

# UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

Petition No. 1063/2015

#### DETERMINATION OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2016-17

AND

TRUE-UP OF ARR AND REVENUE FOR FY 2013-14

**FOR** 

MADHYANCHAL VIDYUT VITRAN NIGAM LIMITED

ORDER UNDER SECTION 62 & 64 OF
THE ELECTRICITY ACT, 2003

August 1, 2016



### **TABLE OF CONTENTS**

1.	BACK	GROUND AND BRIEF HISTORY	12
	1.1	BACKGROUND:	12
	1.2	DISTRIBUTION TARIFF REGULATIONS:	13
2.	PROCE	DURAL HISTORY	15
	2.1	ARR / TARIFF AND TRUE UP PETITION BY THE LICENSEE	15
	2.2	PRELIMINARY SCRUTINY OF THE PETITION:	15
	2.3	ADMITTANCE OF THE TRUE-UP AND ARR / TARIFF PETITION	16
	2.4	PUBLICITY OF THE PETITION	17
	2.5	PUBLIC HEARING PROCESS	17
3.	PUBLIC	C HEARING PROCESS	18
	3.1	OBJECTIVE:	18
	3.2	PUBLIC HEARING:	18
	3.3 PETI	VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON TRUE-UP / ARR / TARIFF	19
	3.4	SINGLE POINT SUPPLY	20
	3.5	ARR & TRUE UP	23
	3.6	TIME OF DAY TARIFF	27
	3.7	REGULATORY SURCHARGE	28
	3.8	HIGH COST OF ELECTRICITY	31
	3.9	LOAD FACTOR REBATE	33
	3.10	OVER LOAD PENALTY	33
	3.11	KVAH BILLING	34
	3.12	TARIFF HIKE	35
	3.13	REDUCED HOURS OF SUPPLY	37
	3.14	T&D LOSSES AND AT&C LOSSES	38
	3.15	PRE-PAID METERING	41
	3.16	TARIFF LMV-1 & LMV-5 CATEGORY	42
	3.17	METERING AND BILLING FOR LMV-10 CATEGORY	44
	3.18	COMPLAINCE OF DIRECTIVES	45
	3.19	MINIMUM CONSUMPTION CHARGES AND FIXED CHARGES	47



	3.20	RECOVERY OF OUTSTANDING DUES	50
	3.21	REBATE ON PAYMENT/ OTHER REBATES	51
	3.22	ELECTRICITY DUTY AND SECURITY DEPOSIT	52
	3.23	SUBSIDY FROM GOUP	54
	3.24	PRICE AND QUANTUM OF POWER PURCHASE	55
	3.25	TAJ TRAPEZIUM ZONE	59
	3.26	METERING AND BILLING	60
	3.27	OPEN ACCESS	64
	3.28	AUDIT OF ACCOUNTS	65
	3.29	CROSS SUBSIDY SURCHARGE	66
	3.30	TARIFF FOR TELECOM TOWERS	67
	3.31	TARIFF STRUCTURE	68
	3.32	LATE PAYMENT SURCHARGE	73
	3.33	PUBLIC HEARING PROCESS	73
	3.34	SUB STATION CAPACITY / INFRASTRUCTURE ENHANCEMENT	74
	3.35	ENCOURAGING RENEWABLE ENERGY	76
	3.36	MERIT ORDER DISPATCH	77
	3.37	OTHER GENERAL ISSUES	80
4. 7	ruino	G UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2013-14	85
	4.1	INTRODUCTION	85
	4.2	POWER PURCHASE EXPENSES	85
	4.3	TRANSMISSION CHARGES	90
	4.4	O&M EXPENSES	91
	4.5	INTEREST AND FINANCE CHARGES	95
	4.6	DEPRECIATION	102
	4.7	PRIOR PERIOD EXPENSES	105
	4.8	PROVISION FOR BAD AND DOUBTFUL DEBTS	108
	4.9	RETURN ON EQUITY	111
	4.10	REVENUE SUBSIDY FROM GOUP	111
	4.11	ADDITIONAL SUSBIDY REQUIREMENT	112
	4.12	REVENUE SIDE TRUING UP	115



	4.13	REVENUE FROM SALE OF POWER	115
	4.14	ARR AND REVENUE GAP/ (SURPLUS) FOR FY 2013-14 AFTER TRUING UP	116
5.	ANNU	AL REVENUE REQUIREMENT OF MVVNL FOR 2016-17	118
	5.1	INTRODUCTION	118
	5.2	CONSUMPTION PARAMETERS: CONSUMER NUMBERS, CONNECTED LOAD, SALES	118
	5.3	DISTRIBUTION LOSSES AND ENERGY BALANCE	136
	5.4	ENERGY AVAILABILITY	146
	5.5	POWER PROCUREMENT FROM STATE GENERATING STATIONS	147
	5.6	POWER PROCUREMENT FROM CENTRAL GENERATING STATIONS	152
	5.7	POWER PROCUREMENT FROM IPPS / JVs	159
	5.8	POWER PROCUREMENT FROM OTHER SOURCES	162
	5.9	POWER PROCUREMENT FROM BILATERAL SOURCES	164
	5.10	FUEL & POWER PURCHASE COST ADJUSTMENT SURCHARGE (FPPCA)	167
	5.11	SUMMARY OF POWER PURCHASE	177
	5.12	APPROVED MERIT ORDER DISPATCH	183
	5.13	ANNUAL REVENUE REQUIREMENT OF MVVNL FOR FY 2016-17	187
	5.14	POWER PROCUREMENT COST	188
	5.15	TRANSMISSION AND SLDC CHARGES	190
	5.16	ESCALATION INDEX	191
	5.17	O&M EXPENSES	192
	5.18	GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS	194
	5.19	FINANCING OF THE CAPITAL INVESTMENT	199
	5.20	DEPRECIATION EXPENSE	201
	5.21	INTEREST AND FINANCING COST	205
	5.22	PROVISION FOR BAD AND DOUBTFUL DEBTS	210
	5.23	OTHER INCOME	212
	5.24	RETURN ON EQUITY	213
	5.25	CONTRIBUTION TO CONTINGENCY RESERVE	215
	5.26	APPORTIONMENT OF O&M EXPENSES AND INTEREST & FINANCE CHARGES OF UPPCL	215
	5.27	GOUP SUBSIDY	216
	5.28	ADDITIONAL SUBSIDY REQUIREMENT	218



	5.29	REVENUE FROM SALE OF ELECTRICITY	218
	5.30	APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP	219
6.	OPEN A	ACCESS CHARGES	221
	6.1	BACKGROUND:	221
	6.2	OPEN ACCESS CHARGES	224
	6.3	WHEELING CHARGES	224
	6.4	CROSS SUBSIDY SURCHARGE	227
	6.5	ADDITIONAL SURCHARGE	231
	6.6	OTHER CHARGES	231
7.	TARIFF	PHILOSPHY	232
	7.1	CONSIDERATIONS IN TARIFF DESIGN	232
8.	REVEN	UE AT REVISED TARIFF AND REVENUE GAP	243
	8.1	REVENUE FROM SALE OF POWER AT APPROVED TARIFF	243
	8.2	AVERAGE COST OF SUPPLY	244
	8.3	REGULATORY SURCHARGE	245
	8.4	TREATMENT OF REVENUE GAP / REGULATORY ASSET ADMITTED IN THIS ORDER	256
9.	DIRECT	TIVES	262
	9.1	DIRECTIVES PROVIDED BY COMMISSION AND THEIR COMPLIANCE BY LICENSEE	262
10	. APPLIC	ABILITY OF THE ORDER	315
11	.ANNEX	URES	316
	11.1	COMMISSION FORECAST OF CONSUMPTION PARAMETERS FOR FY 2016-17	316
	11.2	RATE SCHEDULE FOR FY 2016-17	327
	11.3	SCHEDULE OF MISCELLANEOUS CHARGES	373
	11.4	LIST OF POWER FACTOR APPARATUS	375
	11.5 ALIG	LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT GREATER NOIDA, LUCKNOW AND ARH IN RESPECT OF PROCEEDINGS FOR ARR & TARIFF DETERMINATION FOR FY 2016-17	377
	11.6	FUEL AND POWER PURCHASE COST ADJUSTMENT SURCHARGE	385
	11.7	ACTION TAKEN REPORT ON THE DIRECTIONS ISSUED BY THE COMMISSION IN THE ARR / TARIFF OF	RDER



### **LIST OF TABLES**

TABLE 3-1 SCHEDULE OF PUBLIC HEARING AT VARIOUS LOCATIONS OF THE STATE	18
TABLE 4-1: BULK SUPPLY TARIFF AS COMPUTED BY THE PETITIONER FOR FY 2013-14	85
TABLE 4-2: DETAILS OF POWER PURCHASE COST AND PGCIL CHARGES SUBMITTED BY THE PETITIONER FOR FY	
TABLE 4-3: POWER PURCHASE COST AS COMPUTED BY PETITIONER FOR FY 2013-14	86
TABLE 4-4: COMPUTATION OF O&M EXPENSES OF UPPCL AS SUBMITTED BY PETITIONER FOR FY 2013-14	87
TABLE 4-5: ALLOCATION OF O&M EXPENSES IN THE RATIO OF INPUT ENERGY AS SUBMITTED BY PETITIONER F	
Table 4-6: ENERGY BALANCE AND BULK SUPPLY TARIFF APPROVED FOR FY 2013-14	89
Table 4-7: ALLOWABLE POWER PURCHASE COST FOR FY 2013-14	90
Table 4-8: ALLOWABLE TRANSMISSION CHARGES FOR FY 2013-14	91
TABLE 4-9: ESCALATION INDEX	93
TABLE 4-10: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2013-14 (Rs. Crore)	95
Table 4-11: CAPITAL INVESTMENTS IN FY 2013-14 (Rs. Crore)	96
TABLE 4-12: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES RECEIVED AS ALLOWED BY THE COMMISSION FOR FY 2013-14 (Rs. Crore)	97
TABLE 4-13: FINANCING OF THE CAPITAL INVESTMENTS AS APPROVED BY THE COMMISSION FOR FY 2013-14 ( CRORE)	•
TABLE 4-14: INTEREST ON LONG TERM LOAN FOR FY 2013-14 (RS CRORE)	98
TABLE 4-15: ALLOWABLE FINANCE CHARGES FOR FY 2013-14 (Rs. CRORE)	99
TABLE 4-16: INTEREST ON WORKING CAPITAL FOR FY 2013-14 (Rs. Crore)	100
TABLE 4-17: ALLOWABLE INTEREST AND FINANCE CHARGES FOR FY 2013-14 (Rs. Crore)	101
TABLE 4-18: DEPRECIATION CLAIMED BY LICENSEE FOR FY 2013-14 (Rs. Crore)	103
TABLE 4-19: DEPRECIATION EXPENSES FOR FY 2013-14 (Rs. Crore)	105
TABLE 4-20: PRIOR PERIOD INCOME FOR FY 2013-14(Rs. CRORE)	108
TABLE 4-21: PROVISION FOR BAD AND DOUBTFUL DEBT FOR FY 2013-14 (Rs. Crore)	111
TABLE 4-22: COMPUTATION OF SUBSIDY REQUIREMENT FOR FY 2013-14 (Rs Crore)	114
TABLE 4-23: REVENUE FOR FY 2013-14 (Rs. Crore)	116
TABLE 4-24: ARR, REVENUE AND GAP SUMMARY FOR FY 2013-14 (Rs. CRORE)	116
TABLE 5-1: CONSUMPTION PARAMETERS SUBMITTED BY THE PETITIONER FOR FY 2016-17	119
TABLE 5-2: CONSUMPTION NORMS FOR UNMETERED CATEGORIES	119



TABLE 5-3: CONSUMPTION NORMS IN URBAN AREA SUBMITTED BY UPPCL	122
TABLE 5-4: PROJECTED HOURS OF SUPPLY AS SUBMITTED BY THE PETITIONER FOR FY 2016-17	123
TABLE 5-5: CONSUMPTION PARAMETERS APPROVED BY THE COMMISSION FOR FY 2016-17	124
TABLE 5-6: NUMBER OF CONSUMERS: HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17	124
TABLE 5-7: CONNECTED LOAD (KW): HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17	125
TABLE 5-8: ENERGY SALES (MU): HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17	126
TABLE 5-9: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY PETITIONER	130
TABLE 5-10: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY MVVNL	131
TABLE 5-11: NUMBER OF UN-METERED CONSUMERS OF FOUR DISCOMS (DVVNL, MVVNL, PUVVNL AND PVVI	NL) . 132
TABLE 5-12: ADDITIONAL CONSUMER ADDITION TARGET FOR FY 2015-16	135
TABLE 5-13: ADDITIONAL CONSUMER ADDITION AND LOAD ENHANCEMENT UNDERTAKEN BY THE LICENSEE THROUGH VARIOUS DRIVES IN FY 2014-15	
TABLE 5-14: DISTRIBUTION LOSS PROJECTED BY THE DISTRIBUTION LICENSEES FOR FY 2016-17	137
TABLE 5-15: SUMMARY OF DISTRIBUTION LOSSES	138
TABLE 5-16: SUMMARY OF DISTRIBUTION LOSSES AS PER MOU SIGNED BY PETITIONER UNDER "UDAY SCHEM	E" .142
TABLE 5-17: APPROVED ENERGY BALANCE FOR FY 2016-17	143
TABLE 5-18: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE DISTRIBUTION LICENSEES	148
TABLE 5-19: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE DISTRIBUTION LIC	
TABLE 5-20: DETAILS OF POWER PURCHASE COST FROM UPRVUNL STATIONS FOR FY2016-17 AS SUBMITTED DISTRIBUTION LICENSEES	
TABLE 5-21: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES	
TABLE 5-22: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE COMMISSION	150
TABLE 5-23: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE COMMISSION	151
TABLE 5-24: APPROVED COST OF POWER PURCHASE FROM UPRVUNL STATIONS FOR FY 2016-17	151
TABLE 5-25: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FOR FY 2016-17	151
TABLE 5-26: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC STATIONS AS CONSIDERED BY THE DISTRIBULICENSEES FOR FY 2016-17	_
TABLE 5-27: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE DISTRIBU	TION 152

TABLE 5-28: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE DISTRI LICENSEES	
TABLE 5-29: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES	
TABLE 5-30: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES	
TABLE 5-31: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FOR FY2016-17 AS SUBMITTED B' DISTRIBUTION LICENSEES	
TABLE 5-32: ASSUMPTIONS OF POWER PURCHASE FROM NTPC AS CONSIDERED BY THE COMMISSION	156
TABLE 5-33: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE COMM	
TABLE 5-34: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE COMN	/IISSION
TABLE 5-35: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FOR FY 2016-17	
TABLE 5-36: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FOR FY 2016-17	158
TABLE 5-37: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FOR FY 2016-17	159
TABLE 5-38: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE DISTRIBUTION	
TABLE 5-39: DETAILS OF POWER PURCHASE COST FROM IPPS / JVS STATIONS FOR FY2016-17 AS SUBMITTE  DISTRIBUTION LICENSEES	
TABLE 5-40: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE COMMISSION	۱ 161
TABLE 5-41: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FOR FY 2016-17	162
TABLE 5-42: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES, SOLAR AND OTHER SOURCES FC	
TABLE 5-43: APPROVED COST OF POWER PURCHASE FROM STATE CO-GENERATION FACILITIES AND SOLAR SOURCES FOR FY 2016-17	
TABLE 5-44: DETAILS OF POWER PURCHASE COST FROM INTER SYSTEM EXCHANGE (BILATERAL & PXIL) / UI SUBMITTED BY DISTRIBUTION LICENSEES	
TABLE 5-45: APPROVED COST OF POWER PURCHASE FROM INTER SYSTEM EXCHANGE (BILATERAL & PXIL) /	<sup>/</sup> UI 165
TABLE 5-46: SUMMARY OF POWER PURCHASE COST FOR FY 2016-17 AS SUBMITTED BY THE DISTRIBUTION  LICENSEES FOR FY 2016-17	
TABLE 5-47: SUMMARY OF APPROVED POWER PURCHASE COST FOR FY 2016-17	180
TABLE 5-48: APPROVED MERIT ORDER DISPATCH FOR FY 2016-17	183
FABLE 5-49: APPROVED PGCIL CHARGES FOR FY 2016-17	189



TABLE 5-50: APPROVED CONSOLIDATED BULK SUPPLY TARIFF	189
TABLE 5-51: POWER PROCUREMENT COST FOR MVVNL FOR FY 2016-17	190
Table 5-52: INTRA STATE TRANSMISSION CHARGES FOR FY 2016-17	191
Table 5-53: O&M EXPENSES FOR FY 2016-17 (Rs. Crore)	193
TABLE 5-54: CAPITAL INVESTMENT PLAN PROPOSED BY THE PETITIONER FOR FY 2016-17 (RS. CRORE)	194
Table 5-55: CAPITALISATION & WIP UP TO FY 2016-17 (Rs. Crore)	199
TABLE 5-56: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES CONSIDERED UP TO FY 2016-17 (RS	
TABLE 5-57: FINANCING OF THE CAPITAL INVESTMENTS UP TO FY 2016-17 (Rs. Crore)	200
Table 5-58: GROSS FIXED ASSETS FOR FY 2016-17 (Rs. Crore)	203
Table 5-59: APPROVED DEPRECIATION FOR FY 2016-17 (Rs. Crore)	205
TABLE 5-60: INTEREST ON LONG TERM LOANS UP TO FY 2016-17 (Rs. Crore)	206
Table 5-61: INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2016-17 (Rs. Crore)	207
TABLE 5-62: INTEREST ON SECURITY DEPOSITS FOR FY 2016-17 (Rs. Crore)	209
TABLE 5-63: INTEREST AND FINANCE CHARGES FOR FY 2016-17 (RS. CRORE)	209
Table 5-64: OTHER INCOME FOR FY 2016-17 (Rs. Crore)	213
Table 5-65: EXISTING & APPROVED TARIFF REVENUES: FY 2016-17 (Rs. Crore)	219
Table 5-66: ARR, REVENUE AND GAP SUMMARY FOR FY 2016-17 (Rs. Crore)	220
TABLE 6-1: WHEELING & RETAIL SUPPLY ARR FOR FY 2016-17 (Rs. CRORE)	225
Table 6-2: WHEELING CHARGES FOR FY 2016-17	226
TABLE 6-3: APPROVED VOLTAGE-WISE WHEELING CHARGES FOR FY 2016-17	226
TABLE 6-4: COST OF SUPPLY APPROVED BY THE COMMISSION FOR FY 2016-17	230
TABLE 6-5: CROSS SUBSIDY SURCHARGE APROVED BY THE COMMISSION FOR FY 2016-17	230
TABLE 8-1: REVENUE FROM SALE OF POWER AT APPROVED TARIFF FOR FY 2016-17 FOR MVVNL (Rs. Crore)	243
TABLE 8-2: ESTIMATION OF ARR GAP/SURPLUS AT REVISED TARIFF FOR FY 2016-17 (Rs. Crore)	244
TABLE 8-3: REVENUE REALIZED AS % OF ACOS	245
TABLE 8-4: REVENUE CLAIMED BY THE DISTRIBUTION LICENSEES FOR FY 2013-14	254
TABLE 8-5: SUMMARY OF CONSOLIDATED REVENUE GAP FOR 4 STATE OWNED DISTRIBUTION LICENSEES ADMIT BY THE COMMISSION (Rs. Crore)	
TABLE 8-6: REGULATORY SURCHARGE FOR FY 2016-17	260
TABLE 9-1: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIEF ORDER FOR FY 2013-14 DATED MAY 31, 2013	262



TABLE 9-2: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER FOR FY 2014-15 DATED OCTOBER 1, 2014 . 2	274
TABLE 9 2. STATOS OF COMMENTALE OF BINECITYES OF TARIFF OR BERT OR 17 2014 13 BATEB OCTOBER 1, 2014 1.2	217
TABLE 9-3: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER FOR FY 2015-16 DATED JUNE 18, 2015	287
TABLE 9-4: DIRECTIVES ISSUED UNDER THE PRESENT TARIFF ORDER	308
TABLE 11-1: COMMISSION'S APPROVAL OF NUMBER OF CONSUMERS FOR FY 2016-17	316
TABLE 11-2: COMMISSION'S APPROVAL OF CONNECTED LOAD (KW) FOR FY 2016-17	319
TABLE 11-3: COMMISSION'S APPROVAL OF ENERGY SALES (MU) FOR FY 2016-17	323
TARLE 11-4: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2016-17: FPPCA	385



#### **Before**

#### UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No. 1063/2015

#### IN THE MATTER OF:

Determination of Aggregate Revenue Requirement and Tariff for FY 2016-17 and True up for FY 2013-14 of Madhyanchal Vidyut Vitran Nigam Limited (MVVNL)

And

#### IN THE MATTER OF:

Madhyanchal Vidyut Vitaran Nigam Limited (MVVNL)

**Before** 

#### UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

#### **ORDER**

The Commission having deliberated upon the above Petition and the subsequent filings by the Petitioner, and the Petition thereafter being admitted on March 29, 2016 and having considered the views / comments / suggestions / objections / representations received during the course of the above proceedings and also in the public hearings held, in exercise of power vested under Sections 61, 62, 64 and 86 of the Electricity Act, 2003, hereby passes this Order signed, dated and issued on August 1, 2016. The licensee, in accordance with Section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, shall arrange to get published within three days from the date of issue of this Order, the tariffs and regulatory surcharge approved herein by the Commission. The tariffs so published shall become the notified tariffs and shall come into force after seven days from the date of such publication of the tariffs, and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order. The regulatory surcharge shall be applicable as detailed in this Order.



#### 1. BACKGROUND AND BRIEF HISTORY

#### 1.1 BACKGROUND:

- 1.1.1 The Uttar Pradesh Electricity Regulatory Commission (UPERC) was formed under U.P. Electricity Reforms Act, 1999 by Government of Uttar Pradesh (GoUP) in one of the first steps of reforms and restructuring process of the power sector in the State. Thereafter, in pursuance of the reforms and restructuring process, the erstwhile Uttar Pradesh State Electricity Board (UPSEB) was unbundled into the following three separate entities through the first reforms Transfer Scheme dated January 14, 2000:
  - Uttar Pradesh Power Corporation Limited (UPPCL): vested with the function of Transmission and Distribution within the State.
  - Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL): vested with the function of Thermal Generation within the State
  - Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL): vested with the function of Hydro Generation within the State.
- 1.1.2 Through another Transfer Scheme dated January 15, 2000, assets, liabilities and personnel of Kanpur Electricity Supply Authority (KESA) under UPSEB were transferred to Kanpur Electricity Supply Company Limited (KESCO), a company registered under the Companies Act, 1956.
- 1.1.3 After the enactment of the Electricity Act, 2003 (EA 2003) the need was felt for further unbundling of UPPCL (responsible for both Transmission and Distribution functions) along functional lines. Therefore, the following four new Distribution companies (hereinafter collectively referred to as 'Discoms' / 'Distribution Licensees' )were created vide Uttar Pradesh Transfer of Distribution Undertaking Scheme, 2003 dated August 12, 2003 to undertake distribution and supply of electricity in the areas under their respective zones specified in the scheme:
  - Dakshinanchal Vidyut Vitran Nigam Limited (Agra Discom or DVVNL)
  - Madhyanchal Vidyut Vitran Nigam Limited (Lucknow Discom or MVVNL)
  - Paschimanchal Vidyut Vitran Nigam Limited (Meerut Discom or PVVNL)
  - Purvanchal Vidyut Vitran Nigam Limited (Varanasi Discom or PuVVNL)



- 1.1.4 Under this scheme, the role of UPPCL was specified as "Bulk Supply Licensee" as per the license granted by the Commission and as "State Transmission Utility" under sub-section (1) of Section 27-B of the Indian Electricity Act, 1910.
- 1.1.5 Subsequently, the Uttar Pradesh Power Transmission Corporation Limited (UPPTCL), a Transmission Company (Transco), was incorporated under the Companies Act, 1956 by an amendment in the 'Object and Name' clause of the Uttar Pradesh Vidyut Vyapar Nigam Limited. The Transco is entrusted with the business of transmission of electrical energy to various utilities within the State of Uttar Pradesh. This function was earlier vested with UPPCL. Further, Government of Uttar Pradesh (GoUP), in exercise of power under the Section 30 of the EA 2003, vide notification No. 122/U.N.N.P/24-07 dated July 18, 2007 notified Uttar Pradesh Power Transmission Corporation Limited as the "State Transmission Utility" of Uttar Pradesh. Subsequently, on December 23, 2010, the Government of Uttar Pradesh notified the Uttar Pradesh Electricity Reforms (Transfer of Transmission and Related Activities Including the Assets, Liabilities and Related Proceedings) Scheme, 2010, which provided for the transfer of assets and liabilities from UPPCL to UPPTCL with effect from April 1, 2007.
- 1.1.6 Thereafter, on January 21, 2010, as the successor Distribution companies of UPPCL (a deemed Licensee), the Distribution Companies, which were created through the notification of the UP Power Sector Reforms (Transfer of Distribution Undertakings) Scheme, 2003 were issued fresh Distribution Licenses which replaced the UP Power Corporation Ltd (UPPCL) Distribution, Retail & Bulk Supply License, 2000.

#### 1.2 DISTRIBUTION TARIFF REGULATIONS:

- 1.2.1 Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006 (hereinafter referred to as the "Distribution Tariff Regulations, 2006") were notified on October 6, 2006. These Regulations are applicable for the purposes of ARR filing and Tariff determination of all the Distribution Licensees within the State of Uttar Pradesh from FY 2007-08 onwards.
- 1.2.2 Further the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 have been notified on May 12, 2014. These Regulations shall be applicable for determination of Tariff in all cases covered under these Regulations from April 1, 2015 to March 31, 2020, unless extended by an Order of the Commission. Embarking upon the MYT framework, the Commission has divided



the period of five years (i.e. April 1, 2015 to March 31, 2020) into two periods namely –

- a) Transition period (April 1, 2015 to March 31, 2017)
- b) Control period (April 1, 2017 to March 31, 2020)
- 1.2.3 The transition period being of two years and the first control period being of three years, the Commission shall continue with the existing Annual Tariff Framework for determination of ARR / Tariff of the Distribution Licensee (i.e. as per Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006) during the transition period.



#### 2. PROCEDURAL HISTORY

#### 2.1 ARR / TARIFF AND TRUE UP PETITION BY THE LICENSEE

- 2.1.1 As per the provisions of the UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006, the Distribution Licensees are required to file their ARR / Tariff Petitions before the Commission latest by 30<sup>th</sup> November each year so that the tariff can be determined and be made applicable from the 1<sup>st</sup> of April of the subsequent financial year.
- 2.1.2 The ARR / Tariff Petition for FY 2016-17 and True up Petition for FY 2013-14 was filed by MVVNL (hereinafter referred to as the 'Licensee' or the 'Petitioner') under Sections 62 and 64 of the Electricity Act, 2003 on December 7, 2015 (Petition No. 1063/ 2015).
- 2.1.3 The Commission observed that the Licensee had submitted the audited accounts for FY 2013-14 (with Supplementary Audit Report of the Accountant General of Uttar Pradesh for FY 2013-14) and provisional accounts for FY 2014-15 along with the calculations of revenue gap for FY 2013-14 and the projected revenue for FY 2016-17 based on current tariff in its ARR Petition. But, audited account (with the Supplementary Audit Report of the Accountant General of Uttar Pradesh) for FY 2013-14 and provisional accounts for FY 2014-15 of UPPCL were not submitted by the Licensee. The ARR Petition also did not contain any Tariff Proposal (Rate Schedule) to bridge the revenue gap through tariff hike or through any other mechanism. Further, the Rate Schedule was submitted later on February 2, 2016.

#### 2.2 PRELIMINARY SCRUTINY OF THE PETITION:

- 2.2.1 A preliminary analysis of the Petition was conducted by the Commission wherein it was observed that the ARR Petition did not propose any mechanism to bridge the revenue gap, which was in contravention to the stipulation of Regulation 2.1.4 of the Distribution Tariff Regulations, 2006.
- 2.2.2 In this regard, a deficiency note was issued by the Commission on January 29, 2016 directing the Licensee to submit its proposal for bridging the revenue gap. Such deficiency note also sought clarifications on other issues in regard to the ARR Petition filed by the Licensee. The Commission had granted a time of 10 days to respond on the deficiency note, i.e., by February 8, 2016.



- 2.2.3 The Distribution Licensee submitted the Rate schedule on February 2, 2016. Based on the Rate schedule submitted by the Licensee, the Commission issued a second deficiency note which included queries mainly related to the Rate schedule proposed by the Licensee for FY 2016-17; vide e-mail and letter dated February 10, 2016. The Commission also directed the Licensees to submit its replies within 10 days. A reminder vide letter dated February 22, 2016 was sent to all the State owned Distribution Licensees to submit the replies for both the set of deficiencies at the earliest.
- The Distribution Licensee submitted the replies to the first and second deficiency notes on March 9, 2016.
- 2.2.5 The Hon'ble ATE, in its Judgment dated October 21, 2011 in Appeal No. 121 of 2010 has ruled that if the audited accounts for the previous year are not available for some reasons then the audited accounts for the year just prior to the previous year along with the provisional accounts for the previous year may be considered. Thus, based on the above ruling of the Hon'ble ATE, the audited accounts for FY 2013-14 (i.e., year just prior to the previous year) along with the provisional accounts for FY 2014-15 (previous year) have been considered for the current proceedings in the matter of approval of Annual Revenue Requirement and Tariff Determination of FY 2016-17.

#### 2.3 ADMITTANCE OF THE TRUE-UP AND ARR / TARIFF PETITION

2.3.1 The Commission through its Admittance Order dated March 29, 2016 directed the Petitioner to publish, within 3 days from the date of issue of that order, the Public Notice detailing the salient information and facts of the True-up Petition for FY 2013-14, ARR / Tariff Petition for FY 2016-17, the Rate Schedule (Tariff Proposed for different categories/ sub-categories of consumers), the details of the cumulative revenue gap (regulatory asset) and its treatment, proposed 'Regulatory Surcharge', Distribution losses, average power purchase cost, average cost of supply, average retail tariff realised from each category / sub-category of consumers and the % of average tariff increase required to cover the revenue gap in at least two daily newspapers (one English and one Hindi) for two successive days for inviting views / comments / suggestions /objections /representations from all stakeholders and public at large within the stipulated time of 15 days from the date of publication of the Public Notice. The Commission had also directed the Petitioner to put all details on its internet website, in PDF format, showing detailed computations, the



application made to the Commission along with all regulatory filings, information, particulars and documents, clarification and additional information on inadequacies etc. and all subsequent events and material placed on record if any, made before the issuance of final Order subject to confidentiality of information which requires prior approval of the Commission.

#### 2.4 PUBLICITY OF THE PETITION

2.4.1 The Public Notice detailing the salient features of the True-up Petition for FY 2013-14 and ARR Petition for FY 2016-17 was made available by UPPCL on behalf of the Petitioner and they appeared in daily newspapers as detailed below, inviting objections from the public at large and all stakeholders:

• Times of India (English) : March 31, 2016

• Pioneer (English) : April 1, 2016

Hindustan (Hindi) : March 31, 2016

• Aaj (Hindi) : March 31, 2016

Amar Ujala (Hindi) : March 31, 2016

Dainik Jagaran (Hindi) : April, 1, 2016

Rashtriya Sahara (Hindi) : April, 1, 2016

Swatantra Bharat (Hindi) : April, 1, 2016

#### 2.5 PUBLIC HEARING PROCESS

- 2.5.1 The Commission invited comments / suggestions from consumers and all other stakeholders on the ARR & Tariff proposals of the Licensees. To provide an opportunity to all sections of the population in the State and to obtain feedback from them, public hearings were held by the Commission in the State. Consumer representatives, industry associations and other individual consumers participated actively in the public hearing process.
- 2.5.2 The Commission conducted combined public hearing in the above matter for all Distribution Licensees namely PuVVNL, PVVNL, MVVNL, DVVNL, KESCO, NPCL and Transmission Licensee namely UPPTCL on May 11, 2016 at Greater Noida, May 13, 2016 at Lucknow and May 20, 2016 at Aligarh.



#### 3. PUBLIC HEARING PROCESS

#### 3.1 **OBJECTIVE**:

- 3.1.1 The Commission, in order to achieve the twin objective i.e. to observe transparency in its proceedings and functions and to protect interest of consumers has always attached importance to the views / comments / suggestions / objections / representations of the public. The process gains significant importance in a "cost plus regime", where the entire cost allowed to the Licensee gets transferred to the consumer. The consumers therefore have a locus-standi to comment on the True-up and ARR & Tariff Petitions filed by the licensees.
- 3.1.2 The comments of the consumers play an important role in the determination of Tariff and the design of the Rate Schedule. Factors such as quality of electricity supply and the service levels need to be considered while determining the Tariff. The Commission takes into consideration the submissions of the consumers before it embarks upon the exercise of determining the Tariff.
- 3.1.3 The Commission, by holding public hearings, has provided the various stakeholders as well as the public at large, a platform where they were able to share their views / comments / suggestions / objections / representations for determination of the retail Tariff for FY 2016-17. This process also enables the Commission to adopt a transparent and participative approach in the process of Tariff determination

#### 3.2 PUBLIC HEARING:

3.2.1 To provide an opportunity to all sections of the population in the State to express their views and to also obtain feedback from them, public hearings for each Distribution Licensee were held by the Commission at various places in the State. The public hearings were conducted on May 11, 2016, May 13, 2016 and May 20, 2016 as per details given below:

Table 3-1 SCHEDULE OF PUBLIC HEARING AT VARIOUS LOCATIONS OF THE STATE

Sl.No	Date	Place of Hearing	Hearir	ngs in the	matter	of
1	May 11, 2016	Greater Noida	,	PVVNL	<b>'</b>	′
2	May 13, 2016	Lucknow	DVVNL, KESCO, NPCL	and		
3	May 20, 2016	Aligarh	UPPTCL			



- 3.2.2 Consumer representatives, industry associations as well as several individual consumers participated actively in the public hearing process.
- 3.2.3 The views / suggestions / comments / objections / representations on the True-up / ARR / Tariff Petitions received from the public were forwarded to the Licensees for their comments / response. The Commission considers these submissions of the consumers and the response of the Licensees before it embarks upon the exercise of determining the final True-up / ARR / Tariff.
- 3.2.4 Besides this, the Commission, while disposing the True-up / ARR / Tariff Petitions filed by the Petitioners, has also taken into consideration the oral and written views / comments / suggestions / objections / representations received from various stakeholders during the public hearings or through post or by e-mail.
- 3.2.5 The Commission has taken note of the views and suggestions submitted by the various stakeholders who provided useful feedback on various issues and the Commission appreciates their participation in the entire process.

#### 3.3 VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON TRUE-UP / ARR / TARIFF PETITION

- 3.3.1 The Commission has taken note of the various views / comments / suggestions / objections / representations made by the stakeholders and would like to make specific mention of the following stakeholders for their valuable inputs:
  - Mr. Avadhesh Kumar Verma, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad (UPRVUP)
  - Mr. Rama Shanker Awasthi, Lucknow
- 3.3.2 Commission The has attempted to capture the summary of comments/suggestions/observations in this section. However, in case any comment/suggestion/observation is not specifically elaborated, it does not mean that the same has not been considered. The Commission has considered all the issues raised by the stakeholders and Petitioner's response on these issues while carrying out the detailed analysis of the True Up for FY 2013-14, ARR and Tariff for FY 2016-17.
- 3.3.3 The list of the consumers, who have submitted their views / comments / suggestions / objections / representations, is appended as Annexure 11.5 to this Order. The



major issues raised therein, the replies given by the Licensee and the views of the Commission have been summarised as detailed below:

#### 3.4 SINGLE POINT SUPPLY

- 3.4.1 ANSAL API, Kasturba Gandhi Marg New Delhi made following submissions related to single point supply
  - In rate schedule it is mentioned that to qualify under the LMV-1 category, the single point consumer must have 70% of domestic load. It is understood that the remaining 30% of the total contracted load for the township / housing colonies which may be for non- domestic purpose inside the colony (including shops, club house etc.) should be billed at LMV-2 rates. For loads ranging from 50 kW to below 75 kW, it is not always possible to maintain the ratio of percentage of domestic to non-domestic loads at 70:30 as sometimes the percentage of domestic load may reduce to 60% as well. Therefore, it is suggested that the single point consumers may be directed to recover the tariff from individual residents at either LMV-1 / LMV-2 tariff based on the purpose of supply.
  - Clarification is required regarding classification of load among LMV-1 & HV-1 in various residents, shop owners, townships and multiplexes in the state of UP.
  - Single point consumer should be allowed to recover both temporary charge for construction purpose and LMV-1 / HV-1 tariffs from individual consumers based on the actual units consumed.
  - 70% of contracted load is to include lighting loads for common recreations facilities /Services such as club/ common room, GHS / Care taker office, street lighting, sewerage treatment plant, ventilation system, common / parking areas, dispensary, school, convenience stores /shops etc. for the residents of a housing colony, such lighting load inside housing colonies/township is for common lighting purposes for the benefit of residents and is not being used for any non-domestic or commercial purposes. A single Point consumer taking supply at 11/33 KV for HV-1 category has to sub-distribute the electricity at 220/440V



voltage level. Therefore he should be permitted to recover HV-1 tariff from the end consumers.

- It is proposed in the Petition filed by the Licensees that a single point consumer
  is required to provide information to all its consumers along with a copy of
  detailed computation of the amounts realized from all the individual consumers
  and the amount paid to the Licensee for a certain billing cycle. Such exercise will
  be unduly burdensome and problematic, making objector vulnerable to
  malicious litigations. It is suggested that the objector should be allowed to
  follow the billing format that is used by distribution Licensees for its consumers.
- The Licensee has not provided any details or specific method for the computation of additional charge by the developer. Clarification to be provided in this regard.
- There is no clarity on how the single point consumer will recover line losses incurred during supply of electricity on the distribution network maintained by developer/mall owner. The lack of recovery of transmission / distribution losses is adversely impacting the single-point consumers. In view of such lack of methodology, it has requested the Commission to provide clarity on method of calculation and components for billing of additional 10% to consumers.
- Instead of allowing levy and recovery of additional 10% from the consumer, the Commission may consider granting 10% to 15% rebate to single point consumers on the units consumed by them as they have to compensate on account of the power loss and also they have to construct, maintain and upgrade their own infrastructure /network for distributing power to end consumers.
- There is no minimum charge specified for single-point consumer. Therefore, the methodology for recovering minimum charge by single-point consumers from end consumers needs to be specified.
- 3.4.2 Shalimar Corp Limited and ANSAL API, Kasturba Ghandhi Marg, New Delhi submitted that the option of multi point connection may be provided to Mega townships



- comprising mix of Plots, EWS Flats, Single storied individual villas /Row Houses and Multi-storied flats.
- 3.4.3 Shri Shivshankar Singh Chairman, Civil Lines Vyapar Mandal submitted that due to non-payment of bills by some of the consumer, honest consumers also get suffer as supply get disconnected due to non-payment of complete amount by some consumers. It is further submitted that in multi-storey building the purpose of supply varies with consumer to consumer. So Single point supply should be converted into multipoint supply for multi-storey building.
- 3.4.4 Miss Romi, Global Care Organization submitted that in case of multi-storey buildings and colonies, domestic and commercial consumers should be charged separately.

#### B) Petitioner's Response

3.4.5 The Licensee submitted that Clause 4.9 (a) of supply code 2005 provides as follows:

"Electricity Connection at single point of supply with single point metering shall be provided to a new domestic/non-domestic Multi storied Buildings/ Multiplex / Marriage Halls/ Cooperative Group Housing Societies / Colonies, with load exceeding 25 KW."

- 3.4.6 The Licensee further submitted that it is clear from above that for domestic / non-domestic Multi-storied Buildings / Multiplex / Marriage Halls / Cooperative Group Housing Societies / Colonies, with load exceeding 25 kW connections has to be released on single point as sentence provides "connection shall be released". The use of word "shall" raises a presumption that the particular provision is imperative as has been held by Hon'ble Supreme Court in State of UP vs. Manbodhan Lal Srivastava. Such an interpretation that "when a statute uses the word shall, prima facia it is mandatory" has been adopted by Hon'ble Supreme Court in catena of cases such as State of UP vs. Babu Ram Upadhya, Sainik Motors, Jodhpur vs. State of Rajasthan, Govindlal Chagganlal Patel vs. Agriculture Produce Market Committee. The Licensees added that accordingly, the spirit of supply code has been implemented as per legal provisions and no doubt it helped to a certain extent, in mitigating the problem of scanty meter-reading and billing resources.
- 3.4.7 The Licensee submitted that recently number of grievances relating to individual inhabitants of these multi-storied buildings came in the notice of Licensees as well as the Commission. An understanding was evolved that a first-hand ground survey would be conducted and some kind of feasible solution will be worked out within the



legal framework, which would address majority of concerns. In this regard, the Commission vide its Letter No. UPERC / Secy. / D (T) / 2015-2032 dated March 3, 2015 directed the Licensees to submit a detailed proposal related to New Mechanism for Billing the Single Point Consumers.

- 3.4.8 The Licensee submitted that, in this context, a meeting with Resident Welfare Associations was organized at Noida on May 9, 2015 to discuss various issues linked with supply to Multi Storied Building including tariffs and option of individual connections to consumers residing in Multi Storied Buildings. Subsequently, the Licensee had submitted a detailed report to the Commission.
- 3.4.9 The Licensee understands that the Commission is in the process of framing Regulations for single point bulk supply and the same are expected to be issued shortly.

#### C) The Commission's view:

3.4.10 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The Commission has already taken up this issue and may take appropriate step in this regard. The applicable Tariffs for all the consumer categories have been designed in accordance with the Electricity Act, 2003 and the Tariff Policy. The details of all the aspects related to Tariff design have been covered subsequently in Chapter on Tariff Philosophy and Rate Schedule provided in this Order.

#### 3.5 ARR & TRUE UP

#### A) Comments/Suggestion of the Public

3.5.1 Shri Akarsh Garg, Advocate for Indian Industries Association, Shri Rama Shanker Awasthi, Shri Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad and Shri Amar Singh, President Consumer protection Society submitted the following points on ARR petitions for FY 2016-17 and True Ups petitions for FY 2013-14:

Comments and suggestion on ARR petitions for FY 2016-17

• The ARR can only be fixed after voltage wise supply study has been conducted by the utilities and the tariff of each category is in consonance with Clause 8.2.2



of the Tariff Policy. Stakeholder further submitted that the tariff of each category should be within +/- 20% of the average cost of supply of electricity.

- Capital Investment Plan: Capital investment plan is not in consonance with Regulation 4.5 of Tariff Regulation and may be rejected. The capital sought to be invested by Discoms may be allowed only after through verification of investment already been made by Discoms. The investments are being made for procuring low-quality and sub-slandered products to favor certain people at the cost of consumers. Discoms have indulged into malpractice for paying for products which are not supplied by approved sellers.
- Fixed Asset Register, Gross Fixed Asset and Depreciation: It is submitted that in absence of Fixed Asset Register, the GFA of utility be considered as zero. The main reason behind non-creation or creation of fixed asset register is siphoning off money by officials of Discoms in the name of capital investment. It is further submitted that Discoms have inflated GFA and adding the burden on consumers every year by paying huge sums in the name of capital investment.
- Finance charges: Discoms have sought finance charges without giving any details
  of the same.
- Bad and doubtful debt: No bad and doubtful debt can be allowed in ARR for the ensuing year.
- Return on Equity and Tariff for LMV-10 consumers: Discoms have sought 50% discount on the tariff of departmental employees instead of Return on Equity.
   Such an act of Discoms should not be allowed since it would mean burdening the consumers by depriving the benefits of the 'Return on Equity'.

#### Comment and suggestion for True Up petitions for FY 2013-14

- Power Purchase Expense: They requested the Commission to conduct a prudence check of the rates at which power has been purchased by Discoms visà-vis price at which power available in the market and also initiate appropriate proceedings against the Discoms.
- Repair & Maintenance Expense: R&M being controllable factor, inefficiency of Discoms should not be passed on the consumers. Purchase of faulty transformers and equipments is also one of the major reasons for higher R&M expenses than expected. They requested the Commission to conduct a



prudence check of the quality of equipments procured by Discoms vis-à-vis price at which they are available in the market and initiate appropriate proceedings against the Discoms.

- Proposed Investment should be disallowed: Discoms have been procuring goods/machineries including transformers from the companies which were blacklisted without prejudice to the same, it is submitted that the Discoms have been falsely capitalizing the machinery without actual purchase of the same. Therefore, they requested the Commission to allow capitalization after verifying the physical existence of the assets.
- Depreciation: Discoms are not entitled for any depreciation in absence of Gross Fixed Asset Register.
- Prior Period Expense: It is submitted that prior period expense ought to be disallowed as Discoms have not given any details of the same (year and purpose for which these expense were incurred).
- Bad & Doubtful Debt: PVVNL has submitted Rs. 54.64 Crore towards bad and doubtful debt which is contrary to Clause4.4 of the Tariff Regulations, 2006.
- Carrying Cost: It is submitted that carrying cost, if any, should not be allowed on account of True-up of ARR for FY 2013-14 as Discoms failed in filling True-up Petition in time. It is submitted that consumers should not be burdened due to inefficiency and negligence on the part of Discoms. It is submitted that audited accounts of a company for FY 2013-14, should have been finalized by September, 2014. However, Discoms chose to file True-up Petition for FY 2013-14 after a period more than two years.
- Security Deposit: The Commission may not allow interest on security deposit amount in ARR claimed by Licensees because Licensees had failed to pay the amount of interest on security deposit deposited by the consumers.
- The State Discoms never filed ARR petition as per provisions specified in Conduct of Business Regulations and Tariff Regulations. It is further submitted that provisions in the Regulation are mandatory to be followed by Licensee a well as Commission.



- O&M Expenses: O&M expenses of the Licensees are very high as compared to the other utilities across the country, which shows Licensees' inefficiency.
- The scanned copies of vital documents like category details of consumers and tariff schedule are not good for reference and hence, such information should be in word / excel format. Further, it is submitted that ARR petitions are incorrect, vague, incomplete and is not specific.

ARR Petitions contains proposal for capital investments of more than Rs 20,000 Crore for FY 2015-16 and FY 2016-17 in respect of improvement of distribution network system but it is highly disgusting and unfortunate that the Petitioners have assumed arbitrary quantities.

#### B) Petitioner's Response

- 3.5.2 The Licensee submitted that opening balance of assets and year wise capitalisations as provided in the audited financial statements have been considered for truing up and Tariff purposes and the same have been approved by the independent statutory auditor as well as by CAG. The Licensee further submitted that the growth in the distribution network and consumer base is also a testimony of the large capital investment undertaken by the Licensees in the State. Hence, it cannot be denied that the capital investment has been put to beneficial use.
- 3.5.3 The Licensee further submitted that the accounting policy in relation to fixed assets is provided as part of the Audited Accounts. However, the fixed assets are shown at the value transferred as per the second Transfer Scheme as opening balance. The Licensee submitted that all the costs relating to the acquisition and installation of fixed assets till the date of their commissioning are capitalised in the accounts. The Licensee submitted that based on this policy, the capitalisations have been accounted in Audited Accounts of each year and the statutory auditors have approved the overall balance sheet of the Licensees. Further, the Licensee submitted that even the supplementary audit report of the Auditor General of Uttar Pradesh has not found any discrepancy in this policy. However, the licensee is committed in this direction.
- 3.5.4 The capital investment plan has been duly submitted in the ARR Petition. Finance charges have been claimed towards guarantee charges payable to banks and financial institutions, bank charges etc. The rationale for claiming bad and doubtful debts has been elaborated in the ARR Petition.



3.5.5 The Licensee submitted that various sub-components of the ARR have been claimed by the Petitioner strictly in line with the provisions of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006.

#### C) The Commission's view:

3.5.6 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The detailed analysis of various elements of ARR and True-up has been carried out by the Commission in accordance of the Distribution Tariff Regulations, 2006 and Tariff Policy as elaborated in subsequent sections of the Order.

#### 3.6 TIME OF DAY TARIFF

- 3.6.1 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok Kumar Goyal President, National Chamber of Industries & Commerce submitted that the TOD charges may be made more consumer /Industry friendly and off peak hours should be between 22:00 PM to 7:00 AM.
- 3.6.2 Shri K. L. Aggarwal chairman Associate Chambers of Commerce and Industries of U. P suggested following rates for TOD for HV-2 and LMV-6 tariff categories.

Time hrs.	Proposed TOD Rate	Suggestive TOD Rate
22.00 to 06.00	(-)7.5%	(-)10%
06.00 to 17.00	0.0%	0.0%
17.00 to 22.00	(+)15%	(+)10%

- 3.6.3 Shri Sudhir Chandra Goyal, M/s Khatauli Cold Storage submitted that the proposal for cold storage under HV-2 category which is proposed to be without TOD slabs may be adopted for cold storage under LMV-6 tariff Category.
- 3.6.4 Aligarh Furnace & Rolling Mill Association submitted that the electricity tariff should be reduced up to 50% to 60 % during night hours as power is available at Rs 2 per Unit in exchanges.



#### B) Petitioner's Response

The Licensee submitted that no revision in the TOD structure has been proposed in the instant petition.

#### C) The Commission's view:

3.6.5 The Commission has taken note of the above objections / suggestions given by the stakeholders in this regard. The detailed design for TOD Tariff has been further, discussed in Chapter on Tariff Philosophy and the Rate Schedule provided subsequently in this Order.

#### 3.7 REGULATORY SURCHARGE

- 3.7.1 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok Kumar Goyal President, National Chamber of Industries & Commerce submitted that the regulatory surcharge has to be a non- repetitive temporary surcharge and to be imposed in extra ordinary circumstances only. This regulatory surcharge has become permanent feature of ARR and Discoms are deliberately taking advantage of this.
- 3.7.2 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that the collection amount figures of RS-1 and RS-2 has to be submitted by Discoms.
- 3.7.3 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that the imposition of Regulatory Surcharge additionally on total amount results in addition of 0.50 paisa per unit in the electricity bill. The regulatory surcharge so imposed on the electricity consumers are against the alleged accumulated losses of the Discoms from past 8 years, which is irrational & unjustified. Hence, it is suggested to meet out such alleged accumulated losses of the Discoms by way of direct state subsidy, instead of passing the burden on the consumers.
- 3.7.4 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that Commission's Order dated June 06, 2014 in regard to levy of 2.84% of Regulatory Surcharge (RS) has been implemented without any notice to the public. Further, vide the Commission's Tariff Order dated October 01, 2014 levy of



additional Regulatory Surcharge @ 2.38% is made applicable. As a result thereof the period from 06/06/2014 to 11/10/2014 remains un-notified by UPPCL. Stakeholder further submitted that realization of Regulatory Surcharge @ 2.84% is not incompliance of rule 139 of UPERC conduct of business Regulations 2004. Stakeholder requested to refund the entire amount so realized in RS @ 2.84% to all consumers.

- 3.7.5 The Mahabir Jute Mills Ltd. and Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries submitted that the Commission's Order to stop charging regulatory Surcharge-1 from April 2016 is not followed till May 2016, which is the clear violation of rule 139 of Conduct of Business Regulations. Therefore, differential amount with interest thereof must be refunded to the relative consumer by the Discoms.
- 3.7.6 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that as per UDAY scheme launched by GOI, net loss for UPPCL is Rs.70738 Crore out of which bank loan is Rs.53211 Crore. As per UDAY scheme guidelines 75% of the loan will be taken over by GoUP, so it's not justified to levy Regulatory Surcharge i.e. 4.28% which is continuing year on year on the verge of losses. Stakeholder further requested the Commission to abolish Regulatory Surcharge.
- 3.7.7 Shri Niraj Khandelwal, B.L. Agro Oils Limited and Shri Rahul Agarwal Director (Operations), Vacmet India Ltd. submitted that Regulatory Surcharge is being levied by Discoms on consumers to cover-up there earlier gaps. If a consumer is not having any arrear on his service it means that he has paid all his electricity bills on time. If a consumer have paid all the bills which are raised by Discoms regularly then why he has to pay the Regulatory Surcharge, which is demanded by Discoms for their past losses Hence, it is requested before the commission to abolish the Regulatory Surcharge.
- 3.7.8 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P suggested that no regulatory surcharge should be levied unless the Discoms submit ARR petition on time and achieve 100% metering.
- 3.7.9 Shri Rama Shanker Awasthi submitted that the State Discoms must provide information, pertaining to collection of Regulatory Surcharge-1 and Regulatory Surcharge-2, consumer category /sub-category wise. The Commission issued a direction to the State Discoms to submit year wise collection of Regulatory



Surcharge-1 and Regulatory Surcharge-2 but the details are not submitted by the State Discoms till date.

#### B) Petitioner's Response

- 3.7.10 Clause 6.12 of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006 provides:
  - "1. Creation of Regulatory Asset only for the purposes of avoiding tariff increase shall not be allowed and it shall only be created to take care of natural causes or force majeure conditions or major tariff shocks. The Commission shall have the discretion of providing regulatory asset.
  - 2. The use of the facility of Regulatory Asset shall not be repetitive.
  - 3. Depending on the amount of Regulatory Asset accepted by the Commission, the Commission shall stipulate the amortization and financing of such assets. Regulatory Asset shall be recovered within a period not exceeding three years immediately following the year in which it is created."
- 3.7.11 The Licensee submitted that the regulatory asset had been created by the Commission towards unrecovered gap pursuant to the final true ups based on audited accounts. Thus, the regulatory surcharge is valid in law and is in accordance with the Distribution Tariff Regulations, 2006 and is being charged subsequent to the Orders of the Commission.
- 3.7.12 Regarding capturing of the regulatory surcharge data separately, the Licensee submitted that the data from field units is being collected.

#### C) The Commission's view:

3.7.13 The Commission has taken note of the above objections / suggestions given by the stakeholders in this regard. The Commission would like to clarify that the recovery of Regulatory Surcharge allowed is towards the unrecovered gap allowed by the Commission based on truing up carried out after prudence check and not towards the entire losses of the Distribution Licensees. The matter of accounting of Regulatory surcharge is of great concern to the Commission and accordingly, the Commission deficiency note dated January 29, 2016 directed the Licensees to submit details regarding Regulatory Surcharge. The Commission has also issued a separate Order on April 18, 2016 "Suo-Moto Proceedings in the matter of Regulatory



Surcharge" and directed Licensees to stop the collection of Regulatory Surcharge-1 after March 31 2016. The Commission has also discussed this issue in detail subsequently in this Order.

#### 3.8 HIGH COST OF ELECTRICITY

- 3.8.1 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P submitted that high cost of electricity in Uttar Pradesh is making Industrial products uncompetitive.
- 3.8.2 North Central Railway submitted that the traction tariff should not be further hiked and existing traction tariff for the Railway should be brought down to a reasonable level by determining category-wise voltage-wise cost of Supply, cross subsidy and further, ensuring direct subsidy to be borne by the State Government in line with Electricity Act 2003, Section 60 (g) 65 & Para 8.3 of National Tariff policy. North Central Railway further submitted that Railway Traction Tariff should not be more than HT industrial category HV-2 i.e. other bulk supply tariff category, in line with Article 287 of the Constitution of India.
- 3.8.3 Shri Naveen Gupta Manager Rimjhim Ispat Ltd., M/s Kanpur Fertilizer & Cement Limited and M/s Ambika Steel submitted that higher industrial tariff and uncertain power availability in UP is adversely affecting the commercial viability of industries. It is suggested that affordable and reasonable industrial tariff maybe declared in the State to promote the industries.
- 3.8.4 Shri K. L. Aggarwal Chairman Associate Chambers of Commerce & Industries of Muzaffarnagar, U. P submitted that there is continue general recession in the industries particularly. Due to the un-precedent increase in the energy rates i.e., approx. 45% to 50% w.e.f. 1<sup>st</sup> Nov 2012, most of the furnace industries in U.P. have been closed during the period from 2013 to 2015. Further, the stakeholder submitted that present existing rates of energy charges for HV-2 category of consumers deserve to be reduced at least by 8% to 10%.
- 3.8.5 Shri Rahul Agarwal Director Manager (Operations), Vacmet India Ltd. Submitted that the electricity tariff for surrounding states like Rajasthan, Madhya Pradesh, Uttarakhand etc. are quite reasonable, low & supportive to the Industries. Difference of even Rs. 1.00 / unit makes huge difference in cost of production so far as bulk



- power is concerned. Therefore, it is requested to rationalize the tariff with the surrounding States.
- 3.8.6 Shri Akarsh Garg, Advocate for Indian Industries Association, submitted that the distribution utilities have been enshrined with the duty of supplying electricity to consumers on the basis of cost of supply of electricity for each category of consumers. The Industrial consumers are being made to pay higher cost to cross-subsidize the tariff of other categories, which is contrary to the objective of Electricity Act, 2003 principles enshrined under Section 61 of the Act of 2003 and Tariff policy.
- 3.8.7 The Mahabir Jute Mills Ltd. submitted that protective load is meaningless as industries are paying double that of power purchase cost.

#### B) Petitioner's Response

- 3.8.8 The Licensee submitted that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Commission. The tariff is being proposed to recover the gap between the Annual Revenue Requirement and the revenue at current tariffs. Different states have different cost of service, subsidy levels, different power procurement costs, etc., and hence, while fixing tariffs all these issues have to be taken into account.
- 3.8.9 The Licensee further submitted that the Retail Tariff within the State has been kept uniform as per guidelines provided in the Sec 8.4 (2) of the National Tariff Policy issued by Ministry of Power, Government of India.
- 3.8.10 The Petitioner submitted that the Railway Traction Tariff has been increased in accordance with Article 287 of the Constitution of India. Further, the billing is being done in accordance with the Rate Schedule approved by the Commission. The Petitioner submitted that the Tariff for HV-3 consumers is within +/- 20% of the average cost of service of the licensee, as stated in the Tariff Policy, 2006.

