has been taken as quantum of stranded power.
- b) The DISCOMs have calculated slot wise stranded power and also the Open Access Power availed in that particular time slot. Thereafter, the DISCOMs have calculated total units in MUs, corresponding to the stranded power as above.
- c) and total Open Access units (MUs) availed during the first half of the FY 2016-17.
- d) Accordingly, Additional Surcharge for first half of FY 2016-17 (in Rs. Crores) is calculated over the Units of Power (in MUs) evaluated as above for the first half of FY 2016-17 considering the per unit effective fixed charges as calculated below:-

Source	Estimated Quantum in MU	Annual Fixed Charges Rs. Mn.
Singrauli STPS	1,482.38	729.52
Rihand I	450.37	347.06
Rihand II	437.50	365.05
Rihand III	398.90	500.73

Unchhahar I	39.11	57.18
Unchhahar II	86.29	138.09
Unchhahar III	47.49	111.75
Anta CCPP	60.34	120.13
Auraiya CCPP	98.03	146.41
Dadri CCPP	99.70	157.47
Faridabad CCPP	770.00	1,937.26
Farakka STPS	86.91	14.95
Kahalgaon I	108.71	159.50
Kahalgaon II	331.07	551.64
Kol Dam	141.47	435.34
Salal I	425.28	303.38
Bairasiul	191.32	227.88
Tanakpur	25.09	38.54
Chamera I	330.36	340.20
Chamera II	71.63	134.81
Chamera-III	80.08	241.28
Dhauliganga	54.72	100.07
Dulhasti	102.93	367.79
Uri	131.03	142.90
Uri-II	53.39	127.01
Sewa II	26.41	83.04
Parbati-III	58.84	165.94
SJVNL	286.40	484.32
Rampur HEP	270.63	148.08
Tehri (THDC)	205.25	649.62
Koteshwar HEP	49.18	98.10
HPGCL	17,252.66	17,938.35
DVC Mejia-B	491.45	1,121.46
Koderma DVC	329.38	584.88
CGPL, Mundra	2,503.22	2,409.53
Sasan UMPP	3,278.25	508.52
PTC GMR	1,692.00	1,326.61
IGSTPP, Jhajjar	1,116.12	8,105.17
MGSTPS, CLP, Jhajjar	4,803.43	8,384.27
Total	38,467.32	49,803.83
Average Fixed Charge in Rs per Unit		1.29

- e) It has been submitted that the per unit Additional Surcharge applicable on the Open Access consumers (Rs./unit) has been calculated considering the total Open Access Units estimated for first half of FY 2016-17 and the Additional Surcharge (in Rs. Crores) determined by dividing the total Additional Surcharge with the estimated Open Access Units for first half of FY 2016-17 (considering same open access scenario as in first half of FY 2016-17) in

MUs. The details of the backing down owing to Open Access in MW and MUs for calculation of Additional Surcharge and Open Access availed is given in the table below:-

Months	Average Quantum to be considered for Additional Surcharge in MW	Total Quantum to be considered for Additional Surcharge in MU	Average Quantum of Open Access in MW	Total Quantum of Open Access in MU
Apr-16	252.77	181.99	294.05	211.71
May-16	256.81	191.06	297.52	221.36
Jun-16	238.45	171.69	309.32	222.71
Jul-16	290.96	216.48	341.07	253.75
Aug-16	59.23	44.07	82.41	61.32
Sep-16	302.56	217.85	333.31	239.98
Grand Total	232.95	1,023.13	275.69	1,210.83

- f) UHBVNL, has further submitted the total additional surcharge of Rs. 1.09/unit may be allowed to be levied upon open access consumers, which has been calculated based on details of slot wise surrendered power and slot wise open access power considering data of all days of first half of FY 2016-17, as detailed below:

Total Units of Power in MUs to be considered for Additional Surcharge	in MU	1,023.13
Effective Approved Fixed Cost considered for the purpose of Evaluating Additional Surcharge	Rs/ Unit	1.29
Total Additional Surcharge for the FY 2015-16 IN Rs. Crores	In Rs Crore	1,319.84
Open Access Units estimated for FY 2016-17 (considering same open access scenario as in FY 2015-16) in Mus	in MU	1,210.83
Per Unit Additional Surcharge applicable on the same Quantum of Open Access (Rs./unit)	Rs/ Unit	1.09
Total Units of Power in MUs to be considered for Additional Surcharge	in MU	1,023.13

6.2 Public Hearing

In Order to afford an opportunity of presenting their views in the matter, the Commission held a public hearing on 16.03.2017 along with APR/ ARR/Tariff petitions of UHBVNL. As the Interveners present in the hearing mostly reiterated their submissions already dealt in the Commission's Order dated 01.08.2016 &, for the sake of brevity the same is not being reproduced here.

6.3 Commission's Analysis & Order

- i) The Commission, while passing the Order dated 14.12.2016 (Case No. HERC/PRO-14 of 2016), had determined the Additional Surcharge of Rs.

0.87/kWh. Further, the DISCOMs were advised to take timely action for submission of supporting data / details for the next six months and also host the same on its website. The said Order also provided that the Additional Surcharge shall continue to be effective till the same is revised / amended by the Commission.

- ii) Accordingly, the DISCOMs have filed the requisite data, which has been examined as under:-
- a) That the Petitioner has worked out backing down quantum day-wise, slot-wise for the corresponding six months of FY 2016-17, from the implemented schedule and the entitlements as per their last revision, for the particular day, as available on the NRLDC/SLDC websites (www.nrldc.org.in and www.haryanasldc.org.in).
 - b) That due to the change in the declared capacity of the inter-State generator during the day, the change in entitlement of the State from that particular Generator, is automatically accounted for.
 - c) The above process adopted by the Petitioner for calculating the backing down quantum of power has been checked on sample basis and found to match with the data supplied. It has been further observed that the generating units which are not on bar due to less demand have not been considered and only the running units backing down has been considered for arriving at the stranded cost of power for determination of additional surcharge.
 - d) While calculating effective approved fixed cost per unit, for the purpose of evaluation of additional surcharge, DISCOMs have considered only that much quantum of purchase, which has fixed cost against them. Thus, DISCOMs have taken net purchase quantum as 38467.32 MUs i.e. total purchase quantum approved by the Commission for the FY 2016-17 – 53958.17 MUs minus purchase quantum not having fixed cost – 15490.85 MUs. Whereas, the Commission while approving additional surcharge to be levied w.e.f. 01.08.2016, has considered total purchase quantum irrespective of whether it has the fixed cost or not.

- e) The Commission, while approving Additional Surcharge, has considered fixed cost approved for the FY 2017-18 i.e. Rs. 8047.30 Crore minus PGCIL transmission charges of Rs. 1401.62 Crore and divided the same by approved volume from all approved sources. Accordingly, the Additional Surcharge had been determined as per the details below:-

Months	MW	MU	OA (MW)	OA (MU)
	A= Lower of Open Access and Backing down	B= A converted into MU	C= Open Access	D= C converted into MU
Apr-16	252.75	181.98	294.05	211.72
May-16	256.90	191.13	297.41	221.27
Jun-16	238.43	171.67	309.32	222.71
Jul-16	290.88	216.41	341.08	253.76
Aug-16	424.00	315.46	594.97	442.66
Sep-16	302.56	217.84	333.31	239.98
Total	1,765.52	1,294.50	2,170.14	1,592.10
Monthly Average	294.25	215.75	361.69	265.35
Quantum considered for Addl. Surcharge (lower of the power backed down/surrendered and open access power)				MU 215.75
Per Unit Fixed Cost of Power Purchase for the FY 2017-18				Rs/kWh 1.2149
Avg. Additional Surcharge for the FY 2017-18				Rs. Millions 262.12
Monthly Open Access Power				MU 265.351
Additional Surcharge (rounded off)				Rs/kWh 0.99

The Additional Surcharge of Rs. 0.99/kWh shall be applicable to the consumers of Uttar Haryana Bijli Vitran Nigam (UHBVN) and Dakshin Haryana Bijli Vitran Nigam (DHBVN) (from the date of this Order) who avail power under the Open Access mechanism in terms of Haryana Electricity Regulatory Commission (Terms and Conditions for Grant of Connectivity and Open Access for Intra-State Transmission and Distribution System) Regulations, 2012, from any source other than the distribution licensees.