#### C) The Commission's view:

3.8.11 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The applicable Tariffs for all the consumer categories have been designed in accordance with the Electricity Act, 2003 and the Tariff Policy.



The details of all the aspects related to Tariff design have been covered subsequently in Tariff Philosophy and Rate Schedule chapters of this Order.

#### 3.9 LOAD FACTOR REBATE

#### A) Comments/Suggestions of the Public

3.9.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P, Shri Rahul Agarwal Director (Operations) Vacmet India Ltd. and The Mahabir Jute Mills Ltd. submitted that the Load factor rebate to be re-introduced for better utilization of load and to encourage industrial consumers.

#### B) Petitioner's Response

3.9.2 Load Factor rebate was approved by the Commission in the Tariff Order for FY 2001-02 with a view to encourage better load utilisation to HV-2 consumers above 50% utilisation, lower system losses and better system operation. At that point of time, theft in industries was rampant.

In the current context, the situation has changed. Load factor rebate had been introduced earlier in large and heavy consumers to curb the theft of electricity. But, now licensee has installed high precision meters to monitor the trend and other parameters and as such it appears that there is no need to provide incentive for consumption. Hence, the licensee is of the view that there is no necessity to provide load factor rebate.

#### C) The Commission's view:

3.9.3 The Commission after detailed deliberation on this issue has abolished the Load Factor Rebate in the Tariff Order for FY 2014-15 and finds no merit in stockholder suggestion.

#### 3.10 OVER LOAD PENALTY



3.10.1 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P, Ashok kumar Goyal President, National Chamber of Industries & Commerce and Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that double penalty i.e. charging fixed charge on enhanced load plus overload penalty is unreasonable and only single penalty should be imposed.

#### B) Petitioner's Response

3.10.2 Petitioner submitted that the charges for exceeding contracted demand are levied as per the rate approved by the Commission in last Tariff Order or subsequent amendment.

#### C) The Commission's view:

3.10.3 The Commission would like to clarify that each and every Licensee has to plan and make arrangements for supplying power which the Utility estimates based on Contract Demand. In case of increase in Contract Demand, the Utility has to arrange costly power or carry out the load shedding. Hence, the penalty mechanism has been designed for restricting consumers from exceeding the contract demand and avoid unplanned purchase of costly power.

#### 3.11 KVAH BILLING

- 3.11.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P suggested that till the required KVAH meters (which automatically takes PF between 0.95 to 1.00 as unity for KVAh reading) are not installed, the consumers be given the benefit by treating, kWh units for the purpose of the application of tariff in case the PF of the relative consumer is in the range of between 0.95 -1.00, as unity.
- 3.11.2 Shri D.S. Verma Executive Director, Indian Industries Association submitted that due to electrical load conditions, the power factor of the consumer is leading. In such situation the leading power factor gets the same treatment as that for lagging power factor while computing electricity bills and the consumer is penalized with higher electricity bills. If power factor in the consumer's premises is leading then the power factor should be treated as unity.



#### B) Petitioner's Response

3.11.3 The Licensee submitted that the kVAh based billing is being done as per the Tariff Orders of the Commission.

#### C) The Commission's view:

3.11.4 The Commission has taken note of the objections / suggestions made by the stakeholders with regard to kVAh billing of the consumers. The Commission feels that kVAh billing is a better way of billing than kWh which helps in enhancing system performance by encouraging the consumers to correct their power factor. The Commission has also addressed this issue in the Tariff Philosophy chapter.

#### 3.12 TARIFF HIKE

- 3.12.1 Shri K. L. Aggarwal Chairman, Associate Chambers of Commerce & Industries of U. P submitted that the sharp upward revision on fixed charges for LMV-2 (a), LMV-2 (c), LMV-4(b), LMV-6 and LMV-9 (b) will ruin the economic growth of MSME sector in both Urban and Rural areas.
- 3.12.2 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Shri Ashok Kumar Goyal, President of National Chamber of Industries & Commerce submitted that no further increase in tariff should be allowed for LMV-6 and HV-1 consumers in line with Delhi and the other neighbouring States so that the products manufactured could be made competitive.
- 3.12.3 Shri Anand Singh Secretary, Laghu Udyog Bharti submitted that small & medium enterprises are main sources of employment in the States like U.P. Hence, instead of increasing the tariff of LMV-6 it should be reduced and in rural areas rebate for said category be increased up to 50%.
- 3.12.4 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that tariff for rural schedule should not be increased on the verge of increased hours of supply. It is further submitted that Discoms have to charge lower fixed charges from the consumers where power supply is less than 16 hours.



- 3.12.5 Shri Ganesh Tiwari President, U.P. Chamber of Steel Industries Association submitted that losses have increased abnormally since 1998. Thus, tremendous increase in losses gives impact in increase rates. Controlling the losses is the duty of UPPCL but their inefficiency is being burdened on the industry by increasing tariff rates. Stakeholder further submitted that due to highest rate of tariff, the industries are unable to run. Stakeholder further requested Commission to reduce the tariff.
- 3.12.6 Shri Gyan Chandra Varshney, Aligarh Udyog Vyapar Pratinidhi Mandal submitted that increasing the tariff indicates that honest consumer is forcefully burdened with loss due to theft, hence in spite of increasing Tariff, AT &C losses must be reduced and cheaper power to be made available to the consumers.
- 3.12.7 ANSAL API, Kasturba Ghandhi Marg New Delhi submitted that there is steep increase in tariff proposal from the tariff determined for HV-1 category in Tariff Order dated 18.06.2015 which is unsuitable and arbitrary.

#### B) Petitioner's Response

- 3.12.8 The Licensee submitted that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Commission. The Tariff is being proposed to recover the gap between the Annual Revenue Requirement and the revenue at current tariffs. Different States have different cost of service, subsidy levels, different power procurement costs, etc., and hence, while fixing tariffs all these issues have to be taken into account. The Licensees have submitted that the Retail Tariff for each category within the State has been kept uniform as per guidelines provided in the Sec 8.4 (2) of the National Tariff Policy issued by Ministry of Power, Government of India.
- 3.12.9 The Licensee submitted that the power purchase cost projections have been made in the Tariff Petition as per the latest power purchase bills. Additionally, the Commission had sought the month wise details of the power purchase bills for the last three years. Such details already submitted to the Commission. It is evident that the licensee is not getting cheap power from the generators.
- 3.12.10 The cross subsidy levels for HT consumers are within the threshold limits prescribed under the Tariff Policy. The Tariff has been proposed in line with the Tariff Regulations framed by the Commission, the National Tariff Policy, 2006 and the Electricity Act, 2003.



- 3.12.11 The Licensee further submitted that while framing the proposal for rate revision in FY 2016-17, it has considered the broad aspects laid down in the Tariff Policy, Electricity Act 2003, Tariff Regulations, actual consumer profile and realities existing at the ground and has also considered the prevailing tariff structures across the different States. Further, the underlying objective is such that consumers with higher consumption should pay near the cost of service. Based on such aspects, the licensees feel that it has taken a balanced view of various pertinent issues.
- 3.12.12 The Licensee has submitted the tariff revision proposals considering its power purchase cost from various sources, normative operating expenditure and the overall cost of service. While framing the tariff, the Petitioner was guided by the provisions of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006, Tariff Policy 2006 and the Electricity Act, 2003.

### C) The Commission's view:

3.12.13 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The applicable Tariffs for all the consumer categories have been designed in accordance with the Electricity Act, 2003 and the Tariff Policy. The details of all the aspects related to approval of ARR and Tariff design have been covered subsequently in ARR for FY 2016-17, Tariff Philosophy and Rate Schedule chapters of this Order.

#### 3.13 REDUCED HOURS OF SUPPLY

### A) Comments/Suggestions of the Public

3.13.1 Shri Gyan Chandra Varshney, Aligarh Udyog Vyapar Pratinidhi Mandal submitted that there is un-declared power cut of approx 6 to 8 hours in Mahanagar areas, against 2 hours as per Order. Because of this business is affected and businessmen are forced to move. It is requested that power supply to the commercial category should be provided from 10 Am to 8 PM.

### B) Petitioner's Response



3.13.2 The Licensee submitted that the hours of supply is normally as per schedule, however, sometimes it may be less than that of schedule hours due to emergency rostering which is beyond the control of the Licensees.

Regarding, the demand supply gap, the Licensee submitted that it is endeavouring to reduce the distribution losses. Capacity augmentation is being planned by the State Government. The growth in the capacity addition has been outnumbered by the growth in the demand.

## C) The Commission's view:

3.13.3 The Commission has noted the objections / suggestions of the stakeholders in this regards. The Licensee should properly plan and take corrective measures for reducing the demand supply gap.

#### 3.14 T&D LOSSES AND AT&C LOSSES

- 3.14.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that line losses data submitted by Discoms must be audited separately by outside independent agency duly approved by the Commission. Further, the stakeholder submitted that if Discoms are not able to achieve losses as per loss trajectory, the additional losses should be borne by the Discoms.
- 3.14.2 Shri D.S.Verma Executive Director, Indian Industries Association submitted that incentives should be extended to the consumers and Discoms Employees where T&D loss are less, lower the losses higher should be the incentive. It is further stated that till Discoms bring down the losses to less than 15%, strict actions may be taken against them and the Commission may not allow any hike in the tariff.
- 3.14.3 Shri Ashok kumar Aggarwal President, National Chamber of Industries & Commerce, U.P. submitted that there is zero line loss on industrial feeders and connections and the revenue realization is 110%. Stakeholder further submitted that this Honest and soft target is being unduly penalized in Tariff fixation because of line losses created by unmetered rural and politically supported consumers.
- 3.14.4 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that High Power Committee constituted by Hon'ble Supreme Court has



recommended time bound reduction in T&D losses to 12% by FY 2003-04 which was also accepted by the Energy Task force, constituted by GoUP. Stakeholder further submitted that as per affidavit the Licensee must have saved approx Rs. 27000 Crore by now. Stakeholder requested the Commission to provide benefit of this to consumers.

- 3.14.5 Shri B.K. Gujrati Submitted that power companies should upload line losses of feeders on the website and also supply plan for the month of each feeder per day in hours as it will increase transparency in the system.
- 3.14.6 Shri Niraj Khandelwal, B.L. Agro Oils Limited submitted that the cost of construction of substation increases with voltage of supply, and at the same time Discoms do not invest any amount to construct such substations. Further, at higher voltage services T&D losses becomes zero as consumer gets supply directly from 220 kV substations. Hence, the consumers who are having services of higher voltage are generally zero arrear consumers. This results in lesser AT&C losses to the Discoms. Stakeholder further requested the Commission to maintain the ratio of rates for HV-2 category for different type of voltage supply as it was in 2008-09.
- 3.14.7 Shri Rama Shanker Awasthi submitted that there is no progress in reduction of line loss from FY 2011-12 to FY 2015-16. The State Discoms are reluctant in reducing the distribution loss, therefore, stringent action must be taken against the State Discoms. Stakeholder further submitted that even if the Discoms failed to achieve the target, the Commission should disallow line loss.
- 3.14.8 Miss Romi, Global Care Organization submitted that the Commission should do prudence check of power theft issue in the State and should penalize the Licensees for such losses.
- 3.14.9 Shri Vimal Kumar Kemani, TRAP submitted that due to corruption, power theft is going on large scale in the State and strong steps should be taken to reduce the inefficiency and corruption.
- 3.14.10 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that there is loss of approx. Rs 7000 to Rs 8000 Crore due to power theft every year. It can be seen there is 26.84% line losses in the 11 kV feeder of Chirauri, Ghaziabad and 38.12 % line losses registered for Rohana mill feeder, Saharanpur. The drive to control power theft seems ineffective. Stakeholder further requested the Commission that the loss due to power theft should not be passed on to the consumers.



3.14.11 Shri Sandeep Ranjan Gupta submitted that the overhead lines should be underground to reduce the power theft.

# B) Petitioner's Response

- 3.14.12 The Licensee submitted that it has planned and proposed a gradual reduction in distribution losses up to FY 2021-22 in line with the directives of the Ministry of Power, Govt. of India.
- 3.14.13 All efforts are being made to reduce the losses as the same is beneficial to the utility as well. Tariff revision exercise is done on the basis of normative loss level. It may be noted that when losses are assumed on lower side then tariff will automatically be lesser. Hence, loss level projection is not against the interest of the consumers.
- 3.14.14 The Licensee submitted that the Commission has already issued directions to the Licensees to initiate base line loss estimation studies for assessment of technical and commercial losses. The Licensee would be appointing consulting firms for undertaking the said studies.
- 3.14.15 The Licensee submitted that various steps are being taken to curb theft which is widely prevalent across the State. Some of the steps are listed below:
  - For proper accounting of energy & reducing chances of theft, double metering system is being implemented which is yielding encouraging results.
  - For speedy redressal of consumer grievances, call centre has been established and Control rooms have been set up.
  - In all theft prone areas overhead conductor are being replaced with ABC (Aerial Bunched Conductor). This has helped in the reduction of line losses and breakdowns and has resulted in better quality of supply & consumer satisfaction.
  - Provision of periodic checking of all static and trivector meters installed in high value consumers premises.
  - Special drive to check the cases of theft/unauthorized use of electricity/checking of excess load being carried out in different distribution divisions by officers of the licensees.
- 3.14.16 Special team of departmental engineers and Vigilance teams comprising of licensee's officers and Police personnel's have been formed in each circle. With these teams surprise raids are conducted to direct theft of energy/Katiya connections.



# C) The Commission's view:

3.14.17 The Commission recognizes the fact that the Licensees have been taking measures to reduce T&D losses by implementing schemes such as laying Aerial Bunch Conductors (ABC), APDRP, R-APDRP, etc., but these efforts are yet to yield satisfactory results. On the aspect of T&D losses, the Licensees should undertake necessary strengthening and R&M of the distribution networks to reduce losses which would result in higher availability of power for sale to consumers.

In this regard, the Commission had directed the Licensee to conduct the base line loss estimation studies for assessment of technical and commercial losses. As discussed in subsequent chapters of this Order the Licensees submitted that M/s PFC Consulting Ltd. was appointed to conduct the required study and it has submitted a draft approach paper which is in discussion stage. The Licensee submitted that once the approach paper is finalized, it would submit the same to the Commission. The Commission stresses that the Distribution Licensees may act speedily upon the directives and report the status on a regular monthly basis to the Commission as losses play a very crucial role in the entire process. Further, the Commission for the purpose of truing up of ARR for FY 2013-14 and while approving the ARR for FY 2016-17 has judiciously approved the distribution loss as discussed subsequently in the Order.

#### 3.15 PRE-PAID METERING

- 3.15.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that as per provision in Electricity Act 2003, consumers opting for prepaid meters are not required to pay security deposit. The progress of installation of prepaid meter is far below the desired level. The proposed discount of 1.25% may be increased to 2% considering the OTS launched every year with waiver of 50% to 100% surcharge.
- 3.15.2 Shri Gyan Chandra Varshney, Aligarh Udyog Vyapar Pratinidhi Mandal submitted that the Licensees are asking for heavy amount for changing meter to smart meters. Stakeholder further requested the Commission to reduce the cost of prepaid meter so that the consumers will attracted to opt for smart meter.



- 3.15.3 Shri Vivek Bansal, Ex MLA Indian National Congress and Members of Jila Congress Committee submitted that the cost of prepaid meter is around Rs. 6500 to Rs. 7100 whereas cost of normal meter is only Rs. 930; there should be provision of instalment of payment for prepaid connection. Prepaid connection should not be forcefully imposed to consumers as it should be the choice. Further, prepaid metering may be started with commercial category consumers.
- 3.15.4 Associate Chambers of Commerce & Industries of U. P requested to the Commission to take steps on urgent basis to make the availability of pre-paid meters above 45 kW on priority basis.

### B) Petitioner's Response

- 3.15.5 The Licensee does not agree to the proposal of enhancing the discount. However, no security deposit is applicable in case a connection is taken with prepaid meter.
- 3.15.6 Prepaid meters are being procured and will be installed at consumers' premises. A Petition for tariff structure is being filed before the Commission. The details' regarding the procurement and installation of prepaid meters is being regularly informed to the Commission.
- 3.15.7 Prepaid meters are being installed as an option. They are not forced upon the consumers. However, in case of Juggi Jhopri, and Patri shops, provision has been made for making the payment towards cost of pre paid meters in instalments.

## C) The Commission's view:

3.15.8 The Commission in its earlier Orders has repeatedly directed the Distribution Licensees regarding expedition of process of introduction of Pre-paid meters. Further, details regarding provisions under prepaid metering is being detailed in the Tariff Philosophy and Rate Schedule chapters of this Order.

#### 3.16 TARIFF LMV-1 & LMV-5 CATEGORY

# A) Comments/Suggestions of the Public

3.16.1 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that no fixed charges shall be levied on BPL and other domestic



consumers until and unless 24X7 electricity supply is provided. It is further submitted that Tariff for BPL consumers be reduced at least by 10%. Tariff for rural unmetered consumers should be reduced to Rs. 150 per connection per month. Further, the stakeholder submitted that tariff for drought effected Bundelkhand area must be reduced to zero at least for FY 2016-17 and up to 25% to 50% reduction of electricity tariff should be allowed in other drought affected areas.

3.16.2 Shri Rama Shanker Awasthi submitted that the Commission may approve full cost tariff for Rural Domestic and Agriculture consumers. It is further submitted that subsidy provided by GoUP may directly pass on to consumers as Section 65 of the EA, 2003.

# B) Petitioner's Response

- 3.16.3 The Licensee submitted that no tariff hike has been proposed for rural domestic and agriculture consumers. The Licensee in the current petition has endeavoured to rationalise the tariff for various consumer categories.
- 3.16.4 The Licensee submitted that the hours of supply is normally as per schedule, however, sometimes it may be less than that of schedule hours due to emergency rostering mandated by the grid which is beyond the control of the Licensee.
- 3.16.5 Further, no tariff revision has been proposed for lifeline consumers. The proposal of the stakeholder to provide discount of 10% to lifeline consumers is not feasible as there is no subsidy support from the Government on this account and would lead to further widening of the revenue gap.
- 3.16.6 Similarly, no tariff revision has been proposed for rural domestic. The proposal of the stakeholders to provide discount to rural domestic consumers is not feasible as there is no matching subsidy support from the Government on this account and would lead to further widening of the revenue gap.
- 3.16.7 The Licensee submitted that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Commission. The tariff is being proposed to recover the gap between the Annual Revenue Requirement and the revenue at current tariff and taking into account the cost of service, subsidy levels, power procurement costs, etc.

#### C) The Commission's view:



3.16.8 The Tariff for various categories of consumers is being determined by the Commission in accordance with the principles enshrined in the Distribution Tariff Regulations and Tariff Policy. The Commission while approving the Tariff for the State has also made appropriate comparison with the various other States. Further, the detailed approach as considered by the Commission for approving the Tariff for various categories has been discussed subsequently in the tariff Philosophy chapter in this Order.

#### 3.17 METERING AND BILLING FOR LMV-10 CATEGORY

- 3.17.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that time frame has to be decided by the Commission for the installation of 100% meters on departmental employees, which shall enable to put complete check on wasteful use of electricity and actual figures of energy consumption. Further, till these connections are not metered, such un-metered connections be billed on the different rates by creating new category for such consumers.
- 3.17.2 Vidyut Karamchari Sanyukt Sagharsh Samiti, Supervising Engineer Noida (Gautam budh nagar and others), Uttar Rajya Vidut Parishad Abhiyanta Sangh and Vidyut Pensioners welfare Association and other stakeholders submitted that category LMV-10 should be continue as before and not to be abolished as it is the negligence of section 21 of Indian Constitution. It is further submitted that facilities/benefit provided to employees and pensioners is as per Section 23(7) of Electricity reform Act 1999, Section 133(2) of Electricity Act 2003, Section 3 (4) of UP Reform transfer Scheme etc.
- 3.17.3 Uttar Pradesh Rajya Vidyut Parisad Chaturth Shreni Karamchari sangh submitted that meter should not be installed in the premises of departmental Employees & pensioners and metering & billing should continue as before.
- 3.17.4 Shri Ashok kumar Goyal President, National Chamber of Industries & Commerce U.P submitted that free / concessional supply to pensioners should be borne by the State Govt. through a budgetary support and not through increase in tariff of industrial consumers.
- 3.17.5 Shri Vikram Singh, Vidhyut Pensioner Parisad submitted that the tariff of LMV-10 should not be increased and it is against the Orders of Govt. providing benefit to the



employees. Stakeholder further submitted that same tariff for existing employees and retired employees are unlawful.

### B) Petitioner's Response

3.17.6 In light of Section 23 (7) of Electricity Reforms Act, 1999, the licensee submitted their tariff proposals for metered as well as unmetered category, in the best interest of utility. The commitments of 'UDAI' agreement has also been taken into account while proposing the Tariff.

# C) The Commission's view:

3.17.7 The Commission has taken note of the above objections / suggestions made by the stakeholders in this regards and has dealt with this issued while designing the Tariff as detailed in Rate Schedule provided subsequently in this Order.

#### 3.18 COMPLAINCE OF DIRECTIVES

- 3.18.1 Shri K.L. Aggarwal, Chairman Associate Chambers of Commerce & Industries of U. P submitted that Licensees have not followed the "Suo Moto Proceedings in matter of Regulatory Surcharge" dated 18-04-2016 and OTS Order. Licensees must follow the clause 139 of the UPERC (Conduct of Business) Regulation 2004 and its amendments from time to time.
- 3.18.2 Shri D.S. Verma Executive Director, Indian Industries Association submitted that the Commission for the past 16 years has been passing the Orders on Un-metered supply of power and it appears that the Licensees are not listening to the repeated directives of the Commission. As this situation in power starved and loss incurring Discoms is not corrected since long years, it is requested to the Commission to take a strict action and not to allow supply of unmetered electrical supply to any category of consumers.
- 3.18.3 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that Discoms are filing their ARR petition every year without following the direction issued by the Commission and tariff is increasing year by year, which is not



- justified. The commission should keep watch for compliance of direction by the Discoms in their proceedings.
- 3.18.4 Shri Akarsh Garg, Advocate for Indian Industries Association, submitted that the Commission in its earlier Orders had directed the Discoms to take several actions, which would improve the working; however, no tangible action seems to have taken in the matter so far. Repetition of the same answers year after year shows lack of willingness of Discoms to comply with such directions and wilful default on their part and hence, it is requested to the Commission to take the matter in its own hands and outsourced the tasks to a competent external authority.
- 3.18.5 Shri Rama Shanker Awasthi submitted that the Licensees should pay interest on amounts on account of bill adjustments etc. Provisions are already there in the EA 2003 and relevant Tariff Regulations. It is further submitted that the Commission may direct the State Discoms to strictly follow the said provisions.

# B) Petitioner's Response

- 3.18.6 The Licensee submitted that Order dated June 6, 2014 issued by the Commission regarding regulatory surcharge for FY 2014-15 was a legal interim order and was applicable since the date of issue. Further, it is submitted that publication of any clarification is done in case the Commission specifically directs to do so. As such, the said clarification on the regulatory surcharge was not published. However the same was published on the web-site of UPPCL for information to all the stake holders.
- 3.18.7 The Commission has embarked upon the glorious intention of 100% metering in the state of UP. In view of same, a target of 100% metering of urban consumers up to December 2015 was set by the Commission. The representatives of Discoms had assured the Commission of achieving the target to the satisfaction of the Commission.
- 3.18.8 Thus, it is demonstrated that the Discom is committed to achieve 100% metering and are strictly following the instructions of the Commission.

# C) The Commission's view:

3.18.9 As regards to compliance of directives issued by the Commission in its previous Orders the Commission has taken note of the objections / suggestions raised by the stakeholders and the replies submitted by the Licensees on the same. The detailed



directives as given in earlier Orders and its status of compliance submitted by the Licensees and new directives issued by the Commission have been discussed subsequently in this Order.

#### 3.19 MINIMUM CONSUMPTION CHARGES AND FIXED CHARGES

- 3.19.1 Shri Amar Singh, President Consumer protection Society submitted that the actual historical data of category wise revenue received including the fixed charges and minimum charges during the past years is not in ARR. Stakeholder further submitted that fixed charges and minimum charges are unlawful in view of shortage of supply than the demand and must be withdrawn.
- 3.19.2 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P submitted that after charging system loading charge there is no justification to charge fixed charge and minimum charge.
- 3.19.3 Shri G.C. Chaturvedi, Indian Industries Association and Lokesh Kumar Aggarwal, UP Udhyog Vyapar Patnidhi Mandal submitted that minimum charges proposed for LMV-2 category should be removed, since due to minimum charges small shopkeepers whose monthly consumption is of the range 20-50 units per month are forced to pay Rs. 25 to Rs. 35 per unit due to electricity duty, regulatory surcharge, fixed charge and minimum charge.
- 3.19.4 Shri D.S. Verma Executive Director, Indian Industries Association submitted that method for charging demand charges for HV-2 category may be implemented for LMV-6 category.
- 3.19.5 Director, The Mahabir Jute Mills Ltd. Submitted, the commercial users require maximum power in the evening time, but in most of the area power is not given during evening/ night hours. So, it is not justified to charge fixed charges to them.
- 3.19.6 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that minimum charge may be waived off in case when supply of the consumer is disconnected for non-payment of the energy bill.
- 3.19.7 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P and Miss Romi, Global Care Organization submitted that proposed slabs of fixed charges is not justified as the same are not allowed by the Commission.



- 3.19.8 Shri P.N Singh, Nagrik Adhikar Manch, Uttar Pradesh submitted that charging fixed charge along with service charge is not justified. Further, the stakeholder requested the Commission to abolish fixed charges for domestic as well as small Industries.
- 3.19.9 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that a rural commercial consumer is not supplied electricity during night hours, in some of district electricity supply is for few hours under such circumstances levy of minimum charges is totally unjustified and same should be abolished.
- 3.19.10 Shri Chandra Shekhar Sharma Chairman, Aligarh Tala nagri Audyogik Association submitted that in Kerala industries are having lowest tariff but in UP it is highest. Stakeholder further submitted that for seasonal industry charging same minimum charge for whole complete year is not justified. Stakeholder also submitted that to promote industries in the state some steps may be taken like charging only energy charges, allowing industries to disconnect any time, and removal of demand penalty up to 25 kW.
- 3.19.11 Shri Sandeep Ranjan Gupta submitted that in cases where demand exceeds to Contracted load for continuous 6 month, contracted load automatic should increased, and additional security may be added in electricity bill of consumer. This will increase the revenue of the Licensees.
- 3.19.12 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Shri Ashok Kumar Goyal, President of National Chamber of Industries & Commerce submitted that the concept of fixed charges is wrong hence it should be removed.
- 3.19.13 Shri Rama Shanker Awasthi and Miss Romi, Global Care Organization submitted that the Commission should abolish the Minimum Consumption Charges levied on urban LMV-2 consumers as it is against the principle on conservation of Energy and principal of Economics.
- 3.19.14 Shri Tilok Singh submitted that fixed charge, surcharge and demand charge should be abolished.

# B) Petitioner's Response

3.19.15 The Licensee submitted that fixed charges / minimum charges are part of tariff and are levied for developing the required infrastructure and to meet the expenses incurred to maintain the supply at all the times. These charges cannot be withdrawn, as they are levied as per provisions of Electricity Act, 2003. The Licensee submitted



that the minimum charges have been designed to ensure minimum recovery from the consumers considering that they get electricity for about 3-4 hours only during the day. The Licensees added that at the minimum of 8-10 hours of electricity supply, is being given to rural consumers and all other categories of consumers are getting supply for more than the above mentioned duration and this is despite of vast demand-supply gap. Industries are given top priority and scheduled for getting maximum supply but sometimes system condition and availability of power effects the schedule adversely.

3.19.16 In respect to minimum charges for commercial categories, the Licensee clarifies that the minimum consumption guarantee is required where a consumer has to pay every month a certain bill amount which is levied to recover the fixed expenses since the Licensee has to incur some expenditure to keep supply always ready for the consumer to the extent of their contracted demand. The Licensee further adds that in the Tariff Order for FY 2002-03, the Commission has defined the said charges as below:-

"Fixed / Demand Charge is meant to defray the capital related and other fixed costs while Energy Charges is meant to meet the running expenses i.e. fuel cost / variable portion of power purchase cost, etc. A Licensee requires machinery, plant equipment, sub-stations, and transmission lines, etc., all of which need a large capital outlay. For this purpose it has to raise funds by obtaining loans. The loans have to be repaid with interest. In the total cost, provision is also to be made for depreciation on machinery, equipment and buildings, plants, machines, sub-stations and lines that have to be maintained. All these activities require large staff and their related cost. These costs are largely fixed in nature and are levied as a part of tariff to recover such costs."

It has been further mentioned in the said order that:

"the minimum charges are recovered as Licensee keeps in readiness of energy for the consumer to the extent of contracted demand. If the consumer does not avail of it, energy cannot be stored or preserve. The consumer is therefore, required to pay a fixed sum for energy generation/purchase, even if he does not consume electricity at the contractual level. The levy of minimum charges has been upheld legally, and is being used in several states to enable the utility to recover a part of fixed cost. The difference between levy of fixed charges and minimum charges is that while fixed charges are charged from consumer irrespective of consumption the minimum charges comes into effect only when



the bill amount is less than certain prescribed amount. If the minimum charges are not levied than there will be increase in some other charges as the utility has to recover on its prudently incurred cost from consumer."

Therefore these charges are logical and necessary. It is submitted that fixed costs constitute around 40% of the total expenses of the distribution licensees. However, the revenue assessment from fixed charges is less than the 40% of the total expenses of the distribution licensees.

### C) The Commission's view:

The Commission has taken note of the objections / suggestions made by the Stakeholders in this regard. The Commission has taken note of the objections / suggestions made by the stakeholders in this regard. Further, the Licensees in its submission have provided the justification towards the rationale for imposition of such charges. The Commission has considered the same and the details of all the aspects have been covered subsequently in Chapter Tariff Philosophy and Rate Schedule provided in this Order.

#### 3.20 RECOVERY OF OUTSTANDING DUES

# A) Comments/Suggestions of the Public

- 3.20.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that sincere efforts to be made for recovery of outstanding dues and passing on the burden to honest consumer may be avoided.
- 3.20.2 Shri Rama Shanker Awasthi submitted that the State Discoms have very poor collection efficiency thereby always having a cash flow problem and it directly affects the consumer services and maintenance part. It is further submitted that the State Discoms must improve their collection efficiency.

#### B) Petitioner's Response

3.20.3 The Licensee submitted that arrear in the books of accounts include a huge amount against the consumers whose permanent disconnection are pending for final settlement. Further, in the past, One Time Settlement schemes were launched, wherein old arrears were settled; but in some cases the arrears are still shown in



commercial records. Further true-up petitions up to FY 2013-14 have already been filed on the basis of audited accounts, so every concern of the consumers would be taken care of in yearly calculations which will depict the correct picture of the revenue and expenditure. The Tariff and True-up petitions have been filed in accordance with the Tariff Regulations. The burden of arrears and the recovery thereof, if any, would have no impact of the allowable True-up and ARR of any year.

- 3.20.4 Further, the ARR / Tariff would be determined by the Commission based on audited accounts of (n-2th) year which reflect true and fair view of the financial transaction. Further this exercise will be carried on yearly basis which will take care of the concern of the stakeholders.
- 3.20.5 The tariff of the Licensees is determined on accrual basis. The past dues cannot be treated as income of the Distribution Licensees. Thus, it will have no effect on determination of tariff. The electricity charges are recognised as income once the bills are raised on accrual basis. Hence, they cannot be recognised as income source when arrears are collected. The Commission fixes the tariff on accrual basis and not on the cash basis.
- 3.20.6 Treating the realization of arrears as income would amount to double counting of income. Therefore, it cannot be treated as income again on realization. This issue has been fairly established by the Hon'ble APTEL in its judgment in Appeal No. 15 of 2012 and Appeal No. 152 of 2011.

#### C) The Commission's view:

3.20.7 The Commission has ensured that Truing-up and Tariff determination has been done in accordance with the philosophies and principles laid in the Distribution Tariff Regulations, 2006 and the past Orders of the Commission. In the True up Sections of this Order the Commission has also conducted revenue side Truing up and the Commission has considered the revenue billed on accrual basis and not the revenue collected on cash basis, which has ensured that the burden of poor collection efficiency and consequent larger arrears is not passed on to the consumers.

# 3.21 REBATE ON PAYMENT/ OTHER REBATES



- 3.21.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P, Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad and North Central Railway submitted that as per FY 2015-16 Tariff Order the consumers paying bill timely get rebate of 0.25% which should be increased to 2%. Since every year OTS scheme is launched for defaulters in which 50% to 100% surcharge waiver is allowed. Because of this scheme, the consumer who pays their bills on time feels betrayed. They further requested the Commission to increase the rebate for timely payment to 2%.
- 3.21.2 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that honest consumer shall get rebate of 5% in their electricity bills if the variance between pole meter and meter installed at consumer premises is within 2%.

#### B) Petitioner's Response

3.21.3 The Licensee submitted that the rebate on payment on or before due date is given as per the Commission's Tariff Order for FY 2015-16. Further, Licensee has proposed same rebate in its tariff proposal for FY 2016-17. It is submitted that tariff proposal has been proposed keeping in view the interest of Licensee as well as consumers. Further reduction / rebate is not desirable as it will adversely affect the financial position of the licensee. The genuine costs incurred by the licensee should be allowed to be recovered in a reasonable manner as per the terms of the UPERC Tariff Regulations, 2006 and the Electricity Act, 2003.

# C) The Commission's view:

3.21.4 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The applicable Tariffs for all the consumer categories have been designed in accordance with the Electricity Act, 2003 and the Tariff Policy. The details of all the aspects related to Tariff design have been covered subsequently in Chapter of Tariff Philosophy and Rate Schedule provided in this Order.

### 3.22 ELECTRICITY DUTY AND SECURITY DEPOSIT



- 3.22.1 The Mahabir Jute Mills Ltd. and Shri V.K. Seth, Noida Entrepreneurs Association submitted that bills are made 1st day after the end of the month and due date is 7 days, hence security deposit for 2 months is unreasonable. Due date may be extended up to 21 days.
- 3.22.2 Shri K. L. Aggarwal chairman Associate Chambers of Commerce, & Shri Sanjay Jaiswal Director, Ram Charan Steels Ltd. & Industries of U. P submitted thatfrom September 13, 2012 onwards, Electricity Duty (ED) was charged as 7.5% which comes approx 0.53 paiseper unit against the earlier one i.e. 0.09 paisa per unit. They further requested to continue the earlier rate of electricity duty i.e. 0.09 paise per unit instead of 7.5% on the amount on energy charges and fixed charges.
- 3.22.3 Shri Manoj Aggarwal Chairman Laghu Udyog Bharti Aligarh submitted that the consumers who are currently exempted from paying electricity duty but have paid electricity duty in the past should be liable to get refund of their paid electricity duty or same amount may be adjusted in their future electricity bills.
- 3.22.4 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that the Electricity Act was operative in 2003, as per provision the interest on security deposit was made payable at bank rate prevailing on 1st April of the ensuing year. UPPCL started paying interest at bank rate w.e.f 2007. The differential interest amount from 2003 to 2007 has to be refunded to the consumer.
- 3.22.5 Shri Ashok Kumar Goyal President, National Chamber of Industries & Commerce U.P. submitted that Licensees has not refunded excess money collected i.e. Regulatory Surcharge from April 2016 and balance amount of security from 2003 to 2007. Stakeholder further requested the Commission that excess amount should be paid with interest @ 15% i.e. the rate of late payment surcharge.

# B) Petitioner's Response

3.22.6 The Licensee submitted that the interest on consumer security deposit is being given to consumers as per the Orders of the Commission. The provisions related to security deposit and the interest payable on the same are amply clear and are dealt with in detail in the Distribution Tariff Regulations. Such provisions are being followed in letter and spirit by the Licensees.



- 3.22.7 However, in case any specific discrepancy is brought to the knowledge of the licensee, it is immediately rectified and consumer is credited with the interest on consumer security deposit.
- 3.22.8 The Licensee further submitted that electricity duty is payable to the State Government and its chargeability and rates are not governed by the Tariff Order.

### C) The Commission's view:

- 3.22.9 Matters related to electricity duty relate to GoUP and the stakeholders requiring any such clarifications may approach the GoUP along with their proposal.
- 3.22.10 The provisions related to security deposit and the interest payable on the same are amply clear and are dealt with in detail in the Distribution Tariff Regulations, 2006. It needs to be followed in the same spirit by both, the Licensee as well as the consumers.
- 3.22.11 The Commission in its earlier Orders has directed the Licensee on the above matter and it once again directs the Licensee to pay the applicable interest on security deposit as per the Orders of the Commission and submit the compliance report with the next ARR filing. Licensees are directed to ensure the timely payment of the interest on security deposit to the consumers.

#### 3.23 SUBSIDY FROM GoUP

### A) Comments/Suggestions of the Public

3.23.1 Shri Rama Shanker Awasthi submitted that the State Discoms must provide details of subsidy received from GoUP from FY 2007-08 onwards along with detailed computations. It is further submitted that in the absence of actual subsidy received by the State Discoms, filling of objection and conducting hearing is merely formality and purposeless.

#### B) Petitioner's Response

3.23.2 The Petitioner submitted that the item-wise subsidy has been duly submitted in the ARR Petition



# C) The Commission's view:

3.23.3 The Commission has taken note of the objections / suggestions made by the stakeholders in this regard and the details of GoUP subsidy considered are discussed in detail in subsequent sections of this Order.

### 3.24 PRICE AND QUANTUM OF POWER PURCHASE

- 3.24.1 Shri Amar Singh, President Consumer Protection Society submitted that the petition do not contain the actual data of supply of power received by UPPCL during past financial years. The energy said to have been received during FY 2014-15, FY 2015-16 from various plants does not represent the actual figures and the figures are overestimated and grossly differs from the generation records compiled from the daily progress report being send to CEA. Stakeholder further submitted that historical data of thermal power station wise actual energy received by UPPCL are incorrect. Stakeholder also submitted that the data of power received or planned mentioned in ARR petitions grossly differ.
- 3.24.2 Shri Amar Singh, President Consumer protection Society submitted that tariff for Anpara-C determined from the bidding under Section 63 is average Rs. 1.5866, he further submitted that the variable charges were subject to adjustment for price variation of coal at 4.5% cumulative escalation over the base price of Rs 1045/MT assumed in the Bid and accordingly the present variable charge should not exceed Rs 2.00/kWh and the total Tariff should be less than Rs. 2.80/kWh but the ARR takes the price of power received from Anpara-C as Rs. 4.35/kWh taking fixed and variable charges as Rs. 1.77/kWh and Rs. 2.58 / kWh, respectively, for FY 2016-17. Power purchase cost claimed is more than that of Tariff determined by the Commission for Bajaj Hindustan and Rosa power.
- 3.24.3 The Mahabir Jute Mills Ltd. submitted that in Licensee's ARR, power purchase cost is shown in Rs. / kWh while billing for some of categories are in Rs. / kVAh that is extra benefit to Licensees.
- 3.24.4 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that as per petition average power purchase cost is Rs. 3.97 per unit for FY 2016-17. Stakeholder further submitted that Licensee has not mentioned any explanation regarding purchase of costly power from Bajaj Hindustan and Rosa



Power at the rate of Rs. 6.82 per unit and Rs. 5.50 per unit, respectively. Stakeholder further requested to the Commission for prudence check of such high cost power purchase even in the scenario when power is available at cheaper price at exchanges. It is further submitted that Power should be purchase as per merit order basis hence intervention of the Commission is required for the same.

- 3.24.5 Shri Naveen Gupta Manager Rimjhim Ispat Ltd. and M/s Kanpur Fertilizer & Cement Limited submitted that cheaper power is available at power exchanges and may be procured in preference to costlier power contracted with private / state generating agencies.
- 3.24.6 Shri Ashok Kumar Goyal President, National Chamber of Industries & Commerce U.P. submitted that small consumers and cluster of Consumers should be allowed to make direct purchase of power from MCX for annual requirement and credit the same to Discoms account. The quantity of credit is adjusted from bills of consumers after deducting Transmission and handling charges.
- 3.24.7 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad submitted that because of increased production of domestic coal, reduction in imported coal and permission of swapping of coal from one plant to another plant, cost of generation of plants has been reduced. As per Petition the total power purchase quantum is 125627 MU and total power purchase cost is Rs. 49848 Crore. Stakeholder further submitted that due to above mentioned points the cost of power purchase should become low and as power purchase cost accounts 80% of ARR, the overall ARR will reduce. Stakeholder further requested the Commission to pass the benefit to consumers in the forthcoming Tariff.
- 3.24.8 Shri Rama Shanker Awasthi submitted that the State Discoms must provide the source-wise details of Power Purchase including fixed cost, variable cost, PLF and other charges for the previous five years and including for FY 2016-17. It is further submitted that after submission of aforesaid information, the objection can be filed and appropriate suggestion could be advanced.
- 3.24.9 Shri Rama Shanker Awasthi submitted that the State Discoms claim Average Power Purchase Cost (APPC) and Average Cost of supply (ACS) as Rs. 4.44 / unit and Rs. 6.71 /unit, respectively, it indicates that the Discoms have business expenses of Rs. 2.27 /unit which is 51% of APPC but after true up Discoms expense increased up to 75% of APPC It is further stated that business ethics and economics never allows business expenses more the 25%. It is requested to the Commission to consider



- aforesaid points before further approval and also examine the trueness of business expenses.
- 3.24.10 Rosa Power Company Limited submitted that power purchase cost of Anta, Auriya and Dadri Gas should be disallowed as state is having surplus power and procuring power from such expensive gas based generating station may not be prudent power purchase approach.
- 3.24.11 Rosa power Company Limited has submitted that the Commission may investigate regarding validity of PPAs of Anta, Auriya and Dadri gas, whether UPPCL has signed any Supplemental Agreement without approval of the Commission.
- 3.24.12 Rosa Power Company Limited submitted that irrespective of being expensive stations in the event of low demand these stations get higher dispatch than cheaper stations located in the State due to non-existence of technical minimum criteria in the state.
- 3.24.13 Rosa Power Company Limited submitted that merit order dispatch proposed by the licences in their petitions is completely arbitrary and has no relationship with the actual implementation. It s observed that every year licensees propose merit order dispatch based on their assumptions and the Commission approves the same after carrying out the due diligence of submissions made by the Licensees. However when it comes to actual implementation, UPPCL/UP SLDC does not take into cognizance of merit order dispatch approved by the Commission.
- 3.24.14 Rosa Power Company Limited submitted that UPPCL/ UPSLDC have considered actual variable charges of n-1 months for some generating stations and n-2 months for others. Further UPPCL/UPSLC does not consider fuel cost adjustment bill in the variable charge for drawing up the merit order.
- 3.24.15 Rosa Power Company Limited submitted that the Commission may appreciate the fact that load centre stations like Rosa TPP always being at disadvantageous position in merit order dispatch due to their high fuel transportation cost but at same time it contributes significant reduction in transmission loss. It is further submitted that the Commission may direct UPPCL/ UPSLDC to consider updated variable charge including transmission charges and losses for drawing up the merit order and to follow technical minimum criteria for backing down during low demand.
- 3.24.16 Rosa Power Company Limited submitted that UPPCL in its petition has proposed single part tariff for captive and co generative plants whereas the Commission vide



- its regulation Captive and Renewable Energy Generating Plants Regulations, 2014 has approved two part tariff for said plants.
- 3.24.17 Rosa Power Company Limited submitted that while applying the merit order UPSLDC considers Captive and co generative stations as MUST RUN despite UPECRC orders and regulations that these plants are subject to scheduling under ABT mechanism.
- 3.24.18 Rosa Power Company Limited submitted that it is learned that NTPC is not billing UPPCL strictly as per tariff norms approved by CERC in tariff regulation, 2014. Following discrepancies has been observed in the NTPC billing.
  - Cost of Secondary Oil is being considered in the fixed charges instead of variable charge as per CERC Tariff Regulations, 2014
  - NTPC is not providing certificate of GCV as received

It is further submitted that the Commission may direct UPPCL/UPSLDC to undertake strict scrutiny of NTPC billing of variable charge and ensure NTPC strictly follow CERC Tariff Regulation, 2014.

### B) Petitioner's Response

- 3.24.19 The Licensee submitted that most of the power purchase is being done under long term PPA from generators which have been duly approved by the Commission. The short term power purchase is being done under competitive bid route, after due approval of the Commission. The power from exchanges is being procured to ensure that the scheduled roster is maintained and the consumers are provided quality power.
- 3.24.20 With regard to the contentions raised by one of the stakeholders, the Licensee submitted that the power is purchased from different sources on the basis of merit order, which is dependent on the variable cost and the source having the lowest variable cost is given the preference while purchase of power.
- 3.24.21 Further, it is submitted that source wise power purchase data of last three years up to December 2015 has already been submitted for the kind perusal of the Commission.
- 3.24.22 The petitioner submitted that the benefits of increased production of coal by Coal India Ltd. might have reduced the price of coal, but the Railway freight charges and clean energy cess have also increased. However, such expenses are taken care of in truing up.



# C) The Commission's view:

3.24.23 As regards high power purchase cost, the Commission has taken the matter seriously the Commission vide letter no. UPERC / Secy / D(Tariff) / 16-301 dated May 26, 2016 directed the Licensees to furnish source wise actual power purchase and cost data for FY 2012-13, FY 2013-14,FY 2014-15, FY 2015-16 & FY 2016-17 (till December) and due diligence followed for allowing price variation to the generator on account of escalation in the cost of fuel to which the Petitioner has made partial submission Based on the submissions made by the Licensee the Commission has verified the assumptions considered by Licensee for projecting power purchase cost based on the latest Tariff Order of respective power plants. The methodology adopted by the Commission for projecting power purchase cost for FY 2016-17 is discussed ARR for 2016-17 section.

#### 3.25 TAJ TRAPEZIUM ZONE

# A) Comments/Suggestions of the Public

- 3.25.1 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P submitted that Agra being a sufferer on account of TTZ and should be charged with concessional rate of continuous supply considering colossal amount received as grant under Orders from Hon'ble Supreme court.
- 3.25.2 Dr. Dharampal Singh, Vidhayak, Bahujan Samajwadi party submitted that the farmers of TTZ was charged Rs. 160 per BHP for tubewell whereas farmers of other part of state was charged only Rs. 100 per BHP for tubewells and also the tariff of rural domestic consumers was fixed as Rs. 342 per kW in TTZ area whereas rural domestic consumers in rest of State was fixed as Rs. 223 per kW. He further submitted that as per Supreme Court order, the area must be supplied 24 hours supply or will be charged at the same tariff applicable for other consumers in the State.
- 3.25.3 Shri Sabir Hashami, Chairman Aam Janata Society submitted that as Firozabad is the part of Taj Trapezium zone, therefore 24 hours of supply should be provided in place of 10 to 12 hours of supply in a day.

#### B) Petitioner's Response



- 3.25.4 The Licensee submitted that the hours of supply is normally as per schedule, however, sometimes it may be less than that of schedule hours due to emergency rostering which is beyond the control of the Licensee.
- 3.25.5 The Licensee submitted that complaints of quality of supply, turnaround time for fault repair, etc. are not related to present tariff petition. However, it assures that these issues will be dealt by the concerned local officers of the Discoms.
- 3.25.6 Regarding reduction of Tubewell Charges in TTZ Area the licensee has submitted that the billing is being done in accordance with the tariff approved by the Commission. Further the Commission to mitigate the problem of consumers of the area has reduced the minimum charges from Rs. 220.00 per BHP per month to Rs. 160.00 per BHP per month vide its order dated 05.02.2015.

## C) The Commission's view:

3.25.7 The Commission has taken note of the above objections / suggestions made by the stakeholders in this regards and has appropriately designed the Tariff as detailed in Tariff philosophy and Rate Schedule provided subsequently in this Order.

# 3.26 METERING AND BILLING

- 3.26.1 Shri Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad and Shri Pratap Chandra Chairman Rastravadi Sangthan, submitted that in rural areas consumers should be billed as per rural tariff and in urban areas consumers should be billed as per urban tariff. They further requested the Commission to Order the Licensees to charge rural consumer on rural tariff in place of urban tariff and should return the excess money collected.
- 3.26.2 Shri Pawan Tiwari R.T.I. and Social worker submitted that urban tariff is charged for rural consumer. It is requested that either supply hours be increased as per urban schedule or billing shall continue as per rural schedule in rural areas.
- 3.26.3 Shri G.C. Khanna, Electrical Adviser & representative submitted that Discoms are releasing PTW connections without meter. Maximum PTW connections are running without meter so that Discoms can take advantage of regulatory surcharge by claiming loss. Hence, necessary action is required by the Commission in this regard.



- 3.26.4 Shri Sandeep Ranjan Gupta submitted that places where metering has been done, electricity at cheaper rate should be provided.
- 3.26.5 Shri Akash Garg, Advocate for Indian Industries Association, submitted that as per ARR petition all the consumers should be metered by December 2015, unmetered consumers are increasing the inefficiency. Stakeholder further submitted that supply of electricity to Un-metered consumers is contrary to Section 55 of Electricity.
- 3.26.6 Shri Mahesh Singh Hiruit submitted that the bill should be in Hindi and the bill contain many heads like electricity duty, PF penalty, MD penalty etc, consumer should be given detail of the money collected under each head.

# B) Petitioner's Response

- 3.26.7 The Petitioner has submitted that the billing of the consumers are being done as per the provisions approved by the Commission in its last Tariff Order.
- 3.26.8 The Commission has embarked upon the glorious intention of 100% metering in the State of UP. In view of the same, a target of 100% metering of urban consumers up to December 2015 was set by the Commission. The representatives of Discoms had assured the Commission of achieving the target to the satisfaction of the Commission.
- 3.26.9 Licensee is committed to achieve 100% metering and are strictly following the instructions of the Commission.
- 3.26.10 The Licensee has undertaken a slew of E-governance initiatives which are aimed at higher revenue realization, better consumer satisfaction and maintaining the highest standard of professionalism and ethics in the organization.

The key initiatives have been discussed below:

# **BILL PAYMENT OPTIONS**

The Licensee has introduced several new payment options for consumers. These include:

#### **ONLINE BILL PAYMENT**

Consumers can log on to the company website to pay electricity bills to pay electricity bills through a payment gateway or net banking.



#### **PAYMENT THROUGH MOBILE PHONES**

Customers can pay, accept and transfer money through mobiles handsets and all the DISCOM's PCs/Mobiles/landlines act as a point-of-sale terminals. There are various options to pay through phones.

### **CALLING ON THE HELPLINE NUMBER (THROUGH IVRS)**

Through this system, customers can call on the numbers provided for bill payment. The call will land on the interactive voice response system (IVRS) which captures the consumer number and card information, and connects to Discom's bank payment gateway for processing the transaction. On successful payment authorization, the IVRS updates the payments details on the master server.

#### **DIRECT MOBILE BASED PAYMENT SERVICES**

Through this system, customers log on to the vender's mobile application for bill payments after downloading it. The mobile application captures the consumer's number and card information of the customer, and connects to Discom's bank payment gateway for processing the transaction. On successful payment authorization, the mobile system updates the payment details on the master system.

### **SMS-BASED PAYMENT SOLUTION**

Under this system, customers initiate the payment request through SMS. The server sends a message to the customer on the registered mobile number as the payment confirmation receipt for every successful transaction. The system also sends SMS alerts to customers for the due date for bill payment to avoid uninterrupted services as well as for payment confirmation.

#### **PAY FROM HOME**

Consumers can make cheque payments through the billing agency-the meter reader, who generates bills for consumers through hand held machines at their doorstep. A hand-held-generated receipt is provided to consumers. Besides the aforementioned methods of revenue realization, increasing the customer base by providing easy access to new connections is important. The launch of single-window services is an initiative towards this end.



#### **CONSUMER INTERFACE**

The basic concern of the consumers of any power distribution company is uninterrupted supply. The electricity demand-supply gap being critical issue in India, most of the utilities fail to ensure uninterrupted supply. This causes consumer dissatisfaction and lack of trust for the concerned officials. The unavailability of correct information related to the cause and expected time of interruption adds to customer concerns resulting from local faults, which take hours to be restored. Moreover, at times, related queries are not adequately addressed by substation staff, which results in law and order issues.

To address these issues, Discoms have launched an initiative, Urja Mitra, which seeks to:

- Provide information about power rostering / cuts / breakdowns / shutdowns to consumers on their landline / mobile phones
- Establish mutual trust between citizens and distribution officials

Any scheduled / unscheduled rostering/breakdown is reported to the central control room. The call centre operator selects the specific substation or the 33kV/11kV feeder in the case of breakdowns and the entire area for rostering. Consumers of the concerned area are automatically selected by the software and as soon as a command is given, SMS alerts and voice calls are sent to them.

Therefore, the message provides specific breakdown information to the concerned customer along with the expected time of power supply restoration. These SMS alerts are sent on 24x7 bases to all affected consumers, while voice calls are sent only during the day.

Efforts are being made to cover the remaining customers through billing agencies/division offices. They can also log on to the Discom web site and register their phone numbers for availing of these services. There has been a positive response to the initiative. Customers are enrolling themselves to access information via Urja Mitra and there has been a reduction in general complaints about the behavior of division/substation officials during power interruptions as well as law and order issues.



#### **DEDICATED 24X7 CALL CENTRE**

A centralized call centre has been launched to improve customer services, increase staff efficiency and provide a single-window clearance mechanism for all customer complaints. The call centre is designed to address consumer complaints regarding power outages, wrong billing, payments, metering, etc.

The redressal time frame for different complaints categories range from four hours to 15 days, and unaddressed complaints are forwarded to every subsequent higher officials till being addressed. The software also generates MIS reports of the lodged and solved complaints as well as officer-wise defaulter lists, which are monitored at the highest level. This system is also integrated with SMS facilities for consumers/officers at the time of registration as well as redressal.

3.26.11 The Billing is done as per the extant provisions in the rate schedule which is also linked with the hours of supply.

#### C) The Commission's view:

3.26.12 The Commission has taken note of the objections / suggestions made by the objectors. It is grave concern to achieve 100% metering, various initiative is being taken in this regard. The Commission vide its Order dated December 21, 2015 directed to the Licensees that to put all out efforts to get the rural consumers metered as in respect of urban metering which has reached almost 100% level now and show substantial progress by June 30, 2016.

### 3.27 OPEN ACCESS

- 3.27.1 The Mahabir Jute Mills Ltd. submitted that to promote the open access wheeling loss data must be brought before the Commission.
- 3.27.2 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that separate note from each of the Discoms be asked for, on the performance report on Open Access policy and the same be the part of Tariff proceedings.



3.27.3 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that the process of adopting power through Open Access is very cumbersome. There is a need of favourable wheeling charges and improvement in distribution network.

# B) Petitioner's Response

3.27.4 The Licensee is committed to comply with the provisions of the Electricity Act, 2003 and the regulations framed by the Commission. Open access is being provided as per the extant guidelines and policies framed by the Commission.

# C) The Commission's view:

3.27.5 The Commission has taken note of the above objections / suggestions made by the stakeholders in this regards. The details of the charges applicable to Open Access consumers along with the wheeling losses approved by the Commission have been discussed in subsequent Chapter titled Open Access Charges.

#### 3.28 AUDIT OF ACCOUNTS

## A) Comments/Suggestions of the Public

3.28.1 Shri Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad submitted that ARR / Tariff proposals should be proposed by the Licensees based on the audited accounts and timely filing of ARR which must be done along with the submission of CAG Audit Report. Any delay on account of timely filing must be penalized and benefits must be passed on to the consumers.

#### B) Petitioner's Response

3.28.2 The Licensee submitted that it has already submitted the audited balance sheets along with supplementary audit reports of the Accountant General of Uttar Pradesh (AGUP) for the period up to FY 2013-14. Such audited accounts and AGUP reports has already been published on the website of the Licensee.

#### C) The Commission's view:



3.28.3 The Licensees have submitted the audited accounts for FY 2013-14 and provisional accounts for FY 2014-15. The CAG report for FY 2013-14 has also been submitted by the Licensees. The Petitions of the Licensees were admitted only after the receipt of the above documents.

#### 3.29 CROSS SUBSIDY SURCHARGE

# A) Comments/Suggestions of the Public

- 3.29.1 M/s Ambika Steel, M/s Kanpur Fertilizer & Cement Limited and Shri Naveen Gupta, Manager Rimjhim Ispat Ltd. submitted that in cross subsidy formula "L" is the system loss for applicable voltage level, expressed in percentage. Supply between 11 kV and 132 kV is affected through distribution system, therefore, transmission losses and distribution losses needs to be identified between 11 kV and 132 kV and considered towards system losses for determination of cross subsidy surcharge.
- 3.29.2 Shri P.K. Maskara, The Mahabir Jute Mills Ltd. requested for the clarification of Order on Petition No. 995/2014 dated November 3, 2015 in the matter of cross subsidy surcharge in Open Access.