Chapter 7

DIRECTIVES

The Commission has reviewed all the directives issued to the Discoms in its orders issued in the past and observes that some of the directions issued are yet to be implemented by the Discoms. The Commission reiterates that all the directives issued by it are to bring in operational efficiency and facilitate financial turn-around of the Discoms as well as enhance consumers' satisfaction. On the issue of reigning the feeder line losses and replacement of dead / defective consumer meters, the Commission had given time bound targets and subjected non-compliance of the same to penal action as well. The Commission observes, as also pointed out by the stakeholders in the public hearings that the Discoms have not complied with the directives. **Hence, the Commission gives 45 days time to the Distribution Licensees to submit status report bringing out the measures/efforts taken/made to meet the targets and detailed reason for non-compliance, if any.**

1. While examining several pending issues with both the DISCOMs, the Commission is of the opinion that Smart Metering can resolve several of these issues. Hence the Commission hereby directs the DISCOMs to implement Smart Metering along with AMI as envisaged under the National Tariff Policy, 2016. This would ensure avoidance of human interface in meter reading and would enable generation of relevant data / information which can be in turn efficiently utilised for system strengthening, theft detection, resolution of billing disputes, system planning, best utilisation of resources, implementation of DSM schemes etc. leading to increased consumer satisfaction.

Accordingly, the Licensees are directed to plan their requirement of smart meters which can be configured for both pre and post paid functions so that time lines envisaged under NTP 2016 for roll out of smart meters across mentioned categories can be met.

Discoms are further directed to finalize the specifications of smart meters in line with functional requirement of advance metering infrastructure (AMI) formulated by CEA and the same along with the list of approved vendors be provided on its website to facilitate consumers to purchase the meter if required. The necessary infrastructure for providing the smart meters in certain category of consumers

such as telecom towers, street lighting, bulk supply and temporary connection be also created to plug the revenue leakages due to reading billing disputes.

2. The DISCOMs shall immediately formulate Smart Grid Roadmap and submit along with tentative cost estimates to the Commission at the time of submitting their next ARR, or earlier. For preparation of the Smart Grid Roadmap, the services of the Indian Smart Grid Forum may be engaged, if required.
3. In view of rapid technological changes and the implementation of various technologies / schemes such as RAPDRP, smart metering and smart grid technologies, the training needs of DISCOM's staff as well as requisite upgradation of their skills be assessed and a Training Programme /calendar be prepared accordingly within 3 months. Further, the infrastructure so created by the Power Utilities such as HPTI at Panchkula may be upgraded if required to meet the training requirements of the utilities and a panel of experts on the subjects from related organizations be prepared and the services of such experts may be utilized.
4. The Commission observes that DISCOMs have hired multiple agencies for issuing bills wherein lack of uniformity has been observed. The centralized billing system with the KYC details based on Aadhar No., Mobile No. and E-mail etc. of the consumer base would definitely eliminate above problem and provide the better results. Discoms are directed to work towards centralised billing system for consumers and submit a compliance report to the Commission within three months.
5. During the public hearing, it was observed by the Commission that various Government Departments are not able to clear the pending electricity dues of the DISCOMs for want of requisite budget provision. DISCOMs are directed to take up the matter with the State Government to clear pending dues and update the Commission on the progress made.
6. In order to promote the Roof Top Solar PV installations and meeting the RPO by the Discoms as well as the mandate given vide certain policies of the State Government, a Public awareness campaign may be launched by the Discoms / HAREDA through local TV and newspapers giving various benefits of having a roof top Solar PV Plant under Net Metering arrangement by the consumer.

Further, to better understand the difficulties/bottlenecks in this respect and the consumer's expectation for any other facility, the feedback from the public may also be obtained.

7. With a view to improve the service to the consumers and its business operations in its area of supply, the Discoms may explore the appointment of the Gram Panchayats as retail supply Franchisee in line with the provisions under section 13 of the Electricity Act 2003 whereby the Commission may allow such arrangements on the recommendations of the Government. In such cases the energy to such Panchayat Institutions may be made available by the Discoms at a single point (rebate as per Single Point Supply Regulations shall be applicable) at the bulk supply rate (cost of power at the Discoms periphery). Additionally, Panchayat shall be permitted to install solar system under net metering on the buildings/land and shall be allowed the banking of power as well as the incentive allowed for solar generation at par of that allowed to the DS consumers.
8. The DISCOMs are directed to analyse the consumption pattern of the DS & NDS consumers for past three years and analyse the cases warranting load enhancement. Notice be issued to such consumers for voluntary load enhancement in a set time frame and may allow the security deposit in instalments. In case consumers fails to avail the opportunity extended to such consumers, the Discoms shall suo-moto extend the load and in such case consumers shall pay security deposit. The above action be completed within six months and the Commission be apprised accordingly.
9. It may be ensured that the interest on consumer securities is given to the consumers in the next billing cycle if not paid earlier. Further, DISCOMs are directed to submit details of unclaimed Security Deposit of the consumers, where the consumer has discontinued receiving supply from DISCOMs and the action on such unclaimed securities be also taken as per accounting procedure within six months.
10. The Commission observes that it had approved 'Tatkal' scheme for release of A.P. Tube-well connections as proposed by the Discoms. The objective was to facilitate instant release of such connections by charging a pre-determined premium. It is, however, noticed that a large number of applications are in the

pendency list defeating the very purpose of a “Tatkal Scheme”. It is directed that a status note on implementation of Tatkal Scheme may be submitted within 30 days of receipt of this Order.