# B) Petitioner's Response

- 3.29.3 Regarding clarification on Petition No. 995/2014 dated November 3, 2015 the licensee has submitted that the subject matter of the query of the stakeholder pertains to only FY 2015-16 and hence, is out of the scope of the instant tariff petition which is for FY 2016-17.
- 3.29.4 The cross subsidy is within the threshold limits prescribed under the Tariff Policy. The tariff has been proposed in line with the Tariff Regulations framed by the Commission, the National Tariff Policy, 2006 and the Electricity Act, 2003.
- 3.29.5 The system losses have been considered as per the consistent practice of the Commission in the past Tariff Orders issued by it.

#### C) The Commission's view:

3.29.6 As regards the cross subsidy surcharge the Commission has noted the suggestions made by the stakeholders and has accordingly discussed the issue in detail in subsequent chapter titled Open Access Charges.



#### 3.30 TARIFF FOR TELECOM TOWERS

### A) Comments/Suggestions of the Public

- 3.30.1 Shri Rajesh Singh, Energy Manager of Indus Towers Ltd., filed his objections on following point
  - Rationalization of Tariff for telecom towers in the state: Telecoms towers with stable energy consumption of 24 hours a day allow the utilities to schedule demand in advance and hence, need to buy expensive short term power significantly reduced; this in turn leads to reduced cost of supply for the said consumers. They quoted APTEL decisions (MERC vs. Mumbai Airport and Tata steel vs. OERC) for tariff rationalization be taken as guiding factors in tariff determination process, therefore tariff for the commercial category has to be reduced.
  - Inclusion of Telecom Towers in the redesigned ToD Tariff scheme in the State: As
    TOD scheme is already available for commercial consumers of power like
    Floriculture /mushroom farming with similar load characteristics; hence, TOD
    tariff is made applicable for telecom towers too. The Commission may also
    consider it optional for certain willing consumer.
  - Implementation of consolidated Billing & Roll out of AMR: The Commission may provide directions to the Discoms for supporting proposal of installation of smart meters and roll out consolidated billing for large consumers with multiple connections. Such a measure would drive the efficiency of the Discoms by way of saving in meter reading and billing cost while also ensuring accuracy. For consumers such as Indus Towers operating telecom towers, each of which is billed separately, implementation of consolidated billing and AMR would be greatly beneficial.

## B) Petitioner's Response

- 3.30.2 The Licensee clarified that the activity of consumers under this category is commercial in nature and so the category and tariff proposed for this category is justified and hence request of the stakeholder need not be considered.
- 3.30.3 The Licensee submitted that it has endeavoured to keep the rate schedule as simple as possible. However different categories have been created to discriminate among consumers considering their 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 supply is required. As the telecom companies pass the incidence of their cost on to their consumers in terms of hike in the charges of their services; any move to re-categorise the consumer category which has impact on tariff of such consumers would hurt the Licensees who are already reeling under severe financial crisis.

# C) The Commission's view:

3.30.4 The Commission does not agree with the contentions of the stakeholder to provide special relaxation to the telecom towers based on the kind of services provided by them. The Commission understands that the telecom companies are allowed to pass over the burden of legitimate costs through increase in tariffs to consumers. The Commission does not agree with the proposal to create a separate category for mobile tower in this Tariff Order as this would be a backward step towards tariff rationalisation.

#### 3.31 TARIFF STRUCTURE

- 3.31.1 Shri Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad submitted that the tariff should be determined on the basis of end use of electricity. The agriculture consumers use electricity for yielding their fields and cannot pass the increase in tariff through grains as the price of grains was fixed by Govt., while in case of commercial and industrial consumers they pass the increase in tariff by increasing the cost of their product and services. Stakeholder further requested the Commission for considering these facts before any increase in the tariff of agriculture and domestic consumer.
- 3.31.2 Shri G.C. Chaturvedi, Indian Industries Association submitted that logic adopted for kVAh billing for HV-3 category should be adopted for LMV-6 & HV-2 categories. More no. of slabs makes rate schedule more complicated, it is proposed that for higher consumption lower rate of energy charges to be made applicable and 100% metering has to be done for LMV-10 category.
- 3.31.3 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P. submitted that how uniform tariff rates can be finalized for all the consumers in the



- State of UP as State is having part of the areas covered under the different jurisdiction of several Discoms having separate & different balance sheet performance, line losses etc.
- 3.31.4 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that existing tariff structure for LMV-4 category is not justified as the consumer cannot be deprived from the applicability of all slabs starting from 1st to last for consuming more than 1000 unit.
- 3.31.5 Shri Swami Tattvajnanananda Saraswati, All India Movement for Seva submitted that NGO may be billed under domestic tariff category.
- 3.31.6 Shri Sudhir Chandra Goyal M/s Khatauli Cold Storage submitted that as per tariff schedule continuous period of operation of cold storage industries should not be more than 9 months in a financial year. As per GoUP Order cold storage season is from 15th February to 30th November, which is 9.5 month, hence, this period of more than 9 month should be replaced with 10 months.
- 3.31.7 Shri D.S .Verma Executive Director, Indian Industries Association requested the Commission not to allow the burden of cross subsidy on LMV-6 & HV-2 categories in view to help the industries to compete globally.
- 3.31.8 Jyoti Enviro Tech Pvt. Ltd. submitted that the tariff of waste management plants should be equal to agriculture category tariff.
- 3.31.9 Shri Pyare Lal Sharma chairman, Manyata prapt vidyalay Prababdhak Association submitted that tariff ofschools for children of weaker sections should be billed under normal category not under commercial category.
- 3.31.10 Shri Manoj Aggarwal Chairman and Gaurav Mittal, Laghu Udyog Bharti submitted that shops produce and sale in nature i.e., tailor shop, Sweet Shop & printing press, maybe billed under LMV-6 or LMV-2 must be clarified, as Discoms are raising assessment by taking advantage of this confusion and harassing the consumers.
- 3.31.11 Bharteey Kisan Union (Aligarh) has requested following point to be considered in Tariff Order
  - For PTW category, transportation cost of the transformer should be borne by the Licensee like in other categories. Further, Disconnection charge & reconnection charge should not be billed to the PTW consumer.
  - In Rural areas power must be supplied for the period of 5 PM to 12 AM and 4 AM to 2 PM at voltage of 440V/ 220 V.



- There must be equal hours of power supply in rural areas. In areas where power is supplied for longer duration higher tariff should be charged.
- 3.31.12 Dr. Mohammad Rihan Member In-charge, Department of Electricity, Aligarh Muslim University submitted that the grouping of public institution like Aligarh Muslim University under HV-1 needs to be reconsidered. Grouping of public institution with private institution is not convincing. As the private Institutions charge very high fee from students as compared to public institutions and hence they can afford higher tariff. Therefore it is requested that the public institution like AMU, getting supply at single point may be kept in a different category and a single significant relief in tariff may be provided.
- 3.31.13 Miss Romi, Global Care Organization submitted that tariff structure for plants which uses waste to generate fertilizer must be in line with Agriculture Tariff.
- 3.31.14 Miss Romi, Global Care Organization submitted that there must be clear definition of rural area and rural feeder and there must be at least 10% lower tariff for Industrial feeders.
- 3.31.15 Miss Romi, Global Care Organization submitted that there must be provision for lowering fixed charges on the basis of reliability and hours of supply.
- 3.31.16 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P submitted that if power cuts cannot be controlled in urban areas then the Tariff for rural areas may be followed in urban areas.
- 3.31.17 Shri Rama Shanker Awasthi submitted that in absence of clarification in applicability of rural rebate, there are number of disputes generated in the State out of which some of the matter is pending before the Commission for compliance under Section 142 of EA 2003. It is further submitted that in order to shorten the litigation regarding rural and urban schedule, the Commission should clarify whether the rural rebate is based on supply of electricity or place and area of consumer. It is further submitted that the Commission may specify rural area and rural schedule for each Licensee so that rural consumers get rural rebate.
- 3.31.18 Shri Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that as per Supply Code, the cost involved in enhancement of load is deemed to have been recovered from system loading charges head, but discoms are taking payment of cost of all equipment without giving remission of old surrendered equipment. Stakeholder further submitted that this monopolistic condition is unreasonable and the Discoms should bear the cost of equipment for load



enhancement keeping the property title with them. Stakeholder also submitted that Discoms should maintain the line till the point of supply i.e. Meter without claiming any charges from consumers. Stakeholder further submitted that after charging system loading charges there is no justification of charging any fixed charges or minimum consumption guarantee.

- 3.31.19 The Director, The Mahabir Jute Mills Ltd. submitted that as per PuVVNL petition, power sold to HV-2 is about 1356 MU @ Rs. 7.32 per unit whereas power sold to LMV-5 is about 2100 MU @ Rs. 0.71 per unit. The powers to farmers are subsidized. Stakeholder further submitted that the subsidy to farmers should be reimbursed by the State Govt. instead of collecting from Industries.
- 3.31.20 Shri Sandeep kumar Gupta submitted that at present tariff of LMV-6 is Rs. 6.39 per unit. Stakeholder further submitted that regulatory surcharge and fixed demand charge should be removed from this category consumer and the tariff should be Rs. 7 per unit. This will benefit both consumer and Licensee.
- 3.31.21 Shri B.N. Shuklaa, President UP Petroleum Traders Association submitted that petrol and diesel is a basic commodity and licensees have considered petrol pump as commercial consumer which results in high tariff. Stakeholder further requested the Commission to create a new consumer category for petrol pumps with lower tariff as comparison to commercial category tariff.
- 3.31.22 Director, Ram Charan Steels Ltd. submitted that there should be separate tariff for Iron & Steel industry and the tariff should be minimum.

#### B) Petitioner's Response

- 3.31.23 Regarding high cost of Electricity Tariff for Steel Units the Licensee has submitted that the Tariff Schedule has been framed considering the cost of service of the licensee at normative parameters framed by the Commission and considering various provisions of the Tariff Regulations and Electricity Act, 2003.
- 3.31.24 The Licensee submitted that the Retail Tariff within the State has been kept uniform as per the guidelines provided in the Sec 8.4 (2) of the National Tariff Policy issued by Ministry of Power, Government of India.
- 3.31.25 Fixed charges / minimum charges are part of tariff and are levied for developing the required infrastructure and to meet the expenses incurred to maintain the supply at all the times. These charges cannot be withdrawn, as they are levied as per



provisions of Electricity Act, 2003. Further it is respectfully submitted that the fixed charges have to be recovered by the Petitioner and the consumers with higher consumption ought to bear a fair share of the same. The differential fixed charge is only a mechanism of cross subsidization of fixed charges which is part of tariff and cross-subsidization is allowed as per tariff policy.

- 3.31.26 Licensee further submitted that any move to reduce the tariff of any consumers would hurt the Licensees who are already reeling under severe financial crisis. No subsidy is being received from the State Government towards social and charitable institutions. Hence, any reduction in their tariffs would be uncovered gap for the Licensees.
- 3.31.27 Regarding season period of cold storage the Licensee has submitted that the issues raised by the stakeholder have been duly deliberated in the past and settled by the Commission. Accordingly the billing is being done by the licensee. Further, the Licensee clarified that the activity of consumers under this category is commercial in nature and so the category and tariff proposed for this category is justified and hence request of the stakeholder need not be considered.
- 3.31.28 The proposal of the stakeholder to provide relief in tariff of LMV-4 consumers is not feasible as there is no subsidy support from the Government on this account and would lead to further widening of the revenue gap.
- 3.31.29 The Licensee submitted that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Commission. The tariff is being proposed to recover the gap between the Annual Revenue Requirement and the revenue at current tariffs. Different states have different cost of service, subsidy levels, different power procurement costs, etc., and hence while fixing tariffs all these issues have to be taken into account. The Licensee has submitted that the Retail Tariff for each category within the State has been kept uniform as per guidelines provided in the Sec 8.4 (2) of the National Tariff Policy issued by Ministry of Power, Government of India.
- 3.31.30 The Licensee submitted that while framing the tariff it has endeavoured to simplify the rate schedule. Creating new categories within the industry category would not only make the rate schedule more complex, it would also tantamount to preferential treatment to certain class of industries.

#### C) The Commission's view:



3.31.31 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The applicable Tariffs for all the consumer categories have been designed in accordance with the Electricity Act, 2003 and the Tariff Policy. The details of all the aspects related to Tariff design have been covered subsequently in Chapter of Tariff Philosophy and Rate Schedule provided in this Order.

#### 3.32 LATE PAYMENT SURCHARGE

# A) Comments/Suggestion of the public

3.32.1 Shri Rama Shanker Awasthi submitted that the justification is required for proposal of extraordinary high rate of LPS. It is further submitted that the levy of LPS @ 2% after three month which comes to 24 % per annum is totally illegal therefore the Commission should not allow the increase in rate of LPS.

## B) Petitioner's Response

3.32.2 The Licensee has not submitted any reply.

## C) The Commission's view:

3.32.3 The Commission has taken note of the suggestions made by the stakeholder and has addressed this issue in the subsequent Sections of this Order

#### 3.33 PUBLIC HEARING PROCESS

#### A) Comments/Suggestion of the public

- 3.33.1 Shri D.S .Verma Executive Director, Indian Industries Association submitted that the Public Notice for inviting objection on ARR & Tariff Petitions filed by various Discoms was published in few selected newspapers, hence, large numbers of consumers were not aware of Public Notice.
- 3.33.2 Shri Rama Shanker Awasthi submitted that the State has six independent Licensee, but the hearing has been organized only in three cities i.e. consumers of three Discoms are neglected and was not provided opportunity. Stakeholder further submitted that as per act and regulation, hearing in the area of each Licensee is mandatory.



## B) Petitioner's Response

3.33.3 The subject issue is within the preview of the Commission.

## C) The Commission's view:

3.33.4 The Commission in its Admittance Order dated March 29, 2016 directed Licensees to publish the Public Notice detailing the salient information and facts of the ARR / Tariff Petition along with its website address in at least two daily newspapers (One English and One Hindi) for two successive days inviting views / comments / suggestions / objections / representations within 15 days from the date of publication of the Public Notice(s) by all stakeholders and public at large. Combined Public hearings were held at various locations of the State irrespective of Licensee area and consumer from any licensee area were allowed to participate in the hearing held at any specified location.

## 3.34 SUB STATION CAPACITY / INFRASTRUCTURE ENHANCEMENT

## A) Comments/Suggestions of the Public

- 3.34.1 Shri Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad submitted that the numbers of consumers submitted by the Licensees for FY 2016-17 are 117054709 with connected load of 43591909 kW. Whereas the substation capacity at 132 kV is around 3000 MVA, which reflects that the transmission capacity is only 28000000 kW. The diversity factor must be 1:1 i.e. system capacity must be equivalent to the load sanctioned / connected to the consumers for better performance, which in case of U.P. is almost double. Stakeholder further submitted that due to imbalance in transmission and distribution system capacity and connected load there is frequent load shedding and low voltage in many areas. Stakeholder further requested licensees to focus more on system strengthening instead of tariff hike.
- 3.34.2 Shri Gyan Chandra Varshney, Aligarh Udyog Vyapar Pratinidhi Mandal submitted that incomplete work of underground cabling should be completed.
- 3.34.3 Shri Manoj Kumar Varshney, Bharteey Janata Party and Gyan Chandra Varshney, Aligarh Udyog Vyapar Pratinidhi Mandal submitted that all electricity wires should be underground to reduce theft of electricity.



- 3.34.4 Shri Vivek Bansal, Ex MLA Indian National Congress submitted that villages where transformer used to burn because of underrating /overloading must be replaced with proper capacity.
- 3.34.5 Shri Vivek Bansal, Ex MLA Indian National Congress further submitted that due to poor infrastructure in rural areas various cases of electrical accident noticed, many farmers lost their crop due to fire caused by poor infrastructure.
- 3.34.6 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that strict measures should be taken to prevent theft and pilferage of power, LT lines may be converted to underground lines, the transformers should not be overloaded more than 20%.
- 3.34.7 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that audit meters be installed in transformer to locate line losses.

## B) Petitioner's Response

3.34.8 The Licensee submitted that complaints of quality of supply, turnaround time for fault repair, etc. are not related to present Tariff Petition. However, it assured that these issues are in the jurisdiction of the concerned local field units of the concerned Discoms. Regarding, the demand supply gap, the Licensee is endeavouring to reduce the distribution losses. Capacity augmentation is being planned by the Discoms and Transco and is also depicted in the capital expenditure plan submitted along with the petitions.

#### C) The Commission's view:

3.34.9 The Commission has taken note of the objections / suggestions made by the stake holders. The Licensees must expedite the work of increasing the capacity of various sub-stations and power distribution network, distribution lines has to be ungrounded in theft prone areas and electrical infrastructure must be improved to avoid electrical accidents in accordance with the Capital Investment Plan so that above issues are resolved at the earliest. Further, the Licensees are also directed to plan the distribution network expansion and capacity augmentation to cater to the current and future load requirements and to meet the establish standards of power system design and control the power theft.



#### 3.35 ENCOURAGING RENEWABLE ENERGY

## A) Comments/Suggestions of the Public

- 3.35.1 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that the rebate of Rs. 100 per month for installation of solar water heating system of 100 litre capacity may be increased to Rs 250 per month in consideration to the cost of solar system.
- 3.35.2 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P submitted that subsidy on roof top solar power system has to be provided irrespective of brand and import of PV panels may be duty free. It is further submitted that installation of solar power system in all remote villages should be controlled by Gram Panchayat to save transmission Line cost and line loss under a devised scheme.
- 3.35.3 Prof. Dr. K Kasthuriangan, Indian Wind Power Association submitted that high wind potential states like Tamilnadu, Karnataka and Madhya Pradesh can supply wind energy to wind deficit states like Uttar Pradesh and help the distribution Licensees in meeting the Non-solar renewable purchase obligation at very economical way.
- 3.35.4 In order to promote inter-state transfer of wind energy, the Central Commission has already notified forecasting and scheduling regulation for inter-state sale of wind power. Therefore, energy accounting for transmitting the wind energy would not be an issue, any penalty on deviation from schedule by wind generator would be borne by them. As far as beneficiary is concerned, such scheduled wind energy would be as good as firm power. Stakeholder further requested the Commission to allow the distribution Licensees to procure wind energy at the CERC determined wind zone wise tariff.

# B) Petitioner's Response

- 3.35.5 Regarding subsidy on top Solar Power system the Licensee has submitted that it pertains to previous year Tariff Petition and does not pertain to the instant petition.
- 3.35.6 Regarding determination of Wind Energy Tariff the Licensee has submitted that this issue does not pertain to ARR and Tariff Petition for FY 2016-17.

#### C) The Commission's view:



3.35.7 The Commission has taken note of the objections / suggestions made by the stakeholders in this regards. The Commission is of the view that use of renewable sources at the consumer level must be encouraged. This is essential for the power deficit State like Uttar Pradesh. In view of this, the Commission has already introduced rebate on the monthly bill for all consumers using solar water heaters as detailed further in Rate Schedule.

#### 3.36 MERIT ORDER DISPATCH

## A) Comments/Suggestions of the Public

- 3.36.1 Rosa Power Company Limited submitted following points:
  - Power purchase cost of Anta, Auriya and Dadri Gas should be disallowed as the State is having surplus power and procuring power from such expensive gas based generating station may not be prudent power purchase approach.
  - The Commission may investigate regarding validity of PPAs of Anta, Auriya and Dadri gas, whether UPPCL has signed any Supplemental Agreement without approval of UPERC.
  - Being expensive stations in the event of low demand these stations get higher dispatch than cheaper stations located in the State due to nonexistence of technical minimum criteria in the State.
  - Merit order dispatch proposed by the licensees in their petitions is completely arbitrary and has no relationship with the actual implementation.
     It is observed that every year licensees propose merit order dispatch based on their assumptions and the Commission after carrying out the due diligence of submissions made by the Licensees. However, when it comes to actual implementation, UPSLDC does not take into cognizance of merit order dispatch approved by the Commission.
  - UPPCL/ UPSLDC consider actual variable charges of n-1 months for some generating stations and n-2 months for others. Further UPPCL/UPSLC does not consider fuel cost adjustment bill in the variable charge for drawing up the merit order.
  - Load centre stations like Rosa TPP always are at disadvantageous position in merit order dispatch due to their high fuel transportation cost but at same



time it contributes significant reduction in transmission loss. It is further submitted that the Commission may direct UPPCL/ UPSLDC to consider updated variable charge including transmission charges and losses for drawing up the merit order and to follow technical minimum criteria for backing down during low demand.

- UPPCL in its petition has proposed single part tariff for captive and co generative plants whereas UPERC vide its regulation Captive and Renewable Energy Generating Plants Regulations, 2014 provides two part tariff for said plants.
- While applying the merit order UPSLDC considers Captive and co generative stations as MUST RUN despite UPERC orders and regulations that these plants are subject to scheduling under ABT mechanism.
- NTPC is not billing UPPCL strictly as per tariff norms approved by CERC in tariff regulation, 2014. Following discrepancies has been observed in the NTPC billing.
  - Cost of Secondary Oil is being considered in the fixed charges instead of variable charge as per CERC Tariff Regulations, 2014
  - NTPC is not providing certificate of GCV as received
- It is further submitted that the Commission may direct UPPCL/UPSLDC to undertake strict scrutiny of NTPC billing of variable charge and ensure NTPC strictly follow CERC Tariff Regulation, 2014

# B) Petitioner's Response

3.36.2 The license submitted that the Commission has already issued an interim order for the petition no. 1070/2015 filed by M/S Rosa Power Supply Co. Ltd. dated June 21 2016, wherein the Commission has already deliberated most of the issues raised by the Petitioner. Further, since the final decision is yet to be taken by the Commission in the said petition, it is felt that this issue may be dealt separately, treating it to be beyond the purview of representations called for determination of ARR and Tariff for FY 2016-17..

#### C) The Commission's view:



- 3.36.3 The Commission in its Order dated June 21, 2015 on Petition no. 1070/2015 of Rosa Power Supply Company Ltd. vs. UPSLDC & UPPCL observed that UPSLDC is not strictly adhering to UPEGC in scheduling and dispatch. The Commission has entrusted IIT, Kanpur to study the merit order dispatch procedure followed by UPSLDC and give its recommendation. The Commission in the said Order ruled that it will deliberate over the recommendations with the stake holders and then will take the final decision. In the mean time, until the final order is passed the Commission issued directions as given below:
- 3.36.4 The Commission in the said Order directed UPSLDC to immediately implement the following procedure for scheduling and despatch of power from the generating stations:
  - MOD has to be strictly adhered and given preference over RPO, after RPO Obligations are met.
  - SLDC should draw up the Merit Order Stack based on Variable Charges of previous month as per actual invoices submitted by generator to UPPCL.
  - Variable Charges should take into account the Transmission Charges and Transmission Losses caused by each station and Fuel Adjustment Charges, if any, for the previous month for drawing the MOD stack.
  - Technical minimum for all the generating units should be followed.
  - For ISGS, technical minimum for backing down should be taken based on total schedule of all beneficiaries as per technical minimum specified by the CERC.
  - In the event of load crash or persistent low demand, before putting any unit on reserve shut down, it must be ensured that all units including storage based hydro plants, co-gen plants, thermal units and schedule of ISGS share are reduced to their respective technical minimum or the minimum capacity prescribed in the contract.
  - If system conditions require reserve shut down of any unit, after achieving technical minimum of all the units, it should be done based on merit order stack subject to following:
    - 1. Any unit taken on bar after any shut down, shall not be taken for reserve shut down for the next 72 hours.



2. At least one unit at each generating station shall be kept operational, unless the grid condition prohibits the running of such units. (Clause 2 was subsequently stayed by the Commission vide its Order dated July 4, 2016).

Note: If the two machines are in the same merit order stack then the machine with lower start up time should be preferred.

- The generators who are not falling under MOD stack will have the option of foregoing some part of their fixed cost for which credit will be given in their variable cost and their position in MOD stack will be revised accordingly. This will help the generators in scheduling their generation on day to day basis under MOD as well as in reducing the overall Average Power Purchase Cost (APPC) which would benefit public at large.
- Further, the Commission in the said Order directed UPSLDC to operationalise State Power Committee and prepare detailed procedures for scheduling and despatch in consultation with all stake holders and submit to the Commission within two months for consultation and approval.

## 3.37 OTHER GENERAL ISSUES

#### A) Comments/Suggestions of the Public

- 3.37.1 Shri Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that the Licensees have collected Rs. 150 Crore as MD penalty and addition charges which are against the Commission's Tariff Order. Stakeholder further submitted that Licensees have also collected Rs. 300 Crore by charging higher meter rent as compared to actual meter cost and Rs. 1000 Crore as system loading charges which was abolished in EA 2003. Stakeholder further requested the Commission to take strong action against Licensees for such unlawful activity.
- 3.37.2 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok kumar Goyal President, National Chamber of Industries &Commerce submitted RMU charges should be claimed only when the supply is made from 2 or more feeders. They further submitted that there should be simple interest on late payment and if there is any dispute the interest charge should be waived till decision ontheAppeal.
- 3.37.3 Associate Chambers of Commerce & Industries of U. P. suggested the provisions for holding of periodically Jan Adalat at each Distt. Headquarters chaired by concerned



Supdtt. Engineer at least once in a month on a particular day of each month on the pattern of Tehsil Divas be incorporated in general provisions of the tariff and similarly on quarterly basis chaired by chief Engineer (Distribution) in each of the district head quarter under jurisdiction of related zonal office. There may be provisions for periodical meetings at MD office level with Association/ chambers /organizations. There may be forum constituted under the general provision of Tariff to hear & decide clarifications in regard to certain provisions.

- 3.37.4 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that a committee be constituted at UPERC level to avoid wastage of unnecessary & un-productive time, energy and money by the Discoms. It is further submitted that finding of report regard to power purchase (higher price instead of purchasing from exchanges) to be made available in public. It is also required to make public the methodology by which line losses on account of approx. 53 lacs unmetered consumers are calculated & taken into account in the ARR of Discoms. The report in regard to un-metered consumers may be made available in public to control & check the line losses. Further, strict target of time period be fixed for the Discoms to complete 100% metering.
- 3.37.5 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted that tariff and non-tariff items are specifically clarified in the ensuing Tariff Order to have more transparency.
- 3.37.6 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P sought clarification regarding new connection for categories having load above 50 kW in general provisions.
- 3.37.7 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P sought clarification on rebate on payment on or before due date i.e. Point No. 17 under general provisions. Demand of LPS amount chargeable on the last month's energy bill raised /added for the first time in the current bill of the consumers, all cannot be treated or termed as an arrear & accordingly such consumer cannot be denied for the benefit of rebate in case the relative consumer make the payment of current bill on or before due date.
- 3.37.8 Shri Sudhir Chandra Goyal M/s Khatauli Cold Storage submitted that clarification is required for general provision no. 12 "Option of migration to HV-1 & HV-2 category" regarding on payment of charges prescribed in cost data book creates confusion and should be deleted.



- 3.37.9 Shri K. L. Aggarwal chairman Associate Chambers of Commerce & Industries of U. P submitted, the Licensees have proposed to bear the transaction charges for bill payment up to Rs. 400 but the software installed is not supporting the same. The transaction charges are debited from the consumers account.
- 3.37.10 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P. Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that purchase and sale of all Capital Assets should be through open and transparent tendering system.
- 3.37.11 Uttar Pradesh Vyapar Mandal Aligarh specified following points which are necessary for better efficiency & Transparency:
  - As meter reading is outsourced, so Identified defective (IDF) & Appeared defective (ADF) bills should not be send to consumers.
  - If consumer send request for disconnection then date of receiving should be considered as the date of disconnection
  - Maintaining power factor is the responsibility of Licensee, no penalty has to be imposed on consumer. Earlier, there was a provision of power rebate but same has been abolished while the provision of charging power factor penalty is kept as it is.
  - There must be provision for penalty to Discoms for Non-compliance of direction of the Commission.
  - If any consumer wants to enhance load by self declaration, the same should be accepted immediately.
  - Places where line losses are more, prepaid meter should be installed.
  - At the time of new connection, Full cost of meter is charged from the consumer.
     When meter becomes defective then again consumer is asked to pay the full cost
     of the meter which is not justified and at the time of disconnection meter (which
     is the property of consumer) should be handed over to consumer or cost of
     meter should be paid to consumer in case meter is kept by Discoms.
  - Bill format should be simple and clear.
  - Charging three times in case of excess demand is not logical since at 11kV all the
    equipments are of consumer and any damage due to excess demand is of
    consumer only.
  - If all the equipment in consumer premises is at the cost of consumer, no penalty on exceeding demand should be levied.
  - Solar energy may be connected with GRID.



- There must be rules for improving collection so that cost of electricity reduces over the period of time.
- Licensees should collect the due payments from the govt. offices and big consumers.
- 3.37.12 Shri Vishnu Bhagwan Agarwal Chairman, Agra Chapter, ASSOCHAM, U.P and Ashok kumar Goyal President, National Chamber of Industries & Commerce submitted that the industrial consumers may be allowed to make bulk purchase of electricity based on their annual /periodical requirement and credit the same to the account of Discoms. They further submitted that the said amount of electricity may be supplied after adding permitted transmission charges so that the consumers may get benefit of market rate of supply of electricity.
- 3.37.13 Shri O.P. Rathi, Chairman Uttar Pradesh Udyog Vyapar Pratinidhi Mandal Aligarh submitted that senior officers of Discoms should hear the complaints of consumers by publishing the date of meeting in the newspaper every month. It is further submitted that one copy of complain should be send to Executive Engineer and also deliberation of proceedings to be followed in the last week of the month in the presence of complainant, Executive Engineer and dignitaries.
- 3.37.14 Shri Sabir Hashami, Chairman Aam Janata Society submitted that the Discom has enhanced connected load from 1 kW 2 kW without any investigation. It is further submitted that proper investigation of connected load may be made by third party. It is submitted that there should be minimum limit of connected load as 1/2 kW for commercial consumers having small shops.
- 3.37.15 Shri Rama Shanker Awasthi submitted that as per Section 23 of EA 2003 the Commission is empowered to impose scheduled power cut in the State. It seems that Commission never imposed scheduled power cut. The Licensees illegally imposed protective load surcharge on the consumers for using electricity during unscheduled power cut. In fact levy of protective load surcharge is dependent upon imposition of scheduled power cut by the Commission.

# B) Petitioner's Response

3.37.16 A state advisory committee has already been appointed which comprises of various representatives from the fields of industry, Media, Consumer association, Government etc.



- 3.37.17 The commercial data has been submitted in the load forecast model submitted along with the Tariff Petition.
- 3.37.18 The appointment of the CGRF is done by the Commission.
- 3.37.19 Regarding provision for holding periodically Jan Adalat, Meetings at MD level with association, the Licensee has submitted that the Commission may take suitable view in this regards as it deems fit.

# C) The Commission's view:

3.37.20 The Commission has taken note of issues raised by the stakeholders and has addressed the issues related to Truing Up for FY 2013-14, ARR for FY 2016-17 and tariff design for FY 2016-17 in the relevant sections of this Order.



## 4. TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2013-14

## 4.1 INTRODUCTION

4.1.1 The Petitioner has sought the final truing up of expenditure and revenue for FY 2013-14 based on actual expenditure and revenue as per audited accounts. In this section, the Commission has analysed all the elements of actual revenue and expenses for FY 2013-14 and has undertaken the truing up of expenses and revenue after prudence check on the data made available by the Petitioner.

#### 4.2 POWER PURCHASE EXPENSES

- 4.2.1 The Commission, in the Tariff Order for FY 2013-14, had approved the power purchase quantum of 84,632.00 MU and total power purchase expenses of Rs. 31,456.00 Crore at UPPCL level. The Petitioner, in its True-up Petition, has submitted that the actual power purchase expenses for FY 2013-14 are Rs. 33,233.64 Crore towards power procurement of 84,251.84 MU at UPPCL level.
- 4.2.2 The Petitioner submitted that it has considered the following philosophy for computing the allowable power purchase cost:
  - The allowable power purchase input has been calculated by grossing up the actual energy received at the Discom end by the approved / actual transmission losses, whichever is lower.
  - The allowable power purchase cost has been computed by multiplying the revised bulk supply Tariff with allowable power purchase input to derive the allowable power purchase cost for truing up.
- 4.2.3 As per the above philosophy, the Bulk Supply Tariff as worked out by the Petitioner is shown in the Table below:

Table 4-1: BULK SUPPLY TARIFF AS COMPUTED BY THE PETITIONER FOR FY 2013-14

Particulars	Unit	True-up Petition
Power Purchase	MU	84,251.84
Transmission Loss	MU	4,431.01
Transmission Loss	%	5.26%
Energy available at Discom End	MU	79,820.83
Allowable Power Purchase Cost at Discom end (including PGCIL Charges)	Rs. Crore	33,233.64
Power Purchase Cost per unit at Discom end (BST)	Rs/kWh	4.16



4.2.4 The Commission has computed the BST based on the same philosophy as adopted in its Order dated June 18, 2015. The Commission asked the Petitioner to submit the breakup of the Transmission Losses between Intra-State and Inter-State. The Petitioner submitted the Intra-State transmission loss to be 4.10% and Inter-State transmission loss to be 3.97% for FY 2013-14. Further, in reply to the query raised by the Commission regarding bifurcated details of power purchase cost and PGCIL charges for FY 2013-14, the Petitioner submitted the following details.

Table 4-2: DETAILS OF POWER PURCHASE COST AND PGCIL CHARGES SUBMITTED BY THE PETITIONER FOR FY 2013-14

Particulars	Amount (Rs. Crore)
Power Purchase Cost	31,956.62
PGCIL Charges	1,277.02
Total Power Purchase Cost	33,233.64

4.2.5 The Petitioner submitted that it has calculated the allowable power purchase input at Discom end by grossing up the actual energy sales by the approved distribution loss target or actual Distribution losses, whichever is lower. Thereafter, the allowable power purchase input has been multiplied by the Trued up Bulk Supply rate to derive the allowable power purchase cost for FY 2013-14 as shown in the Table below:

Table 4-3: POWER PURCHASE COST AS COMPUTED BY PETITIONER FOR FY 2013-14

Particulars	Unit	True-up Petition
Power Purchase	MU	14,252.93
Sales	MU	10,710.70
Distribution Loss Target	%	23.00
Allowable Power Purchase	MU	13,910.39
Trued up Bulk Supply Tariff	Rs / kWh	4.16
Allowable Power Purchase Cost	Rs Crore	5,791.63

4.2.6 The Commission has been considering Distribution losses as controllable parameter and thereupon the power purchase cost consequent to under-achievement of Distribution loss is disallowed. For truing up of ARR for FY 2013-14 the allowable power purchase quantum has been computed by grossing up the actual energy sales by the approved distribution loss target or actual loss level whichever is lower. The power purchase cost is then computed by considering the allowable power purchase



thus derived and the bulk supply tariff computed at Discoms periphery which is in line with the approach followed by the Commission in its earlier Orders.

4.2.7 Regulation 4.2 (11) of Distribution Tariff Regulations, 2006 specifies as below:

#### "4.2 Power Purchase Cost:

- 11. In the regime of Availability Based Tariff (ABT), the cost of power purchase through UI shall be allowed to be passed through in tariff of the subsequent year subject to the following conditions:
- a) The average rate for power purchased through UI should not exceed the maximum rate for power purchased under the Merit Order of the licensee as approved by the Commission.
- b) The total cost of electricity units purchased through UI shall be restricted to 10% of total power purchase cost approved by the Commission.

Provided that where the average rate for power purchased under UI exceeds the maximum specified rate of power purchase under the Merit Order of the licensee, the cost of such power purchase shall be allowed to be passed through in tariffs of the subsequent year at the maximum rate for power purchase under the Merit Order of the licensee as approved by the Commission whether the ceiling limit of 10% as stated in 11 (b) above has reached or not."

- 4.2.8 The Commission has obtained the rates and energy procured through unscheduled interchange (UI). It has been observed that the Petitioner for FY 2013-14 has sold 398.16 MUs through UI at an average rate of Rs. 4.28 per kWh. In view of the above, the Commission has allowed the power sold through UI.
- 4.2.9 The Petitioner has claimed Rs. 28.97 Crore towards allocation of O&M Expenses of UPPCL. In reply to the query raised by the Commission regarding computation of arriving at the above mentioned amount of Rs. 28.97 Crore, the Petitioner submitted the following details:

Table 4-4: COMPUTATION OF O&M EXPENSES OF UPPCL AS SUBMITTED BY PETITIONER FOR FY 2013-14 (Rs. Crore)

	2020 2 1 (1.0. 0.0.0)								
	Pa	FY 2013-14 (Audited)							
Eı	mployee Benef	138.48							
i _	dministrative, kpenses	General	and	Other	19.23				



Particulars	FY 2013-14
	(Audited)
Total O&M Expenses	157.71

Table 4-5: ALLOCATION OF O&M EXPENSES IN THE RATIO OF INPUT ENERGY AS SUBMITTED BY PETITIONER FOR FY 2013-14

Particulars	DVVNL	MVVNL	PVVNL	PuVVNL	KESCO	NPCL	Total
Input energy (MU)	18,436.63	14,252.93	24,098.90	16,928.91	3,554.39	314.36	77,586.12
Total O&M Expenses – UPPCL as per audited account of FY 2013-14 (Rs. Crore)							
Allocation of O&M (Rs. Crore)	37.48	28.97	48.98	34.41	7.22	0.64	157.71

- 4.2.10 The Commission has verified the above amount from the Audited Accounts of UPPCL and has allowed such expenses based on actual for FY 2013-14. As the above expenses have been incurred by UPPCL, which is mostly for procuring the power for the Discoms, the above expenses for the purpose of Truing up has been considered as a part of Bulk Supply Tariff. It may further be noted that the procurement of power is the responsibility of the Distribution Licensee for which the Commission allows considerable amount of O&M Expenses and interest on working capital to the Licensee. The Commission has allowed such expenses during Truing-up of FY 2008-09 to FY 2011-12. However, in the Order dated October 1, 2014, the Commission has directed the Licensee that from FY 2014-15 onwards it should manage such O&M Expenses for procuring the power from the O&M Expenses allowed to it.
- 4.2.11 The Table below summarises the energy balance, power purchase quantum and cost submitted by the Petitioner and as approved by the Commission at UPPCL level and the Bulk Supply Tariff for FY 2013-14:



Table 4-6: ENERGY BALANCE AND BULK SUPPLY TARIFF APPROVED FOR FY 2013-14

Particulars	Unit	Tariff Order	Petition	Actual	Approved upon Truing up
Power Purchase	MU	84,632.00	84,251.84	84,251.84	83,870.96
Inter-State Transmission Losses	MU	1,397.00	1,390.72	3,344.80	3,329.68
Inter-State Transmission Losses	%	1.65%	1.65%	3.97%	3.97%
Intra-State Transmission Losses	MU	3,054.00	3,040.28	3,320.92	2,955.16
Intra-State Transmission Losses	%	3.67%	3.67%	4.10%	3.67%
Energy available at Discom End	MU	80,181.00	79,820.83	77,586.12	77,586.12
Power Purchase Cost (including PGCIL charges)	Rs. Crore	31,456.00	33,233.64	33,233.64	33,233.64
Power Purchase Cost per unit	Rs./kWh	3.72	3.94	3.94	3.94
O&M Expenses of UPPCL	Rs. Crore			157.71	157.71
Allowable Power Purchase Cost at Discom end	Rs. Crore				33,241.11
Power Purchase Cost per unit at Discom end (BST)	Rs./kWh	3.92	4.16	4.30	4.28

- 4.2.12 It can be seen from the above that, the Petitioner has claimed the BST as Rs. 4.16 / kWh which does not include the impact of O&M expenses of UPPCL as it has claimed these expenses separately. Thus, considering the impact of O&M expenses of UPPCL and actual expense incurred, the BST works out to be Rs. 4.30 / kWh, against which while undertaking the Truing up of FY 2013-14, the Commission has allowed the BST as Rs. 4.28 / kWh.
- 4.2.13 It can be further observed that the BST approved by the Commission in Tariff Order for FY 2013-14 was Rs. 3.92 / kWh. However, the BST claimed by the Distribution Licensees is Rs. 4.16 / kWh based on the power purchase cost incurred at UPPCL level in FY 2013-14. It is noted that the Distribution Licensees book the cost of power purchase in their Audited Accounts as per the BST approved by the Commission, while UPPCL procure power at the actual rates from the Generating Companies. Further, the Licensees during Truing up of FY 2013-14 have claimed the power purchase cost higher than the cost incurred as per their audited accounts, which is due to the fact that the actual power purchase cost incurred by UPPCL while procuring power from the generating companies is more than the power purchase cost paid by the Licensees to UPPCL, which is as per the BST approved by the Commission. Thus, in order to have greater clarity the Commission directs the



Licensees that, from truing up of FY 2014-15 and onwards it should clearly depict the total power purchase cost incurred at UPPCL level based on actual power purchase cost, total power purchase cost billed by the UPPCL to the Distribution Licensees and power cost payable to UPPCL in its true-up petitions for future years.

4.2.14 Further, allowable power purchase quantum has been computed by grossing up the actual energy sales by the approved Distribution loss target / Actual Loss Level (whichever is lower) for FY 2013-14. The power purchase cost is then computed by considering the allowable power purchase thus obtained and the bulk supply tariff computed at Discoms periphery in line with the approach followed by the Commission in its earlier Orders. Accordingly, the Table below provides the allowable power purchase cost for the Licensee for FY 2013-14:

**Particulars** Approved upon Approved in **True up Petition Tariff Order** Truing up Power Purchase (MU) 14,862.75 14,252.93 14,252.93 10,710.70 Sales (MU) 11,444.00 10,710.70 Distribution Loss Target (%) 23.00% 23.00% 23.00% Allowable Power Purchase (MU) 14,862.75 13,910.39 13,910.39 Trued up Bulk Supply Tariff (Rs. / kWh) 4.28 3.92 4.16 Allowable Power Purchase Cost (Rs. Crore)\* 5.830.95 5.791.63 5.959.79

Table 4-7: ALLOWABLE POWER PURCHASE COST FOR FY 2013-14

# 4.3 TRANSMISSION CHARGES

4.3.1 The Petitioner submitted that in the Tariff Order for FY 2013-14, the Commission had approved the Transmission Charges of Rs. 200.50 Crore towards projected power purchase of 14,862.75 MU. The Petitioner submitted that as per the audited accounts, it has incurred Rs. 298.94 Crore towards transmission charges. The Petitioner further submitted that the allowable power purchase input for FY 2013-14 works out to 13,910.39 MU and therefore, for the purpose of claiming the trued up transmission charges, the allowable power purchase input has been taken into consideration. The Petitioner submitted that the per unit rate of Transmission Charge of Rs. 0.193 per kWh has been considered which is the rate submitted by UPPTCL in its True-up Petition for FY 2013-14 filed before the Commission. The

<sup>\*</sup> The BST as claimed by the Petitioner does not include the impact of O&M Expenses of UPPCL which it has claimed separately.



Petitioner further submitted that the allowable Transmission Charges for FY 2013-14 works out Rs. 268.93 Crore.

- 4.3.2 Accordingly, the Petitioner has claimed allowable transmission charges of Rs. 268.93 Crore against the approved transmission charges of Rs. 200.50 Crore.
- 4.3.3 It is observed that the Petitioner has considered the Transmission Charge equivalent to the rate submitted by UPPTCL in its true-up Petition for FY 2013-14. Thus, to derive the allowable transmission charges, allowable power purchase input has been multiplied by the trued up transmission tariff as approved by the Commission in its True up Order for FY 2013-14.
- 4.3.4 Accordingly, the table below provides the allowable transmission charges for the Petitioner for FY 2013-14:

**Particulars** Approved Approved in True up **Tariff Order** Petition upon Truing up Units Wheeled (MU) 14,862.75 13,910.39 13,910.39 0.125 Trued up Transmission Charge (Rs./kWh) 0.135 0.193 200.50 268.93 173.46 Transmission Charges (Rs. Crore)

Table 4-8: ALLOWABLE TRANSMISSION CHARGES FOR FY 2013-14

## 4.4 O&M EXPENSES

- 4.4.1 Operation and Maintenance (O&M) expenses comprise of employee related costs, A&G expenses and R&M expenditure.
- 4.4.2 The Petitioner's submissions on each of the heads of O&M expenditure for FY 2013-14, and the Commission's analysis on the truing up of the O&M expenditure heads are detailed below:
- 4.4.3 The Petitioner submitted that the actual net employee expenses for FY 2013-14 is Rs. 378.41 Crore, against the approved expenses of Rs. 399.12 Crore. The Petitioner submitted the actual net administrative and general expenses for FY 2013-14 is Rs. 146.87 Crore against the approved expenses of Rs. 74.39 Crore.
- 4.4.4 The Petitioner has submitted the actual Repair and Maintenance (R&M) Expenses for FY 2013-14 as Rs. 225.00 Crore as against the approved expenses of Rs. 153.03 Crore. The Petitioner has claimed the actual R&M Expenses for FY 2013-14.



4.4.5 Regulation 4.3 of Distribution Tariff Regulations, 2006 stipulates the methodology for consideration of the O&M Expenses, wherein such expenses are linked to the inflation index determined under these Regulations. The relevant provisions of the Distribution Tariff Regulations, 2006 are reproduced below:

## "4.30peration & Maintenance Expenses (O&M):

- 1. The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The O&M expenses for the base year shall be calculated on the basis of historical/audited costs and past trend during the preceding five years. However, any abnormal variation during the preceding five years shall be excluded. For determination of the O&M expenses of the year under consideration, the O&M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations......"[Emphasis added]
- 4.4.6 The Commission, in accordance with the above Regulation, has calculated the inflation index for FY 2013-14 based on the weighted average index of WPI and CPI. The Commission has considered the WPI and CPI as available on the website of Economic Advisor, Ministry of Commerce and Industry, Ministry of Labour, respectively. Accordingly, the Commission has calculated the inflation index for approval of O&M expenses as shown in Table below:



Inflation

INDEC 4 3. EGGLETION INDEX												
	Who	lesale	Price II	ndex	Con	sumer	Price Ir	ndex	(	Consolida	ted Index	(
Month	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
	13	14	15	16	13	14	15	16	13	14	15	16
April	164	171	181	176	205	226	242	256	180	193	205	208
May	164	171	182	178	206	228	244	258	181	194	207	210
June	165	173	183	179	208	231	246	261	182	196	208	212
July	166	176	185	178	212	235	252	263	184	199	212	212
August	167	179	186	177	214	237	253	264	186	202	213	212
September	169	181	185	177	215	238	253	266	187	204	212	212
October	169	181	184	177	217	241	253	269	188	205	211	214
November	169	182	181	178	218	243	253	270	188	206	210	215
December	169	180	179	177	219	239	253	269	189	203	208	214
January	170	179	177	175	221	237	254	269	191	202	208	213
February	171	180	176	174	223	238	253	267	192	203	207	211
March	170	180	176	175	224	239	254	268	192	204	207	212
Average	168	178	181	177	215	236	251	265	187	201	209	212
									Calculation of Inflation Index (CPI- 40%, WPI-60%)			
Weighted Average of										7.69%	4.02%	1.39%

**TABLE 4-9: ESCALATION INDEX** 

- 4.4.7 The Commission has determined the trued up O&M expenses of FY 2012-13, in the Order dated June 18, 2015. The approved O&M expenses for FY 2012-13 have been escalated using the inflation index of FY 2013-14 to derive the normative O&M Expenses for FY 2013-14. The Commission while computing the normative O&M Expenses in this Order has considered the escalation rates as shown in the above Table.
- 4.4.8 Further, in addition to the normative O&M expenses based on inflation, the Distribution Tariff Regulations, 2006 provide for incremental O&M expenses at 2.5 % on addition to asset during the previous year. Regulation 4.3 (3) of the Distribution Tariff Regulations, 2006 specifies as follows:

#### "4.3 Operation & Maintenance Expenses (O&M):

•••

3) Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing



financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.3(1)."

- 4.4.9 It is observed from below that the actual audited O&M expenses as claimed by the Licensee for FY 2013-14 are higher than the normative O&M expenses computed based on the above Regulations. Since, the Licensee has to restrict its O&M expenses within the normative level, the expenses beyond normative level have not been allowed by the Commission. The Commission has therefore, approved the Normative O&M expenses for FY 2013-14.
- 4.4.10 Further, in reply to the Commission's query regarding whether CGRF expenses have been included in O&M expenses, the Petitioner submitted that the CGRF expenses are part of the O&M expenses claimed by it. The Petitioner submitted that such expenses are not separately accounted for and hence, details of such expenses are not available with it. The Petitioner requested the Commission to allow an ad-hoc allowance towards the CGRF expenses considering the remuneration norms and associated costs in the CGRF framework approved by the Commission.
- 4.4.11 As the account for CGRF expenses is not separately maintained by the Licensee, no additional allowance towards this head has been considered by the Commission.
- 4.4.12 Further, as discussed earlier, in its reply to the Commission's query regarding the details of expenses incurred towards apportionment of O&M Expenses of UPPCL, the Petitioner submitted the allocation of O&M Expenses of UPPCL. However, as detailed in Para 4.2.10, the apportionment of the O&M Expenses of UPPCL has been considered in the Bulk Supply Tariff.
- 4.4.13 The summary of O&M expenses approved in the Tariff Order, claimed by the Petitioner and as approved by the Commission in this Order for truing up of ARR for FY 2013-14, is shown in the Table below:



Table 4-10: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2013-14 (Rs. Crore)

Particulars	Tariff Order	Actual as per audited accounts	True-up Petition	Normative	Approved upon Truing up
Employee Expenses	469.55	500.06	500.06	471.56	471.56
Repair & Maintenance Expenses	153.03	225.00	225.00	152.15	152.15
Administrative and General Expenses	87.52	163.71	163.71	87.16	87.16
Gross Operation and Maintenance Expenses	710.10	888.76	888.76	710.88	710.88
Less: Capitalisation					
Employee Cost Capitalized	70.43	121.66	121.66	121.66	121.66
A&G Expenses Capitalized	13.13	16.84	16.84	16.84	16.84
Total Capitalization	83.56	138.50	138.50	138.50	138.50
Net Operation and Maintenance Expenses	626.55	750.27	750.27	572.38	572.38
Efficiency Gain		0.00			0.00

#### 4.5 INTEREST AND FINANCE CHARGES

## **Interest on Long Term Loans**

- 4.5.1 The Petitioner has claimed the net Interest on long term loan for FY 2013-14 as Rs. 101.64 Crore, against the approved expenses of Rs. 92.16 Crore. The Petitioner has capitalized an interest of Rs. 10.38 Crore for FY 2013-14, against Rs. 27.53 Crore approved by the Commission in the Tariff Order.
- 4.5.2 The Petitioner submitted that the Commission in its previous Tariff and True-up Orders had considered a normative approach for financing the capital expenditure with a normative debt equity ratio of 70:30. Considering this approach, 70% of the capital expenditure undertaken in any year was considered to be financed through loan and balance 30% was been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants was separated and the depreciation and interest thereon was not charged to the consumers & beneficiaries. The amounts received as consumer contributions, capital subsidies and grants were traced from the audited accounts. Subsequently, the financing of the capital investment was worked



- out based on the gearing ratio of 70:30 and allowable depreciation was considered as normative loan repayment.
- 4.5.3 The Petitioner submitted that considering the Capital Work in Progress balances (CWIP) and Gross Fixed Asset (GFA) balances as per audited accounts, it has derived the actual capital investments undertaken by it in FY 2013-14.
- 4.5.4 In line with the approach adopted by the Commission in its previous Orders, interest expenses has been considered as an uncontrollable cost as the interest rates are determined by various external factors and the actual loans taken are consequential to the capital expenditure undertaken by the licensee.
- 4.5.5 For the above purpose, the Commission has derived the actual capital investments undertaken by the Licensee in FY 2013-14, based on the audited accounts. The details are provided in the Table below:

**Particulars** Derivation FY 2013-14 Tariff Audited Petition Approved Order upon Truing up Opening WIP as on 1st April Α 1392.38 1201.23 1201.23 1198.35 Investments В 396.01 1138.71 1138.71 1138.71 Employee **Expenses** С 70.43 121.66 121.66 121.66 Capitalisation A&G Expenses Capitalisation D 16.84 13.13 16.84 16.84 Capitalisation Interest Ε 27.53 10.38 10.38 10.38 Interest on long term loans F= A+B+C+D+E 2488.81 2488.81 2485.94 **Total Investments** 1899.48 Transferred to GFA (Total G 759.79 1001.27 1001.27 1001.27 Capitalisation) **Closing WIP** H= F-G 1139.69 1487.55 1487.55 1484.67

Table 4-11: CAPITAL INVESTMENTS IN FY 2013-14 (Rs. Crore)

4.5.6 The Commission has followed the same approach as in previous Orders and therefore, considered the funding of capital expenditure in the ratio of 70:30. Considering this approach, 70% of the capital expenditure undertaken in any



- year has been considered to be financed through loan and balance 30% has been considered to be financed through equity contributions.
- 4.5.7 The Consumer Contributions, capital grants and subsidies as submitted by the Petitioner and as allowed by the Commission are shown in the Table below:

Table 4-12: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES RECEIVED AS ALLOWED BY THE COMMISSION FOR FY 2013-14 (Rs. Crore)

Particulars	FY 2013-14								
	Tariff Order	Audited	Petition	Approved upon Truing up					
Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets	990.38	773.31	865.33	773.31					
Additions during the year	280.00	184.20	184.20	184.20					
Less: Amortisation	46.00	44.72	45.54	44.72					
Closing Balance	1224.39	912.79	1003.99	912.79					

- 4.5.8 The portion of capital expenditure financed through consumer contributions, capital subsidies and grants has been separated as the depreciation and interest thereon would not be charged to the consumers. The Commission has also verified the above amounts as per the audited accounts of the Petitioner.
- 4.5.9 Thus, based on the above, the approved financing of the capital investment is depicted in the Table below:

Table 4-13: FINANCING OF THE CAPITAL INVESTMENTS AS APPROVED BY THE COMMISSION FOR FY 2013-14 (Rs. Crore)

Particulars	FY 2013-14								
	Derivation	Tariff Order	Audited	Petition	Approved upon Truing up				
Investment	Α	396.01	1,138.71	1,138.71	1,138.71				
Less:									
Consumer Contribution	В	280.00	184.20	184.20	184.20				
Investment funded by debt and equity	C=A-B	116.01	954.51	954.51	954.51				
Debt Funded	70%	81.20	668.16	668.16	668.16				
Equity Funded	30%	34.80	286.35	286.35	286.35				



- 4.5.14 From the above tables, it is seen that the total investments made in distribution segment in FY 2013-14 were to the tune of Rs. 1,138.71 Crore. The consumer contributions, capital subsidies and grants received during the corresponding period is Rs. 184.20 Crore. Thus, balance Rs. 954.51 Crore have been funded through debt and equity. Considering a debt equity ratio of 70:30, Rs. 668.16 Crore or 70% of the capital investment is approved to be funded through debt and balance 30% equivalent to Rs. 286.35 Crore through equity. Allowable depreciation for the year has been considered as normative loan repayment.
- 4.5.15 In reply to the Commission's query regarding detailed computation of the weighted average interest rate, the Petitioner has submitted the detailed computation with due reconciliation with the audited accounts of FY 2013-14 for the loans used to fund the capital expenditure. Accordingly, the weighted average rate has been considered for computing the interest on long term loan.
- 4.5.16 The Commission considered the closing loan balance of FY 2012-13 as the opening loan balance of FY 2013-14.
- 4.5.17 Considering the above, the gross interest on long term loan has been worked out as shown in the Table below. The interest capitalisation has been considered at the same rate as per audited accounts.

Table 4-14: INTEREST ON LONG TERM LOAN FOR FY 2013-14 (Rs Crore)

Particulars	FY 2013-14						
	Tariff Order	Petition	Approved upon Truing up				
Opening Loan	1,376.76	1,006.69	1,006.69				
Loan Additions (70% of Investments)	81.20	668.16	668.16				
Less: Repayments (Depreciation allowable for the year)	322.79	258.04	258.04				
Closing Loan Balance	1,135.17	1,416.81	1,416.81				
Weighted Average Rate of Interest	9.53%	9.24%	9.24%				
Interest on long term loan	119.69	112.02	112.02				
Less: Interest Capitalized	27.53	10.38	4.69				
Net Interest Charged	92.16	101.64	107.33				
Interest Capitalisation Rate	23.00%	9.27%	4.19%				



# **Finance Charges**

- 4.5.18 The Petitioner has claimed Rs. 19.22 Crore against Rs. 18.95 Crore approved by the Commission towards total finance charges during FY 2013-14.
- 4.5.19 The bank charges and interest on consumer security deposits and finance charges have been allowed at actual based on audited accounts.
- 4.5.20 Thus, the Commission has approved finance charges amounting to Rs. 19.22 Crore as claimed by the Petitioner for FY 2013-14.

Table 4-15: ALLOWABLE FINANCE CHARGES FOR FY 2013-14 (Rs. Crore)

Particulars	Tariff Order	Audited	Petition	Approved upon Truing Up
Interest to Consumers	18.86	19.15	19.15	19.15
Bank Charges	0.09	0.07	0.07	0.07
Discount to Consumers	-	-	-	-
Finance Charges	-	-	-	-
Total Finance Charges	18.95	19.22	19.22	19.22

#### **Interest on Working Capital:**

- 4.5.21 The Petitioner submitted that the Tariff Regulations provide for normative interest on working capital based on the principles outlined in the Distribution Tariff Regulations, 2006. The Petitioner has claimed the normative interest on working capital as Rs. 70.55 Crore against the approved expenses of Rs. 103.58 Crore.
- 4.5.22 Regulation 4.8(2) of the Distribution Tariff Regulations, 2006 specifies as follows:
  - "2. Interest on working capital
  - (a) Working capital shall be worked out to cover
    - (i) Operation and Maintenance expenses, which includes Employee costs, R&M expenses and A&G expenses, for one month;
    - (ii) One-twelfth of the sum of the book value of stores, materials and supplies at the end of each month of such financial year.