11. In compliance of the Commission’s Regulation on Guidelines for establishment of Forum for Redressal of Grievances of the Consumers, Electricity Ombudsman and Consumer Advocacy) Regulations, 2016, the vacant posts of Chairman and Members of CGRF should be filled within a period of two months and office of the CGRF at Panchkula and Hisar be strengthened with adequate manpower and facilities.
12. As already directed in the previous orders on the ARR, the posts lying vacant for more than two years (the period of two years preceding 15.02.2016), whether newly created or old, should not be filled up without prior approval of the Commission. However, this shall not be applicable to the posts for which requisition has already been sent to the recruiting agency and for which advertisements have been issued by them. The Commission in its Order dated 29th May, 2014 had given directions regarding abolition of non-technical post lying vacant for more than three years. Discoms have not reported the compliance of the orders dated 29th May, 2014, dated 7th May, 2015 and also 15th October, 2015. The status report be submitted within 45 days failing which the expenditure on the above such posts shall not be considered in the ARR of Discoms.
13. In order to promote digital payments, the Commission directs the discoms that the transaction charges (MDR) for payment through payment gateway on the website of the discoms by way of credit card, debit card, net banking and also the transaction charges for payment through POS machines at the discoms counters and e-wallets etc. shall be borne by the discoms.

The consumers of urban areas under Municipal Corporations/Municipal Committee shall pay their bills for amount of Rs. 10000/- and above through above mode of payment including RTGS/NEFT and the banks authorized by the discoms.

14. The consumers of all categories with load 10 KW and above may download their bills from discoms website. Further, in order to provide environmental

consciousness among the consumer, suitable facility for exercising option of “No hard copy of Bills” be made available on the website of the discoms. The consumers may give option to stop issue of paper bill to them. The consumers shall be provided bills through SMS alerts and/ or e-mail without any charge.

15. The Commission vide its order dated 01.08.2016, had directed the Discoms to issue a request to the A.P Consumers, whose annual income, other than Agriculture, is in excess of Rs. 20 lakhs, to voluntarily give-up the subsidy on electricity consumed at their tube-well so as to reduce the RE subsidy payable by the State Government which has reached un-sustainable levels largely because of the annual increase in the number of tub e-well connections. However, not much success had been reported in this matter. The Discoms were advised to give wide publicity on a campaign basis through electricity bill/SMS/e-mails. The discoms are directed to continue this campaign and also the peruse with State Government in this regard. The Commission may also be apprise of the outcome of such drive.
16. In view of heavy expenditure on the establishment the four power utilities incurred and also the shortage of technical staff to maintain the system and over staffed clerical and non-technical establishment needing re-structuring, the Commission in its order dated 1st August, 2016 had directed the discoms to examine the issue and take action for re-structuring. The status in this regard be updated and the matter may also be taken up with the State Government.
17. All other directives contained in the various chapters of the present Order shall be complied with by the Discoms within the time line specified for the purpose and all sales circulars/commercial circulars be issued by both the Distribution Licensees uniformly and in consonance with each other.
18. If DISCOMS are unable to reduce their line losses/financial losses etc., then in the alternative they may adopt measures such as providing franchises to different companies so that the situation could be handled in a proper manner in public interest.
19. The issue of double supply to some consumers has come to the notice of the Commission. The Discoms are directed to submit circle wise details of such consumers along with justification, if any.

20. The Discoms, in line with the HERC DSM Regulations, are directed to identify DSM programmes / plan and submit the same for consideration of the Commission.

The Tariff and charges for Distribution & Retail Supply of electricity in Haryana by the distribution licensees i.e. UHBVNL & DHBVNL as well as CSS and Additional Surcharge as determined in the present Order shall be applicable from 01.07.2017 and shall remain effective until these are revised / amended by the Commission.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 11.07.2017.

Date: 11.07. 2017
Place: Panchkula

(Debasish Majumdar)
Member

(M.S. Puri)
Member

(Jagjeet Singh)
Chairman