- (iii) Receivables equivalent to 60 days average billing of consumers less security deposits by the consumers minus amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from consumers and Distribution System Users.
- (b) Rate of interest on working capital shall be the Bank Rate as specified by Reserve Bank of India for the relevant year plus a margin as decided by the Commission."
- 4.5.23 Based on the methodology specified in the above Regulations, the Commission in its Tariff Order for FY 2013-14 had allowed normative interest on working capital of Rs. 103.58 Crore. Following the similar approach and in accordance with the Regulations, the Commission in this Order has assessed the working capital and interest thereon based on the trued up ARR of the Petitioner.
- 4.5.24 In reply to the query raised by the Commission regarding exorbitantly high interest on working capital of Rs. 574.79 Crore as per audited accounts against approved interest on working capital of Rs. 103.58 Crore in the Tariff Order for FY 2013-14, the Petitioner submitted that it has claimed the interest on working capital as per the normative methodology prescribed by the Tariff Regulations and adopted by the Commission's approach in the previous true-up and tariff orders without imposing any additional burden on the consumers.
- 4.5.25 The summary of the interest on working capital approved by the Commission in the Tariff Order for FY 2013-14, claimed by the Petitioner and that approved by the Commission in the present Truing up Order is shown in the Table below:

Table 4-16: INTEREST ON WORKING CAPITAL FOR FY 2013-14 (Rs. Crore)

Particulars Particulars	FY 2013-14			
	Tariff Order	Audited	Petition	Approved upon Truing up
One month's O & M Expenses	52.21		74.06	47.70
One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	3.93		8.85	8.85



Particulars	FY 2013-14				
	Tariff Order	Audited	Petition	Approved upon Truing up	
Receivables equivalent to 60 days average billing on consumers	1015.41		772.36	772.36	
Grand Total	1071.55		855.27	828.91	
Less: Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	242.91		290.90	290.90	
Net Working Capital	828.64		564.37	538.00	
Rate of Interest on Working Capital	12.50%		12.50%	12.50%	
Interest on Working Capital	103.58	574.79	70.55	67.25	

- 4.5.26 The Petitioner has claimed Rs. 162.55 Crore towards interest on bond; however it has not submitted any basis for such claim in the Petition. The Commission in its e-mail dated May 31, 2016 asked the Petitioner to submit the details in support of the interest on bonds to which the Petitioner has not submitted any reply. Further the Commission verified the audited accounts for FY 2013-14 and found the interest on bond to be Rs. 122.77 Crore and interest on Power Sector Emp. Trust to be Rs. 39.78 Crore, the summation of which works out to be Rs. 162.55 Crore. Hence, the Commission provisionally disallows Rs. 162.55 Crore towards interest on bond and directs the Petitioner to submit the required details for such claim for FY 2013-14 after which the Commission may take appropriate view on the same.
- 4.5.27 The following table summarises the interest and finance charges approved by the Commission in the Tariff Order, interest and finance charges claimed by the Petitioner and that approved by the Commission in this Order:

Table 4-17: ALLOWABLE INTEREST AND FINANCE CHARGES FOR FY 2013-14 (Rs. Crore)

Particulars Tariff Order		Actual as per audited accounts	True-up Petition	Approved upon Truing up
A:Interest on Long Term Loans				
Gross Interest on Long Term Loan	119.69	247.87	112.02	112.02



Particulars	Tariff Order	Actual as per audited accounts	True-up Petition	Approved upon Truing up
Interest on Bonds	0.00	162.55	162.55	0.00
Less: Interest Capitalisation	27.53	10.38	10.38	4.69
Net Interest on Long Term Loans	92.16	400.04	264.19	107.33
B:Finance and Other Charges				
Finance Charges	-	-	-	-
Bank Charges	0.09	0.07	0.07	0.07
Interest on Consumer Security Deposits	18.86	19.15	19.15	19.15
Total Finance Charges	18.95	19.22	19.22	19.22
C: Interest on Working Capital	103.58	574.79	70.55	67.25
Total (A+B+C)	214.69	994.05	353.96	193.80

## 4.6 DEPRECIATION

- 4.6.1 The Petitioner has submitted that the actual depreciation expense as per audited accounts is Rs. 129.82 Crore. However, the same depreciation has been accounted for considering the depreciation rates prescribed by the Companies Act, 1956. The Petitioner further submitted that for the purpose of Truing up, it has computed the depreciation expense on the actual GFA base and at the regulatory rates applicable for FY 2013-14.
- As regards the Commission's query regarding source-wise funding of capitalization, the Petitioner submitted that the Commission in the True up Order for FY 2012-13 and ARR Order for FY 2015-16 had considered a normative approach wherein it had considered a normative gearing of 70:30. Considering this approach, 70% of the capital expenditure undertaken in any year was considered to be financed through loan and balance 30% has been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants was separated as the depreciation and interest thereon would not be charged to the consumers.
- 4.6.3 Based on the above, the depreciation as claimed by the Petitioner for FY 2013-14 is shown in the Table below:



Table 4-18: DEPRECIATION CLAIMED BY LICENSEE FOR FY 2013-14 (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rates considered	Allowable Depreciation
Land & Land Rights						
i) Unclassified	0.03	-	-	0.03		-
ii) Freehold Land	-	-	-	_		-
Buildings	33.76	12.40	-	46.15	7.84%	3.13
Other Civil Works	-	-	-	-	7.84%	-
Plants & Machinery	538.18	692.91	431.94	799.15	7.84%	52.42
Lines, Cable Network etc.	1,377.21	294.74	23.47	1,648.48	7.84%	118.61
Vehicles	4.16	0.00	-	4.16	7.84%	0.33
Furniture & Fixtures	4.87	0.90	-	5.77	7.84%	0.42
Office Equipments	40.09	0.32	-	40.41	7.84%	3.16
Jeep & Motor Car	-	-	-	-		-
Total	1,998.31	1,001.27	455.42	2,544.16		178.06
Fixed Asset as per Transfer Scheme	1,601.03	-	-	1,601.03	7.84%	125.52
GRAND TOTAL	3,599.34	1,001.27	455.42	4,145.19	7.84%	303.58

- 4.6.4 In reply to the Commission's query regarding claimed depreciation rate of 7.84%, the Licensee has submitted that it has considered a weighted average depreciation rate of 7.84% for the truing up in respect of FY 2013-14, which is in line with the rate considered by the Commission in its Tariff Order for FY 2013-14.
- 4.6.5 The Commission asked the Petitioner to confirm that the cumulative depreciation in FY 2013-14 is less than 90% of GFA for all assets, since assets cannot be depreciated beyond 90% of GFA in accordance with the Distribution



Tariff Regulations, 2006, which the Petitioner confirmed in the reply to deficiency note.

4.6.6 The Commission has repeatedly given several directions to the Licensee to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. Further, the Hon'ble APTEL in Appeal No. 121 of 2010 & I.A. No. 83 of 2011 has also reinforced Commission's views and has directed the Licensee to comply with the regulations and directions issued by the Commission. In view of the same the Commission in its Tariff Order for FY 2013-14 had withheld 20% of the allowable depreciation for FY 2013-14 and directed the Licensee that same would be released to be recovered through tariff upon submission of fixed asset registers up to FY 2012-13. The relevant extract of the Tariff Order for FY 2013-14 has been reproduced below:

"As a first step towards reprimanding the Licensee over the issue of non-maintenance of fixed asset registers, the Commission has withheld 20% of the allowable depreciation for FY 2013-14. The same would be released for recovery through tariff, upon submission of fixed asset registers up to the current year i.e., FY 2012-13 by 30<sup>th</sup> November, 2013."

Further the Commission in all its subsequent Tariff Orders has been repeatedly directing the Licensee to submit the fixed asset register, but the Licensee has not been able to submit the same. In reply to the Commission's deficiency note dated January 29, 2016, the Petitioner in its reply dated March 9, 2016submitted that it has not been able to finalise the preparation of the fixed asset registers due to the huge backlog of previous financial years and due to the fact that the transfer scheme has still not been finalised and requested the Commission that depreciation may be allowed to the Petitioner based on the GFA balance as per audited accounts as it has been duly certified by the statutory auditors and by the CAG.

- 4.6.7 The Commission has observed that even after repeated direction of the Commission MVVNL has not submitted the detailed fixed asset register. Therefore, the Commission has withheld 20% of the allowable depreciation for FY 2013-14 as directed in Tariff Order for FY 2013-14 dated May 31, 2013.
- 4.6.8 Thus, the approved depreciation for FY 2013-14 is as shown in the Table given below:

258.04

206.43



Table 4-15. DEFRECIATION EXPENSES FOR FT 2015-14 (NS. CIOIE)						
Particulars	Particulars Tariff Order		True-up Petition	Approved upon Truing up		
Depreciation	368.78	175.36	303.58	303.58		
Less: Equivalent amount of depreciation on assets acquired out of the consumer contribution and GoUP Subsidy	46.00	45.54	45.54	45.54		
Gross Allowable Depreciation	322.79	129.82	258.04	258.04		
Less: Depreciation withheld due to non-maintenance of Fixed Asset Register @20%	64.56	0.00	0.00	51.61		

258.23

Table 4-19: DEPRECIATION EXPENSES FOR FY 2013-14 (Rs. Crore)

#### 4.7 PRIOR PERIOD EXPENSES

**Net Allowable Depreciation** 

4.7.1 The Petitioner submitted that the financial statements of the Petitioner are prepared in compliance with Generally Accepted Accounting Principles (GAAP) and Accounting Standards issued by Accounting Standards Board of Institute of Chartered Accountants of India. There are certain prior period items, which have been identified and incorporated in the audited financial statements for FY 2013-14. Accounting Standard (AS 5) (Revised) on 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' states:

"Prior period items are income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods"

129.82

- 4.7.2 The Petitioner has submitted that it has recognized Rs. 4.69 Crore of prior period expense and Rs. 27.87 Crore of prior period income in the audited financial statements for FY 2013-14, thereby amounting the net prior period income to be Rs. 23.18 Crore.
- 4.7.3 As regards the prior period expenses, the Commission in its Order dated October 1, 2014 has directed the Licensee to file a separate Petition for approval of prior period expenses / income for FY 2008-09 to FY 2011-12 which should clearly indicate the head wise and year wise bifurcation of prior period expenses / income clearly indicating the impact of such expenses or



incomes on various ARR components and such impact should not exceed the normative expenses for any particular year. Further, the Commission in its deficiency note had asked the Petitioner to submit the relevant information for FY 2012-13 and FY 2013-14 as well.

- 4.7.4 The Petitioner in its reply to the query sought by the Commission submitted that the prior period expenses / incomes are recognised in the financial statements in compliance with the Accounting Standards (AS 5) (Revised) on 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' which does not require year wise classification of prior period items. As there was no statutory requirement of classifying the prior items with respect to the each year to which they pertain, such information was not specifically depicted in the audited accounts. Considering this the expenses and incomes which are omitted to be accounted for in one or more financial years are accounted for as and when such omissions or errors are detected. It requested that the prior period expenses may be allowed as stated in the audited accounts which has also received the approval of the CAG.
- 4.7.5 The State Discoms viz. DVVNL, MVVNL, PuVVNL, PVVNL and UPPCL had filed an appeal with appeal no. 128 of 2014 before the Hon'ble APTEL in the matter of truing up of ARR requirement for the FY 2000-01 to FY 2007-08 with regard to the prior period expenses wherein the Licensees gave the same explanation as mentioned above for non submission of details of the prior period expenses to which Hon'ble APTEL in its Judgment dated November 23, 2015 gave the following decision.

"The record further depicts that the learned State Commission through letter dated 20.12.2012 raised the queries regarding appellants' claim of prior period expenses. The appellants/DISCOMs, without giving correct reply to the above query of the State Commission simply stated that year-wise classification could not be given as there was neither any statutory requirements to year-wise classify prior period expenses nor the Accounting Standard 5 (Revised) required any such classification. Thus the appellants failed to reply to the exact query made by the State Commission to the aforesaid letter and skipping true reply said that the year-wise classification could not be given as there was no statutory requirement nor Accounting Standard requiring such year-wise classification of prior period expenses.



Thus the appellants instead of replying to the queries correctly and properly tried to take some excuse and ultimately failed to properly respond to the query of the State Commission. The learned State Commission while passing the Impugned Order has disallowed the prior period expenses on the legal and correct ground that year-wise break up of prior period expenses was not given by the appellants. It is true that prior period expenses claimed by the appellants were duly audited expenses allowed in the statutory audit of the appellants but the word "audited" only means that the expenditure has been vouched for and the State Commission is further required to consider or check whether such expenses have been prudently incurred on whether the consumer has received any benefit from such expenditure. We are of the opinion, that in these circumstances and in the absence of nonfurnishing of the details sought by the Commission, the State Commission has rightly disallowed the prior period expenses. After all the State Commission is required to use prudent check whether the expenses have been properly incurred or whether the licensee or the consumer has actually received any benefit from such expenditure. It is clear from the facts and other material on record that in the absence of the details to be provided by the appellants herein, the State Commission could not have conducted the prudence check of such items. The law as settled by this Appellate Tribunal on this point is that the State Commission is not bound by the audited accounts of the licensee because the State Commission being the regulator is required to apply prudence check to such expenses or expenditure to see whether such expenses or expenditure were really required to be made for the benefit of the consumers. On our careful scrutiny we do not find any illegality or perversity in the Impugned Order passed by the State Commission on this issue No.(b). Consequently, this issue is also decided against the appellants. " [Emphasis supplied]

Thus, in line with the approach adopted by the Commission in its earlier True up Orders and Judgment of the Hon'ble APTEL, the Petitioner is again directed to file a separate Petition for approval of prior period expenses / incomes. The Petition should clearly indicate the head-wise year-wise bifurcation of prior period expenses / incomes clearly indicating the impact of such expenses / incomes on various ARR components, and such impact should not exceed the normative expenses for any particular year. Based on the data submitted by the Petitioner, the Commission after scrutiny and prudence check shall consider the expenses under the above head as it deems fit.



4.7.7 The summary of the prior period expenses approved in the Tariff Order, claimed by the Petitioner and that approved by the Commission in this Order for Truing up of FY 2013-14 is shown in the Table below:

Table 4-20: PRIOR PERIOD INCOME FOR FY 2013-14(Rs. Crore)

Particulars	Tariff Order	Actual as per audited accounts	True-up Petition	Approved upon Truing up
Prior Period Income	0.00	23.18	23.18	0.00

## 4.8 PROVISION FOR BAD AND DOUBTFUL DEBTS

- 4.8.1 The Petitioner submitted that the Commission has not allowed any amounts towards Provision for Bad and Doubtful Debts in the Tariff Order for FY 2013-14. The Petitioner submitted that such expenses are legitimate business expenses and are accepted accounting principle even in a sector like banking where the provisioning of un-collectable dues is considered as a normal commercial practice.
- 4.8.2 The Petitioner submitted that it has computed the entitlement towards provision for bad and doubtful debts as 2% of the closing revenue receivables as per audited accounts of the relevant financial year for Distribution business.
- 4.8.3 The Petitioner has claimed Rs. 63.14 Crore towards provision for bad and doubtful debts for FY 2013-14.
- 4.8.4 As regards provision for bad and doubtful debts, the Commission in its previous Orders had directed as follows:

# True up Order for FY 2000-01 to FY 2007-08 dated 21st May, 2013

"The Commission directs the Petitioner to formulate a policy for identifying and writing off fictitious arrears and submit a copy of such report before the Commission." (within six months from the date of issue of True-up Order).

Tariff Order for FY 2013-14 dated 31st May, 2013



"As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts along with policy framework for managing bad debts for the Commission's perusal." (within one month from the date of issuance of the Order.)

#### Tariff Order for FY 2014-15 dated October 1, 2014

"The Commission, further in its deficiency note, has enquired from the Petitioner about the policy followed by it to identify and write off bad debts. In its reply, the Petitioner has submitted that the entitlement towards provision for bad and doubtful debts has been computed at 2% of the closing revenue receivables as per audited accounts of FY 2008-09. However, it was observed that the Petitioner has submitted the approach for creation of provision of bad debts instead of the policy followed by it for identification of actual bad debts and writing off the same. The Commission, in its additional queries, reiterated that the Petitioner is required to submit the policy followed by it for identification and writing off actual bad debts at the earliest. In reply to the same, the Petitioner submitted that it has recently framed a policy for identifying and writing off old arrears, which has been provided to the Commission along with the replies and appropriate directions have been issued to the field units to compile the sample cases based on this recently issued order of the licensee. However, from the Regulations it is amply clear that the Petitioner is required to submit its policy for identifying and writing off doubtful debts to the Commission for prior approval, which the Petitioner has not done."(Emphasis added)

#### Tariff Order for FY 2015-16 dated June 18, 2015

"4.8.8 Thus, in accordance with the Distribution Tariff Regulations, 2006 proper guidelines and procedures for identifying, physically verifying and writing off the bad debts is a must for approval of provision for bad debts. Since, the Petitioner is yet to satisfy the Commission of the sincere and concerted efforts to comply with the Commission's directives; the



Commission is not giving any allowance for bad debts for FY 2012-13 during the final truing up exercise for FY 2012-13.

4.8.9 Therefore, in the absence of proper policy in place for identifying and writing off receivables and non submission of sample cases of LT & HT consumer where orders have been issued for writing off debts, the Commission disallows the claims towards provision for bad and doubtful debts."

- In reply to the query raised by the Commission regarding provision for bad and doubtful debts, the Petitioner has submitted that it has framed a policy for identifying and writing off old arrears and a copy of the same was submitted to the Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15. It is also submitted by the Licensee that appropriate directions have been issued to the field units to compile the sample cases based on such order. The Commission, in its deficiency note, reiterated that the Petitioner has not submitted any such sample data of the consumer indicating the policy framework for managing bad debts for the Commission's perusal. Further, in reply to the query the Petitioner requested the Commission to approve the policy it has framed for identifying and writing off old arrears which it has submitted during the proceedings of ARR and Tariff for FY 2014-15 and also during the current proceedings.
- 4.8.6 Regulation 4.4 of the Distribution Tariff Regulations, 2006 specifies as follows:

#### "4.4 Bad and Doubtful Debts:

Bad and Doubtful Debts shall be allowed as a legitimate business expense with the ceiling limit of 2% of the revenue receivables provided the distribution licensee actually identifies and writes off bad debts **as per the transparent policy approved by the Commission**. In case there is any recovery of bad debts already written off, the recovered bad debt will be treated as other income."(Emphasis supplied)

4.8.7 The submission made by Petitioner comprises of the approach for creation of provision of bad debts instead of the policy followed by it for identification of actual bad debts and writing off the same. Further, the Commission in the Tariff Order for FY 2013-14 had disallowed the claims towards provision for



bad and doubtful debts due to the absence of a clear policy and procedure for identifying and writing off receivables. Any provisioning towards bad and doubtful debts needs to be backed up with processes to identify consumers who are not paying up and then making adequate attempts to collect from such consumers.

- 4.8.8 Thus, in accordance with the Distribution Tariff Regulations, 2006 proper guidelines and procedures for identifying, physically verifying and writing off the bad debts is a must for approval of provision for bad debts. Since, the Petitioner is yet to satisfy the Commission of the sincere and concerted efforts to comply with the Commission's directives; the Commission is not giving any allowance for bad debts for FY 2013-14 during the final truing up exercise for FY 2013-14.
- 4.8.9 Therefore, in the absence of proper policy in place for identifying and writing off receivables and non submission of sample cases of LT & HT consumer where orders have been issued for writing off debts, the Commission disallows the claims towards provision for bad and doubtful debts.

Table 4-21: PROVISION FOR BAD AND DOUBTFUL DEBT FOR FY 2013-14 (Rs. Crore)

Particulars	Tariff Order	Actual as per audited accounts	True-up Petition	Approved upon Truing up
Provision for Bad and Doubtful Debts	0.00	(31.32)	63.14	0.00

#### 4.9 RETURN ON EQUITY

4.9.1 The Petitioner has not claimed any return on equity for the year under review. Hence, the Commission has also not allowed any amount towards return on equity for FY 2013-14.

#### 4.10 REVENUE SUBSIDY FROM GOUP

4.10.1 The Petitioner has submitted that the actual revenue subsidy received from GoUP was Rs. 817.86 Crore during FY 2013-14 as against Rs. 817.40 Crore approved in the Tariff Order.



4.10.2 The Commission has accepted the submission of the Petitioner under this head.

#### 4.11 ADDITIONAL SUSBIDY REQUIREMENT

4.11.1 The Distribution Tariff Regulations, 2006 are effective from FY 2007-08. Clause 6.10 of the Distribution Tariff Regulations, 2006 specifies:

### "6.10 Provision of Subsidy

- 1. The Commission, while determining the tariff, shall see that the tariff progressively reflects the cost of supply of electricity and the cross subsidy is reduced or eliminated.
- 2. If the State Government decides to subsidize any consumer or class of consumers, the State Government shall pay the amount to compensate the affected licensee by grant of such subsidy in advance.

Provided that no such direction of the State Government to grant subsidy shall be operative if the payment is not made in accordance with the relevant provisions contained in these Regulations and the Act. In such a case, the tariff of the applicable categories may be revised excluding the subsidy.

- 3. The Government shall, by notification, declare the consumers or class of consumers to be subsidized.
- 4. Tariff of the subsidized category shall be designed taking into account the subsidy allocated to that category.
- 5. The Distribution Licensee shall furnish details of power consumed by the subsidized category to the State Government and the Commission. The Distribution Licensee shall provide meters on all rural distribution transformers and shall also furnish the power consumption details in respect of agricultural and rural domestic consumption based on readings from such meters and normative distribution losses on a monthly basis." (Emphasis supplied)



4.11.2 The Commission, in its Tariff Orders for FY 2013-14 and FY 2014-15, regarding additional subsidy requirement has stipulated as under:

"The Commission in the true up Order dated 21st May, 2013 had computed the additional subsidy requirement from GoUP as the difference between actual cost of sales to subsidised categories and the revenue assessment to the subsidised categories of LMV-1 (a): Consumer getting supply as per "Rural Schedule" and LMV-5: Private Tube wells (PTW). Similarly, the Commission in this Order also, has computed the additional subsidy requirement from GoUP which ensures that commensurate subsidy from GoUP is factored in the ARR being approved for FY 2013-14."

4.11.3 With regard to the above matter, the Distribution Licensees have filed an Appeal before the Hon'ble APTEL on applicability of additional subsidy. The matter has been decided by the Hon'ble APTEL in its Judgment dated November 23, 2015 which is in line with the approach followed by the Commission in its earlier Tariff Orders and wherein it gave the following decision.

"In case the amount of subsidy assured by the State Government for a particular class of consumers is not released, then it may lead to cross subsidizing that particular class of consumers by another class of **consumers** as the tariff is fixed by the State Commission for different class of consumers taking into account the amount of subsidy assured by the State Government for that particular class of consumers which would be against the principles of law laid down by this Appellate Tribunal. We, after considering these rival contentions of the parties do not find force in the contentions of the appellants. The contentions raised by the respondent Commission appear to be reasonable, legal and correct one. It appears from the Impugned Order and other material on record that the State Commission has been consistent in its approach on the said issue because the State Commission has approved the amount of subsidy in a just and legal way. The State Commission has trued up the amount of subsidy given by the State Government on taking into consideration the amount of subsidy approved in the tariff order of the respective FY and actual amount of subsidy received as per audited accounts in the respective FY and as claimed in the true up petitions for the respective FYs. Further, the State Commission has correctly and legally allowed the



subsidy approved in the respective tariff order where the actual subsidy received from the State Government was less and in some years the actual subsidy where the amount received from the Government was more...

- 8.8) Hence, we hold that the State Commission is legally justified in directing the appellants to recover the subsidy/additional subsidy from Government of Uttar Pradesh instead of giving the same as a pass through in the appellants aggregate revenue requirement. If proper datas and details in true sense were not available with the appellants, then for that lapse or failure of the appellants, the consumers cannot be allowed to suffer. Hence, this issue is decided against the appellants."[Emphasis supplied]
- 4.11.4 The Commission has considered the actual sales of the subsidised categories, namely LMV-1 (a): Consumer getting supply as per "Rural Schedule" and LMV-5: Private Tube wells (PTW) for computing the actual subsidy requirement, which is also same as submitted by the Petitioner. Further, the through rate for the LMV-1 (a) Consumer getting supply as per "Rural Schedule" and LMV-5: Private Tube wells (PTW) has been considered as submitted by the Petitioner.
- 4.11.5 As per the table provided below, the additional subsidy has been considered for reduction from the ARR being trued up.

Table 4-22: COMPUTATION OF SUBSIDY REQUIREMENT FOR FY 2013-14 (Rs Crore)

Particulars	Sales	Cost of Service	Thru Rate	Loss	Loss
	(MU)	(Rs/kWh)	(Rs/kWh)	(Rs/ kWh)	(Rs Crore)
LMV-1: (a) Consumer getting supply as per "Rural Schedule"	1,359	6.60	1.65	4.95	673.09
LMV-5: PTW	731	6.60	1.32	5.28	386.10
Total Loss	2,089.67				1,059.19
Subsidy Available					817.86
Additional Subsidy Requirement					241.33



#### 4.12 REVENUE SIDE TRUING UP

#### **NON-TARIFF INCOME**

- 4.12.1 The Petitioner has submitted that the actual non-tariff income during FY 2013-14 was Rs. 32.44 Crore as compared to Rs. 14.40 Crore approved by the Commission in the Tariff Order.
- 4.12.2 The Commission has accepted the submission of the Petitioner under this head and has accordingly approved Non-Tariff Income of Rs. 32.44 Crore for FY 2013-14.

#### 4.13 REVENUE FROM SALE OF POWER

- 4.13.1 The Petitioner has submitted that the actual revenue from sale of power during FY 2013-14 is Rs. 4,698.54 Crore (out of which, Rs. 202.80 Crore is towards delayed payment surcharge) towards electricity sales of 10,710.70 MU against Rs. 6,092.48 Crore approved by the Commission in its Tariff Order.
- 4.13.2 The Commission, in its deficiency note, asked the Petitioner to confirm that Delayed Payment Surcharge has not been double accounted in the total revenue and to submit the detailed break-up of revenue from sale of power. In its reply, the Licensee has submitted that "Delayed Payment surcharge" has not been double accounted in the total revenue and it has been added up to the Revenue from Sales. Further, the complete breakup of the total revenue and delayed payment surcharge as per the audited accounts is also submitted by the Petitioner.
- 4.13.3 The Commission has accepted the revenue from sale of power as submitted by the Petitioner and has accordingly approved the actual revenue of Rs. 4,698.54 Crore including delayed payment surcharge as per the audited accounts for FY 2013-14 towards sales of 10,710.70 MU. The summary of revenue approved in the Tariff Order, as claimed by the Petitioner and as approved by the Commission in this Order for Truing up of FY 2013-14 is shown in the Table below:



Table 4-23: REVENUE FOR FY 2013-14 (Rs. Crore)

Particulars	Tariff Order	Actual as per audited accounts	True-up Petition	Approved upon Truing up
Revenue from Tariff including Delayed Payment Surcharge	6,092.48	4,698.54	4,698.54	4,698.54
Non tariff items	14.40	32.44	32.44	32.44
Total Revenue	6,106.88	4,730.99	4,730.99	4,730.99

### 4.14 ARR AND REVENUE GAP/ (SURPLUS) FOR FY 2013-14 AFTER TRUING UP

4.14.1 The Aggregate Revenue Requirement for FY 2013-14 after final truing up is summarized in the Table below:

Table 4-24: ARR, REVENUE AND GAP SUMMARY FOR FY 2013-14 (Rs. Crore)

Particulars	Approved	Actual as per audited accounts	True-up Petition	Approved upon Truing Up
Power Purchase Expenses (including PGCIL charges)	5,830.95	6,693.04	5,791.63	5,959.79
Apportionment of O&M Expenses of UPPCL#			28.97	0.00
Transmission Charges- Intra State(including SLDC charges)	200.50	298.94	268.93	173.46
Gross O&M Expenses	710.10	888.76	888.76	710.88
Gross Interest on Long Term Loans	119.69	247.87	112.02	112.02
Interest on Bonds	0.00	162.55	162.55	0.00
Interest to Consumers	18.86	19.15	19.15	19.15
Finance Charges	0.09	0.07	0.07	0.07
Interest on Working Capital	103.58	574.79	70.55	67.25
Discount to Consumers	0.00	0.00	0.00	0.00
Depreciation	258.23	129.82	258.04	206.43
Prior Period Expenses	0.00	(23.18)	(23.18)	0.00
Other Misc Expenses	0.00	0.00	0.00	0.00
Provision for Bad and Doubtful Debts	0.00	(31.32)	63.14	0.00
Gross Expenditure	7,242.01	8,960.49	7,640.64	7,249.04
Less: Employee Capitalisation	70.43	121.66	121.66	121.66
Less: A&G Capitalisation	13.13	16.84	16.84	16.84
Less: Interest Capitalisation	27.53	10.38	10.38	4.69
Total Capitalisation	111.09	148.88	148.88	143.19
Net Expenditure	7,130.92	8,811.62	7,491.76	7,105.86



Particulars	Approved	Actual as per audited accounts	True-up Petition	Approved upon Truing Up
Add: Return on Equity	0.00	0.00	0.00	0.00
Less: Non-tariff Income	14.40	32.44	32.44	32.44
Annual Revenue Requirement	7,116.52	8,779.17	7,459.32	7,073.41
Revenue from Tariff incl. DPS	6,092.48	4,698.54	4,698.54	4,698.54
GoUP Subsidy	817.40	817.86	817.86	817.86
Net Revenue Gap	206.64	3,262.77	1,942.91	1,557.01
Less: Additional Subsidy Requirement	65.81			241.33
Net Revenue Gap	140.83	3,262.77	1,942.91	1,315.68

# Apportionment of O&M Expenses of UPPCL has been allowed while computing BST

- 4.14.2 The Petitioner requested the Commission to consider the revenue side trueup and expense side true-up as per the aforementioned sections wherein the net revenue gap has been computed at Rs. 1,942.91 Crore.
- 4.14.3 However, as observed from the above Table, against the gap of Rs. 1,942.91 Crore claimed by the Petitioner for truing up of FY 2013-14, the Commission has worked out the gap of Rs. 1,315.68 Crore while carrying out the truing up on the basis of the audited accounts. The Commission has discussed the treatment of above revenue gap subsequently in this Order.
- 4.14.4 The Commission in its Tariff Order for FY 2013-14 had considered 50% of the revenue gap carried forward consequent to the final Truing up from FY 2000-01 to FY 2007-08 as approved in the Order dated May 21, 2013 while determining the final revenue gap for FY 2013-14. The Commission allowed the Petitioner to recover such amount through Regulatory Surcharge -1 (RS-1). The Commission in its deficiencies had asked the Petitioner to submit the required details related to Regulatory Surcharge-1 (RS-1) and the same has not been submitted by the Petitioner. In absence of such required information pertaining to the collection of Regulatory Surcharge-1 (RS-1), the Commission has not consider the same while Truing-up for FY 2013-14 and directs the Licensees to submit the required details pertaining to Regulatory Sucharge-1 (RS-1), after which the Commission may take an appropriate view.



#### 5. ANNUAL REVENUE REQUIREMENT OF MVVNL FOR 2016-17

#### 5.1 INTRODUCTION

5.1.1 In this section, the Commission has undertaken the process of approval of the Annual Revenue Requirements of the Licensee for FY 2016-17 in line with the provisions of the Distribution Tariff Regulations, 2006.

## 5.2 CONSUMPTION PARAMETERS: CONSUMER NUMBERS, CONNECTED LOAD, SALES

- 5.2.1 The Petitioner submitted that it has projected the category-wise sales based on the CAGR of the last eight years data and considering factors like available population data, expected conversion of unauthorized connections, connected load factor and specific growth factors and wherever the data was incongruous such incongruity was ignored while projecting the load growth for the ensuing years.
- 5.2.2 The Petitioner submitted that the forecast model projects the specific consumption level (consumption per customer) appropriate for each customer category. The Petitioner submitted that this forecast is based on expected growth relationships to income and price, effect of Demand Side Management and impact of hours of service.
- 5.2.3 The Petitioner submitted that the specific consumption level along with the number of customers in each category gives the sales figure for that particular sub-category and the final detailed calculations estimate the connected load for each tariff category. The Petitioner added that the division level forecasts have been consolidated and losses have been added to the sales estimates to determine power purchase requirements.
- 5.2.4 The billing determinants including number of Consumers, Connected Load and Energy Sales for FY 2016-17 as submitted by the Petitioner are shown in the Table below:



Table 5-1: CONSUMPTION PARAMETERS SUBMITTED BY THE PETITIONER FOR FY 2016-17

Consumer categories	No. of consumers	Connected load (kW)	Energy sales (MU)
LMV-1: Domestic	4394163	5921597	7745
LMV-2:Non-Domestic	320640	840660	1270
LMV-3: Public Lamps	3442	95751	456
LMV-4: Institutions	21808	154389	503
LMV-5: Private Tube Wells	153355	694498	1250
LMV 6: Small and Medium Power	40194	359495	1144
LMV-7: Public Water Works	2196	104793	819
LMV-8: State Tube Wells	10200	160954	834
LMV-9: Temporary Supply	2169	12739	38
LMV-10: Departmental Employees	27486	102522	163
HV-1: Non-Industrial Bulk Loads	917	346570	771
HV-2: Large and Heavy Power	1622	644241	2062
HV-3: Railway Traction	11	69696	152
HV-4: Lift Irrigation	37	33331	170
Extra state & Bulk	1	5000	59
Total	49,78,241	95,46,237	17,435

- 5.2.5 For forecasting the consumption parameters the Commission has adopted the same methodology as proposed by the Petitioner as it seems fair and equitable.
- 5.2.6 The consumption norms for projection of unmetered sales were established vide UPPCL Order No. 2649-CUR/L, dated July 7, 2001 and Order No. 165 CUR-2 / R-3 dated February 14, 2014 as detailed below:

Table 5-2: CONSUMPTION NORMS FOR UNMETERED CATEGORIES

SI. No	Category	Consumption Norm (As per UPPCL Order No. 2649-CUR/L dated July 20, 2001)	Consumption Norm (As per UPPCL Order No. 165 CUR-2/ R-3 dated February 14, 2014)
1	LMV1: Domestic (Rural)	72 kWh / kW / month	108 kWh / kW / month
2	LMV2: Non Domestic (Rural)	72 kWh / kW / month	108 kWh / kW / month
3	LMV3: Public Lamps (Rural)	300 kWh / kW / month	No Change
4	LMV3: Public Lamps (Urban)	360 kWh / kW / month	No Change
5	LMV5: Private Tube Wells (Rural)	91.66 kWh / kW / month	137.49 kWh / kW / month
6	LMV8: State Tube Wells (Rural)	3562.35 kWh / pump / month	5343.53 kWh / pump / month



- 5.2.7 As regards consumption norms to be considered for assessment of consumption of unmetered categories, Regulation 3.1 (3) of the Distribution Tariff Regulations, 2006 specifies as follows:
  - "3. As per the Tariff Policy issued by the Central Government metering is to be completed by March 2007, however, based on ground realities if the distribution licensee seeks exemption towards its metering obligation for any particular category of consumers it must provide the Commission revised norms, based on fresh studies, for assessment of consumption for these categories. Sales forecast for such un-metered categories shall be validated with norms approved by the Commission on the basis of above study carried out by the licensee."
- 5.2.8 Also, the Hon'ble ATE in its Judgment dated November 28, 2013 in Appeal No. 239 of 2012 has ruled as follows:

"The issue of unmetered supply is not restricted only to the State of Uttar Pradesh but is prevalent in every State throughout the country especially in the agriculture sector. The Commission has to adopt some normative value for estimation of the unmetered supply. In the absence of any scientific study made available to the Commission, the Commission has adopted the norms available at that relevant time. The Commission had been directing the distribution licensees to carry out study done for accurate estimation of consumption by unmetered supply. We accept the submissions made by the Commission and do not intend to interfere with the impugned order at present. However, we feel that the important issue cannot be postponed indefinitely at the hands of distribution licensees. We direct the Commission to get the required study done by itself through some expert consultant in a fixed time frame."

5.2.9 With regard to the consumption norms, the Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 has specified as under:

"However, since, the unmetered data submitted by the Distribution Licensees is itself on assessment basis, and does not give the accurate and true picture of the actual unmetered consumption; the data submitted by the Distribution Licensees cannot be the only basis for computation of new consumption norms."



5.2.10 In view of the above, to provide accurate and effective consumption norms the Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 has directed the Licensees to conduct a detailed study. The relevant extract of the aforesaid Order is depicted below:

"Hence, the Commission is of the opinion that revising the consumption norms without validating the same based on detailed and appropriate study, would not be appropriate. Further, the Distribution Licensees / UPPCL in the meeting on this issue held with the Commission on 28<sup>th</sup> April, 2014 in response to the In-House Paper prepared by the Commission, have agreed to conduct a study to assess the actual consumption norms in accordance with the Regulations.

In view of the above, to provide accurate and effective consumption norms, the Commission directs the Petitioners to conduct a detailed study, which should include the following:

- Review of Methodology adopted by Distribution Licensees for assessment of consumption norms for unmetered consumers.
- Identification and finalization of sample size of unmetered consumers for installation of meters by Distribution Licensee.
- Collection and analysis of data like Distribution Sub-division wise number of consumers where sample meters have been installed, month wise load of each such consumer maintained in the Distribution Sub-divisions, month-wise consumption readings of each sample meter along with number of supply hours per month, total connected load - division wise and month wise, etc."
- 5.2.11 Further, in reply to the Commission's directive to conduct a detailed study to provide accurate and effective consumption norms as per the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014, the Licensee requested for some more time for compliance of the same.
- 5.2.12 Hence, the Commission reiterates that the Licensees should adhere to the time line outlined in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for conducting a detailed study to provide accurate and effective consumption norms as specified by the Commission in its earlier Orders.



5.2.13 Further, vide letter No. 83/ PCL/ Revenue dated March 31, 2014, UPPCL submitted the minimum consumption units for billing the consumers with defective meters in urban area as specified below:

Table 5-3: CONSUMPTION NORMS IN URBAN AREA SUBMITTED BY UPPCL

Sl. No	Category Consumption Assessed	
1	LMV-1: Domestic	155 / kW / Month
2	LMV-2: Non-Domestic	260 / kW / Month
3	LMV-6: Small &Medium power	260 / kW / Month

- 5.2.14 The Commission passed Suo Moto Order on May 11, 2015 in the matter of provisional billing in case of Defective meters and Normative Consumption for unmetered Consumer wherein the Commission has directed the Licensees to explain as to why revised consumption norms have been issued inspite of the specific instruction in the Tariff Order for FY 2014-15 to conduct a detailed study to provide accurate and effective consumption norms. Further, in the aforesaid Order the Commission has also directed the Distribution Licensees to submit their proposal regarding the Normative Consumption for unmetered consumers.
- 5.2.15 In the above matter the Commission has passed another Order on May 29, 2015 directing the Licensee to use the normative consumption billing method for defective meters as per the provisions specified in the Electricity Supply Code 2005 and with regard to the study for assessment of metered and unmetered consumers, the Commission directed the Licensees to complete the study adhering to the stipulated timeframe as specified in UPERC (Multi Year Distribution Tariff) Regulations, 2014.
- 5.2.16 Further, in the aforesaid Order, the Commission has also directed the Licensees that before changing / revising any consumption norms, prior approval of the Commission must be taken by the Licensees in future.
- 5.2.17 In this regard, for the present Order, the Commission has estimated the sales for unmetered categories for FY 2016-17 by multiplying the consumption norms as per UPPCL Orders No. 2649-CUR/L dated 20<sup>th</sup> July, 2001 and 165 CUR-2/ R-3 dated February 14, 2014 with the appropriate consumption parameter (connected load or number of consumers).



5.2.18 Further, the Licensees in its ARR / Tariff Petition for FY 2016-17 have submitted that they have accounted the number of hours of supply / load shedding in different areas to estimate the sales for FY 2016-17. The Petitioner in its Petition has projected the hours of supply for various areas as specified below:

Table 5-4: PROJECTED HOURS OF SUPPLY AS SUBMITTED BY THE PETITIONER FOR FY 2016-17

Sl. No.	Description	FY 2016-17* (No. of Hours)
1	Mahanagar – M	24:00
2	District – D	22:00
3	Commissionary – C	24:00
4	Rural – R	16:00
5	Bundelkhand – B	22.00

<sup>\*</sup> Hours of supply would be increased from October 2016 in view of the increase in generation capacities

- 5.2.19 The Commission feels that the tariff design should be linked to number of hours of supply. The Commission, therefore, directs the Petitioner to submit a proposal for "Rate Schedule" linked to number of hours of supply while filing of Petition for FY 2017-18.
- 5.2.20 The Commission has observed that the Petitioner has projected increase in number of consumers and sales for certain unmetered categories for FY 2016-17 over the revised estimates submitted by the Petitioner for FY 2015-16. In the earlier Orders of the Commission it can be observed that the Commission has been taking various steps for reducing number of unmetered consumers thereby facilitating their conversion into metered consumers. Contrary to this the Petitioner has projected increase in number of unmetered consumers and sales for certain categories. The Commission in line with its various initiatives for reducing number of unmetered consumers and sales approves unmetered consumers and sales for FY 2016-17 same at the level of FY 2015-16 (as submitted by the Petitioner) for those specific categories whose sales and number of consumers for the unmetered category has been projected at higher level than FY 2015-16. The Commission has however, for such categories projected the overall sale and number of consumers at the same level as that projected by the Petitioner by adding the differential between



the projections of unmetered consumers as projected by the Petitioner and as approved by the Commission to the metered consumers. The Commission hereby approves the consumption parameters for FY 2016-17 as shown in the Tables below. The detailed sub-category wise consumption parameters (historical and approved) have been annexed to this Order.

Table 5-5: CONSUMPTION PARAMETERS APPROVED BY THE COMMISSION FOR FY 2016-17

Consumer categories	No. of consumers	Connected load (kW)	Energy sales (MU)
LMV-1: Domestic	4394163	5921597	7745
LMV-2:Non-Domestic	320640	840660	1270
LMV-3: Public Lamps	3442	95751	456
LMV-4: Institutions	21808	154389	503
LMV-5: Private Tube Wells	153355	694498	1250
LMV 6: Small and Medium Power	40194	359495	1144
LMV-7: Public Water Works	2196	104793	819
LMV-8: State Tube Wells	10200	160954	834
LMV-9: Temporary Supply	2169	12739	38
LMV-10: Departmental Employees	27486	102522	163
HV-1: Non-Industrial Bulk Loads	917	346570	771
HV-2: Large and Heavy Power	1622	644241	2062
HV-3: Railway Traction	11	69696	152
HV-4: Lift Irrigation	37	33331	170
Extra state & Bulk	1	5000	59
Total	49,78,241	95,46,237	17,435

Table 5-6: NUMBER OF CONSUMERS: HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17

Consumer categories	FY2012-13	FY2013-14	FY2014-15	Computed for FY 2015- 16	Approved for FY 2016- 17
LMV-1: Domestic	2660533	2832752	3451450	3901444	4394163
LMV-2:Non-Domestic	272774	264920	293939	306418	320640
LMV-3: Public Lamps	6057	4029	3199	3318	3442
LMV-4: Institutions	16275	17303	18835	20266	21808
LMV-5: Private Tube Wells	137457	143860	140711	146843	153355
LMV6: Small and Medium Power	35119	35016	36544	38309	40194
LMV-7: Public Water Works	1728	1771	1815	1988	2196
LMV-8: State Tube Wells	9064	9245	9705	9947	10200
LMV-9: Temporary Supply	1604	125	1980	2072	2169



Consumer categories	FY2012-13	FY2013-14	FY2014-15	Computed for FY 2015- 16	Approved for FY 2016- 17
LMV-10: Departmental Employees	22262	23553	24357	25866	27486
HV-1: Non-Industrial Bulk Loads	535	680	692	797	917
HV-2: Large and Heavy Power	1205	1269	1412	1509	1622
HV-3: Railway Traction	4	5	8	9	11
HV-4: Lift Irrigation	18	18	30	33	37
Extra state & Bulk	1	1	1	1	1
Total	31,64,636	33,34,547	39,84,678	44,58,821	49,78,241

Table 5-7: CONNECTED LOAD (kW): HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17

17								
Consumer categories	FY 2012-13	FY 2013-14	FY 2014-15	Computed for FY 2015-16	Approved for FY 2016-17			
LMV-1: Domestic	3701495	3997819	4602653	5358749	5921597			
LMV-2:Non-Domestic	691868	689571	763820	802482	840660			
LMV-3: Public Lamps	94068	88330	77697	91437	95751			
LMV-4: Institutions	113678	119074	113889	143831	154389			
LMV-5: Private Tube Wells	569452	609915	632128	663920	694498			
LMV 6: Small and Medium Power	311925	313917	320111	342728	359495			
LMV-7: Public Water Works	75863	81363	77392	95879	104793			
LMV-8: State Tube Wells	137758	142060	138614	156004	160954			
LMV-9: Temporary Supply	5139	267	8483	12268	12739			
LMV-10: Departmental Employees	79111	78491	70817	96603	102522			
HV-1: Non-Industrial Bulk Loads	210259	263690	261368	300959	346570			
HV-2: Large and Heavy Power	454706	491476	552974	595342	644241			
HV-3: Railway Traction	22425	31100	52700	60605	69696			
HV-4: Lift Irrigation	22961	23101	27245	30122	33331			
Extra state & Bulk	5000	5000	5000	5000	5000			
Total	64,95,708	69,35,174	77,04,891	87,55,930	95,46,237			



Table 5-8: ENERGY SALES (MU): HISTORICAL TREND AND APPROVED VALUES FOR FY 2016-17

Consumer categories	FY 2012-13	FY 2013-14	FY 2014-15	Computed for FY 2015- 16	Approved for FY 2016-17
LMV-1: Domestic	3996	4476	5263	6438	7745
LMV-2:Non-Domestic	861	933	984	1081	1270
LMV-3: Public Lamps	325	308	287	418	456
LMV-4: Institutions	298	282	256	397	503
LMV-5: Private Tube Wells	623	731	890	1191	1250
LMV 6: Small and Medium Power	484	489	496	869	1144
LMV-7: Public Water Works	388	374	380	738	819
LMV-8: State Tube Wells	896	922	804	798	834
LMV-9: Temporary Supply	16	1	25	35	38
LMV-10:Departmental Employees	135	132	130	141	163
HV-1: Non-Industrial Bulk Loads	408	523	561	669	771
HV-2: Large and Heavy Power	1239	1263	1302	1889	2062
HV-3: Railway Traction	35	80	117	132	152
HV-4: Lift Irrigation	117	117	113	154	170
Extra state & Bulk	59	62	59	59	59
Total	9,880	10,694	11,666	15,010	17,435

- 5.2.21 As regards the metering of consumers, Section 55 of the Electricity Act, 2003 stipulates as follows:
  - "55. (1) 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 regulations to be made in this behalf by the Authority:"
- 5.2.22 Chapter 5 'Metering' of the U.P. Electricity Supply Code 2005, specifies as follows:
  - "5.1 Licensees obligation to give supply on meters: Requirement of Meters
  - (a) 2 [No new connection shall be given without a Meter and Miniature Circuit Breaker (MCB) or Circuit Breaker (CB) of appropriate specification from the date of issue of this code.



- (b) All unmetered connections including PTW, streetlights shall be metered by the licensee.
- (c) The Licensee shall not supply electricity to any person, except through installation of a correct meter in accordance with the regulations to be made by the Central Electricity Authority under Electricity Act, 2003.]

Provided that the Commission may, by notification, extend the said period for a class or classes of persons or for such area as may be specified in that notification.

- 2 [Provided also that if a person makes default in complying with the provisions contained in the clauses 5.1(a), (b) and (c), UPERC may make such order as it thinks fit for requiring the default to be made good by the generating company or licensee or by any officer of a company or other association or any person who is responsible for the default."
- 5.2.23 From the above, it is evident that metering of consumers is essential. However, by not complying with the above, the Distribution Licensee is contravening and is in default of above provisions / Regulations. The Distribution Licensee must demonstrate on best effort basis, their will and intent to comply with the provisions of the Act and Regulations, failing which they are liable for being dealt with appropriately as per provisions of the Act / Regulations.
- 5.2.24 The Distribution Losses of the Distribution Licensees are at higher level and the major reasons for the same is larger number of unmetered connections, which ultimately leads to disallowance of power purchase cost on one hand and loss of revenue on the other hand. Thus, it becomes extremely necessary for the Distribution Licensee to ensure that it achieves the target of 100% metering within its distribution area.
- Although bound by the various provisions of the Electricity Act, 2003, various Regulations, and several directions given by the Commission, the Distribution Licensee has not been able to improve the metering status in its distribution area. The Commission opines that part of the problem has arisen because of lack of strong will power and determination of the Distribution Licensee to tackle the above issue and part of the problem has been due to the resistance that the Distribution Licensee faces in this regard. The Commission is of the view that a solution to the above problem can only be evolved if both the



consumers and the Distribution Licensee work together under the supervision of the Commission to achieve the goal of 100% metering.

- 5.2.26 In view of the above, to encourage the unmetered consumers to shift to metered connections the Commission in its Tariff Order for FY 2014-15 dated October 1, 2014, reduced the energy charge for such consumers who shift from unmetered to metered category to some extent. Further to discourage the unmetered connections, the Commission has also increased the Tariff for unmetered category of consumers, for instance the tariff for rural domestic consumers was specified based on per kW / month from the existing per / connection / month. However, considering the general grievance of many consumers under LMV-1 (a) and LMV-2 (a) categories having load upto 2 kW that their contracted load is higher than their actual load, the Commission vide letter no. UPERC / Secy / D(Tariff) / 14-1153 dated October 14, 2014 directed the Licensees to ascertain the actual load of consumer and accorded a time period of 3 months to complete such exercise and till such time for such sub-categories the tariff rate as per Tariff Order for FY 2013-14 was made applicable by the Commission. Further, vide letter no. UPERC / Secy / D(Tariff) / 15-1839 dated January 28, 2015, the Commission has extended the relief to the above categories of consumers till March 31, 2015 and directed the Licensees to prioritize the exercise and get it completed by March 31, 2015.
- 5.2.27 Further, the Commission vide letter no. UPERC / D(T) 2015-475 dated June 03, 2015 in the matter of Load ascertainment for Rural Consumers & Metering has directed the Distribution Licensees to confirm the status of the compliance to the above directive presuming that appropriate action have already been taken by the Licensees.
- 5.2.28 To encourage the consumers to get metered connection, the Commission in its Orders for FY 2014-15 and FY 2015-16 has also specified that the Cost of meter may be borne initially by the Licensee which shall be adjusted in the consumers' bill within 6 months of time and the above scheme was made applicable only for the consumers who install the meters by March 31, 2015.
- 5.2.29 Thus, in line with the direction provided by the Commission in earlier Orders, the Commission has decided to retain the provisions and directs the Licensee that that the Cost of meter may be borne initially by the Licensee which shall be adjusted in the consumers' bill within 6 months of time and



# this scheme would be applicable only for the unmetered consumers who install the meters by March 31, 2017.

- 5.2.30 The Commission vide its Order dated May 29, 2015, on Suo-Moto proceedings on provisional billing in case of defective meters/normative consumption for unmetered consumers & facilitation charges done through internet, directed that in case of defective meters, the Licensees have to use the normative consumption billing method as per the provisions specified in the Electricity Supply Code, 2005 and for the consumers with no meters (i.e. in the case where the consumers were given metered connection but meters are not yet installed) the provisional billing shall continue only for a maximum period of two billing cycles, during which the Licensees should ensure the meters get installed. Thereafter, the Licensees shall not be entitled to raise any bill from the consumers without installation of meters and the revenue loss on this account will be borne by the Licensees which will also be considered as deemed revenue.
- 5.2.31 The Distribution Licensees aggrieved by the above Order of the Commission filed an affidavit on June 04, 2015 in which it informed the Commission about the practical difficulties being faced on installation of meters and thus requested the Commission to extend the period of provisional billing from two months to six months by which time licensees were hopeful of arranging the meters and installing them.
- 5.2.32 The Commission vide its Order dated August 21, 2015 allowed the Distribution Licensees to install meters at all the un-metered urban consumers upto October 31, 2015 beyond which the licensees will not be entitled to raise any bill from the consumers, and reiterated that the loss of revenue on this account shall be borne by the licenses, and the same will be considered as deemed revenue.
- 5.2.33 The Distribution Licensees filed a Petition on October 6, 2015 before the Commission in which it was submitted that the Licensees have started the installation of meters on war footing and about the problems faced by them in respect of some defiant consumers.



5.2.34 During the hearing dated December 9, 2015 in the matter of "Installation of meters" the representatives of the respective Licensees submitted the information about the status of metering in urban areas as provided below:

TABLE 5-9: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY PETITIONER

Particulars	DVVNL	MVVNL	PuVVNL	PVVNL	KESCO	Consolidated
LMV -1	0	0	714	1724	519	2957
LMV -2	0	0	0	160	108	268
LMV-3	0	146	0	98	18	262
LMV-5	0	2100	0	51	0	2151
LMV-8	0	262	0	0	0	262
Total	0	2508	714	2033	645	5900

#All the above figures are updated till November, 2015

- 5.2.35 The Commission also observed some data discrepancies in the information submitted by the Licensees. However the Commission appreciated the efforts put in by the concerned officers of DVVNL, PuVVNL & KESCo and further directs the MDs of MVVNL & PVVNL to take strict action against the officers who have been responsible for not achieving the targets and intimate the Commission of the same.
- 5.2.36 Further, the Commission in its Order dated December 21, 2015 directed the Licensees to provisionally bill all such consumers who do not get the meters installed at their premises, despite issuance of public as well as individual notices at the rate of 2 (Two) times of the normative consumption rates applicable at that time. For this purpose, a public notice be published, requesting the remaining consumers to get the meters installed within a maximum period of 7 (seven) days and simultaneously the licensees must serve individual notices to all such consumers giving them15days' time to get the meter installed, failing which, the licensee will charge enhanced provisional billing @2 (Two) times of the normative consumption rates as applicable at that time. Consumers who have been served such notices will not be under the ambit of the provision of the 'Licensees not to be entitled to raise any bill in case of unmetered consumers' till a decision on their reply to the notice is taken.
- 5.2.37 In the said Order dated December 21, 2015 the Commission directed that no Licensee will be entitled to raise any bill to the unmetered urban consumers from January 1, 2016, provided such consumers have not been issued notices



to get the meters installed and till a decision on their reply to the notice is taken and the loss of revenue on this account shall be borne by the Licensees, and the same will be considered as deemed revenue.

- 5.2.38 The Commission also expressed its satisfaction, and also appreciated the Discoms for the work done in respect of urban metering which has almost reached 100% level. The rural metering, however, still remains an area of grave concern. As 100% metering has been provided for in the Electricity Act, 2003, the Commission has been repeatedly directing and stressing the licensees to achieve 100% metering & energy auditing. In this regard, the Commission directs the Licensees to put all efforts to get all the rural consumers metered and submit monthly progress report to the Commission. Further the Licensees / UPPCL are directed to put up a proposal to the Commission on payment of interest to all such consumers whose cost of the meter is deposited with them but the licensee has not installed their meters.
- 5.2.39 In reply to the Commission's deficiency note regarding number of unmetered connections up to FY 2014-15, the Petitioner has submitted the details as follows:

**Particulars** FΥ FΥ FΥ FY FY FY FY 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2008-09 LMV – 1 Rural Domestic 7,71,177 8,31,834 8,44,922 8,35,115 8,48,076 8,88,464 12,08,758 LMV 2 Rural 13,074 17,648 21,412 21,069 20,609 26,165 18,751 Commercial 5,013 5,064 5.899 3,057 LMV-3 Public Lamps 5,635 5,852 3,875 LMV-5 PTW 1,15,607 1,22,965 1,26,701 1,30,578 1,32,748 1,26,178 1,36,615 LMV-8 State Tube Wells 9,175 8,680 8,501 8,138 8,861 8,806 9,247 LMV-9 **Temporary** 7 1,014 59 25 173 Supply LMV-10 Employees 19,334 21,237 21,609 22,262 24,357 19,856 23,553 10,15,476 10,36,745 Total 9,34,394 10,19,142 10,15,571 10,81,922 14,04,505

Table 5-10: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY MVVNL

5.2.40 It is observed that the number of unmetered consumers has been increasing since FY 2008-09 and the Licensee has not been able to convert its consumers into metered connections since a very long time. It may be noted that the Commission in its Tariff Order dated May 31, 2013 had directed the Petitioner as follows:



"Commission directs the Licensee to submit a road map for 100% metering in its licensed area. However, based on the ground realities, if the Distribution Licensee seeks exemption towards its metering obligation for any particular category of consumers, it must provide the Commission revised norms specific for its supply area, based on fresh studies, for assessment of consumption for these categories. Sales forecast for such un-metered categories shall be validated with norms approved by the Commission on the basis of above study carried out by the Licensee."

- 5.2.41 However, the Licensee has not submitted any explanation as to why it has not been able to convert the unmetered connections to metered connections till now. This clearly implies that the Petitioner has not been making its full efforts to convert the unmetered connections. Therefore, the Commission once again directs the Licensee to comply with the direction given by the Commission in this Order and accordingly put its sincere efforts for converting the unmetered consumers to metered consumers. The Licensee must ensure that metering is achieved upto the satisfactory level, failing which the Commission may take a strict view for appropriate action.
- 5.2.42 The details of un-metered consumers of the 4 Distribution Licensees, viz., DVVNL, MVVNL, PVVNL and PuVVNL for the period from FY 2008-09 to FY 2014-15 are shown in the Table below:

Table 5-11: NUMBER OF UN-METERED CONSUMERS OF FOUR DISCOMS (DVVNL, MVVNL, PUVVNL AND PVVNL)

Particulars	FY						
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
LMV – 1 Rural Domestic	3461091	3688734	3884519	4108404	4368890	4716315	5671510
LMV – 2 Rural Commercial	72090	84533	83235	88172	96372	100842	110978
LMV-3 Public Lamps	6802	7233	7294	8174	8969	7131	6582
LMV-5 PTW	745919	721451	752153	765552	802308	827654	856688
LMV-8 State Tube Wells	27788	27458	27332	27865	28325	29420	29975
LMV-9 Temporary Supply	1167	100	490	215	251	278	476
LMV-10 Employees	70700	75327	75722	80468	81966	84940	89234
Total	4385557	4604836	4830745	5078850	5387081	5766580	6765443

5.2.43 Looking at the status of unmetered consumers, as shown in the table above, it appears that the Distribution Licensees have not been able to comply with the



direction of the Commission and instead of reducing the number of unmetered consumers, there has been a consistent increase in the number of unmetered consumers combined for all the Distribution Licensees, indicating the inefficiency of the Licensees.

Further, with regard to the above the Petitioner in its ARR / Tariff Petition for FY 2016-17 has submitted that large number of meters are required for providing new connections as well as for replacement of defective meters for effective energy accounting. At present large section of the consumers are not correctly metered due to defective metering. This needs immediate replacement. Presently the Petitioner is releasing all the new connections with meters. In addition to investment on replacement and installation of meters, investment in respect of installation of 3-phase meters and investment in respect of double metering of high value consumers is being undertaken in the current year and is also projected in the ensuing year.

5.2.44 The Commission in its Tariff order for FY 2015-16 in the matter of unmetered consumers of LMV-1(a) i.e. Consumers getting supply as per "Rural Schedule" directed the Petitioner that such consumers shall be converted into metered consumers by December 31, 2015 beyond which the Tariff for unmetered category of LMV-1(a) shall be increased by 10%. The relevant part of the said Tariff Order is reproduced below:

"In this regard, the Commission expressing its utmost concern directs the Distribution Licensees to ensure that all their unmetered consumers of LMV-1(a) i.e. Consumers getting supply as per "Rural Schedule" shall be converted into metered connection by December 31, 2015 beyond which the Tariff for unmetered category of LMV-1(a) shall be increased by 10%."

5.2.45 The Commission in its Order dated February 18, 2016 Suo-Moto, elaborated several options for giving relief to the farmers who are facing acute hardship due to drought conditions prevailing in the State and decided in public interest to grant relief to all the rural domestic consumers of the 50districts notified as drought hit by the State Government, to defer the above increase of 10% after December 31, 2015, for next three months. This means that increase of 10% is only effective after March 31, 2016.



- 5.2.46 Further in the said Order the Commission had also directed the State Distribution Licensees to submit their comments on the above observations along with the data /clarifications sought vide Commission's letter dated February 8, 2016. The Distribution Licensees did not make any such submission as per the direction of the Commission. Further in Tariff Proposal for FY2016-17, the Distribution Licensees did not propose any hike for the concerned category. Taking the above facts into consideration the Commission in its Order dated April 18, 2016 decided to put the above discussed 10% rise in abeyance till further Order of the Commission.
- 5.2.47 In this regard, the Commission expressing its utmost concern directs the Distribution Licensees to make sincere efforts to convert all their unmetered consumers of LMV-1(a) i.e. Consumers getting supply as per "Rural Schedule" into metered connection and bill all the rural unmetered consumers as per the rates provided in the Rate Schedule of this Tariff Order.
- 5.2.48 Another important issue highlighted by the Commission in its Tariff Order for FY 2014-15 was to increase the distribution network of the Licensee and to cover all the prospective electricity users to become the consumers of the Licensee. As per the population census of 2011 conducted by the Census Organization of India, the total number of residential premises / households in the State of Uttar Pradesh are around 3.29 Crore. While from the actual data submitted by the Distribution Licensees for FY 2012-13, it was observed that the total number of residential consumers having electricity connections in the State is only 1.14 Crore.
- 5.2.49 In this regard, the Commission in its Tariff Order for FY 2014-15 has provided additional consumer addition target to the Distribution Licensees to be added in FY 2014-15. The relevant extract of the said Order has been specified as under:

"The Commission is of the view that there is a pressing need for the Distribution Licensees to expand their consumer base by increasing the overall consumer addition per year. Considering the same, the Commission opines that in addition to the normal consumer addition (which may only cater to the population growth) the Licensees are



required to add consumers to fulfil the huge gap between potential and actual consumers who can be given an electricity connection.

......the Commission sets an additional target of 25% (i.e., to cover all the potential household consumers in about 4 years) of 70% of the difference between the numbers of consumers estimated as per the projections done by the Commission for FY 2014-15 and total number of households in the Licensees' area as per the 2011 census (Emphasis added)..."

5.2.50 Thus, in line with the direction provided by the Commission in its Tariff Order for FY 2014-15 the consumer addition target the Commission decided the target for FY 2015-16 as specified below:

Distribution 2011 Census Total No. of Additional 70 % of Target **Target** Licensee Data (No. of Domestic Households Additional number of number of Households) Consumers to be Household is **Consumers Consumers** covered considered to be to be (LMV-1 Category) for target added in added in approved for setting 1st Year 2nd Year FY 2014-15 (FY 2014-(FY 2015-15) 16) Α В C = A-BD = 70%\*C E= 25%\*D F= 25%\*D **DVVNL** 7,185,882 2,489,664 4,696,218 3,287,353 821,838 821,838 **MVVNL** 10,069,784 2,929,785 7,139,999 4,997,999 1,249,500 1,249,500 **PVVNL** 5,894,819 3,491,752 420,537 420,537 2,403,067 1,682,147 9,773,781 **PuVVNL** 3,464,136 6,309,645 4,416,752 1,104,188 1,104,188 Total 32,924,266 12,375,337 20,548,929 14,384,250 3,596,063 3,596,063

Table 5-12: ADDITIONAL CONSUMER ADDITION TARGET FOR FY 2015-16

5.2.51 Further, in compliance to the Commission's directive for additional target consumer to be added in FY 2014-15, for last year the Petitioner submitted that from July, 2014 onwards it has been running new connection drives and by means of various campaigns have been successfully able to add considerable number of consumers within few months. The Licensees submitted the following table depicting actual no of consumers added and load enhanced by the Licensees since July, 2014 during the proceedings of Tariff determination for FY 2015-16.



## TABLE 5-13: ADDITIONAL CONSUMER ADDITION AND LOAD ENHANCEMENT UNDERTAKEN BY THE LICENSEES THROUGH VARIOUS DRIVES IN FY 2014-15

Particulars	New Service Connection provided by the Licensees (In Nos.)	Load enhancement done by Licensees (In kW)
TOTAL	2402465	304658

<sup>\*</sup>The above figures are at State Level

5.2.52 The Commission had at that time appreciated the efforts put in by the Licensees. But, the Licensees seem to have again become lax and have shown no appreciable progress thereafter and have also not submitted periodical progress report regarding the addition of consumers. The Licensees are strongly advised to add to its number of existing consumers in a big way and also ensure to provide metered connection, only while adding new consumers. Any laxity in this matter would be viewed seriously by the Commission and may result into appropriate action.

#### 5.3 DISTRIBUTION LOSSES AND ENERGY BALANCE

- 5.3.1 Based on review of actual performance of the Licensees, the Commission is of the view that there is ample room for reduction in distribution losses; however, the Licensee has failed to act upon the same. There is an urgent need to have an appreciable loss reduction trajectory and aggressive follow-up efforts to achieve it.
- In this regard, the Commission in its previous Tariff Orders, had directed the Distribution Licensees to conduct proper loss estimate studies for assessment of technical and commercial losses under its supervision and submit the report to the Commission so that the Commission may set the base line losses in accordance with Clause 3.2.3 and Clause 3.2.4 of the Distribution Tariff Regulations, 2006. The study shall segregate voltage-wise distribution losses into technical loss (i.e., Ohmic / Core loss in the lines, substations and equipment) and commercial loss (i.e., unaccounted energy due to metering inaccuracies / inadequacies, pilferage of energy, improper billing, no billing, bad debts, etc.). The Commission also directed the Licensee to complete the study and submit the report within 3 months of the Order, i.e., by August 31, 2013.



- 5.3.3 In this regard, the Distribution Licensees submitted that M/s PFC Consulting Ltd. has been appointed to draft a strategy paper for the turnaround of the Distribution Licensees, which covers the voltage wise loss studies.
- 5.3.4 As per the current status of compliance of the Commission's Directive, the petitioner has submitted that the PFC Consulting Ltd. has prepared a draft approach paper which is in discussion stage. Once the approach paper is finalized, the Petitioner would submit the same to the Commission. The Commission is of the view that the Petitioner should expedite the process as the time period allowed for conducting the study was 3 months. The Commission would like to reiterate that the distribution loss proposal of the Licensee should be based on correct energy audit data and supported by a report on the study carried out on such data. The Commission has been continuously stressing upon such study so that the appropriate target of distribution losses could be given to the Distribution Licensee.
- 5.3.5 The State owned Distribution Licensees namely, MVVNL, PVVNL, DVVNL, PuVVNL and KESCO in their ARR Petition for FY 2016-17 have projected the following Distribution Losses for FY 2016-17:

Table 5-14: DISTRIBUTION LOSS PROJECTED BY THE DISTRIBUTION LICENSEES FOR FY 2016-17

Discom	FY 2016-17
PVVNL (Retail)	18.00%
PuVVNL	19.25%
MVVNL	19.00%
DVVNL (Retail)	26.00%
KESCO	22.00%

- 5.3.6 The Commission, in its deficiency note, asked the Distribution Licensees to submit the actual Distribution losses for FY 2015-16 (till December, 2015) and the reason for variation in the projected losses as per the ARR / Tariff Petition and as approved in the FRP.
- 5.3.7 In response to the query of the Commission, Petitioner submitted that data in respect of actual distribution losses for FY 2015-16 (till December) has yet not been prepared and the same can be made available only on the annual basis when the provisional accounts of the Licensee are in shape. The Licensees further submitted that the major reason for variation in the Distribution losses projected for FY 2016-17 and the Distribution Loss considered in FRP is due to



the gap in the funding of cash gap estimated by the Petitioner in the FRP and the actual funding made by the participating banks. Due to the substantial gap in the availability of funds, the petitioner has not been able to make the envisaged capital investments for implementing loss reduction schemes and other performance improvement measures planned in the FRP. However the Petitioner is in the process of finding new sources of funding for implementation of aforementioned measures at the earliest possible to curb the distribution losses and bring down the same to the desired level as projected in the FRP.

- 5.3.8 The Petitioner in its Petition has mentioned that it has submitted a loss trajectory before the Commission being in line with the loss reduction trajectory suggested by Ministry of Power, Government of India. Thus considering the commitments made by the Petitioner in the aforesaid submission, it has considered the losses for FY 2014-15, FY 2015-16 & FY 2016-17. Also, if in case the actual losses for FY 2014-15 are lower than the committed losses as per the trajectory, the Petitioner has estimated a 2% reduction in the Distribution Losses each year over the actual loss level of FY 2014-15.
- 5.3.9 The summary of the actual distribution loss for the past years as submitted by the Distribution Licensees, distribution loss approved in the FRP for FY 2016-17 and the distribution loss as projected by the Licensees for FY 2016-17 in their Petitions is shown in the Table below:

**Table 5-15: SUMMARY OF DISTRIBUTION LOSSES** 

Distribution	Actual	Provisional	Approved by	Approved	Projected by
Licensee	FY 2013-14	FY 2014-15	the	in FRP for	Licensees for
			Commission for	FY 2016-17	FY 2016-17
			FY 2015-16		in their
					Petitions
DVVNL	28.69%	29.49%	29.00%	18.55%	26.00%
MVVNL	24.85%	22.88%	21.03%	17.00%	19.00%
PVVNL	23.08%	19.66%	19.52%	17.00%	18.00%
PuVNNL	24.73%	23.88%	20.93%	16.00%	19.25%
KESCO	30.84%	26.04%	23.50%	17.00%	22.00%



- 5.3.10 However, as may be observed from the above table the actual distribution losses of the Licensees are very high as compared to the loss target approved in the FRP for FY 2016-17. Therefore, approving the target losses at the levels approved in the FRP may not be achievable by the Licensees.
- 5.3.11 The Commission is of the view that the Distribution Losses reduction targets projected by some Distribution Licensees are very low. As the actual losses are very high, there is ample room to reduce the Distribution Losses with appropriate measures. The Commission, while approving the distribution losses for FY 2016-17 has considered the submission made by the Distribution Licensees and practicality of the Distribution Loss Reduction target. The Commission has also considered the consumers mix, sales mix and geographical spread of the Distribution Licensees along with the recent MOU signed by the Distribution Licensees with Ministry of Power, Govt. of India and all other relevant factor contributing to the Distribution Losses in the supply area of Distribution Licensees.

#### **Ujwal DISCOM Assurance Yojna (UDAY)**

- 5.3.12 Electricity is a concurrent subject at Entry 38 in List III of the seventh Schedule of the Constitution of India. The Ministry of Power is primarily responsible for the development of electrical / power sector in the country as well as for the administration of the Electricity Act, 2003, the Energy Conservation Act, 2001 and to undertake such amendments to these Acts, as may be necessary from time to time, in conformity with the Government's policy & objectives.
- 5.3.13 In an initiative to revive the financially distressed Distribution Companies the Union Cabinet chaired by the Hon'ble Prime Minister Shri Narendra Modi, approved a new scheme moved by the Ministry of Power Ujwal DISCOM Assurance Yojna (UDAY). UDAY provides for the financial turnaround and revival of Power Distribution companies (DISCOMs), and thereby ensuring a sustainable permanent solution to the problem.
- 5.3.14 Salient Features of UDAY Scheme launched by Ministry of Power, Government of India (GoI)



- States shall take over 75% of DISCOM debt as on September 30, 2015 over two years 50% of DISCOM debt shall be taken over in 2015-16 and 25% in 2016-17.
- 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 2016-17.
- 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%.
- States shall take over the future losses of DISCOM in a graded manner and shall fund them as follows:

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Previous	0% of the	0% of the	5% of the	10% of the	25% of the	50% of the
Year's	loss of	loss of	loss of	loss of	loss of	previous
DISCOM loss	2014-15	2015-16	2016-17	2017-18	2018-19	year loss
to be taken						
over by State						

- State DISCOMs will comply with the Renewable Purchase Obligation (RPO) outstanding since April 1, 2012, within a period to be decided in consultation with Ministry of Power.
- States accepting UDAY and performing as per operational milestones will be given additional / priority funding through Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY),Integrated Power Development Scheme (IPDS), Power Sector Development Fund (PSDF) or other such schemes of Ministry of Power and Ministry of New and Renewable Energy.
- Such States shall also be supported with additional coal at notified prices and, in case of availability through higher capacity utilization, low cost power from NTPC and other Central Public Sector Undertakings (CPSUs).
- States not meeting operational milestones will be liable to forfeit their claim on IPDS and DDUGJY grants.



- UDAY is optional for all States. However, States are encouraged to take the benefit at the earliest as benefits are dependent on the performance.
- 5.3.15 The Government of India, Government of Uttar Pradesh and the U.P. Discoms have entered into a tripartite MOU in order to improve the operational and financial efficiency of the U.P. Discoms to enable financial turnaround of the Discoms. Uttar Pradesh Power Corporation Limited (UPPCL) on behalf of its subsidiary Discoms namely Dakshinanchal Vidyut Vitran Nigam Limited (DVVNL), Kanpur Electricity Supply Company Limited (KESCO), Madhyanchal Vidyut Vitran Nigam Limited (MVVNL), Paschimanchal Vidyut Vitran Nigam Limited (PVVNL), Purvanchal Vidyut Vitran Nigam Limited (Puvvnl) has signed the "Tripartite MOU" with Ministry of Power (GoI) and Government of Uttar Pradesh (GoUP) on January 30, 2016.
- 5.3.16 The scheme comprises four initiatives improving operational efficiencies of Discoms, reduction of cost of power, reduction in interest cost of Discoms and enforcing financial discipline on Discoms through alignment with state finances. It allows state Government, which own the Discoms, to take over 75 percent of their debt as of September 30, 2015, and pay back lenders by selling bonds. Discoms are expected to issue bonds for the remaining 25 percent of their debt.
- The U.P. Discoms have been reeling under severe financial stress. As per the MOU signed by the Discoms, they had revenue deficit during FY 2013-14 (Rs. 13,802 Crore) with an expected revenue deficit of Rs. 10,636 Crore in FY 2014-15. The accumulated losses have reached to the level of Rs.70,738 Crore (approx.) up to March 31, 2015. The outstanding debt level of the U.P. Discoms has reached Rs.53,211 Crore (Figures of outstanding loan as on September 30, 2015 are provisional as all lenders are yet to confirm the outstanding loan data as such the amount of loan may change upon confirmation)at the end of September 2015. Also, the interest cost burden of nearly Rs. 0.88per unit of sales during FY 15is significantly higher than the national average of Rs 0.44 per unit only. The Annual Revenue Requirement (ARR) is insufficient to meet the Average Cost of Supply (ACOS), with a cost recovery of only 65.97 %.
- 5.3.18 The Distribution Loss trajectory as agreed by the Discoms in the MoU signed under UDAY Scheme is provided below:



Table 5-16: SUMMARY OF DISTRIBUTION LOSSES AS PER MOU SIGNED BY PETITIONER UNDER "UDAY SCHEME"

Distribution Licensee	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
DVVNL	27.20%	23.82%	20.07%	16.25%	12.10%
MVVNL	23.14%	21.52%	19.16%	16.09%	11.80%
PVVNL	21.49%	20.20%	18.18%	15.20%	11.80%
PuVVNL	22.67%	21.57%	19.73%	16.43%	12.20%
KESCO	25.58%	22.51%	18.91%	15.13%	11.80%
Total	23.56%	21.71%	19.18%	15.90%	11.96%

- 5.3.19 The Commission has considered the practical difficulties being faced by the Distribution Licensees in reduction of Distribution Losses. It is well established that there are number of factors such as sales mix, consumer mix, geographical spread of consumers, condition of distribution infrastructure that contribute to the distribution losses. Distribution Licensees during the public hearing process and in various submissions to the Commission explained the steps undertaken by them to improve the supply hours and reduce the distribution losses. They also explained various contributing factors like increased supply hours, new connections addition drives etc. The Commission, while approving the distribution losses for FY 2016-17 has considered the submission made by the Distribution Licensees and practicality of the Distribution Loss Reduction target. The Commission has also considered the consumers mix, sales mix and geographical spread of the Distribution Licensees and all other relevant factor contributing to the Distribution Losses in the supply area of Distribution Licensees.
- 5.3.20 Further, the Commission has also observed that the actual Distribution Losses of Distribution Licensees namely DVVNL and KESCO are very high in last three years and it would be practically difficult for them to achieve even the Distribution loss reduction target set by the Commission for FY 2015-16. It should also be noted that the Distribution Licensees submitted their Petition for Truing Up for FY 2013-14 and ARR / Tariff determination for FY 2016-17 in early December, 2015 and signed MOU under the UDAY scheme in the month of January, 2016. The Commission believes that the Distribution Licensees must have performed prudence exercise before projecting the loss reduction trajectory to be achieved during FY 2015-16 to FY 2019-2020 in the MOU and



considers the Distribution Loss targets as agreed to be more realistic. Thus, taking into consideration all the reasons as stated above, actual distribution loss level of last three years and the MoU signed by the Discoms under UDAY Scheme the Commission directs the Discoms to strictly follow the Distribution Loss trajectory as well as AT&C Loss trajectory as agreed in UDAY Scheme and approves the Distribution Loss targets of the Distribution Licensees same as specified under UDAY Scheme for FY 2016-17.

- 5.3.21 While projecting the Power Purchase requirement for FY 2016-17, the Intra State-Transmission Losses has been considered at 3.59% same as that approved for FY 2015-16 against the proposed 3.67% by the Distribution Licensees.
- 5.3.22 Based on the above, the approved energy balance for FY 2016-17 for the State owned Distribution Licensees is shown in the Table below:

**Particulars** PVVNL DVVNL MVVNL PuVVNL **KESCO** Consolidated Retail Sales (MU) 28,032.91 20,551.90 17,434.92 25,301.24 3,278.36 94,599.33 Distribution Losses (%) 20.20% 23.82% 21.52% 21.57% 22.51% 21.70% Energy at Discom Periphery for 35,128.96 26,978.08 22,215.74 32,259.65 4,230.68 120,813.12 Retail Sales (MU) Inter-State Transmission Losses % 3.59% 3.59% 3.59% 3.59% 3.59% 3.59% Energy Available at State periphery 36,437.05 27,982.66 23,042.99 33,460.89 4,388.22 125,311.82 for Transmission(MU) Periphery Loss (Upto inter 1.65% 1.65% 1.65% 1.65% 1.65% 1.65% connection Point) (%) Purchases Required & Billed Energy 37,048.35 28,452.12 23,429.58 34,022.26 4,461.84 127,414.15 (MU) Total Inter Intra State 5.18% 5.18% 5.18% 5.18% 5.18% 5.18% Transmission Losses (%) Total T&D Losses in Retail Sales 9,015.44 7,900.22 5,994.66 8,721.02 1,183.48 25.75% (MU) / (%)

Table 5-17: APPROVED ENERGY BALANCE FOR FY 2016-17

5.3.23 The distribution losses and the collection efficiency are the two critical parameters to evaluate the performance of a Distribution Licensee and have to be brought to the desired levels, based on sound and authentic data and study analysis.



- 5.3.24 Although the Commission while doing the True-up of previous years has disallowed the excess power purchase cost on account of higher losses, it is important to note that such disallowance of the cost is borne by the Distribution Licensees and the officials responsible for not achieving the targets have no direct accountability. The Commission opines that this methodology of reducing the power purchase cost on account of distribution losses neither directly affects the officials responsible for achieving the target loss levels nor does it encourage the employees to strive for achieving the loss targets for the benefit of the utility.
- 5.3.25 Further, it is a common industry practice that the employees achieving or exceeding their targets are provided with bonus / incentives. Such practice may be introduced for the officials of the Distribution Licensees so as to encourage them to assist the utilities to achieve the targeted losses / collection efficiency. The accountability of achieving the targets should be assigned to the responsible officials.
- 5.3.26 In view of the above, Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 has directed the Distribution Licensee to formulate a mechanism so as to make their officials accountable by providing incentives or disincentives for achievement or non-achievement of the distribution loss and the collection efficiency targets. The relevant extract of the direction of Commission is given below:

"9.3.20 In view of the above, the Commission directs the Distribution Licensees to formulate a mechanism so as to make their officials accountable by providing incentives or disincentives for achievement or non-achievement of the distribution loss and the collection efficiency targets. Further, such policy should also cover the following aspects:

- Allocation of such distribution loss and collection efficiency targets to various responsible officials based on current level of losses and efficiency levels in their area / zone / circle / division / sub-station, etc.
- The system of MoU signed by concerned Officer(s) regarding distribution loss target, which can be based on input energy, billed energy / amount and collection efficiency, etc. - Fixing of accountability of the concerned personnel of the Utilities will



help considerably in reduction of losses. This may include making the relevant field level personnel accountable and through monitoring of their performance, to achieve results in the form of reduction of losses. Similarly, holding officials responsible for various Zone / Circle / Division / sub-station wise revenue related performance parameters such as reduction in arrears, etc., will help the Distribution Licensees in improving the cash flows for day to day operations.

- Senior officials including Chairman UPPCL, Managing Director, UPPCL, Managing Directors of all State owned Distribution Licensees and all other officials up to Junior Engineer level as per the hierarchy shall be part of the process of signing of the above MoU.
- Formulation of clear mechanism of providing the incentives or disincentives to the concerned officials.
- Regular monitoring of the entire mechanism along with submission of quarterly reports to the Commission.
- Further, the organisational structure and management system
  of the Distribution Licensees are best understood by the
  Distribution Licensees, hence, it would be more appropriate that
  any other important aspect as deemed necessary by the
  Licensees may also be included in addition to the above.
- 9.3.21 Petitioner, in its submissions on the In-House paper prepared by the Commission in this regard, has also agreed to the Commission's approach and has agreed to get the MoU signed by its officials. The Commission further directs the Petitioner to sign the MoUs to be implemented at all levels and submit the copy of the same to the Commission within 2 months from the date of this Order."
- 5.3.27 In this regard, the Commission in its Tariff Order for FY 2015-16 had given the following direction.
  - "5.3.22 The Commission reiterate& directs the Petitioner to formulate such policy and to sign the MoUs to be implemented at all levels and submit the copy of the same to the Commission within three months from the date of this Order."



5.3.28 In reply to the Commission's query regarding submission of the signed MOU, the Licensee has sought some more time to comply with the Commission's direction. The Commission again directs the Licensee to expedite the process to comply with the direction given by the Commission and submit the same at the earliest.

### 5.4 ENERGY AVAILABILITY

- 5.4.1 Clause 3.4 of the Distribution Tariff Regulations, 2006 specifies that the power requirement for the Distribution Licensee for sale to its consumers shall be estimated based on the approved sales, approved transmission losses and distribution losses for the tariff year.
- 5.4.2 The Licensees submitted a detailed power purchase plan for FY 2016-17 in its ARR Petitions. The Distribution Licensees have submitted that the energy requirement for FY 2016-17 is 1,19,020 MU, and the same has to be procured from the existing resources (State, Central and IPP / Joint Venture generating Stations) with whom the Distribution Licensees have PPAs. If these sources fail to supply the requisite amount of energy, the balance energy will be procured through energy exchanges / UI / short-term contracts with trading companies and utilities, which are having extra power and from other sources as well. A marginal amount of energy has been envisaged to be obtained from energy exchanges to manage the energy requirement during peak hours.
- 5.4.3 For precisely projecting the power purchase quantum and cost for the ensuing year, the Commission in its deficiency note had sought the source-wise details of the actual power purchased during FY 2013-14, FY 2014-15 & FY 2015-16 (till December) in a specified format. The Commission in the said format sought month-wise power purchase details including quantum, Fixed Charges, Energy Charges, other charges, PLF, Availability, etc. The Commission provisionally admitted the Petitions with the direction that the Petitioner should submit the power purchase details at the earliest. The Distribution Licensees vide their reply dated March 9, 2016 submitted the source wise power purchase details for FY 2013-14 (up to March, 2014). The Petitioner vide its letter dated June 6, 2016 submitted the source wise power purchase data for the year 2015 and the subsidy details for FY 2013-14 to FY 2016-17. Further, the Petitioner vide its letter dated June 17, 2016 submitted that it has



already provided the power purchase details for FY 2012-13, FY 2014-15 & FY 2015-16 (upto Dec. 2015) to the Commission under previous proceedings. However, the Commission has observed that the power purchase details submitted are not in the specified format.

- 5.4.4 Further the Commission has considered the data in respect of power procurement plan provided in the ARR / Tariff Petition for FY 2016-17 and the details provided, as it is the most relevant data available for projecting the power purchase cost for FY 2016-17. Suitable modifications, wherever deemed necessary, have been made by the Commission to arrive at the approved power purchase cost for FY 2016-17.
- 5.4.5 The Commission has also run the merit order dispatch schedule for power purchase for FY 2016-17 after considering the availability of power and sales trend projected for the Licensee. The final merit order dispatch showing the approved power purchase quantum by the Commission for FY 2016-17has been provided subsequently.
- 5.4.6 Since, the power purchase expense is the largest component in the ARR of a Distribution Licensee; it becomes imperative that this element of cost is incurred with utmost care based on the most efficient way of power procurement from the generating stations through long-term / short-term power purchase arrangements, through bilateral power purchase agreements or Power Exchange etc. trying to replace expensive power with cheaper power whenever possible. Power Purchase cost being an un-controllable component of the ARR, the Distribution Tariff Regulations, 2006 provide for the Fuel and Power Purchase Cost Adjustment (FPPCA) formula, which enables the Distribution Licensee to claim legitimate variances on account of power purchase cost.

### 5.5 POWER PROCUREMENT FROM STATE GENERATING STATIONS

### The Licensees' Submission:

5.5.1 Distribution Licensees submitted that the State of Uttar Pradesh has got both Thermal as well as Hydro generating stations. UPRVUNL owns all the thermal generating stations within the State and the hydro stations are owned by UPJVNL. The Multi Year Tariff (MYT) Petitions filed by the UPRVUNL before the



Commission and the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 form the basis for determining the costs for FY 2015-16 and thereafter escalations have been considered in the Fixed and energy Charges for determination of cost for FY 2016-17.

- 5.5.2 Distribution Licensees submitted that the cost of energy available from State Thermal and Hydro generating stations has been derived from the tariff petitions filed by the UPRVUNL before the Commission and the UPERC (Terms and Conditions of Generation Tariff) Regulations 2014. Additionally, the Petitioner has also submitted to have considered the actual energy bills for the period April, 2015 to September, 2015.
- 5.5.3 The major assumptions considered by the Distribution Licensees while projecting the power purchase from the State owned Thermal generating stations and Hydro stations are shown in the Tables below:

Table 5-18: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE DISTRIBUTION LICENSEES

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is considered based on the Actual Availability for FY 2014-15 for all power stations. Further current trends in FY 2015-16 have also been considered. Additionally the fact that some of the units are under R&M and will soon be commissioning again has been duly accounted for. Unit #1 of Anpara D has been synchronised and is expected to be commissioned in January 2016.  Merit Order Despatch is Must-run for approval of quantum.
2	Fixed & Variable Charges	Fixed Charges have been considered as per the MYT Petition filed by the UPRVUNL before the Commission. Additionally the improvement in norms and operation parameters along with other changes in cost parameters stipulated by the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 have been duly considered while projecting the capacity and energy charges. Escalation in FY 2015-16 has been considered at 4% towards capacity charges. The variable charges have been considered as per the actual bills raised by UPRVUNL for the period April to September, 2015 including the bills raised for Fuel Cost Adjustment.



Table 5-19: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE DISTRIBUTION LICENSEES

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum form all power stations except Belka & Babail is considered as per UPERC MYT Tariff Order dated 20.10.2011 for UPJVNL for FY 2009-10 to 2013-14. It is pertinent to mention that UPJVNL has still not filed its MYT Petition for FY 2014-19 tariff period.  Net Power Purchase from Belka & Babail is taken as per the recent bills.  Hydro Stations are considered Must-run in Merit Order Despatch
2	Fixed & Variable Charges	The same have been considered as per the actual bills raised by UPJNL for the period April, 2015 to September, 2015.

5.5.4 Considering the above, the power purchase quantum and cost as projected by the Distribution Licensees from State Thermal and Hydro Generating Stations for FY 2016-17 is as shown in the Tables below:

Table 5-20: DETAILS OF POWER PURCHASE COST FROM UPRVUNL STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of Power	MW Available	MU	Fixe	ed Cost	Variab	le Cost	Total	Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara A	630	3,852	0.75	289	2.12	816	2.87	1,104	2.87
Anpara B	1,000	7,194	1.11	801	1.95	1,404	3.07	2,206	3.07
Harduagunj	165	300	1.58	47	3.66	110	5.23	157	5.23
Obra A	288	533	1.25	67	2.55	136	3.81	203	3.81
Obra B	1,000	3,955	0.71	281	2.40	951	3.11	1,232	3.11
Panki	210	646	1.46	94	4.54	293	6.00	387	6.00
Parichha	220	425	1.06	45	4.39	187	5.45	232	5.45
ParichhaExtn.	420	2,252	1.44	325	3.60	810	5.04	1,135	5.04
ParichhaExtn. Stage II	500	3,388	1.84	625	3.59	1,216	5.43	1,841	5.43
Harduaganj Ext.	500	3,388	2.01	681	2.83	959	4.84	1,640	4.84



Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anpara D	1,000	6,192	1.66	1,027	1.77	1,094	3.43	2,121	3.43
Sub-Total	5933	32126	1.33	4283	2.48	7976	3.82	12259	3.82

Table 5-21: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of Power	MW Available	MU	Total Cost			
			(Rs. / kWh)	(Rs. Cr.)		
Khara	58	151	0.78	11.79		
Matatila	20	53	0.70	3.70		
Obra (Hydel)	99	260	0.68	17.73		
Rihand	255	670	0.59	39.87		
UGC Power Stations	14	36	2.30	8.29		
Belka&Babail	6	16	2.43	3.84		
Sheetla	4	9	2.95	2.79		
Sub total - Hydro	455	1195	0.74	88.00		

### The Commission's Analysis:

5.5.5 The assumptions considered by the Commission while approving the power purchase from the State owned Thermal generating stations and Hydro generating stations are given below in the following Tables:

Table 5-22: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE COMMISSION

SI. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is considered based on the Commission's Order for UPRVUNL stations. Further the quantum is approved as per Merit order despatch principles.
2	Fixed & Variable Charges	Fixed and Variable charge per unit is considered based on the Commission's Order for UPRVUNL stations



Table 5-23: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE COMMISSION

S. No.	Particulars	Assumption
1	Power Purchase Quantum	<ol> <li>Net Power Purchase from Belka and Babail is taken as projected by the Licensees.</li> <li>Hydro Stations are considered as Must-run in Merit Order Dispatch.</li> </ol>
2	Fixed & Variable Charges	The same has been considered as submitted by the Licensee which is as per the actual bills raised by UPJVNL for the period April to September, 2015.

5.5.6 Based on above approach, the summary of approved cost of power purchase from UPRVUNL and UPJVNL generating stations for FY 2016-17 is given in the following Tables:

Table 5-24: APPROVED COST OF POWER PURCHASE FROM UPRVUNL STATIONS FOR FY 2016-17

Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	
Anpara A	630.00	4,292.25	0.72	309.20	1.87	802.65	2.59	1,111.85	2.59	
Anpara B	1,000.00	7,055.09	0.65	459.88	1.62	1,142.92	2.27	1,602.80	2.27	
Harduagunj	165.00	840.86	1.47	123.42	3.47	291.78	4.94	415.20	4.94	
Obra A	288.00	1,070.65	1.81	194.07	1.60	171.30	3.41	365.37	3.41	
Obra B	1,000.00	6,328.22	0.69	436.17	1.52	961.89	2.21	1,398.06	2.21	
Panki	210.00	1,161.52	1.44	167.70	3.45	400.72	4.89	568.42	4.89	
Parichha	220.00	1,290.74	1.06	136.82	3.90	503.39	4.96	640.21	4.96	
ParichhaExtn.	420.00	2,845.86	1.35	384.40	3.21	913.52	4.56	1,297.92	4.56	
ParichhaExtn. Stage II	500.00	3,387.93	1.84	624.00	3.21	1,087.53	5.05	1,711.53	5.05	
Harduaganj Ext.	500.00	3,387.93	1.99	672.96	2.67	904.58	4.66	1,577.54	4.66	
Anpara D	1,000.00	7,000.11	1.89	1,323.02	1.44	1,008.02	3.33	2,331.04	3.33	
Total	5,933.00	38,661.16	1.25	4,831.64	2.12	8,188.30	3.37	13,019.94	3.37	

Table 5-25: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FOR FY 2016-17

Source of Power	MW MU Fixed Cos		Cost	
	Available		(Rs. / kWh)	(Rs. Cr.)
Khara	57.60	151.37	0.78	11.79
Matatila	20.00	52.56	0.70	3.70



Source of Power	MW	MU	Fixed Cost		
	Available		(Rs. / kWh)	(Rs. Cr.)	
Obra (Hydel)	99.00	260.17	0.68	17.73	
Rihand	255.00	670.14	0.59	39.87	
UGC Power Stations	13.70	36.00	2.30	8.29	
Belka&Babail	6.00	15.77	2.43	3.84	
Sheetla	3.60	9.46	2.95	2.79	
Total	454.90	1195.48	0.74	88.00	

#### 5.6 POWER PROCUREMENT FROM CENTRAL GENERATING STATIONS

#### The Licensees' Submission:

- The Licensees procures power from Central Generating Stations (CGS), which includes power from National Thermal Power Corporation Ltd. (NTPC), National Hydro Power Corporation Ltd. (NHPC), and Nuclear Power Corporation of India Ltd. (NPCIL). In addition to the firm share allocation, most of these stations have unallocated power. The distribution of this unallocated power among the constituents of Northern Region is decided from time to time based on power requirement and power shortage in different States. UPPCL also gets a substantial portion of the unallocated share. The Licensees in their ARR / Tariff Petition for FY 2016-17 have submitted that the cost of power procurement for FY 2016-17 from these sources is based on the following:
  - UPPCL's current allocated share from various central sector plants is projected as per (NRPC/ OPR/ 103/ 02/ 2015-16/9771-9794) dated 26.10.2015. In this circular, UPPCL's total share includes the allocated share from unallocated quota also.
  - The variable (Primary and Secondary fuel) costs of central sector plants and other plants have been taken from the energy bills for the month up to September, 2015 and are inclusive of FPA. All variable costs have been escalated by 4% for FY 2016-17.
  - Provisional power purchase cost and units of FY 2014-15
- 5.6.2 The Licensees has submitted that the cost of energy from Central Sector stations has been derived from tariffs approved by Central Electricity



Regulatory Commission. It is pertinent to mention that the final orders for 2014-19 tariff period is yet to be finalised by the CERC. In such cases, the Petitioner has referred to the last approved Tariff Orders by CERC.

5.6.3 The assumptions considered by the Licensees while estimating the power purchase from NTPC, NHPC and NPCIL Stations are given in the following Tables:

Table 5-26: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC STATIONS AS CONSIDERED BY THE DISTRIBUTION LICENSEES for FY 2016-17

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, plant load factor (PLF) and UP State's share in respective power plant. Further the quantum is approved as per Merit Order despatch principles.  The Petitioner has also referred to the actual plant load factor of such stations for the last 3 years while projecting the PLF for the current year and ensuing year.
2	Fixed Charges	Fixed charges are computed after considering UP State's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and ERPC and fixed cost approved as per CERC order for respective power plants.
3	Variable Charges	Variable cost is considered as per the recent energy bills raised for the period April, 2015 to September, 2015

Table 5-27: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE DISTRIBUTION LICENSEES

S. No.	Particulars	Assumption					
1	Power Purchase Quantum	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, plant load factor (PLF) and UP State's share in respective power plant. Power sourced from these NHPC plants is considered Must-run in Merit Order Despatch.					
2	Fixed Charges	Fixed charges are computed after considering UP State's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and fixed cost approved by as per CERC Orders for respective power plants.					
3	Variable Charges	Variable cost is considered as per the recent energy bills raised for the					



S. No.	Particulars	Assumption	
		period April, 2015 to September, 2015	1

Table 5-28: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE DISTRIBUTION LICENSEES

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, capacity factor and UP State's share in respective power plant. Power sourced from these NPCIL plants is considered Must-run in Merit Order Dispatch.
2	Tariff (Single part)	Variable cost is considered as per the recent energy bills raised for the period April, 2015 to September, 2015

5.6.4 The Licensees' submission of projected power purchase from NTPC, NHPC and NPCIL generating stations for FY 2016-17 is provided in the following Tables:

Table 5-29: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of	MW	MU	Fixe	d Cost	Varia	ble Cost	To	tal Cost	Average
Power	Available								Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	119	626	0.73	45.95	4.62	289.39	5.36	335.34	5.36
Auriya	243	1279	0.55	70.92	5.03	643.12	5.58	714.04	5.58
Dadri Thermal	84	613	0.86	52.49	4.13	252.96	4.98	305.45	4.98
Dadri Gas	271	1427	0.57	81.06	4.56	650.58	5.13	731.63	5.13
Dadri Ext.	148	1055	1.61	170.36	3.68	388.27	5.29	558.63	5.29
Rihand-I	372	2697	0.81	219.65	2.08	560.15	2.89	779.80	2.89
Rihand-II	346	2791	0.95	263.86	1.95	542.99	2.89	806.85	2.89
Singrauli	846	6687	0.54	360.97	1.33	890.82	1.87	1,251.79	1.87
Tanda	440	3255	1.05	342.56	3.69	1,201.23	4.74	1,543.79	4.74
Unchahar-I	257	2009	0.86	173.75	2.93	588.84	3.80	762.59	3.80
Unchahar-II	152	1166	0.89	104.27	2.90	338.28	3.80	442.56	3.80
Unchahar-III	74	577	1.37	79.07	2.43	139.95	3.80	219.02	3.80
Farakka	33	202	0.85	17.25	2.86	57.66	3.71	74.90	3.71
Kahalgaon St. I	77	552	0.96	52.74	2.61	144.04	3.57	196.78	3.57
KahalgaonSt.II Ph.I	251	1807	1.22	220.76	2.35	423.84	3.57	644.60	3.57



Source of Power	MW Available	MU	Fixed Cost		Varia	ble Cost	Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Koldam (Hydro)	95	361	1.56	56.29	2.41	87.06	3.97	143.36	3.97
Rihand-III	375	1980	1.32	261.38	1.57	311.02	2.89	572.40	2.89
Total	4184	29083		2,573.32		7,510.21		10,083.53	3.47

Table 5-30: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

				D1 D131111D			•			
Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Averag e Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	
Chamera	109	336	0.60	20.28	0.85	28.58	1.46	48.86	1.46	
Chamera-II	86	392	1.34	52.31	1.04	40.56	2.37	92.87	2.37	
Chamera-III	62	282	1.81	50.97	1.86	52.53	3.67	103.50	3.67	
Dhauliganga	75	281	1.10	31.04	1.27	35.60	2.37	66.64	2.37	
Salal I&II	48	252	0.60	15.20	0.38	9.50	0.98	24.70	0.98	
Tanakpur	21	103	1.70	17.47	1.22	12.50	2.92	29.97	2.92	
Uri	96	497	1.05	51.95	0.89	44.42	1.94	96.38	1.94	
Dulhasti	111	516	2.82	145.50	2.30	118.44	5.12	263.94	5.12	
Sewa-II	35	136	1.89	25.77	1.81	24.62	3.70	50.39	3.70	
Uri-II	25	111	4.98	55.11	0.45	4.98	5.43	60.08	5.43	
Parbati ST-II	160	0	-	-	-	-	-	-	-	
Parbati ST-III	104	383	1.41	53.98	3.74	143.07	5.15	197.05	5.15	
Total	933	3287		519.58		514.80		1,034.38	3.15	

Table 5-31: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of Power	MW MU Available	MU	Fixed	Fixed Cost		Variable Cost		able Cost Total Cost			Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)		
NAPP	166	935	-	-	2.59	242.17	2.59	242.17	2.59		
RAPP #3&4	80	604	-	-	3.08	185.95	3.08	185.95	3.08		
RAPP#5&6	115	799	-	-	3.67	293.43	3.67	293.43	3.67		
Total	361	2339				721.55		721.55	3.09		



### The Commission's Analysis:

5.6.5 The Commission's assumptions for approving the power purchase quantum and cost from the NTPC, NHPC and NPCIL Stations are given in the following Tables:

Table 5-32: ASSUMPTIONS OF POWER PURCHASE FROM NTPC AS CONSIDERED BY THE COMMISSION

S. No.	Particulars	Assumption
1	Power Purchase Quantum	<ol> <li>Net Power Purchase Quantum has been derived as a product of respective power plants' MW capacity, plant load factor (PLF) and UP State's Share in respective power plant.</li> <li>Further, the quantum has been projected as per Merit order Dispatch principles.</li> </ol>
2	Fixed Charges	Fixed charges are computed after considering UP state's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRPC and ERPC and fixed cost approved as per CERC order for respective power plants.
3	Variable Charges	Variable charges have been considered as submitted by the Licensees for the period April to September, 2015

Table 5-33: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE COMMISSION

S. No.	Particulars	Assumption
1	Power Purchase Quantum	1. Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, plant load factor (PLF) and UP State's share in respective power plant.
		2. Power sourced from these NHPC plants has been considered as must-run in Merit Order Dispatch.
2	Fixed Charges	For the stations for which CERC Orders have been issued, Fixed (Capacity Charges) have been considered based on AFC as per CERC Order. For remaining stations, Fixed charges are considered as submitted by Licensee which has been computed after considering UP state's allocated share in respective power plant as per Regional Energy Accounting Report and Annual Report of NRRC and fixed cost approved as per CERC Order for respective power plants.



S. No.	Particulars	Assumption
3	Variable Charges	For the stations for which CERC Orders have been issued,
		Variable Charges have been considered based on AFC as per
		CERC Order. For remaining stations, Variable cost has been
		considered as submitted by the Licensee which is as per the
		actual bills raised for the period April to September, 2015.

Table 5-34: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE COMMISSION

S. No.	Particulars	Assumption
1	Power Purchase Quantum	1. Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, capacity factor and UP state's share in respective power plant.
		2. Power sourced from these NPCIL plants is considered Must-run in Merit Order Dispatch.
		3. Capacity factor is considered to be the average of the capacity factor recorded at respective power stations for the last three year's (2012-13, 2013-14 and 2014-15). Capacity factors are sourced from official website of NPCIL.
		4. Allocation of Power from various central generating stations for FY 2015-16 and 2016-17 both firm and unallocated quota has been considered as per the NRPC circular (NRPC/ OPR/ 103/ 02/ 2015-16/9771-9794) dated 26.10.2015.
2	Tariff (Single part)	Variable cost has been considered as submitted by the Licensee which is as per the actual bills raised for the period April to September, 2015.

5.6.6 Based on above approach, the summary of approved cost of power purchase from NTPC, NHPC and NPCIL generating stations is given in Table 5-33, Table 5-34, and Table 5-35, below:



Table 5-35: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FOR FY 2016-17

Source of Power	MW Available	MU	Fixe	ed Cost	Varia	ble Cost	Tot	tal Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Anta	119.50	626.10	0.73	45.95	4.62	289.39	5.36	335.34	5.36
Auriya	243.59	1278.55	0.55	70.92	5.03	643.12	5.58	714.04	5.58
Dadri Thermal	84.00	613.15	0.86	52.49	4.13	252.96	4.98	305.45	4.98
Dadri Gas	271.83	1426.97	0.57	81.06	4.56	650.58	5.13	731.63	5.13
Dadri Extension	150.43	1055.29	1.61	170.36	3.68	388.27	5.29	558.63	5.29
Rihand-I	373.20	2697.16	0.81	219.65	2.08	560.15	2.89	779.80	2.89
Rihand-II	347.50	2790.71	0.95	263.86	1.95	542.99	2.89	806.85	2.89
Singrauli	849.00	6686.91	0.54	360.97	1.33	890.82	1.87	1251.79	1.87
Tanda	440.00	3255.30	1.05	342.56	3.69	1201.23	4.74	1543.79	4.74
Unchahar-I	257.63	2008.94	0.86	173.75	2.93	588.84	3.80	762.59	3.80
Unchahar-II	153.01	1165.85	0.89	104.27	2.90	338.28	3.80	442.56	3.80
Unchahar-III	74.87	576.97	1.37	79.07	2.43	139.95	3.80	219.02	3.80
Farakka	33.28	201.74	0.85	17.25	2.86	57.66	3.71	74.90	3.71
Kahalgaon St. I	76.61	551.63	0.96	52.74	2.61	144.04	3.57	196.78	3.57
KahalgaonSt .IIPh.II	250.95	1807.02	1.22	220.76	2.35	423.84	3.57	644.60	3.57
Koldam (Hydro)	94.50	360.84	1.56	56.29	2.41	87.06	3.97	143.36	3.97
Rihand-III	377.42	1979.78	1.32	261.38	1.57	311.02	2.89	572.40	2.89
Sub-Total	4197.30	29082.92	0.88	2573.32	2.58	7510.21	3.47	10083.53	3.47

Table 5-36: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FOR FY 2016-17

Source of Power	MW Availa	MU	Fixe	d Cost	Varia	ble Cost	Tot	al Cost	Average Cost
	ble		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Chamera	109.46	335.60	1.08	36.15	1.08	36.15	2.15	72.30	2.15
Chamera II	86.28	391.66	1.49	58.46	1.49	58.46	2.99	116.91	2.99
Chamera III	62.13	282.05	1.81	50.97	1.86	52.53	3.67	103.50	3.67
Dhauliganga	74.90	281.18	1.10	31.04	1.27	35.60	2.37	66.64	2.37
Salal I&II	47.96	252.05	0.55	13.91	0.55	13.91	1.10	27.82	1.10



Tanakpur	21.33	102.75	1.48	15.21	1.48	15.21	2.96	30.43	2.96
Uri	96.29	496.78	1.05	51.95	0.89	44.42	1.94	96.38	1.94
Dulhasti	111.38	515.50	2.82	145.50	2.30	118.44	5.12	263.94	5.12
Sewa II (June/July - 2010)	35.10	136.19	1.89	25.77	1.81	24.62	3.70	50.39	3.70
Uri-II	25.35	110.65	4.98	55.11	0.45	4.98	5.43	60.08	5.43
Parbati II	160.00	-	-	-	-	-	-	-	
Parbati III	104.00	382.64	1.41	53.98	3.74	143.07	5.15	197.05	5.15
Sub-Total-NHPC	934.17	3,287.05	1.64	538.05	1.67	547.39	3.30	1,085.44	3.30

Table 5-37: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FOR FY 2016-17

Source of Power	MW Available	MU	Fixed Cost				Tot	Average Cost	
					(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NAPP	166.54	935.18	-	-	2.59	242.17	2.59	242.17	2.59
RAPP #3&4	79.67	604.04	-	-	3.08	185.95	3.08	185.95	3.08
RAPP#5&6	115.46	799.29	-	-	3.67	293.43	3.67	293.43	3.67
Total	361.67	2338.50	-	-	3.09	721.55	3.09	721.55	3.09

### 5.7 POWER PROCUREMENT FROM IPPS / JVs

### The Licensees' Submission:

5.7.1 The cost of power purchase from IPPs within the State has been determined in accordance with UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 and recently issued Orders by the Commission such as in the case of Lanco, Anpara and Lalitpur thermal power plants. Similarly, the cost of power purchase from IPPs outside the State has been derived from tariffs and power purchase agreement approved by the Commission. The cost of energy from other sources has been derived from the power purchase / banking / trading agreements and tariffs approved by the Central / Appropriate Commissions. Further, wherever the Tariff Orders for FY 2016-17 have not been issued, the base year tariffs i.e., for FY 2014-15 have been escalated by 4% in case of fixed charges (only on O&M Expenses), 6.00% in case of variable charges and 4% for gas based stations.



5.7.2 The assumptions considered by the Licensees while estimating the power purchase from the IPPs and Joint Ventures (JVs) for FY 2016-17 is provided in the Table below:

Table 5-38: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE DISTRIBUTION LICENSEES

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is derived as a product of respective power plants' MW capacity, capacity factor and UP State's share in respective power plant.
2	Tariff (Single part & Two part)	Variable cost is considered as per the recent energy bills raised for the period April to September, 2014

5.7.3 The Petitioner has submitted that for Lalitpur thermal Power Plant, the capacity and energy charges have been considered as per the UPERC Order dated November 27, 2015 in Petition No. 975/2014 and 2017/2015 in respect of approval of capital cost and fixation of provisional tariff.

Further, in consideration of the UPERC Order dated November 23, 2015 in Petition No. 871 and 891 of 2013 of Lanco ,Anpara, an amount of Rs. 499.58 Crore has to be paid by UPPCL in 12 equal monthly instalments starting January 2016. The Commission has also allowed compensatory tariff for sustainability of the project @ Rs. 0.226/kWh. Accordingly, the Petitioner has made such provisions in the projected power purchase from Lanco, Anpara in FY 2015-16 and 2016-17.

5.7.4 The summary of power purchase quantum and cost estimated by Distribution Licensees for FY 2016-17 from IPP / JVs are provided in the Table below:

Table 5-39: DETAILS OF POWER PURCHASE COST FROM IPPS / JVs STATIONS FOR FY2016-17 AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of Power	MW Availa	MU			Variable Cost		Tot	Average Cost	
	ble				(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NATHPA JHAKRI HPS	287	1383	1.60	221.43	1.51	208.85	3.11	430.28	3.11
TALA POWER	45	181	-	-	2.22	40.15	2.22	40.15	2.22



Source of Power	MW Availa	Availa		d Cost	Varia	ble Cost	Tot	al Cost	Average Cost
	ble		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Koteshwar	173	569	2.02	114.76	1.87	106.53	3.89	221.29	3.89
Srinagar	290	519	-	-	4.16	215.75	4.16	215.75	4.16
Sasan	495	2081	0.27	55.81	1.20	248.87	1.46	304.68	1.46
Case-1	2175	10186	2.19	2,227.21	1.52	1,552.96	3.71	3,780.18	3.71
Karcham- Wangtoo	200	158	-	-	3.12	49.20	3.12	49.20	3.12
VISHNUPRAYAG	352	1623	0.92	149.01	1.30	211.74	2.22	360.75	2.22
TEHRI STAGE-I	418	1809	1.88	339.75	3.56	644.32	5.44	984.07	5.44
Rosa Power Project	600	3946	1.75	689.24	3.72	1,469.15	5.47	2,158.39	5.47
Rosa Power Project	600	3946	1.75	689.24	3.75	1,481.46	5.50	2,170.70	5.50
Bara	1782	7395	1.18	873.91	3.14	2,322.74	4.32	3,196.66	4.32
Anpara 'C'	1100	7015	1.77	1,240.75	2.58	1,809.31	4.35	3,050.06	4.35
IGSTPP, Jhajhjhar	51	354	1.61	56.95	4.36	154.48	5.97	211.43	5.97
Bajaj Hindusthan	450	2807	2.25	631.53	4.57	1,281.43	6.82	1,912.96	6.82
Lalitpur	1782	10108	1.88	1,900.24	2.95	2,981.77	4.83	4,882.01	4.83
Total	10799	54080		9190		14779		23969	4.43

### The Commission's Analysis:

5.7.5 The Commission's assumptions for approving the power purchase quantum and cost from the IPPs / JVs are given in the following Tables:

Table 5-40: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE COMMISSION

S. No.	Particulars	Assumption
1	Power Purchase Quantum	Net Power Purchase Quantum is derived as a product of respective power plants MW capacity, capacity factor and UP state's share in respective power plant. Further the quantum is approved as per Merit order despatch principles.
2	Tariff (Single part & Two part) for IPPs / JVs	For stations for which UPERC Order has been issued, tariff has been considered based on UPERC Order. For remaining stations, Tariff is considered as projected by the Licensees.



Table 5-41: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FOR FY 2016-17

Source of Power	MW Available	MU	Fixe	ed Cost	Varia	able Cost	Tot	al Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
NATHPA JHAKRI HPS	287.85	1383.25	1.60	221.43	1.51	208.85	3.11	430.28	3.11
TALA POWER	44.98	181.26	0.00	0.00	2.22	40.15	2.22	40.15	2.22
Koteshwar	172.84	568.94	2.02	114.76	1.87	106.53	3.89	221.29	3.89
Srinagar	290.00	518.63	2.44	126.55	2.44	126.55	4.88	253.09	4.88
Sasan	495.00	2081.38	0.27	55.81	1.20	248.87	1.46	304.68	1.46
Teesta St-III	0.00	10186.13	2.19	2227.21	1.52	1552.96	3.71	3780.18	3.71
Karcham- Wangtoo	200.00	157.68	0.00	0.00	3.12	49.20	3.12	49.20	3.12
VISHNUPRAYAG	352.00	1622.83	0.92	149.01	1.30	211.74	2.22	360.75	2.22
TEHRI STAGE-I	418.50	1808.87	1.88	339.75	3.56	644.32	5.44	984.07	5.44
Rosa Power Project	600.00	3945.94	1.75	689.24	3.72	1469.15	5.47	2158.39	5.47
Rosa Power Project	600.00	3945.94	1.75	689.24	3.75	1481.46	5.50	2170.70	5.50
Bara	1188.00	7395.39	1.18	873.91	3.14	2322.74	4.32	3196.66	4.32
Anpara 'C'	1100.00	7015.01	1.77	1240.75	2.58	1809.31	4.35	3050.06	4.35
IGSTPP, Jhajhjhar	51.15	354.25	1.61	56.95	4.36	154.48	5.97	211.43	5.97
Bajaj Hindusthan	450.00	2806.70	2.25	631.53	4.57	1281.43	6.82	1912.96	6.82
Lalitpur	1782.00	10107.68	1.88	1900.24	2.95	2981.77	4.83	4882.01	4.83
Total	8032.32	54079.88	1.72	9316.40	2.72	14689.52	4.44	24005.92	4.44

### 5.8 POWER PROCUREMENT FROM OTHER SOURCES

### The Licensees' Submission:

5.8.1 The Licensee's submission of power purchased from Co-generating stations, solar energy sources and NTPC Vidyut Vyapar Nigam Ltd. (NVVNL) for FY 2016-17 is provided in the Table below:



Table 5-42: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES, SOLAR AND OTHER SOURCES FOR FY 2016-17

Source of MU Power		Fixed	Cost	Varia	ble Cost	Tota	Average Cost	
		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen	2865			4.79	1,373.60	4.79	1,373.60	4.79
Solar Energy	84			10.76	90.42	10.76	90.42	10.76
NVVN Coal Power	352			3.26	114.46	3.26	114.46	3.26
Total	3,301			4.78	1,578	4.78	1,578	4.78

### The Commission's Analysis:

- 5.8.2 In an effort to encourage renewable generation, the Commission has mandated that the Distribution Licensees shall, based on availability, procure a minimum % of power from the renewable energy sources including Cogenerating stations available in the State as well as from the solar energy sources.
- 5.8.3 The Commission, for projecting the power purchase for FY 2016-17, has considered the quantum from captive and cogenerating stations as submitted by the Licensees. The Commission is of the view that the rate of solar power has been decreasing in past years; therefore, it would not be appropriate to estimate the power purchase rate from solar energy sources to be more than approved in last Tariff Order for FY 2015-16. Considering the same, the Commission for approving the power purchase cost from solar energy sources for FY 2016-17 has considered the average rate of power from solar energy as Rs. 10.76 / kWh as submitted by the Petitioner.
- 5.8.4 Further, although the Commission has considered the quantum from renewable sources as estimated by the Licensees for projection purposes, however, the UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 specifies that during each Financial Year, every obligated entity shall purchase a minimum % of its total consumption of electricity (in kWh) from Renewable Energy (RE) sources under RPO. In view of the same, the Licensees should ensure to procure renewable energy in accordance with Regulation 4 of the UPERC (Promotion



- of Green Energy through Renewable Purchase Obligation) Regulations, 2010 as amended from time to time during FY 2016-17 to meet their obligation.
- 5.8.5 Based on the above, the approved power purchase quantum and cost from the Co-generating stations and Solar energy sources for FY 2016-17 is provided in the Table below:

Table 5-43: APPROVED COST OF POWER PURCHASE FROM STATE CO-GENERATION FACILITIES

AND SOLAR ENERGY SOURCES FOR FY 2016-17

Source of Power	MU	Fixed Cost		Varia	ble Cost	То	Average Cost	
		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Captive and Cogen	2,865.00			4.79	1,373.60	4.79	1,373.60	4.79
Solar Energy	84.00			10.76	90.42	10.76	90.42	10.76
NVVN Coal Power	351.62			3.26	114.46	3.26	114.46	3.26
Total	3,300.62			4.78	1578.47	4.78	1,578.47	4.78

### 5.9 POWER PROCUREMENT FROM BILATERAL SOURCES

### The Licensees' Submission:

- The Petitioner has signed PPAs under Case-1 bidding from various generators and traders such as PTC India Limited (TRN Energy & MB Power), Lanco Babandh, KSK Energy. The scheduled date of supply is October 1, 2016. However, early supply from PTC India (MB Power) and KSK Energy-200 MW has already commenced from August and October 2015 respectively. Accordingly, the projected power purchase from such generators has been projected at the yearly tariff streams quoted by such generators in the Case-1 bids.
- 5.9.2 The Licensee's submission of power purchase from bilateral sources for FY 2016-17 is provided in the Table below:

Table 5-44: DETAILS OF POWER PURCHASE COST FROM INTER SYSTEM EXCHANGE (BILATERAL & PXIL) / UI AS SUBMITTED BY DISTRIBUTION LICENSEES

Source of Power	MU	Fixed Cost	Variable Cost	Total Cost	Average
					Cost



		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL) / UI	217			5.30	114.98	5.30	114.98	5.30
Total	217			5.30	114.98		114.98	5.30

- 5.9.3 The Commission based on the submission of the Licensees has assessed the rate for Power purchase from other / emergency sources as Rs. 5.30 / kWh for FY 2016-17. In accordance with Clause 4.2.8 of the Distribution Tariff Regulations, 2006, the Commission hereby approves a maximum ceiling rate of Rs. 5.30 / kWh towards power purchase cost from short term sources for FY 2016-17. Further, if at any point of time, the Licensees are required to purchase the power at the rate more than the above ceiling limit, the same should be done taking prior approval of the Commission. It may be noted that the average power purchase rate from other / emergency sources should not be more than the specified ceiling limit.
- 5.9.4 Considering the above, the approved power purchase from bilateral sources for FY 2016-17 is provided in the Table below:

Table 5-45: APPROVED COST OF POWER PURCHASE FROM INTER SYSTEM EXCHANGE (BILATERAL & PXIL) / UI

Source of Power	MU	Fixed	Fixed Cost		Variable Cost		Total Cost	
		(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL) / UI	216.94			5.30	114.98	5.30	114.98	5.30
Total	216.94			5.30	114.98	5.30	114.98	5.30

5.9.5 Considering that the Distribution Licensee may need to buy power in exigency to meet immediate and urgent power delivery, the Commission would also like to mention that any quantum of power purchased from emergency / other sources should be procured only through bilateral sources / power exchanges or through competitive bidding route to the extent possible following the "Guidelines for short-term (i.e. for a period of more than one day to one year) Procurement of Power by Distribution



### Licensees through Tariff based bidding process" / framework laid down by Gol on March, 2016.

The Commission initiated a Suo-Moto proceeding in the matter of power purchase being made by UPPCL from the power exchange. In its Order dated June 9, 2016 the Commission held that the opportunity of cheaper prices in the exchange can be utilised by UPPCL by reducing the load of costly power stations to the technical minimum. UPPCL should carry out a detailed exercise to ascertain that how the total power purchase cost can be reduced further without compromising the availability of power to the consumers. Many utilities in other States have taken advantage of cheaper power by reorganising their scheduling practices. In the aforesaid Order the Commission also gave the following direction:

"The Commission directs UPPCL to submit a power purchase plan showing that how it will take the advantage of cheaper power either through the Energy Exchanges or other sources. The Commission would monitor the steps taken by UPPCL in future on monthly basis. UPPCL should submit the details of monthly power procurement to the Commission highlighting the efforts made by it in the light of observations made by the Commission."

Thus in line with the above Order the Petitioner / UPPCL is directed to comply with the above direction of the Commission.

- 5.9.7 The Commission, in Clause 4.2(11) of the Distribution Tariff Regulations, 2006, has specified that in the regime of Availability Based Tariff (ABT), the cost of power purchase through UI shall be allowed to be passed through in tariff of the subsequent year subject to the following conditions:
  - "a) The average rate for power purchased through UI should not exceed the maximum rate for power purchased under the Merit Order of the Licensee as approved by the Commission.
  - b) The total cost of electricity units purchased through UI shall be restricted to 10% of total power purchase cost approved by the Commission.



Provided that where the average rate for power purchased under UI exceeds the maximum specified rate of power purchase under the Merit Order of the Licensee, the cost of such power purchase shall be allowed to be passed through in tariffs of the subsequent year at the maximum rate for power purchase under the Merit Order of the Licensee as approved by the Commission whether the ceiling limit of 10% as stated in 11 (b) above has reached or not."

- 5.9.8 The Commission is of the view that the UI mechanism is intended for maintaining discipline in the grid operations and is not to be treated as a regular source for power purchase. Hence, the Commission reiterates that the Licensees should take due care while overdrawing power from the grid (if any), especially when the UI rates are high.
- 5.9.9 The Commission would also like to caution the Licensees here that this issue would be dealt with at the time of True-up and any power purchases undertaken in contravention to the provisions of the Distribution Tariff Regulations, 2006 would be disallowed and the Licensee would have to bear the cost for the same.
- 5.9.10 Further, the Commission would like to reiterate that the Licensee should assess the demand supply position in the State in advance and make its best endeavour to enter into bilateral contracts with generators / traders for meeting the envisaged demand supply gap. This would enable them to optimise the power purchase expenses.
- 5.9.11 The Licensee needs to adopt a transparent procedure based on competitive bidding for procuring power on short-term basis.

### 5.10 FUEL & POWER PURCHASE COST ADJUSTMENT SURCHARGE (FPPCA)

5.10.1 A Review Petition No. 893/2013 had been filed by the UPPCL, MVVNL, PVVNL, PuVVNL, DVVNL & KESCo in the matter of "Review of the Mechanism for Fuel & Power Purchase Cost Adjustment formulated by the Commission", wherein a number of issues have been raised by the Petitioners. Prior to the above Petition, UPPCL also filed a Review Petition No. 848/2012 in the matter of "Applicability of Fuel & Power Purchase Cost Adjustment (FPPCA) formula



notified vide GOUP notification no. UPERC/Secy/Regulation/240dt. 10.05.2012"

- 5.10.2 In the matter of Petition No. 893/2013 "Review of the Mechanism for Fuel & Power Purchase Cost Adjustment formulated by the Commission", the Commission vide its Order dated 23<sup>rd</sup> October, 2013 gave direction to the Petitioners to submit details on various issues along with its detailed proposal on the same. Further, as the Petition No. 893/2013 and 848/2012 are related, the Commission also directed to club the above two Petitions.
- 5.10.3 The Commission vide its Letter No. UPERC/Secy/D(Tariff)14-257 dated 28th October, 2014 reminded the Petitioners to submit its detailed proposal in view of the directions given by the Commission in its Order dated 23rd October, 2013.
- 5.10.4 Subsequently the Petitioners vide its Letter No. 3135/RAU/FPPCA dated 29th December, 2014 submitted their proposal. The detailed proposal on various issues as submitted by the Petitioners is extracted below for reference:

### "A -Differential distribution of FPPCA over different category of consumers:

In this regard this is to submit that differential distribution of FPPCA over different category could be based on their **average billing rate (ABR)**. Since various category of consumer have different average billing rate, therefore uniform distribution of FPPCA will lead to non-uniform percentage distribution over different category. In order to avoid non-uniform percentage distribution of FPPCA it seems most appropriate to distribute FPPCA over different category in the ratio of their ABR in such a way that percentage increase across all the categories remains the same.

## B - Disallowance of power purchase from few costlier sources with whom licensee has long term agreement:

In Power Purchase Plan approved for FY 2012-13, power purchase from following sources has been disallowed by the Commission, whereas licensee has long term agreement with these sources:

- 1- NTPC, Auraiya Gas
- 2- NTPC, Dadri Gas



- 3- NTPC, Kahalgaon Stn.-1
- 4- NTPC, Farakka
- 5- NTPC, Talchar
- 6- NTPC, Jhajhjhar
- 7- Bajaj Hindustan

This situation has arisen due to the fact that the Commission has approved Power Purchase Plan (FY-2012-13) on the basis of MYT (2009-14) generation figures for state owned thermal generating stations. The Commission has not taken into account the past trend of generation from these state owned thermal generating stations.

Owing to the fact of long term agreement with few of the disallowed sources, in FY 2012-13, the existing provision of not allowing FPPCA for power purchase from unapproved sources will lead heavy financial loss to the licensee.

### C - FPPCA may be allowed on power purchase from UI & unapproved sources:

As regard to the issue of allowing FPPCA on power purchase from UI & unapproved sources, Commission has directed the licensee to file reply as directed in its order dt.17.12.2012 in petition no. 848/2012. The desired FPPCA computation has been filed by the licensee vide letter no. 1621/RAU/FPPCA Review dt. 30.06.2014 for the period Jan-2013 to Sept-2013 (for 3 Quarters), on the basis of the bills raised by the generators, in following two scenarios:

- a) FPPCA working Excluding UI & unapproved purchases
- b) FPPCA working Including UI & unapproved purchases

As evident from above submitted computation there is a loss of Rs. 457.5 Cr. to the licensee in terms of FPPCA for three quarters only.

Therefore, in light of submission made by the licensee in its petition & computation shown in reply dt. 30.06.2014, it is submitted that the variation in power purchase cost due to UI & unapproved sources may also be covered under FPPCA.



# D - For the purpose of recovery FPPCA, power purchase cost may include all bills raised by the generators instead of bills paid and credit received by the licensee:

With regard to this issue it is humbly submitted that the submission made in petition no. 848/2012 seems sufficient and does not need further elaboration.

### E - Date of applicability of FPPCA:

The issue with regard to the date of applicability of FPPCA has been settled by the Commission vide its letter no. UPERC/D(T)RAU/2012-1127 dt. 30.10.2012. Therefore, no further submission is required in this regard."

5.10.5 The relevant provisions of the UPERC (Terms and conditions for Determination of Distribution Tariff), Regulations, Amendment No. 3 of 2012 are reproduced below for reference:

Quote

### 6.9 Fuel and Power Purchase Cost Adjustment (FPPCA):

### 1. Recovery Periodicity (Cycle):

The cycle will be quarterly. The FPPCA for the quarter ending March will be calculated in next quarter i.e. up to June when the data/ bills from generators/suppliers and sale of energy data for the quarter under consideration are available and the same will be applicable to all categories w.e.f. July.

### 2. Fuel & Power Purchase Cost Adjustment Formula (FPPCA):

1. The distribution licensee shall recover FPPCA amount with effect from a date which would be issued by a separate Commission's order from all consumers. The formula is as follows:

## Step (A) Determination of Difference between Actual and Approved Power Purchase Cost in a quarter

 $P_D = (P_{actual} - P_{approved})$ 

Where

 $P_D$  = Difference in Actual and Approved Power Purchase Cost ('Crs.)



P actual = Actual Cost of Power Purchase ('Crs.)

 $P_{approved}$  = Approved Cost of Power Purchase ('Crs.)

Step (B) Determination of (E) Energy billed (in MUs) in a quarter after considering approved T&D losses.

Actual power purchased during the quarter (MUs) X(MUs)

Approved T&D losses Y%

Approved MUs billed after T&D losses (E) X \* (1-Y/100)

# Step (C) Determination of Fuel & Power Purchase Cost Adjustment per unit based on approved T&D losses to be charged from all consumers each month of the quarter

### FPPCA ('/unit)) = $(P_D/E)*10$

- 2. The variation in power purchase cost due to UI and other unapproved purchases shall not be covered under FPPCA.
- 3. For the purpose of recovery of FPPCA, power purchase cost shall include all the bills paid and credits received by the distribution licensee, to the suppliers of the power, during the previous FPPCA cycle irrespective of the period to which they pertain. This shall include arrears and refunds, if any, not settled earlier.
- 4. The total FPPCA recoverable, as per the formula specified above, shall be recovered from the actual sales and in case of unmetered consumers, it shall be recoverable based on estimated sales to such consumers, calculated in accordance with such methodology / mechanism as may be stipulated by the Commission.
- 5. Per unit rate of FPPCA shall be worked out in paisa after rounding off to the next place.
- 6. In case of negative FPPCA, the credit shall be given to the consumers under the FPPCA head, so that the base tariff determined by the Commission effectively remains the same.



7. The Distribution licensee shall submit details in the stipulated format to the Commission on a quarterly basis, the FPPCA charged and, for this purpose, shall submit such details of the FPPCA incurred and the FPPCA charged to all consumers for each month in such quarter, along with the detailed computations and supporting documents as may be required for verification by the Commission.

Provided that the above submission made to the Commission must be certified by a Chartered Accountant.

Provided further that the FPPCA applicable for each month shall be displayed prominently at the collection centres and the offices dealing with consumers and on the internet website of the Distribution Licensee.

Provided that the Distribution Licensee shall put up on his internet website such details of the FPPCA incurred and the FPPCA charged to all consumers for each month along with detailed computations.

- 8. In case of Minimum Charges, FPPCA shall be charged only on actual units consumed by the consumer during the relevant month in addition to the Minimum Charges amount.
- 9. In case Government of Uttar Pradesh decided to provide subsidy on FPPCA to a particular consumer category then, it should do the same as per the provisions of Section 65 of Electricity Act 2003. It shall be the responsibility of the licensee to seek prior approval of the State Government in this regard and maintain appropriate record of the same.
- 10. The Commission may however suitably modify / change the proposed formula / procedure or adopt a different formula / procedure for the assessment of fuel surcharge if it considers it to be more appropriate.

### Unquote

5.10.6 As per Regulation 6.9 (2) (10) of UPERC (Terms and Conditions for Determination of Distribution Tariff), Regulations, Amendment No. 3 of 2012, the Commission may suitably modify / change the proposed formula /



procedure or adopt a different formula / procedure for the assessment of fuel surcharge if it considers it to be more appropriate. In view of the same and above discussion the Commission in its Tariff Order dated June 18, 2015 for FY 2015-16 approved the revised formula / procedure in respect to the applicability and recovery of Fuel and Power Purchase Cost Adjustment (FPPCA) as detailed in Regulation 6.9 below (the changes / modifications are underlined):

### 6.9 Fuel and Power Purchase Cost Adjustment (FPPCA):

### 1. Recovery Periodicity (Cycle):

The cycle will be quarterly. The FPPCA for the quarter ending March will be calculated in next quarter i.e. up to June when the data / bills from generators / suppliers and sale of energy data for the quarter under consideration are available and the same will be applicable to all categories w.e.f. July.

### 2. Fuel & Power Purchase Cost Adjustment Formula (FPPCA):

1. The distribution licensee shall recover FPPCA amount with effect from a date which would be issued by a separate Commission's order from all consumers. The formula is as follows:

### Step (A) Determination of Difference between Actual and Approved Power Purchase Cost in a quarter

 $P_D = (P_{actual} - P_{approved})$ 

Where,

 $P_D$  = Difference in Actual and Approved Power Purchase Cost

(Rs. Crore)

P actual Cost of Power Purchase (Rs. Crore)

 $P_{approved}$  = Approved Cost of Power Purchase (Rs. Crore)

# Step (B) Determination of (E) Energy billed (in MUs) in a quarter after considering approved T&D losses.

Actual power purchased during the quarter (MUs) : X (MUs)



Approved T&D losses : Y%

Approved MUs billed after T&D losses (E) : X \* (1 - Y / 100)

Step (C) <u>Determination of Category wise Fuel & Power Purchase Cost</u>

<u>Adjustment per unit based on approved T&D losses to be charged from consumers each month of the quarter</u>

### <u>Category wise FPPCA (Rs. / unit) = $ABR_C / ABR_D * FPPCA_A$ </u>

Where,

<u>FPPCA<sub>A is</sub> Average Fuel and Power Purchase Cost Adjustment (in Rs. / kWh)</u> =  $(P_D/E)*10$ 

<u>ABR<sub>c</sub> is Average Billing Rate or through rate of Consumer Category (in Rs. / kWh) as approved in Tariff Order for the year</u>

<u>ABR<sub>D</sub></u> is Average Billing Rate or through rate of Distribution Licensee (in Rs. / kWh) as approved in Tariff Order for the year

- 2. The variation in power purchase cost due to UI and other unapproved purchases from short term sources shall not be covered under FPPCA.
- 3. For the purpose of recovery of FPPCA, power purchase cost shall include all the bills received by the distribution licensee, from the suppliers of the power, during the previous FPPCA cycle irrespective of the period to which they pertain. This shall include arrears and refunds, if any, not settled earlier.
- 4. The total FPPCA recoverable, as per the formula specified above, shall be recovered from the actual sales and in case of unmetered consumers, it shall be recoverable based on estimated sales to such consumers, calculated in accordance with such methodology / mechanism as may be stipulated by the Commission.



- 5. Per unit rate of FPPCA shall be worked out in paisa after rounding off to the unit place.
- 6. In case of negative FPPCA, the credit shall be given to the consumers under the FPPCA head, so that the base tariff determined by the Commission effectively remains the same.
- 7. The Distribution licensee shall submit details to the Commission on a quarterly basis towards the computation of the FPPCA, which shall include the source wise power purchase quantum, power purchase cost incurred and power purchase rate, details of the FPPCA incurred and the FPPCA chargeable from the consumers for each month in such quarter, along with the detailed computations and supporting documents as may be required for approval by the Commission.

Provided that the above submission made to the Commission must be certified by a Chartered Accountant.

Provided further that the FPPCA applicable for each month shall be displayed prominently at the collection centres and the offices dealing with consumers and on the internet website of the Distribution Licensee.

Provided that the Distribution Licensee shall put up on his internet website such details of the FPPCA incurred and the FPPCA charged to all consumers for each month along with detailed computations.

- 8. In case of Minimum Charges, FPPCA shall be charged only on actual units consumed by the consumer during the relevant month in addition to the Minimum Charges amount.
- 9. In case Government of Uttar Pradesh decided to provide subsidy on FPPCA to a particular consumer category then, it should do the same as per the provisions of Section 65 of Electricity Act 2003. It shall be the



responsibility of the licensee to seek prior approval of the State Government in this regard and maintain appropriate record of the same.

- 10. The Commission may however suitably modify / change the proposed formula / procedure or adopt a different formula / procedure for the assessment of fuel surcharge if it considers it to be more appropriate.
- 5.10.7 For the purpose of Fuel & Power Purchase Cost Adjustment (FPPCA) as per above mentioned formula, the projected monthly power purchase requirement is annexed to this Order, which is derived from the monthly power purchase submitted by the Licensees.
- 5.10.8 Further, the Commission in its previous Orders has time and again directed the Licensees to file submissions in respect of FPPCA in a timely and regular manner as specified under the Regulations. However, the Licensees have not complied with the directions of the Commission in this regard.
- 5.10.9 It is to be noted that the power purchase expenses being an uncontrollable expense, is pass-through to the consumers, however, the difference between the actual cost of power procurement and the approved power purchase expenses, is being recovered by the Distribution Licensee at the time of truing up. The time lag in recovery of the variation in power purchase expenses adversely affects the financial position of the Distribution Licensee and also puts additional burden on consumers on account of Carrying Cost.
- 5.10.10 Failure to file FPPCA in a timely manner has many repercussions such as higher accumulated Aggregate Revenue Requirement (ARR) on account of variation in Power Purchase Expenses and the carrying cost, higher increase in Tariff or allowance in the form of Regulatory Surcharge, leading to Tariff shock. Further, the delayed filing of the FPPCA and claiming of the additional power purchase expenses during the Truing-up process also put the burden of such additional power purchase expenses on the new consumers, who may not have been consumers during the respective year.
- 5.10.11 The Commission once again directs the licensees that they should file FPPCA in a timely and regular manner failing which the Commission may have to resort to take strict action against the Licensees like disallowance of additional power purchase expenses and the associated carrying cost on



account of additional Power Purchase expenses or any other action that the Commission may deem fit while doing the Truing up.

### 5.11 SUMMARY OF POWER PURCHASE

5.11.1 The total power purchase quantum available from State owned generating stations, central generating stations and other sources along with the quantum and cost as submitted by Licensees and approved by Commission for FY 2016-17 is presented in the Tables below:

Table 5-46: SUMMARY OF POWER PURCHASE COST FOR FY 2016-17 AS SUBMITTED BY THE DISTRIBUTION LICENSEES FOR FY 2016-17

				LICENSEES	7				
Source of Power	MW Available	MU	Fixe	ed Cost	Varial	ble Cost	t Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
	Proci	ırement o	f power f	rom State S	ector Gen	erating Sta	tions		
			Tł	nermal Stati	ons				
Anpara A	630	3,852	0.75	289	2.12	816	2.87	1,104	2.87
Anpara B	1,000	7,194	1.11	801	1.95	1,404	3.07	2,206	3.07
Harduagunj	165	300	1.58	47	3.66	110	5.23	157	5.23
Obra A	288	533	1.25	67	2.55	136	3.81	203	3.81
Obra B	1,000	3,955	0.71	281	2.40	951	3.11	1,232	3.11
Panki	210	646	1.46	94	4.54	293	6.00	387	6.00
Parichha	220	425	1.06	45	4.39	187	5.45	232	5.45
ParichhaExtn.	420	2,252	1.44	325	3.60	810	5.04	1,135	5.04
ParichhaExtn. Stage II	500	3,388	1.84	625	3.59	1,216	5.43	1,841	5.43
Harduaganj Ext.	500	3,388	2.01	681	2.83	959	4.84	1,640	4.84
Anpara D	1,000	6,192	1.66	1,027	1.77	1,094	3.43	2,121	3.43
Sub total - Thermal	5933	32126		4283		7976		12259	3.82
Per unit Avg Rate o	of Thermal G	eneration	<u></u> )					3.82	
Hydro Stations									
Khara	58	151	0.78	12			0.78	12	0.78
Matatila	20	53	0.70	4	•		0.70	4	0.70
Obra (Hydel)	99	260	0.68	18			0.68	18	0.68
Rihand	255	670	0.59	40	•		0.59	40	0.59
UGC Power Stations	14	36	2.30	8			2.30	8	2.30



Source of Power	MW Available	MU	Fixe	ed Cost	Varia	ble Cost	Tot	tal Cost	Average Cost	
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	
Belka&Babail	6	16	2.43	4			2.43	4	2.43	
Sheetla	4	9	2.95	3			2.95	3	2.95	
Sub total - Hydro	455	1195		88.00		0.00		88.00	0.74	
Purchase Per unit A	Avg Rate fro	m hydro g	generating	g stations				0.74		
Sub-Total Own generation	6388	33321		4,370.72		7,975.92		12,346.64	3.71	
Procurement of po	wer from Co	entral Sec	tor Gener	ating Statio	าร			i		
Anta	119	626	0.73	46	4.62	289	5.36	335	5.36	
Auriya	243	1,279	0.55	71	5.03	643	5.58	714	5.58	
Dadri Thermal	84	613	0.86	52	4.13	253	4.98	305	4.98	
Dadri Gas	271	1,427	0.57	81	4.56	651	5.13	732	5.13	
Dadri Extension	148	1,055	1.61	170	3.68	388	5.29	559	5.29	
Rihand-I	372	2,697	0.81	220	2.08	560	2.89	780	2.89	
Rihand-II	346	2,791	0.95	264	1.95	543	2.89	807	2.89	
Singrauli	846	6,687	0.54	361	1.33	891	1.87	1,252	1.87	
Tanda	440	3,255	1.05	343	3.69	1,201	4.74	1,544	4.74	
Unchahar-I	257	2,009	0.86	174	2.93	589	3.80	763	3.80	
Unchahar-II	152	1,166	0.89	104	2.90	338	3.80	443	3.80	
Unchahar-III	74	577	1.37	79	2.43	140	3.80	219	3.80	
Farakka	33	202	0.85	17	2.86	58	3.71	75	3.71	
Kahalgaon St. I	77	552	0.96	53	2.61	144	3.57	197	3.57	
KahalgaonSt.IIPh.I	251	1,807	1.22	221	2.35	424	3.57	645	3.57	
Koldam (Hydro)	95	361	1.56	56	2.41	87	3.97	143	3.97	
Rihand-III	375	1,980	1.32	261	1.57	311	2.89	572	2.89	
Sub-Total NTPC	4184	29083		2573		7510		10084	3.47	
Chamera	109	336	0.60	20	0.85	29	1.46	49	1.46	
Chamera-II	86	392	1.34	52	1.04	41	2.37	93	2.37	
Chamera-III	62	282	1.81	51	1.86	53	3.67	103	3.67	
Dhauliganga	75	281	1.10	31	1.27	36	2.37	67	2.37	
Salal I&II	48	252	0.60	15	0.38	9	0.98	25	0.98	
Tanakpur	21	103	1.70	17	1.22	13	2.92	30	2.92	
Uri	96	497	1.05	52	0.89	44	1.94	96	1.94	
Dulhasti	111	516	2.82	145	2.30	118	5.12	264	5.12	
Sewa-II	35	136	1.89	26	1.81	25	3.70	50	3.70	



Source of Power	MW Available	MU	Fixed Cost		Variable Cost		Total Cost		Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Uri-II	25	111	4.98	55	0.45	5	5.43	60	5.43
Parbati ST-III	104	383	1.41	54	3.74	143	5.15	197	5.15
Sub-Total NHPC	773	3287		519.58		514.80		1,034.38	3.15
NAPP	166	935	-	-	2.59	242	2.59	242	2.59
RAPP #3&4	80	604	-	-	3.08	186	3.08	186	3.08
RAPP#5&6	115	799	-	-	3.67	293	3.67	293	3.67
Sub-Total NPCIL	361	2339				721.55		721.55	3.09
NATHPA JHAKRI HPS	287	1,383	1.60	221	1.51	209	3.11	430	3.11
TALA POWER	45	181	-	-	2.22	40	2.22	40	2.22
Koteshwar	173	569	2.02	115	1.87	107	3.89	221	3.89
Srinagar	290	519	-	-	4.16	216	4.16	216	4.16
Sasan	495	2,081	0.27	56	1.20	249	1.46	305	1.46
Case-1	2,175	10,186	2.19	2,227	1.52	1,553	3.71	3,780	3.71
Karcham- Wangtoo	200	158	-	-	3.12	49	3.12	49	3.12
VISHNUPRAYAG	352	1,623	0.92	149	1.30	212	2.22	361	2.22
TEHRI STAGE-I	418	1,809	1.88	340	3.56	644	5.44	984	5.44
Rosa Power Project	600	3,946	1.75	689	3.72	1,469	5.47	2,158	5.47
Rosa Power Project	600	3,946	1.75	689	3.75	1,481	5.50	2,171	5.50
Bara	1,782	7,395	1.18	874	3.14	2,323	4.32	3,197	4.32
Anpara 'C'	1,100	7,015	1.77	1,241	2.58	1,809	4.35	3,050	4.35
IGSTPP, Jhajhjhar	51	354	1.61	57	4.36	154	5.97	211	5.97
Bajaj Hindusthan	450	2,807	2.25	632	4.57	1,281	6.82	1,913	6.82
Lalitpur	1,782	10,108	1.88	1,900	2.95	2,982	4.83	4,882	4.83
Sub-Total IPP/JV	10799	54080		9190		14779		23969	4.43
Captive and Cogen	-	2,865	-	-	4.79	1,374	4.79	1,374	4.79



Source of Power	MW Available	MU Fixe		ed Cost Variab		ble Cost T		al Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Inter system exchange (Bilateral & PXIL, IEX) / UI	-	217	-	-	5.30	115	5.30	115	5.30
Solar Energy	-	84	-	-	10.76	90	10.76	90	10.76
NVVN Coal Power	-	352	-	-	3.26	114	3.26	114	3.26
Sub-Total : Co- Generation & Other Sources	-	3518				1,693.45		1,693.45	4.81
Grand Total of Power Purchase	22505	125627		16,653.47		33,194.7		49,848.13	3.97

Table 5-47: SUMMARY OF APPROVED POWER PURCHASE COST FOR FY 2016-17

Source of Power	MW Available	MU	Fixe	ed Cost	Varia	Variable Cost		Total Cost	
		Þ	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
		9	State The	rmal Gener	ating Stati	ions			
Anpara A	630.00	4292.25	0.72	309.20	1.87	802.65	2.59	1111.85	2.59
Anpara B	1000.00	7055.09	0.65	459.88	1.62	1142.92	2.27	1602.80	2.27
Harduaganj	165.00	840.86	1.47	123.42	3.47	291.78	4.94	415.20	4.94
Obra A	288.00	1070.65	1.81	194.07	1.60	171.30	3.41	365.37	3.41
Obra B	1000.00	6328.22	0.69	436.17	1.52	961.89	2.21	1398.06	2.21
Panki	210.00	1161.52	1.44	167.70	3.45	400.72	4.89	568.42	4.89
Parichha	220.00	1290.74	1.06	136.82	3.90	503.39	4.96	640.21	4.96
Parichha Extension	420.00	2845.86	1.35	384.40	3.21	913.52	4.56	1297.92	4.56
Parichha Extension St.II	500.00	3387.93	1.84	624.00	3.21	1087.53	5.05	1711.53	5.05
Harduaganj Extension	500.00	3387.93	1.99	672.96	2.67	904.58	4.66	1577.54	4.66
Anpara D	1000.00	7000.11	1.89	1323.02	1.44	1008.02	3.33	2331.04	3.33
Total	5933.00	38661.16	1.25	4831.64	2.12	8188.30	3.37	13019.94	3.37



Source of Power	MW Available	MU	Fixe	ed Cost	Varia	riable Cost		tal Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
			State Hy	/dro Genera	ting Statio	ons		•	
Khara	57.60	151.37	0.78	11.79			0.78	11.79	0.78
Matatila	20.00	52.56	0.70	3.70			0.70	3.70	0.70
Obra (Hydel)	99.00	260.17	0.68	17.73			0.68	17.73	0.68
Rihand	255.00	670.14	0.59	39.87			0.59	39.87	0.59
U.G.C.Power	13.70	36.00	2.30	8.29			2.30	8.29	2.30
Stations									
Belka&Babail	6.00	15.77	2.43	3.84			2.43	3.84	2.43
Sheetla	3.60	9.46	2.95	2.79			2.95	2.79	2.95
Total	454.90	1195.48	0.74	88.00			0.74	88.00	0.74
Sub-Total Own generation	6387.90	39856.64	1.23	4919.64	2.05	8188.30	3.29	13107.94	3.29
				NTPC					-
Anta	119.12	626.10	0.73	45.95	4.62	289.39	5.36	335.34	5.36
Auriya	243.25	1278.55	0.55	70.92	5.03	643.12	5.58	714.04	5.58
Dadri Thermal	84.00	613.15	0.86	52.49	4.13	252.96	4.98	305.45	4.98
Dadri Gas	271.49	1426.97	0.57	81.06	4.56	650.58	5.13	731.63	5.13
Dadri EXT. St-II	147.64	1055.29	1.61	170.36	3.68	388.27	5.29	558.63	5.29
Rihand-l	371.60	2697.16	0.81	219.65	2.08	560.15	2.89	779.80	2.89
Rihand-II	345.80	2790.71	0.95	263.86	1.95	542.99	2.89	806.85	2.89
Singrauli	846.00	6686.91	0.54	360.97	1.33	890.82	1.87	1251.79	1.87
Tanda	440.00	3255.30	1.05	342.56	3.69	1201.23	4.74	1543.79	4.74
Unchahar I	257.38	2008.94	0.86	173.75	2.93	588.84	3.80	762.59	3.80
Unchahar II	152.12	1165.85	0.89	104.27	2.90	338.28	3.80	442.56	3.80
Unchahar III	74.45	576.97	1.37	79.07	2.43	139.95	3.80	219.02	3.80
Farakka TPS	33.28	201.74	0.85	17.25	2.86	57.66	3.71	74.90	3.71
Kahalgaon St-I	76.61	551.63	0.96	52.74	2.61	144.04	3.57	196.78	3.57
KahalgaonPh-II ST-II	250.95	1807.02	1.22	220.76	2.35	423.84	3.57	644.60	3.57
Koldam (Hydro) (COD 12-13)	94.50	360.84	1.56	56.29	2.41	87.06	3.97	143.36	3.97
Rihand-III	375.42	1979.78	1.32	261.38	1.57	311.02	2.89	572.40	2.89
Total	4183.61	29082.92	0.88	2573.32	2.58	7510.21	3.47	10083.53	3.47
		i	. <b></b>	NHPC	åå			h	.k
Chamera	109.46	335.60	1.08	36.15	1.08	36.15	2.15	72.30	2.15
Chamera II	85.98	391.66	1.49	58.46	1.49	58.46	2.99	116.91	2.99
Chamera III	61.92	282.05	1.81	50.97	1.86	52.53	3.67	103.50	3.67



Source of Power	MW MU Available		Fixe	Fixed Cost Variat		ble Cost		tal Cost	Average Cost
			(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Dhauliganga	74.65	281.18	1.10	31.04	1.27	35.60	2.37	66.64	2.37
Salal I&II	47.96	252.05	0.55	13.91	0.55	13.91	1.10	27.82	1.10
Tanakpur	21.33	102.75	1.48	15.21	1.48	15.21	2.96	30.43	2.96
Uri	96.29	496.78	1.05	51.95	0.89	44.42	1.94	96.38	1.94
Dulhasti	111.03	515.50	2.82	145.50	2.30	118.44	5.12	263.94	5.12
Sewa II (June/July - 2010)	34.99	136.19	1.89	25.77	1.81	24.62	3.70	50.39	3.70
Uri-II	25.35	110.65	4.98	55.11	0.45	4.98	5.43	60.08	5.43
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parbati III	104.00	382.64	1.41	53.98	3.74	143.07	5.15	197.05	5.15
Total	772.95	3287.05	1.64	538.05	1.67	547.39	3.30	1085.44	3.30
		<u> </u>		NPCIL					
NAPP	166.14	935.18	0.00	0.00	2.59	242.17	2.59	242.17	2.59
RAPP #3&4	79.67	604.04	0.00	0.00	3.08	185.95	3.08	185.95	3.08
RAPP#5&6	115.06	799.29	0.00	0.00	3.67	293.43	3.67	293.43	3.67
Total	360.87	2338.50	0.00	0.00	3.09	721.55	3.09	721.55	3.09
	<u>i</u>	i		IPPs / JV	S		l		<b>i</b>
NATHPA JHAKRI HPS	287.10	1383.25	1.60	221.43	1.51	208.85	3.11	430.28	3.11
TALA POWER	44.98	181.26	0.00	0.00	2.22	40.15	2.22	40.15	2.22
Koteshwar	172.64	568.94	2.02	114.76	1.87	106.53	3.89	221.29	3.89
Srinagar	290.00	518.63	2.44	126.55	2.44	126.55	4.88	253.09	4.88
Sasan	495.00	2081.38	0.27	55.81	1.20	248.87	1.46	304.68	1.46
Teesta St-III	2175.00	10186.13	2.19	2227.21	1.52	1552.96	3.71	3780.18	3.71
Karcham- Wangtoo	200.00	157.68	0.00	0.00	3.12	49.20	3.12	49.20	3.12
VISHNUPRAYAG	352.00	1622.83	0.92	149.01	1.30	211.74	2.22	360.75	2.22
TEHRI STAGE-I	418.00	1808.87	1.88	339.75	3.56	644.32	5.44	984.07	5.44
Rosa Power Project	600.00	3945.94	1.75	689.24	3.72	1469.15	5.47	2158.39	5.47
Rosa Power Project	600.00	3945.94	1.75	689.24	3.75	1481.46	5.50	2170.70	5.50
Bara	1782.00	7395.39	1.18	873.91	3.14	2322.74	4.32	3196.66	4.32
Anpara 'C'	1100.00	7015.01	1.77	1240.75	2.58	1809.31	4.35	3050.06	4.35
IGSTPP, Jhajhjhar	50.55	354.25	1.61	56.95	4.36	154.48	5.97	211.43	5.97
Bajaj	450.00	2806.70	2.25	631.53	4.57	1281.43	6.82	1912.96	6.82



Source of Power	MW Available	MU	Fixe	ed Cost	Variable Cost		Variable Cost Total Cost		Average Cost
		i.	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. / kWh)
Hindusthan									
Lalitpur	1782.00	10107.68	1.88	1900.24	2.95	2981.77	4.83	4882.01	4.83
Total	10799.27	54079.88	1.72	9316.40	2.72	14689.52	4.44	24005.92	4.44
			Co-Gen	eration & Ot	ther Sour	ces	•		
Captive and Cogen	0.00	2865.00	0.00	0.00	4.79	1373.60	4.79	1373.60	4.79
Solar Energy	0.00	84.00	0.00	0.00	10.76	90.42	10.76	90.42	10.76
NVVNL Coal Power	0.00	351.62	0.00	0.00	3.26	114.46	3.26	114.46	3.26
Total	0.00	3300.62	0.00	0.00	4.78	1578.47	4.78	1578.47	4.78
Inter system exchange (Bilateral & PXIL) / UI	0.00	216.94	0.00	0.00	5.30	114.98	5.30	114.98	5.30
Grand Total of Power Purchase	22504.60	132162.54	1.31	17347.42	2.52	33350.42	3.84	50697.84	3.84
Grand Total of Power Purchase (after applying merit order)	22504.60	127414.15	1.36	17347.42	2.44	31103.64	3.80	48451.06	3.80

# 5.12 APPROVED MERIT ORDER DISPATCH

5.12.1 The Merit Order Dispatch as approved by the Commission after evaluating the power purchase cost is given in the Table below:

Table 5-48: APPROVED MERIT ORDER DISPATCH FOR FY 2016-17

Rank	Power Station	Туре	Dispatch Mode	Variable Charge (Rs / kWh)
1	Rihand	UPJVNL-Hydro	Must Run	0.00
2	Obra (Hydel)	UPJVNL-Hydro	Must Run	0.00
3	Matatila	UPJVNL-Hydro	Must Run	0.00
4	Khara	UPJVNL-Hydro	Must Run	0.00
5	Salal I&II	NHPC-Hydro	Must Run	0.55
6	Uri	NHPC-Hydro	Must Run	0.89
7	Chamera	NHPC-Hydro	Must Run	1.08
8	TALA POWER	IPP/JV/Bilateral/Others	Must Run	2.22



Rank	Power Station	Туре	Dispatch Mode	Variable Charge (Rs /
			Mode	kWh)
9	VISHNUPRAYAG	IPP/JV/Bilateral/Others	Must Run	1.30
10	U.G.C.Power Stations	UPJVNL-Hydro	Must Run	0.00
11	Dhauliganga	NHPC-Hydro	Must Run	1.27
12	Belka&Babail	UPJVNL-Hydro	Must Run	0.00
13	NAPP	NPCIL-Nuclear	Must Run	2.59
14	Sheetla	UPJVNL-Hydro	Must Run	0.00
15	Tanakpur	NHPC-Hydro	Must Run	1.48
16	Chamera II	NHPC-Hydro	Must Run	1.49
17	RAPP #3&4	NPCIL-Nuclear	Must Run	3.08
18	NATHPA JHAKRI HPS	IPP/JV/Bilateral/Others	Must Run	1.51
19	Karcham-Wangtoo	IPP/JV/Bilateral/Others	Must Run	3.12
20	Chamera III	NHPC-Hydro	Must Run	1.86
21	RAPP#5&6	NPCIL-Nuclear	Must Run	3.67
22	Sewa II (June/July - 2010)	NHPC-Hydro	Must Run	1.81
23	Koldam (Hydro)	NTPC-Thermal	Must Run	2.41
24	Captive and Cogen	Captive &Cogen	Must Run	4.79
25	Srinagar	IPP/JV/Bilateral/Others	Must Run	2.44
26	Dulhasti	NHPC-Hydro	Must Run	2.30
27	Parbati III	NHPC-Hydro	Must Run	3.74
28	Uri-II	NHPC-Hydro	Must Run	0.45
29	Tehri Stage-I	IPP/JV/Bilateral/Others	Must Run	3.56
30	Solar Energy	IPP/JV/Others	Must Run	10.76
31	Sasan	IPP/JV/Bilateral/Others	Merit	1.20
32	Singrauli	NTPC-Thermal	Merit	1.33
33	Anpara D	UPRVUNL-Thermal	Merit	1.44
34	Obra B	UPRVUNL-Thermal	Merit	1.52
35	Teesta St-III	IPP/JV/Bilateral/Others	Merit	1.52
36	Rihand-III	NTPC-Thermal	Merit	1.57
37	Obra A	UPRVUNL-Thermal	Merit	1.60
38	Anpara B	UPRVUNL-Thermal	Merit	1.62
39	Anpara A	UPRVUNL-Thermal	Merit	1.87
40	Koteshwar	IPP/JV/Bilateral/Others	Merit	1.87
41	Rihand-II	NTPC-Thermal	Merit	1.95
42	Rihand-I	NTPC-Thermal	Merit	2.08
43	KahalgaonPh-II ST-II	NTPC-Thermal	Merit	2.35
44	Unchahar III	NTPC-Thermal	Merit	2.43



Rank	Power Station	Туре	Dispatch Mode	Variable Charge (Rs / kWh)
45	Anpara 'C'	IPP/JV/Bilateral/Others	Merit	2.58
46	Kahalgaon St-I	NTPC-Thermal	Merit	2.61
47	Harduaganj Extension(2*250)	UPRVUNL-Thermal	Merit	2.67
48	Farakka TPS	NTPC-Thermal	Merit	2.86
49	Unchahar II	NTPC-Thermal	Merit	2.90
50	Unchahar I	NTPC-Thermal	Merit	2.93
51	Lalitpur	IPP/JV/Bilateral/Others	Merit	2.95
52	Bara	IPP/JV/Bilateral/Others	Merit	3.14
53	Parichha Extension	UPRVUNL-Thermal	Merit	3.21
54	Parichha Extension St.II	UPRVUNL-Thermal	Merit	3.21
55	NVVNL Coal Power	IPP/JV/Others	Merit	3.26
56	Panki	UPRVUNL-Thermal	Merit	3.45
57	Harduaganj	UPRVUNL-Thermal	Merit	3.47
58	Dadri EXT. St-II	NTPC-Thermal	Merit	3.68
59	Tanda	NTPC-Thermal	Merit	3.69
60	Rosa Power Project	IPP/JV/Bilateral/Others	Merit	3.72
61	Rosa Power Project	IPP/JV/Bilateral/Others	Merit	3.75
62	Parichha	UPRVUNL-Thermal	Merit	3.90
63	Dadri Thermal	NTPC-Thermal	Merit	4.13
64	IGSTPP, Jhajhjhar	NTPC-Thermal	Merit	4.36
65	Dadri Gas	NTPC-Thermal	Merit	4.56
66	Bajaj Hindusthan	IPP/JV/Bilateral/Others	Merit	4.57
67	Anta	NTPC-Thermal	Merit	4.62
68	Auriya	NTPC-Thermal	Merit	5.03
69	Inter system exchange (Bilateral & PXIL) / UI	IPP/JV/Others	Merit	5.30

The Commission directs the Distribution Licensee to procure power to meet demand on real time basis strictly following the merit order dispatch principles. The Distribution Licensee should also take into consideration the prevailing rates on the Energy Exchanges while procuring the power and should try to minimize the cost of power purchase as much as possible. It has been provided, that the power from short term sources should be procured at cheapest price and in any case, it should not be more than Rs. 5.04/ kWh taking into consideration the availability of power at lower prices in the market.



The Commission has been directing the Licensees in various proceeding to take advantage of the prevailing cheaper short term power based on the availability. Further, in its Order dated June 9, 2016 in the matter of Suo-Moto proceeding regarding purchase of power from energy exchange has directed the Licensees to follow the philosophy of daily scheduling. Also, the Commission in the matter of Petition No. 1070 / 2015 has passed various orders (dt. June 21, 2016 etc.) regarding the merit order dispatch. The Licensees are hereby directed that they must strictly comply with the same in procuring the power.



## 5.13 ANNUAL REVENUE REQUIREMENT OF MVVNL FOR FY 2016-17

- 5.13.1 The Petitioner has submitted that the Distribution Tariff Regulations, 2006 requires the Licensee to file Aggregate Revenue Requirement (ARR) complete in all respect along with requisite fees as prescribed by the Commission.
- 5.13.2 The Petitioner submitted that as per the Regulations, the ARR Petition should contain details of estimated expenditure and expected revenue that it may recover in the ensuing financial year at the prevailing rate of Tariff. The Petitioner further submitted that the Distribution Tariff Regulations, 2006 require that the ARR should separately indicate Aggregate Revenue Requirement (ARR) for Wheeling & Retail Supply function embedded in the distribution function and till such time complete segregation of accounts between Wheeling and Retail Supply Business takes place, ARR proposals for Wheeling and Retail Supply Business shall be prepared based on an allocation statement as per the best judgement of the Distribution Licensee.
- 5.13.3 The Petitioner submitted that the Distribution Tariff Regulations, 2006 has broadly classified cost incurred by the Petitioner as controllable and uncontrollable costs wherein the uncontrollable cost include fuel cost, increase in cost due to changes in interest rate, increase of cost due to inflation, taxes and cess, variation of power purchase unit costs, etc.
- 5.13.4 The Petitioner submitted that Tariff Order for FY 2007-08 is the first Order issued by the Commission in accordance with the Distribution Tariff Regulations, 2006. In this Tariff Order, the Commission used allocation methodology for segregation of Wheeling & Retail Supply business function of ARR. The Petitioner added that it has adopted the same methodology for deriving wheeling charges, as the complete segregation of accounts between Wheeling and Retail Supply business has not yet been completed.
- 5.13.5 The Petitioner further submitted that it has filed the current ARR Petition in strict compliance with the Distribution Tariff Regulations, 2006.
- 5.13.6 The Petitioner submitted that the cost elements of ARR have been estimated based on the provisional un-audited accounts of FY 2014-15 and expenses available for FY 2015-16.



- 5.13.7 The Commission has analysed all the components of the Aggregate Revenue Requirement (ARR) to arrive at suitable values. As per the Distribution Tariff Regulations, 2006, the ARR comprises of the following components:
  - a) Power Purchase cost
  - b) Transmission Charges
  - c) SLDC Charges
  - d) Operation and Maintenance Expenses
    - Employee Expenses
    - Administration & General Expenses
    - Repairs and Maintenance Expenses
  - e) Depreciation
  - f) Interest and Financing Costs
  - g) Bad and Doubtful Debts
  - h) Return on Equity
  - i) Taxes on Income
  - j) Other Expenses
  - k) Contribution to Contingency Reserve
- 5.13.8 The detailed analysis of each and every element identified above is presented in the subsequent sections.

#### 5.14 POWER PROCUREMENT COST

- 5.14.1 The Petitioner submitted that the total Inter-State transmission charges payable by UPPCL to PGCIL has been projected to be Rs. 2,999.90 Crore in the ensuing year. The PGCIL charges consequent to Inter-State transmission is being levied on energy procured from NTPC, NPCIL, NHPC, SJVNL, Tehri, TALA, etc., and these charges have been incorporated in Power Procurement Cost.
- 5.14.2 The Petitioner submitted that while considering power procurement to meet the State's requirement, losses external to its system, i.e., in the Northern Region PGCIL system, need to be accounted for. The availability of power for the Petitioner (i.e., at UPPCL system boundary) from these sources gets reduced to the extent of these losses and the Petitioner has accordingly incorporated them while drawing up the energy balance and merit order dispatch for meeting the State requirement.



- 5.14.3 The Commission has run the merit order Dispatch schedule for power purchase for FY 2016-17 after considering the availability of power. The power purchase quantum and cost approved by the Commission for FY 2016-17 has already been discussed in previous section.
- 5.14.4 Further aligning with the Licensee's submission, the Commission has grossed up the power purchase costs to include PGCIL losses (inter-State transmission losses).
- 5.14.5 The Commission has projected the PGCIL charges on the basis of approved power purchase quantum as detailed in the Table below:

**Particulars** Derivation FY 2016-17 **Approved** Projected Power Purchase by Licensee (MU) Α 125,627.02 R 2,999.90 Projected PGCIL Charges (Rs. Crore) C = B/A\*100.24 Projected PGCIL Charges (Rs./kWh) Approved Power Purchase (MU) 127,414.15 E = D\*C/103,042.58 **Approved PGCIL Charges (Rs. Crore)** 

**TABLE 5-49: APPROVED PGCIL CHARGES FOR FY 2016-17** 

- 5.14.6 The Commission further reiterates that the actual inter-State transmission charges for FY 2016-17 would be allowed as pass through during true-up process subject to prudence check by the Commission based on audited accounts.
- 5.14.7 The Commission has determined the bulk supply rate by dividing the power purchase cost including PGCIL charges so computed with the energy input (MU) at transmission-distribution interface. The Commission has approved the bulk power supply tariff for FY 2016-17 as given in the Table below:

Table 5-50: APPROVED CONSOLIDATED BULK SUPPLY TARIFF

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Purchases Required & Billed Energy (MU)	Α	125,627.02	127,414.15
Periphery Loss (Up to inter connection Point) (%)	В	1.65%	1.65%
Energy Available at State periphery for Transmission (MU)	C =A* (1-B)	123,554.18	125,311.82
Intra -State Transmission losses %	D	3.67%	3.59%
Energy Input into Transmission-Distribution	E=C* (1-D)	119,019.74	120,813.12



Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Interface (MU)			
Power Purchase Cost (Rs. Crore)	F	49,848.13	48,451.06
PGCIL Inter-State transmission charges (Rs. Crore)	G	2,999.90	3,042.58
Total Power Procurement Cost (Rs. Crore)	H=F+G	52,848.03	51,493.63
Bulk Supply Tariff (Rs./Unit)	I= (H/E)*10	4.44	4.26

5.14.8 Based on the approved quantum, the Commission has approved power procurement cost for MVVNL for FY 2016-17 as given in the Table below:

Table 5-51: POWER PROCUREMENT COST FOR MVVNL FOR FY 2016-17

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Energy Input into Transmission-Distribution Interface (MU)	А	21,524.59	22,215.74
Bulk Supply Tariff (Rs./kWh)	В	4.44	4.26
Power Procurement Cost from UPPCL (Rs. Crore)	C =A*B /10	9,557.51	9,468.92

#### 5.15 TRANSMISSION AND SLDC CHARGES

- 5.15.1 The Petitioner submitted that the Intra-State transmission charges for current year and ensuing year payable by the Petitioner are on the basis of actual energy received and uniform charges are to be paid by all the Distribution Licensees proportionate to the energy delivered to them.
- 5.15.2 The Petitioner further submitted that the transmission licensee is also performing the function of SLDC and such SLDC cost is embedded in the transmission charges.
- 5.15.3 The Petitioner submitted that the projections of transmission charges have been taken from the ARR / Tariff Petition filed by U.P. Power Transmission Corporation Ltd (UPPTCL) for FY 2016-17.
- 5.15.4 The Petitioner submitted that in its Petition, UPPTCL has projected transmission charge at a rate of Rs. 0.194 per kWh for FY 2016-17 and accordingly MVVNL has estimated the cost of Intra-State transmission charges.



5.15.5 Transmission and SLDC charges for FY 2016-17 have been approved in concurrence with the ARR and transmission tariff approved for UPPTCL for FY 2016-17 in the Commission's Order for determination of Intra-State transmission charges approved for UPPTCL by the Commission. The approved transmission charges for MVVNL FY 2016-17 are given in Table below:

Table 5-52: INTRA STATE TRANSMISSION CHARGES FOR FY 2016-17

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Energy Input into Transmission-Distribution Interface (MU)	Α	21,525	22,216
Transmission Tariff (Rs./kWh)	В	0.194	0.162
Transmission Cost (Rs. Crore)	C =A*B /10	416.67	360.12

#### 5.16 ESCALATION INDEX

- 5.16.1 For approving the O&M expenses for the ensuing year, the Distribution Tariff Regulations, 2006 specifies a formula of escalation index to be applied to the base year as detailed below.
- 5.16.2 The Petitioner submitted that the Distribution Tariff Regulations, 2006 specifies that expenses of the base year shall be escalated at Inflation / Escalation rate notified by the Central Government for different years. The Petitioner submitted that the inflation rate for this purpose shall be weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40.
- 5.16.3 The Petitioner submitted that for the purpose of ARR, it has used the above methodology in arriving at Inflation / Escalation rate of 4.01% for FY 2015-16 and 0.92% for FY 2016-17. This Inflation / Escalation rate has been used in estimation of various components of ARR.
- 5.16.4 Regulation 4.3 of Distribution Tariff Regulations, 2006 specifies the methodology for consideration of the O&M Expenses, wherein such expenses are linked to the inflation index determined under these Regulations. Accordingly, the Commission has computed escalation / inflation index of 1.39% for FY 2015-16 and the same escalation / inflation index has been considered for FY 2016-17 as computed in Truing up Chapter of this Order.



#### 5.17 O&M EXPENSES

5.17.1 The Petitioner submitted that the O&M expenses comprise of Employee costs, Administrative & General (A&G) Expenses and Repair & Maintenance (R&M) expenses. The Regulation 4.3 of the Distribution Tariff Regulations, 2006 specifies as follows:

*"*...

- 1. The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The O&M expenses for the base year shall be calculated on the basis of historical/audited costs and past trend during the preceding five years. However, any abnormal variation during the preceding five years shall be excluded. For determination of the O&M expenses of the year under consideration, the O & M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations.
- 2. Where such data for the preceding five years is not available the Commission may fix O&M expenses for the base year as certain percentage of the capital cost.
- 3. Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.3 (1)......"
- 5.17.2 The Petitioner submitted that the O&M expenses for FY 2016-17 have been claimed by escalating the actual component wise O&M expenses for FY 2013-14 by using the yearly inflation indices approved by the Commission up to FY 2015-16 in its Tariff Order dated June 18, 2015 and at the rate of 4.01% for FY 2016-17.
- 5.17.3 The Petitioner submitted that increase in dearness pay may be higher than the escalation index determined as per the Distribution Tariff Regulations, 2006 and requested the Commission that any variation in employee expenses due



to increase in dearness pay may be considered by the Commission at the time of true-up for the relevant year based on specific submissions by the Petitioner in this regard.

- 5.17.4 The allowable O&M expenses for FY 2016-17 have been approved by escalating the component wise O&M expenses for FY 2013-14 by using the yearly inflation indices as discussed above. Since, escalation index of FY 2016-17 cannot be computed at this stage, escalation index of FY 2015-16 i.e., 1.39%, has been considered to project the normative O&M expense of FY 2016-17.
- 5.17.5 Further, in addition to the O&M expenses based on inflationary indices, the Commission has also worked out incremental O&M expenses for FY 2016-17 as per the Distribution Tariff Regulations, 2006 and has further allocated the same across the individual elements of the O&M expenses on the basis of the contribution of each element in the O&M expenses.
- 5.17.6 It is observed that the O&M expenses estimated by the Petitioner are higher than the normative O&M expenses computed by the Commission considering base year as FY 2007-08. Since the Licensee has to restrict its O&M expenses within the normative level, the Commission has therefore, approved the normative O&M expenses for FY 2016-17 computed in accordance with the Distribution Tariff Regulations, 2006.
- 5.17.7 Further, capitalization of employee expenses and administrative and general expenses has been considered as 15% of the gross employee expenses and gross A&G expenses respectively, which is in line to the approach adopted by the Commission in its earlier Tariff Orders as well as that proposed by the Petitioner for FY 2016-17.
- 5.17.8 The summary of the O&M expenses submitted by the Petitioner and as approved by the Commission for FY 2016-17 is shown in the Table below:

Table 5-53: O&M EXPENSES FOR FY 2016-17 (Rs. Crore)

	•	•
Particulars	ARR Petition	FY 2016-17 Approved
Employee Expenses		
Employee Cost and Provisions	565.30	473.59
Incremental Employee Expenses @ 2.5%	23.39	69.96



Particulars	ARR Petition	FY 2016-17 Approved
Gross Employee Expenses	588.69	543.55
Employee expenses capitalized	88.30	81.53
Net Employee Expenses	500.38	462.01
A&G Expenses		
Admin & Gen Expenses	185.06	87.41
Incremental Admin & Gen Expenses @ 2.5%	10.40	7.52
Gross Admin & Gen Expenses	195.46	94.93
Admin & Gen expenses capitalized	29.32	14.24
Net Admin & Gen Expenses	166.14	80.69
R&M Expenses		
Repair & Maintenance Expenditure	254.35	150.63
Incremental R&M Expenses @ 2.5%	7.81	26.59
Gross Repair & Maintenance Expenses	262.16	177.22
Total O&M Expenses	928.69	719.93
#Cumulative incremental O&M Expenses allocations   Expenses and A&G Expenses	ated to Employee E	xpenses, R&M

5.17.9 Further, it is clarified that the O&M expenses thus approved would be subject

to Truing-up upon finalisation of audited accounts for FY 2016-17.

# 5.18 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS

5.18.1 The Petitioner has submitted that the projected capital expenditure is proposed to be funded in a debt equity mix of 70:30, which is also in line with the Distribution Tariff Regulations, 2006 and established philosophy of the Commission. The Petitioner proposed the following capital expenditure for FY 2016-17.

Table 5-54: CAPITAL INVESTMENT PLAN PROPOSED BY THE PETITIONER FOR FY 2016-17 (RS. CRORE)

Particulars Particulars	Capital Investment Plan
	-



	Physical	Loans	Equity / Internal Accruals	Deposit Works	Total
Replacement of Meters					
Single Phase	38000	5.72	2.45		8.18
Three Phase	1950	0.81	0.35		1.16
LT TVM	200	0.08	0.03		0.12
11 kV TVM	75	0.03	0.01		0.05
33 kV TVM	25	0.01	0.01		0.02
11 kV Metering Cubicle	40	0.12	0.05		0.17
33 kV Metering Cubicle	10	0.04	0.02		0.06
11 kV C.T./ P.T Unit	50	0.09	0.04		0.13
33 kV C.T./ P.T Unit	20	0.03	0.01		0.04
11 kV C.T for 33 kV S/S	250	0.13	0.06		0.18
11 kV P.T for 33 kV S/S	50	0.05	0.02		0.08
Double Metering	180	0.25	0.11	•	0.36
AERIAL BUNCHED CONDUCTORS	225	4.54	1.94		6.48
Construction of 11 kV Line	180	3.72	1.59	•	5.31
System Improvement of 11 kV Lines	710	4.65	1.99		6.64
Construction of 11/0.4 kV	425	13.61	5.83		19.45
Substations	423	13.01	3.63		13.43
Capacity Enhancement of 11/0.4 kV Substations	650	9.77	4.19		13.96
Replacement og 11kV Cable	24	2.45	1.05		3.50
Replacement of 11 kV Switchgears	175	3.13	1.34		4.47
Purchase of mobile transformer trolley - 6.6./0.4 kV 400 KVA	30	1.29	0.55		1.84
System Augmentation of Distribution Network	50	444.29	190.41		634.70
Capacity Enhancement of 33/11 kV Substations	70	22.79	9.77		32.56
Construction of 33 kV Line	120	11.28	4.83		16.11
System Improvement of 33 kV Lines	170	6.94	2.98		9.92
Construction of 33/11 kV Substations	7	11.04	4.73		15.77
Replacement of damaged / obsolete 33 kV BCV	11	0.41	0.17		0.58
Replacement of Distribution Transformers	9	0.41	0.17		0.58
Rural Electrification	7	0.05	0.02		0.07
Replacement of old and damaged poles	5400	1.04	0.45		1.49
Earthing works	1575	1.17	0.50		1.67
Replacement of old and damaged conductors	340	0.77	0.33		1.09



	Capital Investmen				nt Plan	
Particulars	Physical	Loans	Equity / Internal Accruals	Deposit Works	Total	
Plinth & Fencing Works	260	0.35	0.15		0.49	
D.C. Battery / Battery Charger / Relay	85	0.26	0.11		0.37	
Replacement of old switchgears	75	0.41	0.17		0.58	
Construction / Replacement of LT Line	50	0.71	0.30		1.02	
Guarding of Lines	250	0.14	0.06		0.19	
Other Misc Works	25	0.05	0.02		0.07	
Other Misc Works	2	0.04	0.02		0.06	
Construction of 11kV Feeders in Rural Areas	-	67.74	29.03		96.76	
RGGVY Phase I - Consultancy	-	9.49	4.07		13.56	
R-APDRP Part A	-	4.69	2.01		6.70	
R-APDRP Part B	-	7.85	3.36		11.21	
Tehsil Town (PMC)	-	2.01	0.86		2.87	
Capital Works under Vyapar Vikas Nidhi		141.31	60.56		201.87	
Energisation of PTW	11750	54.12	23.19		77.32	
Electrification of villages under Dr. Ram Manohar Lohia Samagr Vikas Yojna Scheme	515	63.61	27.26		90.88	
33/11 kV Substations under Tehsil Scheme	66	201.43	86.33		287.76	
RGGVY Works		9.16	3.92		13.08	
R-APDRP Non SCADA Works		93.68	40.15		133.83	
R-APDRP SCADA Works		297.24	127.39		424.63	
Deposit Works				350.00	267.40	
Total		1505.00	645.00	350.00	2500.00	

- 5.18.2 The Petitioner submitted that the following assumptions were used for projecting GFA and CWIP for FY 2016-17:
  - The opening GFA and CWIP for FY 2015-16 have been taken as per the closing figures from provisional annual accounts of FY 2014-15.
  - 40% of the opening CWIP and 40% of investment made during the year, expenses capitalized & interest capitalized (40% of total investment) has been assumed to get capitalized during the year.



- Investment through "deposit work "has been taken for capital formation. However depreciation thereon has not been charged to the ARR in line with the policy adopted by the Commission in its previous Tariff Orders.
- The capital investment for FY 2015-16 has been pegged at Rs. 2,248.97
   Crore out of which, deposit works have been envisaged at Rs. 337.35
   Crore.
- 5.18.3 The Petitioner has proposed a capital investment of Rs. 2,500 Crore in FY 2016-17 out of which deposit works have been estimated at Rs. 350 Crore.
- 5.18.4 The capital investment plan (net of deposit works) has been projected to be funded in the ratio of 70:30 (debt to equity).
- 5.18.5 With a view to approve realistic levels of gross fixed asset (GFA) balance, and consequent tariff components such as depreciation, interest on loan and return on equity, the Commission has referred to the gross fixed asset balances, capital additions, capital deletions, capital work in progress balances, etc., up to FY 2014-15 as per the provisional accounts for FY 2014-15 as also considered by the Licensee in its Petition.
- 5.18.6 The Commission has finalised the philosophy for capital investments and capital additions in the Tariff Order dated May 31, 2013 as below:
  - "...The Commission has observed that the capital investment claimed by the Licensee is not in strict accordance with the Distribution Tariff Regulations. In order to reprimand the Licensee, the Commission disallows 30% of the capital investment claimed in the ARR / Tariff Petition..."
- 5.18.7 Regulation 4.5 of Distribution Tariff Regulation, 2006 stipulates as below:

# "4.5 Capital Investment Plan:

1. The licensee shall in its ARR/Tariff filing identify projects for the ensuing financial year and subsequent four years and submit detailed capital investment plan along with a financing plan for undertaking the identified projects in order to meet the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply & system reliability, metering, communication, computerization, etc.



- 2. The Commission shall consider and approve the licensee's capital investment plan, subject to prudence check. The costs corresponding to the approved investment plan of the licensee for a given year shall be considered for determining its annual revenue requirement. Provided that prior approval would not be required in cases where the normal distribution projects cost is below 1 Crs.
- 3. The detailed capital investment plan shall separately show ongoing projects that will spill into the year under review, and new projects that will commence but may be completed within or beyond the tariff period. For the new projects, the filing must provide the justification as stipulated under investment guidelines of the Commission.

.....

- 7. The Licensee shall provide Project Completion Report in respect of those projects for which prior approval has been sought from the Commission, as and when they achieve the Commercial Operation.
- 8. Capitalisation of works by the Licensee will be linked to the physical completion of the works. The Commission will not accept any capitalisation that does not have work completion certificates and the work is put to beneficial use of consumers.
- 9. The Licensee will maintain asset registers at each operating circle/division that will capture all necessary details on the asset, including the cost incurred, date of commissioning, location of asset, and all other technical details." (Emphasis added)
- 5.18.8 For FY 2016-17 also, the Commission observed that the capital investment claimed by the Licensee is not in strict accordance with the Distribution Tariff Regulations, 2006 as reproduced above and hence, based on the philosophy adopted by the Commission in its Order dated June 18, 2015, approves 70% of capital investment proposed by the Petitioner.
- 5.18.9 The capitalisation of expenses and interest has been considered as detailed in the sections dealing with O&M expenses and Interest on long term loans. Further, in line with the methodology adopted by the Commission in its Order dated June 18, 2015, 40% of the total investments including opening CWIP, expenses and interest capitalisation during the year have been projected to be capitalised in FY 2016-17.



5.18.10 Accordingly, the details of Capitalisation and Work-in-progress up to FY 2016-17 are shown in the Table below:

Table 5-55: CAPITALISATION & WIP UP TO FY 2016-17 (Rs. Crore)

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Opening WIP as on 1 <sup>st</sup> April	Α	3,226.46	2,804.06
Investments	В	2,500.00	1,750.00
Employee Expenses Capitalisation	С	88.30	81.53
A&G Expenses Capitalisation	D	29.32	14.24
Interest Capitalisation on Interest on long term loans	E	78.30	63.26
Total Investments	F= A+B+C+D+E	5,922.38	4,713.08
Transferred to GFA (Total Capitalisation)	G=F*40%	2,368.95	1,885.23
Closing WIP	H = F-G	3,553.43	2,827.85

#### 5.19 FINANCING OF THE CAPITAL INVESTMENT

- 5.19.1 The Petitioner submitted that it has considered a normative ratio of 70:30. Considering this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contribution, capital subsidies and grants has been separated as the depreciation and interest thereon would not be charged to the beneficiaries.
- 5.19.2 The Petitioner further submitted that the amounts received as consumer contributions, capital subsidies and grants are traced from the provisional accounts for FY 2014-15. Further, the consumer contributions, capital subsidies and grants for FY 2015-16 and 2016-17 have been considered to be in the same ratio to the total investments, as received by it in FY 2014-15.
- 5.19.3 Thus, the Petitioner submitted that out of the total capital investment of Rs. 2,500 Crore in FY 2016-17, the capital investment through deposit works is to the tune of Rs. 350 Crore and balance Rs. 2,150 Crore has been considered to be funded through debt and equity. Considering a debt equity ratio of 70:30, i.e., Rs. 1,505 Crore or 70% of the capital investment is proposed to be funded through debt and balance 30% equivalent to Rs. 645 Crore through equity.



- 5.19.4 The Commission, on the similar lines, has re-worked the portion of capital expenditure financed through consumer contribution, capital grants and subsidies. The Trued-up closing balance of consumer contribution, capital grants and subsidies of FY 2013-14 based on the audited accounts has been considered and subsequent additions in FY 2014-15 as per the provisional accounts have been considered to arrive at the opening amount of consumer contribution, capital grants and subsidies.
- 5.19.5 Since, the Commission has reduced the 30% of capital investment claimed by the Petitioner, the same treatment has been given to the additions to the consumer contribution, capital grants and subsidies and accordingly the Commission has allowed only 70% of the total additions in consumer contribution, capital grants and subsidies claimed by the Petitioner in the ARR / Tariff Petition for FY 2016-17.
- 5.19.6 The Table below summarises the amounts considered towards consumer contributions, capital grants and subsidies up to FY 2016-17:

Table 5-56: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES CONSIDERED UP TO FY 2016-17 (Rs. Crore)

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets	А	1,529.93	1,339.21
Additions during the year	В	350.00	245.00
Less: Amortization (Depreciation on assets created out of Consumer Contribution)	С	124.19	114.90
Closing Balance	D=A+B-C	1,755.74	1,469.31

5.19.7 Thus, the financing of the capital investment as considered by the Commission is shown in the Table below:

Table 5-57: FINANCING OF THE CAPITAL INVESTMENTS UP TO FY 2016-17 (Rs. Crore)

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Investment	Α	2,500.00	1,750.00
Less:			
Consumer Contribution and Capital Assets Subsidy	В	350.00	245.00



Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Total	C = A- B	2,150.00	1,505.00
Investment funded by debt and equity			
Debt Funded	70%	1,505.00	1,053.50
Equity Funded	30%	645.00	451.50

# 5.20 DEPRECIATION EXPENSE

- 5.20.1 The Petitioner submitted that Regulation 4.9 of the Distribution Tariff Regulations, 2006 specifies for:
  - full year depreciation on the opening balance of GFA
  - pro-rata depreciation on the additions made to the GFA balance during the financial year
- 5.20.2 The Petitioner submitted that for the purpose of computing the allowable depreciation, it has considered the GFA base as per provisional accounts for FY 2014-15 and have subsequently added the yearly capitalizations for 2015-16 and 2016-17. The Petitioner submitted that it has computed the depreciation only on the depreciable asset base and has excluded the non-depreciable assets such as land, land rights, etc.
- 5.20.3 The Petitioner further submitted that the "Annexure: B" to the Distribution Tariff Regulations, 2006 specifies the depreciation rate to be charged on each class of asset. Accordingly, the Petitioner has computed deprecation at a weighted average rate of 7.84%. Considering this philosophy, Petitioner has claimed the gross depreciation for FY 2016-17 as Rs. 548.56 Crore.
- 5.20.4 The Petitioner submitted that it has projected the depreciation on assets created out of consumer contributions, capital grants and subsidies for FY 2015-16 and FY 2016-17 in the same ratio as per provisional accounts of FY 2014-15.
- 5.20.5 The Petitioner submitted that it has reduced the equivalent depreciation amounting to Rs. 124.19 Crore in FY 2016-17 in respect of depreciation on assets created out of consumer contributions, capital grants and subsidies. Thus, the net depreciation claimed by the Petitioner for FY 2016-17 is Rs. 424.36 Crore.



# 5.20.6 Regulation 4.9 of the Distribution Tariff Regulations, 2006 specifies as under:

# "4.9 Depreciation:

- 1. For the purposes of tariff, depreciation shall be computed in the following manner, namely:
- a. The value base for the purpose of depreciation shall be the historical cost as provided in the Fixed Assets Register, excluding consumer contribution or capital subsidy/grant utilized for capitalization of the assets.
- b. Depreciation shall be calculated annually at the rates specified in the Annexure B.
- c. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset.
- d. On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- e. Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

Provided that where the Fixed Assets Register is not maintained, the Commission shall allow only as much depreciation as it may consider appropriate."

- 5.20.7 The Commission in its deficiency note asked Petitioner to submit the basis of considering the weighted average depreciation rate of 7.84% for computing the depreciation for FY 2016-17. The Petitioner in its reply submitted that the Distribution Tariff Regulations, 2006 provides for a depreciation rate of 7.84% in respect of lines and distribution system. The Petitioner further submitted that in the Tariff Order for FY 2015-16, the Commission had considered a weighted average depreciation rate of 7.84%, and hence, it has considered the same for FY 2016-17.
- 5.20.8 The depreciation rate as applicable for different class of assets have to be applied for computing the depreciation as per the Annexure–B of Distribution



Tariff Regulations, 2006. However, as the Petitioner has not been able to submit the class wise details of its assets, the Commission has computed deprecation for FY 2016-17 at a weighted average rate of 7.84% as considered by the Commission in its Order dated June18, 2015 and also claimed by the Petitioner.

- 5.20.9 For the purpose of computing depreciation, the Commission has considered the GFA base as per audited accounts up to FY 2013-14 and has subsequently added the yearly capitalisations for FY 2014-15 as per the provisional accounts to arrive at the opening balance of the GFA for FY 2015-16. Opening and Closing GFA for FY 2016-17 has been estimated based on the capitalisation considered by the Commission for FY 2015-16 and FY 2016-17.
- 5.20.10 The Commission has computed the depreciation only on the depreciable asset base and has excluded the non-depreciable assets such as land, land rights, etc.
- 5.20.11 Considering the above philosophy and total capitalization approved by the Commission for FY 2016-17, the GFA base approved by the Commission is given in the Table below:

Table 5-58: GROSS FIXED ASSETS FOR FY 2016-17 (Rs. Crore)

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Depreciation Rate	Α	7.84%	7.84%
Opening GFA as on 1 <sup>st</sup> April (Depreciable)	В	F 013 4F	5,530.82
Opening GFA as on 1 <sup>st</sup> April (Non-Depreciable)	С	5,812.45	0.03
Total Opening GFA as on 1 <sup>st</sup> April	D=B+C	5,812.45	5,530.85
Addition to GFA during the year (Depreciable)	Е	2 200 05	1,885.23
Addition to GFA during the year (Non Depreciable)	F	2,368.95	-
Deduction from GFA during the year (Depreciable)	G		-
Closing GFA as on 31 <sup>st</sup> March (Depreciable)	H = B + E - F	0 101 40	7,416.06
Closing GFA as on 31 <sup>st</sup> March (Non Depreciable)	I = C + G	8,181.40	0.03
Total Closing GFA as on 31 <sup>st</sup> March	J = H + I	8,181.40	7,416.09

5.20.12 The Commission has projected the depreciation on assets created out of consumer contributions, capital grants and subsidies for FY 2016-17 in the same ratio as projected by the Petitioner. The Commission has reduced the



equivalent depreciation on assets created out of consumer contributions, capital grants and subsidies.

5.20.13 The Commission, in its Tariff Order for FY 2013-14, has stipulated as under:

"The Commission has repeatedly given several directions to the Licensee to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. Further, the Hon'ble APTEL in Appeal No. 121 of 2010 & I.A. No. 83 of 2011 has also reinforced Commission's views and has directed the Licensee to comply with the regulations and directions issued by the Commission.

As a first step towards reprimanding the Licensee over the issue of non-maintenance of fixed asset registers, the Commission has withheld 20% of the allowable depreciation for FY 2013-14. The same would be released for recovery through tariff, upon submission of fixed asset registers up to the current year i.e., FY 2012-13 by 30<sup>th</sup> November, 2013."

- 5.20.14 As evident from the above, the Commission in its earlier Tariff Order has withheld 20% of the allowable depreciation for FY 2013-14. Further, over the issue of non-maintenance of fixed asset registers the Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 and FY 2015-16 dated June 18, 2015 has withheld 25% and 30% respectively of the allowable depreciation for FY 2014-15 and FY 2015-16. However, even after several directions no submission in this regard has been made by the Licensee so far. The Commission has already expressed its displeasure on the non-availability of fixed asset registers of the Licensee and further reiterates its direction to the Licensee to ensure proper maintenance of detailed fixed asset registers as specified in the Distribution Tariff Regulations, 2006.
- 5.20.15 Hence, in line with the approach adopted by the Commission in its earlier Order over the issue of non-maintenance of fixed asset registers, the Commission has withheld 30% of the allowable depreciation for FY 2016-17. The Licensee is further directed to submit the complete details pertaining to Fixed Asset Register for FY 2012-13 to FY 2015-16 along with the ARR Petition for FY 2017-18, otherwise the withheld amount may not be allowed by the Commission.
- 5.20.16 In view of the above, the net depreciation expense approved by the Commission for FY 2016-17 is shown in the Table below:



Table 5-59: APPROVED DEPRECIATION FOR FY 2016-17 (Rs. Crore)

Particulars	Derivation	ARR Petition	FY 2016-17 Approved
Depreciation Rate	Α	7.84%	7.84%
Opening GFA as on 1 <sup>st</sup> April (Depreciable)	В	5812.45	5,530.82
Addition to GFA during the year (Depreciable)	С	2,368.95	1,885.23
Depreciation on Opening GFA + Addition during the year	D = (A*B)+(C*A/2)	548.56	507.52
Less:			
Depreciation on assets created from Consumer Contribution and Capital Assets Subsidy	Е	124.19	114.90
Allowable Depreciation for 2016-17	F=D-E	424.36	392.62
Less: Depreciation withheld due to non- maintenance of Fixed Asset Register	G = F*30%		117.79
Net Allowable Depreciation for FY 2016-17	H = F – G	424.36	274.83

#### 5.21 INTEREST AND FINANCING COST

# **Interest on Long Term Loans**

- 5.21.1 The Petitioner submitted that it has considered a normative approach with a debt: equity ratio of 70:30. In this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be funded through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants has been separated as the depreciation and interest thereon has not been charged to the beneficiaries.
- 5.21.2 The Petitioner submitted that the allowable depreciation for the year has been considered as normative loan repayment. The weighted average rate of interest of overall long term loan portfolio for FY 2013-14 has been considered for FY 2015-16 and FY 2016-17, as it seems to be fair and equitable. The interest capitalization has been considered at a rate of 23% which is consistent with the rate considered by the Commission in previous Tariff Orders.
- 5.21.3 It is observed that the Petitioner has computed interest on long term loan based on the normative approach adopted by the Commission in its previous Orders. Therefore, the Commission has approved the methodology used by the Petitioner. However, the Commission has computed the interest on long term loan based on the revised opening and closing loan balances approved in



earlier sections while doing up the Truing up of FY 2013-14. Also the loan addition during FY 2016-17 has been considered as worked out in earlier section of this Chapter. The allowable depreciation for the year has been considered as normative loan repayment.

- 5.21.4 The weighted average rate of interest as submitted by the Petitioner has been considered for computing the interest on long term loans for FY 2016-17. Further, the interest capitalisation has been considered at a rate of 23%, which is same as the Petitioner's submission and is also consistent with the methodology adopted by the Commission in its previous Order.
- 5.21.5 The interest on long term loan as claimed by the Petitioner and as approved by the Commission is shown in the Table below:

**Particulars ARR Petition** FY 2016-17 Approved Opening Loan 3,142.42 2,644.66 Loan Additions (70% of Investments) 1,505.00 1,053.50 Less: Repayments (Depreciation allowable for the year) 424.36 392.62 4,223.05 **Closing Loan Balance** 3,305.54 Weighted Average Rate of Interest 9.24% 9.24% 275.02 Interest on long term loan 340.44 **Interest Capitalisation Rate** 23.00% 23.00% Less: Interest Capitalized 78.30 63.26 **Net Interest Charged** 262.14 211.77

Table 5-60: INTEREST ON LONG TERM LOANS UP TO FY 2016-17 (Rs. Crore)

#### **Interest on Working Capital**

- 5.21.6 The Petitioner has submitted that it has worked out the interest on working capital based on the methodology specified in the Regulations as provided below:
  - Operation and Maintenance expenses, which includes Employee costs, R&M expenses and A&G expenses, for one month;
  - One-twelfth of the sum of the book value of stores, materials and supplies at the end of each month of current financial year;
  - Receivables equivalent to 60 days average billing of consumers less security deposits provided by the beneficiaries.



- 5.21.7 The Petitioner submitted that the Distribution Tariff Regulations, 2006 provides for interest on the working capital requirement at the Bank Rate as specified by the Reserve Bank of India as on 1<sup>st</sup> April of the relevant year plus a margin as decided by the Commission. The Petitioner submitted that accordingly, it has considered the interest rate on working capital requirement at 12.50% including margin, however, the actual rate of interest would be considered based on the audited accounts during the True-up process for the year in accordance with the Distribution Tariff Regulations, 2006.
- 5.21.8 Regulation 4.8.2 of the Distribution Tariff Regulations, 2006 lays down the norms and methodology for calculating interest on working capital. Further, the Commission in its earlier Orders has clearly opined that although there is a situation of financial stress and liquidity crunch for the Licensee, the Distribution Licensee is eligible only for interest cost on account of normative working capital. Further, it is observed that the collection efficiency of the Petitioner also needs improvement and by improving the same, the cash flows of the Petitioner will improve, which will help in managing day to day working capital requirements. The Petitioner should understand that only by ensuring that its working capital needs are well looked after, it can focus on growth and development of its organisation.
- 5.21.9 In view of the above, the Commission has considered the interest on working capital at the rate of 12.50% as proposed by the Petitioner, which includes the margin above the Bank Rate specified by the RBI and is in accordance with the provisions of the Distribution Tariff Regulations, 2006.
- 5.21.10 The interest on working capital as submitted by the Petitioner and as approved by the Commission for FY 2016-17 is shown in the Table below:

Table 5-61: INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2016-17 (Rs. Crore)

Particulars	Petition	FY 2016-17 (Approved)
One month's O&M Expenses	87.19	59.99
One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	17.36	17.36
Receivables equivalent to 60 days average billing on consumers	1,514.29	1,596.98
Gross Total	1,618.84	1,674.34
Less: Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act	429.86	429.86



Particulars	Petition	FY 2016-17 (Approved)
2003		
Net Working Capital	1,188.98	1,244.48
Rate of Interest for Working Capital	12.50%	12.50%
Interest on Working Capital	148.62	155.56

# **Interest on Consumer Security Deposits**

- 5.21.11 The Petitioner submitted that as per the Regulation 4.8(3) of the Distribution Tariff Regulation, 2006, the Licensee has to pay interest to the consumers at Bank Rate or more on the consumer security deposit.
- 5.21.12 The Petitioner further submitted that Section 47(4) of the Electricity Act 2003, states as follows:

"the distribution licensee shall pay interest equivalent to the bank rate or more, as may be specified by the concerned state Commission, on the security referred to in sub-section (1) and refund such security on the request of the person who gave such security"

- 5.21.13 The Petitioner submitted that accordingly, the interest to consumers on the security deposits has been computed on the opening balance of the security deposits at the beginning of the year at the Bank Rate of 8.50% for FY 2015-16 and 7.75% for FY 2016-17, however, the same shall be Trued-up, based on audited accounts.
- 5.21.14 As the approach followed by the Petitioner is in accordance with the Distribution Tariff Regulations, 2006 and is also consistent with the approach adopted by the Commission in the previous Tariff Orders, therefore, the Commission approves the methodology employed by the Petitioner in this regard. However, it is observed that the Reserve Bank of India vide circular no. RBI / 2015-16 / 194 dated September 29, 2015 has revised the Bank Rate from 8.25% to 7.75% w.e.f. September 29, 2015. Hence, the Commission has recomputed the interest on consumer security deposit at the rate of 7.75%. However, the actual interest payable on consumer security deposits would be at the Bank Rates notified by the RBI from time to time as per the provision of



the Electricity Supply Code. The same would be trued up based on audited accounts.

5.21.15 Accordingly, the Commission has approved interest on security deposits for FY 2016-17 at 7.75% as shown in the Table below:

Table 5-62: INTEREST ON SECURITY DEPOSITS FOR FY 2016-17 (Rs. Crore)

Particulars	Derivation	Petition	FY 2016-17 (Approved)
Opening Balance of Security Deposits from Consumers	Α	394.27	394.27
Projected Closing Balance of Security Deposits from Consumers	В	429.86	429.86
Bank Rate (%)	С	7.75%	7.75%
Interest on Security Deposits	D = (A+B)/2*C	31.93	31.93

# **Finance Charges:**

- 5.21.16 The Petitioner has submitted that the finance charges towards expenses such as guarantee fees and bank charges is Rs. 0.12 Crore for FY 2016-17 and the same have been computed by extrapolating the actual guarantee fees and bank charges incurred in FY 2014-15 as per provisional accounts by using the Inflation Index.
- 5.21.17 Further, the Petitioner submitted that it may be allowed to claim discount to consumers on actual during Truing-up based on audited accounts.
- 5.21.18 The Commission has considered Rs. 0.12 Crore as bank charges as submitted by the Petitioner for FY 2016-17.

# **Summary of Interest and Finance Charges**

5.21.19 In view of the above, the approved interest and finance costs including interest on working capital for FY 2016-17 is summarised in the Table below:

TABLE 5-63: INTEREST AND FINANCE CHARGES FOR FY 2016-17 (RS. CRORE)

Particulars	ARR Petition	FY 2016-17 (Approved)
Interest on Long term Loans	340.44	275.02
Interest on Working Capital Loans	148.62	155.56



Sub Total	489.06	430.58
Interest on Consumer Security Deposits	31.93	31.93
Bank Charges	0.12	0.12
Discount to Consumers	-	-
Sub Total	32.05	32.05
Gross Total Interest & Finance Charges	521.12	462.64
Less: Capitalization of interest on Long term Loans	78.30	63.26
% Capitalization	23.00%	23.00%
Net Interest & Finance Charges	442.81	399.38

#### 5.22 PROVISION FOR BAD AND DOUBTFUL DEBTS

- 5.22.1 The Petitioner submitted that the provisions for bad and doubtful debts have been made at 2% of revenue receivables in line with Regulation 4.4 of Distribution Tariff Regulations, 2006. The Petitioner submitted that in the last Tariff Order, the Commission had disallowed the Petitioner's claim for provision for bad and doubtful debts due to the absence of any clear-cut policy. The Petitioner added that provision for bad and doubtful debts are an accepted accounting principle even in a sector like banking where the provisioning of un-collectable dues is considered as a normal commercial practice.
- 5.22.2 The Petitioner has requested the Commission to allow the annual provisioning towards bad and doubtful debts as it is an accepted industry norm and also recognized by other State Electricity Regulatory Commissions.
- 5.22.3 The Petitioner submitted that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts during any particular year and hence, it is a legitimate ARR component. Accordingly, the Petitioner has made provisions for bad debts for FY 2016-17 in line with the provisions of the Distribution Tariff Regulations, 2006.
- 5.22.4 Regulation 4.4 of the Distribution Tariff Regulations, 2006 provides for expenses under bad and doubtful Debts to the extent of 2% of the revenue receivables as specified below:
  - "4.4 Bad and Doubtful Debts: Bad and Doubtful Debts shall be allowed as a legitimate business expense with the ceiling limit of 2% of the revenue



receivables provided the distribution licensee actually identifies and writes off bad debts as per the transparent policy approved by the Commission. In case there is any recovery of bad debts already written off, the recovered bad debt will be treated as other income."(Emphasis added)

- 5.22.5 However, the Petitioner has to actually identify and write-off the bad debts as per a transparent policy approved by the Commission.
- 5.22.6 The Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 has disallowed the provision for bad and doubtful debts on account of lack of proper and transparent policy for actual identification and write-off the bad debts. The relevant extract of the Commission's aforesaid Order is reproduced below:
  - "...The very fact that the Petitioner has not been able to identify and write off any amount towards bad and doubtful debts till now clearly indicates lack of proper policy framework for identification, recognition, and management of provision for bad and doubtful debts. Therefore, in accordance with the Regulations, the Commission disallows the Petitioner's claim towards provision for bad and doubtful debts for FY 2014-15 ..."
- 5.22.7 The Petitioner has repeatedly pointed out that provisioning towards bad and doubtful debts is an accepted industry norm. However, the Petitioner should also recognize that as per prudent practices, every business should also ensure that the amount of debtors do not increase to an alarming level. Further, every prudent management would ensure to recover the dues and prevent them from becoming bad. It has been observed that despite the Commission's directions in the regard in the previous Tariff Orders, there has been no improvement on the part of the Petitioner.
- 5.22.8 In reply to the status of compliance to the Commission's directive regarding submission of a policy to be followed by Licensee for identification and writing off actual bad debts and submission of ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, the Petitioner submitted that it has recently framed a policy for identifying and writing off old arrears, which has been provided to the Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15 and



- appropriate directions have been issued to the field units to compile the sample cases based on this recently issued order by the licensee.
- 5.22.9 Further, in reply to the query the Petitioner requested the Commission to approve the policy it has framed for identifying and writing off old arrears which it has submitted during the proceedings of ARR and Tariff for FY 2014-15 and also during the current proceedings. It has also failed to submit any such sample data on the consumer indicating the policy framework for managing bad debts for the Commission's perusal. As discussed in earlier paragraphs it is observed that the so called policy submitted by the Petitioner is just the basic approach for creation of provision of bad debts instead of the detailed policy to be followed by it for identification of actual bad debts and writing off the same.
- 5.22.10 The very fact that the Petitioner has not been able to identify and write off any amount towards bad and doubtful debts till now clearly indicates lack of proper policy framework for identification, recognition, and management of provision for bad and doubtful debts. Therefore, in accordance with the Regulations, the Commission has not allowed the Petitioner's claim towards provision for bad and doubtful debts for FY 2016-17.
- 5.22.11 In view of the above, the Commission directs the Petitioner to frame guidelines and procedures for identifying, physically verifying and writing off the bad debts and also to fix responsibility of its employees in this regard immediately and submit the same to the Commission for its approval. As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts along with policy framework for managing bad debts for the Commission's perusal.

#### 5.23 OTHER INCOME

5.23.1 The Petitioner submitted that other income includes non tariff income such as interest on loans & advances to employees, income from fixed rate investment deposits and other miscellaneous income from retail sources. The Petitioner submitted that the other income for FY 2016-17 has been projected to grow at the rate of inflation index from the actual of FY 2014-15.



- 5.23.2 As per Regulation 5.1 (2) of the Distribution Tariff Regulations, 2006, the indicative heads to be considered in Non-Tariff are as follows:
  - "5.1 Forecast of Revenues:
  - ...2. The non-tariff income shall comprise of:
  - (a) Delayed Payment Surcharge,
  - (b) Meter Rent,
  - (c) Income from investments,
  - (d) Miscellaneous receipts from consumers,
  - (e) Trading income
  - (f) Share of income from the other businesses of the distribution licensee
  - (g) Any other income...."
- 5.23.3 Accordingly, the Commission approves Non-Tariff Income to the tune of Rs. 29.15 Crore as claimed by the Petitioner for FY 2016-17 and as shown in the Table below:

Table 5-64: OTHER INCOME FOR FY 2016-17 (Rs. Crore)

Particulars	ARR Petition	Approved FY 2016-17
Interest on Advances to Suppliers/ Contractors	10.64	10.64
Miscellaneous receipts	1.90	1.90
Income on fixed deposits	15.49	15.49
Interest on loans and advances to Staff	0.04	0.04
Interest from Banks other than Fixed Deposits	1.08	1.08
Total	29.15	29.15

5.23.4 Further, any variation on this account would be taken up at the time of True-up of FY 2016-17 based on the audited accounts.

## 5.24 RETURN ON EQUITY

5.24.1 The Petitioner has submitted that the return on equity may be allowed to cover subsidization of departmental employees under LMV-10 dispensation to



the extent of 50% as has been historically allowed by the Commission and making good of waived surcharge in case of applicability of OTS, if required.

5.24.2 Regulation 4.10 of the Distribution Tariff Regulations, 2006 provides for return on equity @16% as specified below:

# "4.10 Return on Equity:

- 1. Return on equity shall be allowed @16%, on the equity base determined in accordance with regulation 4.7. However, the Commission may reduce/raise the rate of return subject to performance of the distribution licensee vis-à-vis performance benchmarks set by the Commission.
- 2. Equity invested in foreign currency shall be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the prevailing exchange rate.
- 3. The premium raised by the distribution licensee while issuing share capital and investment of internal resources created out of free reserves, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such share capital, premium amount and internal resources are actually utilized for meeting the capital expenditure of the distribution system and forms part of the approved financial package.

Return on equity shall be chargeable from the first year of operation. In case of infusion of equity during the year, return on equity shall be charged on pro-rata basis."

- Under the provisions of the Distribution Tariff Regulations, 2006Licensees are permitted return on equity @ 16% on the equity base determined in accordance with Regulation 4.7of the Distribution Tariff Regulations, 2006. However, the Commission may reduce/raise the rate of return subject to performance of the distribution licensee vis-à-vis performance benchmarks set by the Commission. The Commission is of the view that there is huge under recovery under the distribution segment and the Commission does not want to burden the consumers by allowing return on equity as it will further increase the gap.
- 5.24.4 Hence, the Commission has not approved any amounts towards return on equity for FY 2016-17.



#### 5.25 CONTRIBUTION TO CONTINGENCY RESERVE

- 5.25.1 The Petitioner submitted that the Distribution Tariff Regulations, 2006 provides for the contribution to the contingency reserves up to 0.50% of opening GFA to be included in the ARR of Licensees and the contingency reserve so created shall be utilized to meet cost of replacement of equipment damaged due to force majeure situations. The Licensee shall invest in Contingency Reserve as allowed by the Commission in Government securities. However, the use of such reserve is only with the prior permission of the Commission.
- 5.25.2 The Petitioner submitted that since there is a substantial revenue gap between ARR and revenue forecast, any amounts allowed on this account will only go to enhance the already large gap and create extra burden on the consumers. The Petitioner has not claimed any contribution to contingency reserve for the year under review.
- 5.25.3 In view of the same, the Commission has not approved any amounts under the said component in the present Order for FY 2016-17.

# 5.26 APPORTIONMENT OF O&M EXPENSES AND INTEREST & FINANCE CHARGES OF UPPCL

- 5.26.1 The Petitioner submitted that in FY 2013-14 Tariff Order the Commission had directed the Distribution Companies to consider the apportionment of the O&M expenses of UPPCL and submit the share of each Distribution Licensees and accordingly, the O&M expenses of UPPCL for FY 2014-15 as per provisional accounts have been considered as base expenses and the same have been escalated for FY 2016-17 based on the escalation indices.
- 5.26.2 The Petitioner submitted that considering the above, the same have also been apportioned to all the Distribution Licensees including the Petitioner in the power purchase ratio for each relevant year. The Petitioner submitted that the share of apportionment of O&M charges of UPPCL is Rs. 31.01 Crore for FY 2016-17 and accordingly the same have been considered as part of ARR to be recovered from retail consumers.
- 5.26.3 Petitioner submitted that UPPCL resorts to short term borrowings on behalf of Distribution Companies to meet the power purchase liabilities of Licensees and incurs interest expenses on behalf of such working capital loans. Also it



incurs expenditure towards LC and OD charges incidental to power purchase expenses. Petitioner requested the Commission to consider these expenses and allow UPPCL to claim such expenses from the Petitioner and other Distribution Companies through an internal adjustment without any impact on the ARR.

5.26.4 The Commission in this Order while computing the Bulk Supply Tariff for FY 2013-14 has allowed such expenses based on actual based on the audited accounts of UPPCL. Further, as discussed in the Truing-up section, since, the above expenses have been incurred by UPPCL, mostly for procuring the power for the Licensees, the above expenses have been allowed while doing the Truing up of FY 2013-14. However, it may be noted that procurement of power is the responsibility of the Distribution Licensees and the Commission allows considerable amount of O&M Expenses and the interest on working capital to the Licensees for this purpose. The Commission has allowed such expenses for the past years, but in its Tariff Order for FY 2014-15 dated October 1, 2014 the Commission has specifically mentioned that, such expense will not be allowed for future years i.e., FY 2014-15 onwards. The relevant extract of the aforementioned Order is reproduced below:

"The Commission has allowed such expenses for the past years, however for future years, i.e., from FY 2014-15 onwards, the Commission disallows the claim of additional expenses towards allocation of O&M expenses for UPPCL and directs the Petitioner to manage such additional Expenses for procuring the power from the O&M Expenses allowed to it for the relevant year."

5.26.5 Thus, the Commission has not considered the claim of additional expenses towards allocation of O&M expenses for UPPCL for FY 2016-17.

## 5.27 GoUP SUBSIDY

- 5.27.1 The Petitioner has submitted that the projected budgeted subsidy for FY 2016-17 for overall Discoms is to the tune of Rs. 5,440 Crore, out of which the share of the Petitioner is pegged to be Rs. 939.17 Crore on provisional basis.
- 5.27.2 The Petitioner submitted that the decision on the basis and allocation within Distribution Companies is yet to be finalized by the GoUP. It is submitted that



the estimated budgeted subsidy is the absolute quantum of subsidy available from GoUP.

5.27.3 Clause 6.10 of the Distribution Tariff Regulations, 2006 specifies as under:

# "6.10 Provision of Subsidy

- 1. The Commission, while determining the tariff, shall see that the tariff progressively reflects the cost of supply of electricity and the cross subsidy is reduced or eliminated.
- 2. If the State Government decides to subsidize any consumer or class of consumers, the State Government shall pay the amount to compensate the affected Licensee by grant of such subsidy in advance.

Provided that no such direction of the State Government to grant subsidy shall be operative if the payment is not made in accordance with the relevant provisions contained in these Regulations and the Act. In such a case, the tariff of the applicable categories may be revised excluding the subsidy.

- 3. The Government shall, by notification, declare the consumers or class of consumers to be subsidized.
- 4. Tariff of the subsidized category shall be designed taking into account the subsidy allocated to that category.
- 5. The Distribution Licensee shall furnish details of power consumed by the subsidized category to the State Government and the Commission. The Distribution Licensee shall provide meters on all rural distribution transformers and shall also furnish the power consumption details in respect of agricultural and rural domestic consumption based on readings from such meters and normative distribution losses on a monthly basis." (Emphasis supplied)
- 5.27.4 As per the submission of the Licensee, since the estimated budgeted subsidy is the absolute quantum of subsidy available from GoUP, the share as submitted by the Licensee has been considered by the Commission. The Commission has accepted the total subsidy allocation of Rs. 5,440 Crore for FY 2016-17 from



GoUP as submitted by the Licensee and its allocation for MVVNL as Rs. 939.17 Crore.

## 5.28 ADDITIONAL SUBSIDY REQUIREMENT

- 5.28.1 As discussed in the earlier chapters of Truing up of FY 2013-14, the Distribution Licensees had filed an Appeal before the Hon'ble APTEL on applicability of additional subsidy to which the Hon'ble APTEL gave its Judgment dated November 23, 2015 in favour of the Commission.
- 5.28.2 It can be observed from the earlier section that, the Petitioner has projected the billing determinants for various categories for FY 2016-17. Accordingly, the Commission has also approved the billing determinants for FY 2016-17. The Commission in its various Orders has been aggressively pursuing the Petitioner to convert all its unmetered consumers of rural and urban area to metered consumers. Most of these consumers would be from the rural areas having lower tariffs and are largely subsidised. Large number of addition of such consumers would require large amount of the subsidy to be provided in order to compensate for the lower tariffs as compared with the Average Cost of Supply. The Commission feels that it would be premature to estimate the additional subsidy requirement for all such consumers as these consumers would be added over the time period of the full year. Also, the actual subsidy allocation may also vary for each Discom and accordingly the values of additional subsidy may also vary. So, the Commission has decided to consider the matter of appropriate allocation of additional subsidy to the Discoms for FY 2016-17 during the Truing-up exercise based on the actual audited figures and the petitions filed.

#### 5.29 REVENUE FROM SALE OF ELECTRICITY

- 5.29.1 For FY 2016-17, the Petitioner has estimated the revenue from existing tariffs to the tune of Rs. 9,211.92 Crore, i.e., based on approved Tariff as per Tariff Order dated June 18, 2015.
- 5.29.2 The Commission has computed the revenue at existing tariffs by applying the tariff rates as per Tariff Order dated June 18, 2015 to the approved consumption for FY 2016-17. Further, the Commission has also approved tariffs and computed resultant revenue by applying the approved tariff rates



to the approved consumption parameters for FY 2016-17. The Commission has also observed that the Petitioner has projected sales for the LMV-1 bulk supply category at a very lower level as compared to the previous year giving rise to an abnormal Average Billing Rate (ABR). Thus the Commission has considered the approved Average Billing Rate (ABR) of the FY 2015-16 to calculate the revenue for that particular category of consumers. The following Table summarizes the revenue approved by Commission for FY 2016-17 at both existing as well as revised tariffs.

Table 5-65: EXISTING & APPROVED TARIFF REVENUES: FY 2016-17 (Rs. Crore)

Consumer Categories	Approved	Approved
	(At Existing Tariff)	(At Revised Tariff)
LMV-1: Domestic	3,166.67	3,166.67
LMV-2:Non-Domestic	934.06	992.84
LMV-3: Public Lamps	299.68	307.96
LMV-4: Institutions	374.26	387.36
LMV-5: Private Tube Wells	167.58	167.58
LMV 6: Small and Medium Power	809.05	840.44
LMV-7: Public Water Works	588.23	637.83
LMV-8: State Tube Wells	590.87	638.81
LMV-9: Temporary Supply	38.17	42.03
LMV-10: Departmental Employees	45.38	48.36
HV-1: Non-Industrial Bulk Loads	649.49	700.24
HV-2: Large and Heavy Power	1,518.90	1,518.90
HV-3: Railway Traction	114.32	122.92
HV-4: Lift Irrigation	134.75	144.81
Sub-total	9,431.41	9,716.74
Extra state & Bulk	24.85	24.85
Total	9,456.27	9,741.60

**Note:** Revenue at approved tariffs depicted in the table above have been considered effective for 8 months in FY 2016-17.

## 5.30 APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP

5.30.1 In the preceding Sections, the Commission has detailed the expenses submitted by the Petitioner and that approved by the Commission under various heads for FY 2016-17. The Commission has also approved the revenue from existing tariffs and revenue from revised tariffs.



5.30.2 The Commission has assessed the ARR for FY 2016-17 on standalone basis. Based on the above, the approved ARR and the revenue from tariffs for FY 2016-17 are summarized in the Table below:

Table 5-66: ARR, REVENUE AND GAP SUMMARY FOR FY 2016-17 (Rs. Crore)

Particulars	Petition	FY 2016-17
		(Approved)
Power Purchase Expenses (including PGCIL charges)	9,557.51	9,468.92
Apportionment of O&M Expenses & Interest & Finance Charges of UPPCL	31.01	0.00
Transmission Charges - Intra state (including SLDC Charges)	416.67	360.12
Gross O&M Expenses	1,046.31	815.70
Gross Employee cost	588.69	543.55
Gross A&G expenses	195.46	94.93
Gross R&M expenses	262.16	177.22
Gross Interest & Finance charges	521.12	462.64
Depreciation	424.36	274.83
Total Expenditure	11,996.97	11,382.20
Expense capitalization	195.92	159.03
Net Expenditure	11,801.05	11,223.17
Special Appropriations		
Provision for Bad & Doubtful debts	54.07	0.00
Total net expenditure with provisions	11,855.12	11,223.17
Add: Return on Equity	0.00	0.00
Less: Non Tariff Income	29.15	29.15
Annual Revenue Requirement (ARR)	11,825.97	11,194.02
Less: Subsidy from Govt.	939.17	939.17
Annual Revenue Requirement after GoUP Subsidy (ARR)	10,886.80	10,254.86
Total Revenue Requirement	10,886.80	10,254.86
Revenue at existing tariffs	9,211.92	9,456.27
Net Gap / (Surplus) at Existing Tariff	1,674.89	798.59

5.30.3 Treatment of the above approved revenue gap / (surplus) has been discussed subsequently in this Order.



#### 6. OPEN ACCESS CHARGES

## **6.1 BACKGROUND:**

- 6.1.1 The Commission has issued Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (in short 'UPERC Open Access Regulations') vide notification no. UPERC/Secy./Regulations/05-249 dated 7<sup>th</sup> June, 2005 to operationalize long term and short term open access in the State. The Regulations also provides that effective from 1<sup>st</sup> April, 2008 any consumer with demand of above 1 MW can avail open access of transmission and distribution systems.
- 6.1.2 Subsequently, the Commission has also made / finalized the necessary regulatory framework as below:
  - a. UPERC (Terms and Conditions for Open Access) (First Amendment) Regulations, 2009 that includes among others detailed procedure(s) for Long-Term Open Access and Short-Term Open Access for use of distribution system, with or without transmission system;
  - b. Model Bulk Power Wheeling Agreement (BPWA) for availing wheeling services of Distribution Licensee(s);
  - c. Procedures for Scheduling, Dispatch, Energy Accounting, UI Accounting and Settlement System of electricity transmitted through the State grid for the electricity drawn by Distribution Licensee(s) from outside and / or within the State.
- 6.1.3 Further, the Commission has also advised the SLDC to develop procedure for energy accounting of electricity drawn from the grid by an open access consumer who is connected with the distribution system or electricity injected into the grid by a generating station embedded in the distribution system.
- In absence of procedures and guidelines from State Transmission Utility (in short 'STU') and State Load Dispatch Centre (in short 'SLDC'), the Commission, on its own motion, has made detailed procedures for long term and short term open access which covers all aspects, which the Regulations direct by way of an amendment. The "Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) (First Amendment) Regulations, 2009 dated 18.6.09", came into force from the date it is notified in the Gazette.



- 6.1.5 The said amendment, which includes procedures for Long-Term Open Access and Short-Term Open Access mainly, focuses on:
  - a. Operationalisation of long-term and short-term use of intra-State transmission and distribution system by generating companies including captive plants /renewable energy plants, distribution / trading Licensees and open access customers with sustained development of transmission and distribution systems in 'proper and coordinated' manner for conveyance of electricity.
  - b. Operationalisation of time-block wise accounting of the quantity of electricity transmitted through State grid and stating the responsibilities of STU for weekly metering and of SLDC for scheduling, dispatch and energy accounting including UI accounting.
  - c. Requirement of Bulk Power Transmission Agreement for use of transmission network and Bulk Power Wheeling Agreement for use of distribution network for long-term open access transactions.
- 6.1.6 The Electricity Act, 2003 has defined the Open Access as non discriminatory provisions for use of transmission lines or distribution system or associated facilities. Having regards to operation constraints and other relevant factors, the Commission directs that the Open Access shall be allowed by the Distribution Licensees as per the provisions outlined by the Commission in its Regulations and amendments from time to time.
- 6.1.7 The Commission has finalized the model Bulk Power Transmission Agreement (BPTA) and Supplementary BPTA for availing transmission services of UPPTCL.
- 6.1.8 The Commission has also finalized model Bulk Power Wheeling Agreement (BPWA) which is to be signed between a Distribution Licensee and long term customer to agree therein, inter alia, to make payment of wheeling charge, surcharge and additional surcharge, if any, for use of the distribution system.
- 6.1.9 Further, the Commission in its Order dated November 3, 2015in the matter of review Petition filed by M/s Rimjhim Ispat Limited had held that provisions made in the Tariff Orders for FY 2014-15 & FY 2015-16 regarding open access cross subsidy surcharge has failed in operationalization of open access in the State despite power prices being low in the power exchanges. So, to



promote open access in the State, the Commission directed that provisions regarding open access surchargemade in the Tariff Orders for FY 2014-15 and FY 2015-16 be kept in abeyanceand also directed that all open access consumers may be levied the cross subsidy surcharge as per rates approved in the Tariff Order for FY 2013-14.In the said Order the Commission decided to revisit the issue of Cross Subsidy Surcharge in its next Tariff Order i.e. FY 2016-17. The relevant extract of the same has been reproduced below:

"The Commission in its Tariff Order dated October 1, 2014, has rightly computed the cross subsidy surcharge as per the relevant provisions of the Distribution Tariff Regulations, 2006. However the Commission realises that provisions made in the Tariff Orders for FY 2014-15 &FY 2015-16 regarding open access cross subsidy surcharge has failed in operationalization of open access in the State despite power prices being low in the power exchanges. Therefore to promote open access in the State, the Commission directed that provisions regarding open access surcharge made in the Tariff Orders for FY 2014-15 & FY 2015-16 be kept in abeyance and all open access consumers may be levied the cross subsidy surcharge as per rates approved in the Tariff Orders for FY 2013-14 only. The Commission would be revisiting the issue of cross subsidy surcharge etc. in its next Tariff Order with a view to promote open access as mandated by the Electricity Act, 2003. Further the Commission directs UPPCL to file a detailed report within a month on the various aspects of open access and reasons why it is not being operationalized. Also UPPCL / SLDC are directed to submit within 15 days, the details of all open access consumers in the State along with the quantum of power wheeled through open access, charges levied etc. for FY 2012-13, FY 2013-14 & FY 2014-15." [Emphasis Supplied]

6.1.10 M/s Rimjhim Ispat Limited again filed a review Petition on the Commission's review Order dated November 3, 2015. During the proceeding in this matter, UPPCL in its letter dated February 26, 2016 submitted that sanction of Inter-Intra state open access has limitation on account of TTC / ATC (Total Transmission Capacity / Available Transmission Capacity) and UPPCL has been allowing all Intra-state open access transactions whereas Inter-state open access are not being considered due to limitation in transmission capacity at



CTU- STU (C-T) periphery. The relevant extract of the same has been reproduced below:

"UPPTCL has allowed all Intra- State Short Term Open Access and there is no limitation on account of sanction from UPSLDC. However, in case of Inter- State STOAs on account of the limitation of TTC / ATC such applications are not being considered due to limitations in transmission capability at CTU-STU (C-T) periphery. The existing capacity is fully booked on account of long term commitments of UPPTCL in accordance with their share in central sector energy projects and MTOAs, if any sanctioned. Only to the extent of non-utilization of allowed capacity for various reasons in real time on daily basis SDLC is given concurrence for Inter- Intra State STOAs. Currently, on an average 100 numbers per month STOAs are sanctioned, all of them pertaining to UPPCL and NPCL & have top most priority in allocation of surplus capacity over other consumers being a distribution licensee of U.P. State."

6.1.11 The Commission has considered the submissions of UPPTCL and other stakeholders during various proceedings including public hearings. During the public hearing while addressing issues under Inter State transmission constraints UPPTCL submitted that it is going to increase its transmission capacity shortly to address this problem. In view of the above submissions the Commission has decided to withdraw its Order of abeyance as mentioned in its Order dated November 3, 2015 and has also determined the Open Access Charges for FY 2016-17 subsequently in this Order.

#### **6.2 OPEN ACCESS CHARGES**

6.2.1 The Commission in the Tariff Order for UPPTCL has determined the Transmission Charges payable by Open Access users for use of UPPTCL transmission network for transmission of electricity. Similarly, the Commission in this Order has also determined the wheeling charges payable by the Open Access users for utilising the distribution network of the Distribution Licensees for wheeling of electricity.

# **6.3 WHEELING CHARGES**



- 6.3.1 Clauses 2.1 (2) and (3) of the Distribution Tariff Regulations, 2006 specify that the ARR / Tariff filing by the Distribution Licensee shall separately indicate Aggregate Revenue Requirement (ARR) for Wheeling function and Retail Supply function embedded in the distribution function and that till such time complete segregation of accounts between Wheeling and Retail Supply function takes place, ARR proposals for Wheeling and Retail Supply function shall be submitted on the basis of an allocation statement to be prepared by the Distribution Licensee based on their best judgment.
- 6.3.2 The Licensee, in its Petition, has followed the allocation in accordance with the approach followed by the Commission in the previous Order. As there is no basis submitted by the Licensee in its filing, the Commission finds merit in considering the allocation into Retail Supply and Wheeling Function as per the methodology adopted in the previous Tariff Order. The allocation of ARR for DVVNL, MVVNL, PVVNL and PuVVNL into wheeling function and retail function as approved by the Commission for FY 2016-17 is as shown in the Table below:

Table 6-1: WHEELING & RETAIL SUPPLY ARR FOR FY 2016-17 (Rs. Crore)

Particulars	Allocati	ion %	Allo	location FY 2016-17		
	Wheeling	Supply	Wheeling	Supply	Total	
Power Purchase Expenses (incl PGCIL charges)	0%	100%	-	49,690.41	49,690.41	
Apportionment of O&M Expenses & Interest	0%	100%	-	-	0.00	
& Finance Charges of UPPCL						
Transmission Charges - Intra state (incl SLDC	0%	100%	-	1,890.28	1,890.28	
Charges)						
Gross O&M Expenses			2,262.92	1,133.45	3,396.37	
Gross Employee cost	60%	40%	1,200.85	800.56	2,001.41	
Gross A&G expenses	40%	60%	154.71	232.07	386.78	
Gross R&M expenses	90%	10%	907.36	100.82	1,008.18	
Gross Interest & Finance charges	90%	10%	2,370.40	263.38	2,633.78	
Depreciation	90%	10%	1,149.11	127.68	1,276.79	
Total Expenditure			5,782.43	53,105.19	58,887.63	
Expense capitalization			557.07	194.20	751.27	
Employee cost capitalized	60%	40%	180.13	120.08	300.21	
Interest capitalized	90%	10%	353.74	39.30	393.04	
A&G expenses capitalized	40%	60%	23.21	34.81	58.02	
Net Expenditure			5,225.36	52,910.99	58,136.36	
Provision for Bad & Doubtful debts	0%	100%	-	-	0.00	
Provision for Contingency Reserve	0%	100%	-	-	0.00	
Total net expenditure with provisions			5,225.36	52,910.99	58,136.36	
Add: Return on Equity	90%	10%	-	-	0.00	
Less: Non Tariff Income	0%	100%	-	112.99	112.99	



Particulars Particulars	Allocation %		Allocation FY 2016-17		
	Wheeling	Supply	Wheeling	Supply	Total
Annual Revenue Requirement (ARR)			5,225.36	52,798.00	58,023.36

6.3.3 Based on the above, the wheeling charges for FY 2016-17 are as shown in the Table below:

Table 6-2: WHEELING CHARGES FOR FY 2016-17

S. No	Particulars	Units	Approved FY 2016-17
1	Wheeling ARR	Rs. Crore	5,225.36
2	Retail sales (PVVNL, DVVNL, MVVNL, PuVVNL)	MU	91,321
3	Average Wheeling charge	Rs./kWh	0.572

- 6.3.4 The Commission, in order to encourage Open Access transactions in the State, has further tried to segregate the wheeling charges payable by consumers seeking Open Access based on the voltage levels at which they are connected to the distribution network. However, in absence of voltage level wise break-up of expenses and asset details, the Commission has considered an interim allocation of costs at various voltage levels and approved the following wheeling charges payable by Open Access customers based on the voltage level at which they are connected with the distribution network.
- 6.3.5 The charges have been worked out on the assumption that the wheeling expenses at 11 kV voltage level shall be 80% of the average wheeling charges determined for the Wheeling function of all Distribution Licensees and that for wheeling at voltages above 11 kV shall be 50% of the average wheeling charges. Further, as specified in the Tariff Order of UPPTCL for FY 2016-17, the Commission has considered the transmission open access charges for short term open access at the same level as approved for Long term open access. In view of the same the Commission has approved the short term distribution wheeling charges same as long term wheeling charges.

Table 6-3: APPROVED VOLTAGE-WISE WHEELING CHARGES FOR FY 2016-17

S. No.	Particulars	Units	Approved FY 2016-17
1	Connected at 11 kV		
ı	Long Term (@ 80% of Average Wheeling Charge)	Rs./kWh	0.458
11	Short Term (@ 80% of Average Wheeling Charge)	Rs./kWh	0.458



S. No.	Particulars	Units	Approved FY 2016-17
2	Connected above 11 kV		
I	Long Term (@ 50% of Average Wheeling Charge)	Rs./kWh	0.286
ll II	Short Term (@ 50% of Average Wheeling Charge)	Rs./kWh	0.286

- 6.3.6 In addition to the payment of wheeling charges, the customers also have to bear the wheeling losses in kind. The Commission has been seeking voltage level loss data from the utility but the same has not been forthcoming. Further, it is also logical that the open access customers have to bear only the technical losses in the system, and should not be asked to bear any part of the commercial losses.
- 6.3.7 The Commission has considered the wheeling loss applicable for Open Access transactions entailing drawl at 11 kV voltage level as 8%, and that for drawl at voltages above 11 kV voltage level as 4% which in inline with the approach adopted by the Commission in its Tariff Order for FY 2015-16 as well as submitted by Petitioner during the proceedings in the matter of ARR / Tariff determination of FY 2016-17.
- 6.3.8 The open access charges and the losses to be borne by the Open Access customers may be reviewed by the Commission on submission of the relevant information by the Licensee.
- 6.3.9 The wheeling charges determined above shall not be payable if the Open Access customer is availing supply directly from the state transmission network.

#### **6.4 CROSS SUBSIDY SURCHARGE**

6.4.1 As regards the Cross Subsidy Surcharge, Regulation 6.6 of the Distribution Tariff Regulations, 2006 specifies as follows:

#### "6.6 Surcharge

1. Till such time the cross subsidies are eliminated, the open access consumer shall pay to the distribution licensee a cross subsidy surcharge in addition to wheeling charges. Surcharge to be levied on the open access consumer shall be determined by the Commission keeping in view the loss



of cross-subsidy from the consumers or category of consumers who have opted for open access to take supply from a person other than the incumbent distribution licensee.

2. When open access is allowed the surcharge for the purpose of sections 38, 39, 40 and sub-section 2 of section 42 would be computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the distribution licensee could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the cost of supply to the consumer for this purpose may be computed as the aggregate of (a) the weighted average of power purchase costs (inclusive of fixed and variable charges) of top 5% power at the margin, excluding liquid fuel based generation, in the merit order approved by the UPERC adjusted for average loss compensation of the relevant voltage level and (b) the transmission and distribution wheeling charges as determined in accordance with the UPERC Terms and Conditions for Determination of Distribution and Transmission Tariff Regulations as amended from time to time.

Cross Subsidy Surcharge formula:

$$S = T - [C(1+L/100) + D]$$

Where

S is the cross subsidy surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power

D is the Wheeling charges for transmission and distribution of power.



L is the system Losses for the applicable voltage level, expressed as a percentage

The cross-subsidy surcharge shall be brought down progressively and, as far as possible, at a linear rate to a maximum of 20% of its opening level by the year 2010-11.

...

- 5. However, in order to facilitate open access, the Commission may adopt a procedure different from the procedure stated above for the calculation of cross subsidy surcharge consistent with the provisions of the EA 2003 and the spirit of the tariff policy after considering the view points of licensee and the open access customer."
- 6.4.2 The Commission has computed the cross-subsidy surcharge for Open Access consumers in accordance with the methodology specified in Clause 6.6 of Distribution Tariff Regulations.
- As per Clause 6.6, the Cross Subsidy Surcharge is to be computed based on the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the Distribution Licensee to supply electricity to the consumers of the applicable class. In case of a consumer opting for open access, the Distribution Licensee could be in a position to discontinue purchase of power at the margin in the merit order. Accordingly, the Commission has computed the cost of supply to the consumer for this purpose as the aggregate of (a) the weighted average of power purchase costs (inclusive of fixed and variable charges) of top 5% power at the margin, excluding renewable and liquid fuel based generation, adjusted for average loss compensation of the relevant voltage level, and (b) the distribution wheeling charges as determined in the preceding section.
- 6.4.4 The Commission has computed the Cross Subsidy Surcharge for the relevant consumer categories using the following formula:

$$S = T - [C (1 + L / 100) + D]$$

Where

S is the cross subsidy surcharge

T is the Tariff payable by the relevant category of consumers;

6.12

8.00%

7.07



C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power. In case of UP, this works out to Rs. 6.12 / kWh considering the cost of marginal power purchase sources of Bajaj Hindustan, IGSTPP, Jhajhjhar, Auriya and Rosa Power Project.

D is the wheeling charges.

HV Categories at 11 KV

2

L is the system losses for the applicable voltage level, expressed as a percentage, which is considered as 4% for HT Categories (above 11 KV) and 8% for HT Categories (at 11 KV) as submitted by the Licensee in its reply to deficiency.

6.4.5 The cost of the Distribution Licensee to supply electricity to the consumers of the HV-2 category (above 11 KV) and HV-2 category (at 11 KV) is working out as shown in the Table below:

S No.	Categories	Wheeling Charge (D)	Wt. Avg. Power Purchase Cost (C)	System Loss (L)	Total Cost
1	HV Categories above 11 KV	0.286	6.12	4.00%	6.65

0.458

Table 6-4: COST OF SUPPLY APPROVED BY THE COMMISSION FOR FY 2016-17

- 6.4.6 The impact of migration / shifting of consumers from the network of the incumbent Distribution Licensee on the consumer mix and revenues of a particular Distribution Licensee shall be reviewed by the Commission from time to time as may be considered appropriate.
- 6.4.7 The Commission has approved levy of Regulatory Surcharge for recovery of cumulative regulatory asset created for the Licensee, which is a part of the tariff charged to different consumer categories. Hence, the Cross Subsidy Surcharge has been computed by subtracting the avoidable cost of supply for the Open Access consumers from the tariff applicable for the relevant consumer, which also includes the applicable Regulatory Surcharge.
- 6.4.8 The category-wise Cross Subsidy Surcharge approved by the Commission for FY 2016-17 is as given in the Table below:

Table 6-5: CROSS SUBSIDY SURCHARGE APROVED BY THE COMMISSION FOR FY 2016-



S No.	Categories	Average Billing Rate	Average Billing Rate (inclusive of Regulatory Surcharge) "T"	Cost of Supply for computing CSS	Cross Subsidy Surcharge "CSS"
1	HV-1 (Supply at 11 kV)	9.49	9.87	7.07	2.80
2	HV-1 (Supply above 11 kV)	8.48	8.82	6.65	2.16
3	HV-2 (Supply at 11 kV)	7.81	8.12	7.07	1.05
4	HV-2 (Supply above 11 kV)	7.01	7.29	6.65	0.63
5	HV-3 (Supply above 11 kV)	7.86	8.18	6.65	1.52
6	HV-4 (Supply at 11 kV)	8.90	9.24	7.07	2.17
7	HV-4 (Supply above 11 kV)	8.64	9.01	6.65	2.36

# **6.5 ADDITIONAL SURCHARGE**

6.5.1 It has been observed by the Commission that there has been considerable amount of load shedding which implies that there is a power deficit scenario. In such a case if any consumer avails open access, the Licensee does not really have to reduce the power procurement from the tied up sources. The distribution licensee in such a scenario still has large number of consumers to whom the available electricity can be supplied and there will not be any stranded costs. Considering the above, the Commission has approved additional surcharge for FY2016-17 as Nil (zero).

# **6.6 OTHER CHARGES**

6.6.1 The Commission to encourage the Open access in the State rules that the standby charges, grid support charges and parallel operations charges shall be zero in case of Open Access consumers.



#### 7. TARIFF PHILOSPHY

#### 7.1 CONSIDERATIONS IN TARIFF DESIGN

- 7.1.1 Section 62 of the Electricity Act 2003, read with Section 24 of the Uttar Pradesh Electricity Reforms Act, 1999 sets out the overall principles for the Commission to determine the final tariffs for all categories of consumers defined and differentiated according to consumer's load factor, power factor, voltage, total consumption of energy during any specified period or the time at which supply is required or the geographical position of any area, nature of supply and the purpose for which the supply is required. The overall mandate of the statutory legislations to the Commission is to adopt factors that will encourage efficiency, economical use of the resources, good performance, optimum investments and observance of the conditions of the License.
- 7.1.2 The linkage of tariffs to cost of service and elimination of cross-subsidies is an important feature of the Electricity Act, 2003. Section 61 (g) of the Electricity Act, 2003 states that the tariffs should progressively reflect the cost of supply and it also requires the Commission to reduce cross subsidies within a timeframe specified by it. The need for progressive reduction of cross subsidies has also been underlined in Sections 39, 40 and 42 of the Electricity Act, 2003. The Tariff Policy also advocates for adoption of average cost of supply, which should be taken as reference point for fixing the tariff bands for different categories.
- 7.1.3 The Commission has determined the retail tariff for FY 2016-17 in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy. The Commission has also considered the comments / suggestions / objections of the stakeholders and public at large while determining the tariffs. The Commission in its past Orders has laid emphasis on adoption of factors that encourages economy, efficiency, effective performance, autonomy, regulatory discipline and improved conditions of supply. On these lines, the Commission, in this Order too, has applied similar principles keeping in view the ground realities.
- 7.1.4 As regards to the linkage of Tariff with the Cost of Service, the Distribution Tariff Regulations state as follows:



- "1. The tariffs for various categories / voltages shall progressively reflect Licensee's cost to serve a particular category at a particular voltage. Allocation of all costs prudently incurred by the Distribution Licensee to different category of consumers shall form the basis of assessing cost to serve of a particular category. Pending availability of information that reasonably establishes the category-wise / voltage-wise cost to serve, average cost of supply shall be used for determining tariffs taking into account the fact that existing cross subsidies will be reduced gradually. Every Licensee shall provide to the Commission an accurate cost to serve study for its area. The category-wise/ voltage wise cost to serve should factor in such characteristics as supply hours, the load factor, voltage, extent of technical and commercial losses etc.
- 2. To achieve the objective that the tariff progressively reflects the cost of supply of electricity, the Commission may notify a roadmap with a target that latest by the end of year 2010-2011 tariffs are within ± 20 % of the average cost of supply. The road map shall also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."
- 7.1.5 In terms of the Distribution Tariff Regulations, 2006, Tariff Policy and the Electricity Act, 2003, the Commission opines that in the ideal scenario, the tariff of any category should be linked to the cost imposed on the system by the said category. In this regard, the Commission has been directing the Licensee to conduct Cost of Service studies to have a tool for alignment of costs and charges. The Licensee has not submitted any details regarding the cost of service studies for each category or voltage level. The paucity of data in this regard has restricted the Commission in establishing a linkage of tariff to average cost of supply.
- 7.1.6 Accordingly, while determining the tariff for each category, the Commission has looked into the relationship between the tariff and the overall average cost of supply for FY 2016-17. Effort has been made to move the tariff of appropriate consumer categories, towards the band of +/- 20% to meet the declared objectives of the Distribution Tariff Regulations, 2006, Tariff Policy and the Electricity Act, 2003.
- 7.1.7 In view of the above, the Commission has determined the retail tariff keeping in the mind the guiding principles as stated in Section 61 of the Electricity Act,



2003. There was unabridged revenue gap considering the existing tariff for FY 2016-17 (including the gap for previous years). Considering the huge amount of accumulated revenue gap of previous years as well as revenue gap for current year and high cost of supply and resultant poor cost coverage in the absence of cost reflective tariff, the Commission has decided to increase the tariff as detailed in the subsequent sections to ensure some recovery of the revenue gap.

# Metering

- 7.1.8 In the tariff Order for FY 2014-15, the Commission linked the tariff for unmetered consumer categories in (LMV-1 and LMV-2) with the contracted load which was earlier linked with number of consumers. The Commission in cognizance to the approach followed in the Tariff Order for FY 2014-15 and FY 2015-16, has decided to continue to levy of fixed charges of the unmetered consumers under LMV-1 and LMV-2 up to 2 kW as per their contracted load in Rs. / kW terms.
- 7.1.9 To incentivise the rural consumers who shift from unmetered to metered category, the Commission has allowed a rebate of 10% on Rate applicable as per the applicable tariff of metered category which shall be applicable to the consumer from the date of installation of meter till end of FY 2017-18.
- 7.1.10 It has further been observed in the previous years, that in spite of various incentive / dis-incentives, there has not been any considerable improvement in the metering status in the State and the Distribution Licensees continue to supply electricity to the unmetered consumers which results in huge loss of unaccounted electricity. The Petitioner has not been making its full efforts to convert the unmetered connections. Therefore, the Commission in this Order has directed the Licensee to comply with the direction given by the Commission to put its sincere efforts for converting the unmetered consumers to metered consumers thereby ensuring that metering is achieved up to the satisfactory level, failing which the Commission may take a strict view for appropriate action.

#### **Billable Demand**

7.1.11 For all consumers having TVM / TOD / Demand recording meters installed, the billable load / demand during a month shall be the actual maximum load /



- demand as recorded by the meter (can be in parts of kW or kVA) or 75% of the contracted load / demand (kW or kVA), whichever is higher.
- 7.1.12 Further in case the licensee fails to note the actual maximum load / demand reading or in case of spot-billing, then the consumer may approach the licensee with a photo of the actual maximum load / demand reading displayed on his meter of the previous month. The licensee shall accept the same for the purpose of computation of billable demand, however, if the licensee wishes to, it can get the same verified within 10 days.

# **Time of Day Tariff**

- 7.1.13 The Time of Day tariff (TOD) is a widely accepted Demand side Management (DSM) measure for energy conservation by price. The TOD structure prompts the consumer to change their consumption profile so as to shift their loads during off peak hours when the power is relatively cheaper. TOD tariff encourages the distribution licensees to move towards separation of peak and off-peak tariffs which would help in reducing consumption as well as costly power purchase at the peak time. The Tariff is set in such a way that it inherently provides incentives and disincentives for the use of electricity in different time periods. The basic objective of implementing time of day tariffs is to flatten the load curve over a period of a day resulting in a reduction in the peaking power requirement and also to enhance power requirement during off peak period. The Licensees have proposed same TOD structure as approved by the Commission in its previous Tariff Order for FY 2015-16.
- 7.1.14 It may be noted that by implementing the TOD Tariff, the peak load gets shifted and the Distribution Licensees gain in the form of reduction in power purchase expenses as the additional energy supplied to the consumers during peak hours are typically purchased from a costlier source. The Commission in this Tariff Order has continued with the optional TOD structure as introduced in FY 2015-16 for consumers who want to operate at full potential only during the specified night hours (i.e. from 22:00 hrs to 06:00 hrs) with restricted consumption in remaining hours, in addition to the TOD slabs which will be applicable for LMV-6 and HV-2 categories. Apart from the above the Commission in this Order has reduced the TOD rate for the Induction Furnaces / Arc Furnaces, Rolling / Re-Rolling Mill industrial consumers. The TOD structure has been detailed in the Rate Schedule which is provided subsequently in this Order.



#### Life-line consumers

7.1.15 Licensees have not proposed any change for the Life Line category of consumers. The Commission in the past has been allowing tariff support to lifeline consumers having load up to 1 kW and maximum consumption of 150 kWh / month. In spirit of the National Electricity Policy and the approach followed in last year's Order for FY 2015-16 the Commission in this Order, has decided not to change the slabs and rates for the lifeline consumers.

## Scheme for advance deposit for future monthly energy bills

7.1.16 The Commission in this Order has continued with the provision for Advance Deposit against payment of monthly future energy bills which would provide the consumer better facility and the consumer will also be entitled to get interest at the interest rate applicable on security deposit, for the period during which advance exists for each month. With this the Licensees would also get benefitted by improvement in their working capital requirement / cash flows. The detail of this arrangement of advance deposit against payment of future monthly electricity bills is provided in the rate schedule of this Order.

# **Rebate on Timely Payment**

7.1.17 The Commission has decided to increase the rebate to 0.50% for the consumers who pay the bills in time i.e. on or before due date. The consumers having any arrears in the bill shall not be entitled for this rebate. The consumers who have made advance deposit against future energy bills shall also be entitled for this rebate.

## **Rebate for Prepaid Meters**

7.1.18 In order to encourage the prepaid meters, the Commission has decided to continue the rebate of 1.25% on the Rate of Charge for the consumers having prepaid meters.

## Charges for exceeding contracted demand

7.1.19 The Commission has aligned the charges for exceeding the contracted load for the domestic consumers as per the provision of Electricity Supply Code Regulations, 2005 as amended from time to time. The relevant changes



regarding levy of Charges for exceeding contracted demand has been provided in rate schedule.

# **Delayed Payment Surcharge / Penalty**

7.1.20 To discourage the late payment of electricity bills the Commission has continued with the applicable surcharge / penalty on the late payment of bills to 1.25% per month (based on number of days for which the payment is delayed from the due date) up to first three months. However to penalise the consumers for the delay in payment of energy bills beyond the 3 months delayed payment surcharge would be levied @ 2.00% per month as detailed in the Rate Schedule of this Order.

# Single point buyer

7.1.21 As depicted in the Rate Schedule the Commission has decided to reduce the maximum limit to5% for the single point buyer to charge the end consumers over and above the actual Rate & other applicable charges.

# **Rebate for using Solar Water Heater**

7.1.22 Solar Water Heater not only promotes the use of renewable energy but also a measure of Demand Side Management. In order to encourage the use of solar energy which will conserve electricity, the Commission has continued with the rebate to the consumers who installs and uses the solar water heater.

# **Facilitation Charge for Online Payment**

7.1.23 With regard to facilitation charges being levied by the Distribution Licensees on the consumers who make payment through internet, the Commission is of the view that as the Distribution Licensees are facing issues like low collection efficiency, lack of meter readers etc., levying such charges would further act as deterrent for the consumers who want to pay through internet. In this regard the Commission initiated a Suo Moto proceeding and directed the Licensee to bear the transaction charge for transaction up to Rs. 4,000.00 for payment through Debit Card or Credit Card in the Order issued on May 29, 2015. The same mechanism of Licensee to bear the transaction for transaction up to Rs. 4,000.00 for payment through Debit Card or Credit Card shall be continued.



#### kVAh Tariff

- 7.1.24 Implementation of kVAh metering and kVAh tariff is seen as a commercial inducement on consumers to pay lesser electricity bill by ensuring that they do not draw reactive power It suggests that consumers must be billed as per the kVAh (apparent energy) drawl, and not as per the kWh (active energy).
- 7.1.25 A change to a kVAh tariff is beneficial to non-defaulting consumer as the kVAh tariff is cheaper than the kWh tariff. The Distribution Licensee can benefit through the collection of more revenue from consumers having low power factor loads. Most importantly, the tariff is environmentally friendly due to improved efficiency. This will also prompt the consumers to take the initiative in correcting the power factor, using compensating capacitors at their end.

# Minimum Charge Payable for LMV-2(c) (Non-domestic light, Fan and Power) Category

7.1.26 The Commission understands that the consumption pattern of the consumers is not uniform throughout the year and varies seasonally. In view of the same appropriate minimum charges have been decided for summer and winter season as detailed in the Rate Schedule. The Commission taking into considerations the views of the stakeholders and also taking into cognizance the wide use of energy efficient equipment (like LED bulbs, etc.) in the State, has lowered the minimum charge payable for the urban LMV-2 consumers.

## **LMV-5-PTW Consumers**

- 7.1.27 Uttar Pradesh has agrarian economy. To cope up with the growing demand of various means of irrigation for agriculture in the State, electrification of private tube wells has always been of much importance. The GoUP provides support in from of subsidy for these consumers. Under this scheme GoUP allots area wise targets for energisation of Private Tube Wells & accordingly allocates fund for this purpose.
- 7.1.28 Under System Improvement initiatives the Licensee has submitted to have undertaken Rural Feeder Segregation program to ensure supply as per scheduled hours to the agriculture sector. The Distribution Licensee in its tariff proposal for FY 2016-17 to the Commission has not proposed any tariff increase for LMV-5 (a) (small power for private tube wells / pumping sets for



irrigation purposes) category. During the public hearing process various farmer and farmer associations requested the Commission not to make any tariff hike in light of the draught and unseasonal rains that have destroyed the crops.

7.1.29 The Commission after considering the submission made by Licensee and the poor condition of the farmers in the State, has decided not to increase the tariff of the consumers getting supply under rural schedule of the LMV-5 category. Further, recognizing the hardship of the farmers of Bundelkhand, the Commission has relaxed the minimum bill payable by a consumer, till installation of meter applicable to PTW consumers of Bundelkhand area located in Gram Sabha.

#### **Tariff for Industrial consumers**

7.1.30 The tariff for LMV-6 category has been increased moderately in line with the commercial consumers. But no rise has been made in HV-2 category keeping in view the fact that these consumers are mainly connected on independent feeders and the line losses in their case is very low. Therefore, their cost of service is low as compared to LMV-6. Further HV-2 category consumers consume huge quantum of energy and in some cases the electricity is like a raw material therefore any increase in HV-2 category has been avoided in order to protect them from financial stress. It is also justified in view of low losses and low cost of service for this category.

## **Tariff for LMV-10 Departmental Employees**

- 7.1.31 The tariff for LMV-10 (Departmental Employees and Pensioners) category was historically approved by the Commission who were a special subsidized category. The Licensees though various submissions have informed the Commission that, they had certain commitment towards their employees at the time of unbundling of U.P. State Electricity Board, regarding supply of electricity at concessional rate.
- 7.1.32 Section 23 (7) of Uttar Pradesh Electricity Reforms Act, 1999 provides that "terms and condition of service of the personnel shall not be less favourable to the terms and condition which were applicable to them before the transfer".

  The benefits for employees / pensioners as provided in section 12 (b) (ii) of



the Uttar Pradesh Reform Transfer Scheme, 2000provides for "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before January 14, 2000.

7.1.33 The Commission in its Tariff Order dated June 18, 2015 had directed that from January 1, 2016 onwards, the tariff for LMV-10 (Departmental Employees and Pensioners) consumers shall be same as that of "other metered consumers" under LMV-1 (Domestic Light, Fan and Power). The relevant extract has been reproduced below:

# "RATE (B): (January 1, 2016 Onwards)

Tariff for consumers under this category shall be same as that of "other metered consumers" under LMV-1 category.

The Licensees are permitted to provide the "rebate" as it deems fit to the consumers eligible to get supply under this category. However, the Licensees shall have to bear the burden from its own resources, if it wants to provide the "rebate" to such consumers. The amount of "rebate" given, energy billed and amount billed must be clearly accounted by the Licensees and shall ensure appropriate modification in its billing software in this regard. The actual amount billed plus the rebate so recognized shall be considered as total revenue from this category while undertaking the truing up of the relevant financial year."

- 7.1.34 Also, the Commission after considering the representations from various stakeholders along with the submissions made in the matter of Petition Nos. 1042/2015 dated September 21, 2015 filed by Uttar Pradesh Rajya Vidyut Pensioners Parishad and 1061/2015 dated April 12, 2015 filed by Uttar Pradesh Rajya Vidyut Parishad Adhiyanta Sangh opined as follows regarding the LMV-10 consumers:
  - a) The tariff prescribed by the Commission in its Tariff Order for FY 2015-16 does not provide any special dispensation for LMV-10 (departmental employees and pensioners) consumers of the licensee. As such, they are like any other domestic consumers and revenue recognition for them should be based on tariff prescribed for domestic consumers i.e. LMV-1 (Domestic Light, Fan and Power). The concessional supply of power to its employees will have to be borne by the licensee and cannot be allowed to devolve on other consumers.
  - b) The Commission in its Tariff Order for FY 2015-16 has already directed the Licensees to make the tariff of the said category of consumers



same as that of "other metered consumers" under LMV-1 category from January 1, 2016 onwards.

- c) The Commission hereby directs the Licensees to charge such consumers same as that under LMV-1 (Domestic Light, Fan and Power) category. However the Licensees are authorised to provide the "rebate" as it deems fit to the consumers eligible to get supply under this category.
- d) The Commission would again like to caution the Petitioner that any further allowance or incentives or benefits granted to its departmental employees & pensioners will have to be borne by the licensee from its own resources or through increased efficiency.
- e) The Licensee is hereby directed to make separate accounting field for the amount of "rebate" given, energy billed and amount billed to such category of consumers on a monthly basis and shall ensure appropriate modification in its billing software in this regard.

# **Introduction of Slabs for Fixed Charge**

7.1.35 The Petitioner in its proposal for the Rate Schedule to be applicable for FY 2016-17 has proposed different slabs for fixed charge depending on the consumption of electrical energy. The Commission understands that the slabs for the fixed / demand charges must be preferably based on load and not energy consumption. Hence, the Commission is of the view that the fixed charge should be linked with contracted load rather than the energy consumed. Thus the Commission in this Tariff Order has approved fixed charge linked to the contracted load for certain categories of consumers.

## Telescopic Tariff for LMV-4 (Public and Private Institutions) Category

7.1.36 The Commission in this Order has approved telescopic tariff for LMV-4 category of consumers which in turn will result in less electricity bills for consumers who consume less electricity and also help in facilitating smooth implementation of pre-paid metering.



# Applicability of tariff category

7.1.37 The applicability, character and point of supply and other terms & conditions of different consumer categories have been defined in the Rate Schedule given in Annexure 11.2. In case of any inconformity, the Rate schedule shall prevail over the details given in the various sections of this Order.

# **Exemption from Minimum Charge for Using Solar Power**

7.1.38 The Commission in this Order has exempted payment of minimum charge for LMV-2 (Non domestic light, fan and power) consumers using solar power for meeting their requirement of electricity, towards an initiative for encouraging the use of renewable source of energy. With this facility the consumers will be motivated towards use of clean energy, with less carbon emission and the Licensees will be benefited from the reduced demand supply gap. The details of this arrangement of exemption of minimum charge for use of solar energy are provided in the rate schedule of this Order.

## Interest on Dues Payable to consumers by the Licensee

7.1.39 The Commission in this Order has introduced provision for interest on dues payable by the Licensee to the consumers, under which they will be entitled to get interest at the interest rate applicable for interest on security deposits on all the dues payable by Licensee which may arise out of rectification / adjustment / settlement of bill from the Licensee. The detail of this arrangement of interest on pending dues is provided in the rate schedule of this Order.

# **System Loading Charges**

7.1.40 The Commission taking into considerations the views of the stakeholders has decided to stop the levy of the System Loading Charges from next Tariff cycle. The Licensees are advised to include the amount being collected under this head in their Capital Expenditure in the future ARR/ Tariff filings, if they so desire.



## 8. REVENUE AT REVISED TARIFF AND REVENUE GAP

# 8.1 REVENUE FROM SALE OF POWER AT APPROVED TARIFF

8.1.1 As detailed in the previous Chapter, the Commission has revised the Tariff for different categories. The Tariff so published shall become the notified Tariff applicable in the area of supply and shall come into force after seven days from the date of such publication of the Tariff, and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order. Considering the period of applicability, the revenue at revised Tariff for FY 2016-17 is worked out as under:

Table 8-1: REVENUE FROM SALE OF POWER AT APPROVED TARIFF FOR FY 2016-17 FOR MVVNL (Rs. Crore)

Consumer categories	Approved Revenue FY 2016-17
LMV-1: Domestic	3,166.67
LMV-2:Non-Domestic	992.84
LMV-3: Public Lamps	307.96
LMV-4: Institutions	387.36
LMV-5: Private Tube Wells	167.58
LMV 6: Small and Medium Power	840.44
LMV-7: Public Water Works	637.83
LMV-8: State Tube Wells	638.81
LMV-9: Temporary Supply	42.03
LMV-10: Departmental Employees	48.36
HV-1: Non-Industrial Bulk Loads	700.24
HV-2: Large and Heavy Power	1,518.90
HV-3: Railway Traction	122.92
HV-4: Lift Irrigation	144.81
Sub-total	9,716.74
Extra State & Bulk	24.85
Total	9,741.60

- 8.1.2 The revenue increase due to revision in Tariff for DVVNL would be Rs. 285.33 Crore (Rs. 9,741.60 Crore Rs. 9,456.27 Crore).
- 8.1.3 The estimated gap / surplus after incorporating impact of revised Tariff for FY 2016-17 for the period of 8 months is given in the Table below:



Table 8-2: ESTIMATION OF ARR GAP/SURPLUS AT REVISED TARIFF FOR FY 2016-17 (Rs. Crore)

Particulars	Petitioner	Approved
Revenue Gap for FY 2013-14	1942.91	1315.68
Revenue Gap / (Surplus) for FY 2016-17 (at existing Tariff)	1674.88	798.59
Increase in Revenue due to revision in Tariff	520.60	285.33
Total Revenue for FY 2016-17 (Excluding Regulatory Surcharge)	9732.52	9741.60
Net Revenue Gap for FY 2016-17 after tariff increase (Including gap for FY 2013-14)	3097.19	1828.94

## 8.2 AVERAGE COST OF SUPPLY

- As discussed earlier, the Commission has taken into consideration the percentage increase in Tariff with respect to Average Cost of Supply while approving the tariff. For instance during FY 2016-17, the average billing rate (ABR) at existing Tariff would have been Rs. 5.29 / kWh (Consolidated for Distribution Licensees' namely DVVNL, MVVNL, PVVNL and PuVVNL), while the average cost of supply is Rs. 6.35 / kWh (Consolidated for Distribution Licensees' namely DVVNL, MVVNL, PVVNL and PuVVNL) as against the ACOS of Rs. 6.71 / kWh projected by the Licensees. Thus, the Tariff would have been 83.31 % of ACOS approved by the Commission. After revision of the Tariff, as approved in this Order, the average billing rate (ABR) would be Rs. 5.55 / kWh, thus, the Tariff would be 87.29 % of ACOS, which is a step towards achieving / keeping the Tariff within +/- 20% of Average Cost of Supply as per the Tariff Policy.
- 8.2.2 In the instant Tariff Order, the cross subsidy structure has marginally changed as the ACOS has not undergone any significant change, however, for the recovery of accumulated revenue gap the tariff has been increased to some extent. The table below summarises the per unit revenue realisation (average billing rate) as a percentage of ACOS (Consolidated for Distribution Licensees' namely DVVNL, MVVNL, PVVNL and PuVVNL).



Table 8-3: REVENUE REALIZED AS % OF ACOS

Consumer Categories	Existing	Tariff	Revi	sed Tariff
	Avg Revenue (Rs. / kWh)	Avg Revenue / unit % of ACOS	Avg Revenue (Rs. / kWh)	Avg Revenue / unit % of ACOS
LMV-1: Domestic	3.92	61.66%	3.92	61.66%
LMV-2:Non-Domestic	6.95	109.44%	7.67	120.65%
LMV-3: Public Lamps	7.79	122.61%	8.84	139.08%
LMV-4: Institutions	7.40	116.42%	7.78	122.46%
LMV-5: Private Tube Wells	1.50	23.60%	1.50	23.60%
LMV 6: Small and Medium Power	7.54	118.69%	7.99	125.80%
LMV-7: Public Water Works	7.36	115.88%	8.32	130.89%
LMV-8: State Tube Wells	7.65	120.36%	8.52	134.10%
LMV-9: Temporary Supply	9.19	144.69%	10.51	165.46%
LMV-10: Departmental Employees	2.88	45.39%	3.18	50.00%
HV-1: Non-Industrial Bulk Loads	8.27	130.08%	9.23	145.24%
HV-2: Large and Heavy Power	7.47	117.59%	7.47	117.59%
HV-3: Railway Traction	7.12	112.12%	7.86	123.75%
HV-4: Lift Irrigation	7.87	123.79%	8.74	137.55%
Sub-total Sub-total	5.29	83.32%	5.55	87.30%
Extra state & Bulk	4.20	66.08%	4.20	66.08%
Total	5.29	83.31%	5.55	87.29%

8.2.3 The Licensee should ensure that they must at least achieve & maintain the category wise ABRs approved, failing which the Commission may take an appropriate view and necessary action.

# 8.3 REGULATORY SURCHARGE

8.3.1 The Commission, in its Suo-Moto Tariff Order dated May 31, 2013, had allowed the Regulatory Surcharge for liquidation of part Regulatory Assets admitted by the Commission in its Order dated May 21, 2013 at 3.71% of Rate of charge, which was applicable till end of FY 2013-14. The Commission, in the above mentioned Order, had allowed recovery of 50% of the total revenue gap approved by the Commission vide Order dated May 21, 2013 for truing up of ARR for FY 2000-01 to FY 2007-08.



8.3.2 The Commission, on a separate Petition filed by the Distribution Licensees, issued an Order on June 6, 2014 for extension of the Regulatory Surcharge for the recovery of balance 50% of admitted Regulatory Asset in which the performance linked regulatory surcharge of 2.84% was approved by the Commission to recover the regulatory asset within 2 years. The relevant extract of the same is reproduced below:

"In view of the above, the applicable Regulatory Surcharge for FY 2014-15 shall be 2.84%. However, the Regulatory Surcharge for FY 2015-16 (i.e. from 1st April, 2015 to 31st March, 2016) shall be linked with the actual performance of FY 2014-15. That is in case the Distribution Licensees fail to achieve the target Distribution Losses of FY 2014-15, the Regulatory Surcharge for FY 2015-16 shall be reduced in proportion to the losses under-achieved by the Licensees as compared to the target losses for FY 2014-15. The performance of the Distribution Licensee shall be measured from the actual distribution losses as submitted by the Licensee for FY 2012-13 in its Tariff Petition for FY 2014-15."

8.3.3 The Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 had allowed a separate regulatory surcharge of 2.38% for liquidation of the Regulatory asset as approved in the aforesaid Order which was made applicable in the supply areas of DVVNL, MVVNL, PVVNL and PuVVNL. The relevant extract of the same has been reproduced below:

"It may be observed that even after a considerable increase in Tariff allowed by the Commission in this Order, there is still a large accumulated revenue gap of Rs. 11940.38 Crore (consolidated for 4 state owned Distribution Licensees). The huge and ever increasing cumulative revenue gap to be recovered from the consumers is a matter of great concern for the Commission as well as the Licensees. The consumers on the other hand are aggrieved with the poor quality of supply and services being rendered by the Licensees and the constantly rising tariff. The Commission issued an In-house paper on recovery of the cumulative revenue gap in which it was stated that the recovery of the accumulated revenue gap if allowed to be recovered in less than three years may result in a massive tariff shock for the consumers. In view of the same and considering such a huge amount of accumulated revenue gap / regulatory asset, the Commission in its In-House paper



proposed the recovery of the same in more than 3 years to avoid any tariff shock to the consumers. The above methodology may however be in variation with the provisions of the Distribution Tariff Regulations, 2006 and the findings of the Hon'ble ATE in its Judgment in OP No. 1 of 2011 but would be the most appropriate way for recovering the gap in the current scenario of large accumulated revenue gap. However, the Licensees submitted that the recovery of the accumulated revenue gap / regulatory asset may be allowed in a period not exceeding 3 years at the most and preferably within the control period which is line with the findings of the Hon'ble ATE.

It may be noted that the total accumulated revenue gap / regulatory asset of Rs. 11940.38 Crore if allowed to be recovered within 3 years would result in an additional regulatory surcharge of around 16%. It may be noted that along with other reasons the major reasons which have resulted in such a huge accumulated revenue gap / regulatory asset are (a) Not filling the FPPPCA Petition and (b) Late filing of the True-up Petitions. If the Licensees would have filed the FPPPCA and True-up Petitions on time the accumulated revenue gap / regulatory asset would have been much lower. And in such a case the recovery of the same could have been allowed within 3 year of time. However, in the current scenario it would not be appropriate to give a huge tariff shock to the consumers. Also the Hon'ble ATE in its various Judgments has ruled that the increase in Tariff should not result in tariff shock for the consumers. A relevant extract of the Hon'ble ATE's Judgment in Appeal No.10 of 2013 & I.A. Nos. 29 & 30 of 2013 dated 25th October, 2013 in matter of Association of Approved & Classified Hotels vs Kerala State Electricity Regulatory Commission and Kerala State Electricity Board is reproduced below:

# "21. Summary of our findings

The tariff determined by the State Commission for HT IV Commercial Category is inconsistent with the provisions of Act and Tariff Policy and the dictum held by this Tribunal in various judgments. The tariff of consumers of this category has been increased exorbitantly giving them tariff shock. Accordingly, the tariff fixed by the State Commission for HT IV Commercial Category is set aside and they will be charged at the tariff as



proposed by the Electricity Board in their petition to the State Commission i.e. fixed charges of Rs. 400 per kVA per month and energy charges of Rs. 5.50 per kWh..."

Giving due consideration to the view of the Hon'ble ATE it may not be appropriate to allow the recovery of the entire accumulated revenue gap / regulatory asset within 3 years of time which may result in Tariff shock to the consumers. Having considered the existing Regulatory surcharge as per Commission's Order dated 6th June, 2014, the Commission for liquidation of the Regulatory asset as approved in this Order has decided to introduce a separate regulatory surcharge of 2.38% applicable on "RATE" as defined in the Rate Schedule for FY 2014-15. Such surcharge would be applicable in the supply areas of DVVNL, MVVNL, PVVNL and PuVVNL".

8.3.4 Further, in the Tariff Order for FY 2014-15, the Commission had also linked the Regulatory Surcharge for FY 2015-16 with the actual performance of the Licensees in FY 2014-15. The relevant extract of the same has been reproduced below:

"In view of the above, the applicable Regulatory Surcharge for FY 2014-15 shall be 2.38%. However, the Regulatory Surcharge for subsequent year shall be linked with the actual performance of the Licensees in previous year i.e. the regulatory surcharge for FY 2015-16 will depend on the performance of the Licensees in FY 2014-15. In case the Distribution Licensees fail to achieve the target consumer addition or the target distribution losses in FY 2014-15, the regulatory surcharge for subsequent year i.e. FY 2015-16 shall be reduced by 10% over the applicable regulatory surcharge for the previous year (i.e. FY 2014-15). The Commission at the end of FY 2015-16 shall again review the applicability of the regulatory surcharge for future years i.e. beyond 2015-16 based on the actual performance of Licensee in the past years.

It may be clarified that the Regulatory Surcharge reduced on account of the under-achieved performance targets shall be considered as deemed recovery. The Commission after accounting the actual recovery and the deemed recovery shall true-up the over / under recovery of the accumulated Regulatory Surcharge while undertaking the Truing up of the relevant year.



The Licensees are directed to depict the Regulatory Surcharge separately and distinctly in the electricity bills of the consumers. The Commission directs the Licensee to maintain separate accounting fields for both the regulatory surcharges approved vis-a vis the Commission's Order dated 6th June, 2014 and that approved in this Order, and capture the two different amounts collected as Regulatory Surcharges in both of its financial and commercial statements. This would enable the Licensee to correctly report the amounts collected towards Regulatory Surcharges.

The Distribution Licensees are directed to submit the actual Regulatory Surcharge recovered in FY 2014-15 on account of the Revenue Gap / Regulatory Asset admitted by the Commission in this Order along with the actual Distribution Losses achieved in FY 2014-15 and additional target consumers added in FY 2014-15 by 15th April, 2015.

Based on the achievement or under-achievement of target Distribution Losses and consumer addition target the Regulatory Surcharge for subsequent financial year i.e. FY 2015-16 shall be revised as detailed in Para above and the same shall be applicable for FY 2015-16." (Emphasis added)

8.3.5 With regard to above, the Commission passed an Order on April 22, 2015 in the matter of "Applicability of Regulatory Surcharges for State Distribution Licensees for FY 2015-16 as per Commissions Orders dated June 6, 2014 and October 1, 2014". The relevant extract of the aforesaid Order regarding applicability of Regulatory Surcharge-1 (i.e. for recovery of the balance revenue gap consequent to True up Orders dated May 21, 2013 and Tariff Orders May 31, 2013) for FY 2015-16 has been reproduced below:

"The Commission is of the view that since the actual Distribution Losses for FY 2014-15 have not yet been submitted by the Distribution Licensees and there have been various submission of the licensees reporting different loss figures in various forums, hence taking these into view, the Commission has worked out the Regulatory Surcharge applicable for FY 2015-16 based on the estimated Distribution Losses submitted by the Licensees. The applicable Regulatory Surcharge for FY 2015-16 for recovery of the balance revenue gap consequent to True up Orders dated May 21, 2013 and Tariff Orders May 31, 2013 i.e. Rs.



1243.96 Crore as per the formula prescribed in Order dated June 6, 2014 is shown in the Table below:

Table-3: Applicable Regulatory Surcharge for Recovery of the balance revenue gap consequent to True Up Order dated May 21, 2013 and Tariff Order May 31, 2013 i.e. Rs 1243.96 Crore

Particulars	Formula	DVVNL	MVVNL	PVVNL	PuVVNL
Target Distribution Losses for FY 2014-15 as approved in Tariff Orders for FY 2014-15	А	28.00%	21.03%	23.00%	21.72%
Distribution Losses achieved in FY 2014-15	В	33.13%	23.86%	22.60%	24.23%
Actual Distribution Losses FY 2012- 13 (As Submitted by the Licensee, which is considered as base)	С	36.56%	24.84%	28.16%	25.66%
Regulatory Surcharge applicable for FY 2014-15	D	2.84%	2.84%	2.84%	2.84%
Regulatory Surcharge applicable for FY 2015-16 (Max of 2.84%)	E = D x (C-B) / (C-A)	1.14%	0.73%	2.84%	1.03%

The summary of the Regulatory Surcharge -1 applicable for FY 2014-15 and FY 2015-16 is shown in the Table below:

Table-4: Summary of the Regulatory Surcharge - 1 applicable for FY 2014-15 and FY 2015-16 is shown in the Table below:

Distribution Licensee	Regulatory Surcharge - 1 (Applicable for FY 2014-15) (As approved in Order dated June 6, 2014)	Regulatory Surcharge - 1 (Applicable for FY 2015-16) (As approved in this Order)
DVVNL	2.84%	1.14%
MVVNL	2.84%	0.73%
PVVNL	2.84%	2.84%
PuVVNL	2.84%	1.03%
KESCO	0.00%	0.00%

Note: The Regulatory Surcharge for FY 2015-16 as approved in this Order would be effective from 1<sup>st</sup> April, 2015"

8.3.6 The relevant extract of the aforesaid Order regarding applicability of Regulatory Surcharge-2 (i.e. for the recovery of approved Revenue Gap on account of True-up of ARRs for FY 2008-09 to FY 2011-12) for FY 2015-16 has been reproduced below:



"With regard to above, the Commission is of the view that the Distribution Licensees have shown its sincere efforts to the direction given by the Commission. As detailed above, the Distribution Licensees have undertaken various initiatives such as new connection drive, feeder wise loss reduction drive, OTS and regularization of connection, etc. In this regard, it is to be noted that the Commission has given consumer addition target of 35.96 lakh for FY 2014-15 to the Distribution Licensees, in compliance to which the Distribution Licensees has added around 24 lakh consumers in time period of only two months. Thus, considering the remarkable achievement of the Licensees with regard to the consumer addition target, the Commission approves the Regulatory Surcharges for FY 2015-16 at the same level as approved in the Tariff Orders for FY 2014-15 dated October 1, 2014 for the Distribution Licensees namely DVVNL, PVVNL, PuVVNL & MVVNL.

The summary of the Regulatory Surcharge-2 applicable for FY 2014-15 and FY 2015-16 is shown in the Table below:

Table-5: Summary of the Regulatory Surcharge - 1 applicable for FY 2014-15 and FY 2015-16 is shown in the Table below:

Distribution Licensee	Regulatory Surcharge - 2 (Applicable for FY 2014-15) (As approved in Order dated Oct 1, 2014)	Regulatory Surcharge - 2 (Applicable for FY 2015-16) (As approved in this Order)
DVVNL	2.38%	2.38%
MVVNL	2.38%	2.38%
PVVNL	2.38%	2.38%
PuVVNL	2.38%	2.38%
KESCO	2.23%	2.01%

Note: The Regulatory Surcharge for FY 2015-16 as approved in this Order would be effective from 1<sup>st</sup> April, 2015

......As detailed in by the Commission in its Orders dated June 6, 2014 and October 1, 2014, the Regulatory Surcharges reduced on account of the under-achieved performance targets shall be considered as deemed recovery. The Commission after accounting the actual recovery and the deemed recovery shall true-up the over / under recovery of the accumulated Regulatory Surcharges while undertaking the Truing up of the relevant year.



The Licensees are directed to depict the Regulatory Surcharges distinctly in the electricity bills of the consumers. The Commission directs the Licensee to maintain separate accounting fields to capture the amounts collected as Regulatory Surcharges in both of its financial and commercial statements. This would enable the Licensee to correctly report the amounts collected towards Regulatory Surcharges.

Further as in the absence of the actual distribution losses the Commission for the purpose of this Order has considered the estimated Distribution Losses for FY 2014-15 as provided in its ARR / Tariff Petitions for FY 2015-16, the applicable Regulatory Surcharges for FY 2015-16 as worked out in this Order are provisional and subject to change based on the actual additional consumer addition and the actual distribution losses for FY 2014-15. The Distribution Licensees are directed to submit the same at the earliest.

It is to be noted that as the efforts for reduction in line losses have been mostly directed at the domestic and agriculture consumers, the revised Regulatory Surcharge-1 & Regulatory Surcharge-2 for FY 2015-16 as approved in this order, would only be applicable for the consumer of LMV-1 & LMV-5 categories only."

- 8.3.7 With regard to above, it must be noted that the Regulatory Surcharge-1 was to be levied as per the Commission's Order dated April 22, 2015 @ 2.84% on the "Rate" to all categories of consumers except LMV-1 & LMV-5 categories in the supply area of DVVNL, MVVNL, PVVNL and PuVVNL (except KESCO supply area). The consumers of LMV-1 & LMV-5 categories was to be levied Regulatory Surcharge-1 at 1.14% for DVVNL, 0.73% for MVVNL, 2.84% for PVVNL and 1.03% for PuVVNL on the "Rate" during FY 2015-16.
- 8.3.8 The Commission in its Tariff Order for FY 2015-16 dated June 18, 2015 had revised levy of Regulatory Surcharge (RS)- 2 @ 4.28% for liquidation of the regulatory asset which was made applicable in the supply areas of DVVNL, MVVNL, PVVNL and PuVVNL. The relevant extract of the same is reproduced below:

"8.4.11 **Thus, the applicable Regulatory Surcharge-2 for FY 2015-16 shall be 4.28%.** However, the Regulatory Surcharge for subsequent year shall be linked with the actual performance of the Licensees in previous year i.e. the regulatory surcharge for FY 2016-17 will depend on the performance of the Licensees in FY 2015-16. In case the Distribution Licensees fail to



achieve the consumer addition target, metering target and the Distribution loss target in FY 2015-16 as specified in the Table below, the regulatory surcharge for subsequent year i.e. FY 2016-17 shall be reduced by 10% over the applicable regulatory surcharge for the previous year (i.e. FY 2015-16). "

8.3.9 Further, in the Tariff Order for FY 2015-16, the Commission had also linked the Regulatory Surcharge for FY 2016-17 with the actual performance of the Licensees in FY 2015-16. The relevant extract of the Order is reproduced below:

"8.4.12 Considering the significance of performance parameters, equal weightage has been assigned to all the three targets specified by the Commission (i.e. for non achievement of the targets 10% reduction would be done in such a manner that, if the metering target is not achieved then regulatory surcharge shall reduce by 3.33%. Similarly, if consumer addition target and Distribution Loss target is not achieved then regulatory surcharge shall reduce by 3.33% and 3.34% respectively). The Commission at the end of FY 2015-16 shall again review the applicability of the regulatory surcharge for future years i.e. beyond 2016-17 based on the actual performance of Licensee in the previous years.

TABLE 8-7: LINKING OF PERFORMANCE OF THE LICENSEES TO REGULATORY
SURCHARGE OF FY 2016-17

Distribution	Linking of Performance of the Licensees to Regulatory Surcharge of FY 2016-17						
Licensees	Target number of Consumers to be added in FY 2015-16	Target Number of Unmetered Connection to be converted to Metered Connection in FY 2015-16 (20% of the actual Unmetered Consumers as on December 2015)	Distribution Loss Target for FY 2015-16				
	(A)	(B)	(C)				
DVVNL	821,838	170,869	29.00%				
MVVNL	1,249,500	277,275	21.03%				
PVVNL	420,537	364,808	19.52%				
PuVVNL	1,104,188	510,889	20.93%				
Total	3,596,063	1,323,841	22.67%				

8.4.16 Based on the achievement or under-achievement of performance parameters the Regulatory Surcharge for subsequent financial year i.e. FY 2016-17 shall be revised as detailed above and the same shall be applicable for FY 2016-17."



- 8.3.10 Subsequently, the Commission, in the Suo-Moto proceedings in the matter of Regulatory Surcharge, issued an Order on April 18, 2016, directed the Distribution Licensees namely DVVNL, PuVVNL, PVVNL and MVVNL to stop collection of Regulatory Surcharge (RS)-1 after March 31, 2016 and submit the year and category / sub-category wise amount collected with regard to Regulatory Surcharge(RS)-1. The accounts of RS-1 shall be finalized at the time of Truing up of FY 2015-16. The relevant extract of the same is reproduced below:
  - "3. In view of the above the Commission directs the Distribution Licensees to stop collection of RS-1 after March 31, 2016 and submit the year and category / sub-category wise amount collected in this regard. The accounts of RS-1 shall be finalised at the time of truing up of FY 2015-16."
- 8.3.11 Further, the Commission in the aforesaid Order also directed the Distribution Licensees to continue levying of Regulatory Sucharge-2 (RS-2) as per the Tariff Orders for FY 2015-16 dated June 18, 2015 till issuance of further Orders in this regard. The relevant extract of the same is reproduced below:
  - "4. The Commission also directs the Distribution Licensees to continue levying of RS-2 as per the Tariff Orders for FY 2015-16 dated June 18, 2015 till issuance of further Orders in this regard."
- 8.3.12 The Commission in its deficiency note dated January 29, 2016 had asked the Distribution Licensee to submit consumer category and sub-category wise Regulatory Surcharges (separately for Regulatory Surcharge-1 & Regulatory Surcharge-2) collected for each year till FY 2015-16 (December). In view of the above, the Distribution Licensee submitted the requisite details as Annexure-5, wherein the data pertaining to RS-1 & RS-2 was not shown under separate heads.
- 8.3.13 The Commission has also observed in the True-up Petition that the Revenue for the 4 State Discoms namely DVVNL, PVVNL, MVVNL & PuVVNL have changed significantly in comparison to the approved amount in the Tariff Orders for FY 2013-14 and subsequently the Regulatory Surcharge amount collected thereon would have been reduced in proportion. The actual revenue as per the True-up petition is depicted below in the table.

# Table 8-4: REVENUE CLAIMED BY THE DISTRIBUTION LICENSEES FOR FY 2013-14 (Rs. CRORE)



Particulars	Tariff Order FY 2013-14	True-up Petition FY 2013-14
DVVNL	6,189.82	4,943.64
PVVNL	10,583.72	9,025.95
MVVNL	6,092.48	4,698.54
PuVVNL	6,261.57	5,044.45

- 8.3.14 The Commission is unable to a take a view with regard to the collection and recovery of Regulatory Surcharge-1 in absence of amount recovered and directs the Licensees to submit the consumer category and sub-category wise Regulatory Surcharges separately for Regulatory Surcharge-1 & Regulatory Surcharge-2 collected for each year since inception at the earliest. In absence of this information, the Commission would be forced to draw a presumption about liquidation of Regulatory Assets.
- 8.3.15 Also, in the previous Tariff Order for FY 2015-16, the Distribution Licensee was directed to submit the actual Regulatory Surcharge recovered in FY 2015-16 on account of the Revenue Gap / Regulatory Asset admitted by the Commission in the Tariff Order FY 2015-16 along with the actual Distribution Losses achieved in FY 2015-16, number of unmetered connection converted to metered connection and additional target consumers added in FY 2015-16 by April 15, 2016. Based on the submissions, achievement or under-achievement of performance parameters, the Regulatory Surcharge for subsequent financial year i.e. FY 2016-17 was to be decided.
- 8.3.16 It is to be noted that the Petitioner has not submitted any information with regard to the performance parameters like number of consumers added, number of unmetered consumers converted to metered consumers and actual distribution loss in FY 2015-16 as directed by the Commission in its Tariff Order for FY 2015-16. The Petitioner is hereby directed to submit the relevant information at the earliest from the issuance of this Order. Further the Commission directs DVVNL, MVVNL and PuVVNL to continue levy of Regulatory Surcharge-2 for FY 2016-17 at the same rate as specified in the Tariff Order for FY 2015-16 i.e. 4.28% till issuance of further Order in this regard. For PVVNL the reduced Regulatory Surcharge-2 applicable for FY 2016-17 shall be 3.03% in view of total liquidation of regulatory assets of PVVNL during FY 2016-17. The details with regard to levy of Regulatory Surcharge-2 have been discussed subsequently in this Order.



# 8.4 TREATMENT OF REVENUE GAP / REGULATORY ASSET ADMITTED IN THIS ORDER

8.4.1 With regard to the carrying cost, while undertaking the True up of FY 2008-09 to FY 2011-12, the Commission in Tariff Order for FY 2014-15 has disallowed the claim of Petitioner towards carrying cost. The relevant extract of the aforesaid Order is reproduced below:

"UPPCL and the State Discoms namely DVVNL, PuVVNL, MVVNL and PVNNL have filed an Appeal before the Hon'ble ATE against the Commission's views on the matter. Since, the matter is sub-judice before the Hon'ble ATE, the Commission has considered the same philosophy on the issue as mentioned above. Therefore, the Commission has disallowed the Petitioner's claim towards carrying cost in the present Order. However, the same shall be reviewed based on the Judgment of the Hon'ble ATE in this regard."

- 8.4.2 Thus, in line with the approach adopted by the Commission in its earlier Order, the Commission has disallowed the claim of Petitioner towards carrying cost in present Order.
- 8.4.3 The Commission recomputed the revenue gap as determined in the Tariff Order for FY 2014-15 in its Tariff Order for FY 2015-16 as mentioned below:

Table-8-4: REVISED REVENUE GAP FOR FY 2014-15

Particulars	PVVNL	MVVNL	DVVNL	PuVVNL	Consolidated for 4 Discoms
Revenue Gap for FY 2008-09 to FY 2011-12	1496.49	3704.02	3862.86	4137.06	13200.44
Efficiency Gain for FY 2011-12	-	-	-	71.02	71.02
Revised Revenue Gap for FY 2008-09 to FY 2011-12	1,496.49	3,704.02	3,862.86	4,208.07	13,271.45
Carrying Cost on the Regulatory Asset @ 10%	74.2	183.7	191.6	208.7	658.12
Revenue Gap / (Surplus) for FY 2014-15 (at existing Tariff)	-767.6	325.9	335.4	188.9	82.57
Increase in Revenue due to Tariff revision	445.7	252.2	257.7	387.0	1342.63
Net Revenue Gap for FY 2014-15 after tariff increase (Including gap for FY 2008-09 to FY 2011-12)	357.4	3961.4	4132.1	4218.6	12669.50
Recovery through Regulatory	133.3	74.9	79.9	83.5	371.65



Particulars	PVVNL	MVVNL	DVVNL	PuVVNL	Consolidated for 4 Discoms
Net Revenue Gap after considering part recovery of Regulatory Asset	224.0	3886.5	4052.2	4135.2	12297.85
admitted by the Commission in Order dated October 1, 2014	224.0	3886.5	4052.2	4135.2	12297.

8.4.4 Further the Commission in its Tariff Order for FY 2015-16 dated June 18, 2015 determined the revenue gap as follows:

Table 8-6: REGULATORY SURCHARGE FOR FY 2015-16

Particulars	PVVNL	MVVNL	DVVNL	PuVVNL	Consolidat ed for 4 Discoms
Net Revenue Gap after considering part recovery of Regulatory Asset admitted by the Commission in Order dated October 1, 2014	224.0	3886.5	4052.2	4135.2	12297.85
Carrying Cost on the Regulatory Asset as admitted in Order dated October 1, 2014 @ 10%	22.4	388.6	405.2	413.5	1229.79
Total Revenue Gap (Including Carrying Cost)	246.5	4275.1	4457.4	4548.7	13527.64
Revenue Gap for FY 2012-13	987.55	1603.54	1539.80	1575.82	5706.71
Carrying Cost on the Regulatory Asset for the Revenue Gap of FY 2012-13 @ 10%	78.46	127.40	122.34	125.20	453.41
Revenue Gap for FY 2012-13 after Carrying Cost	1066.01	1730.95	1662.14	1701.03	6160.12
Total Revenue Gap till FY 2012-13 (Including Gap of Previous Years )	1312.46	6006.09	6119.51	6249.70	19687.76
Revenue Gap / (Surplus) for FY 2015- 16 (at existing Tariff)	-82.46	476.99	1717.30	1228.14	3339.97
Increase in Revenue due to Tariff revision	501.27	336.64	328.84	318.30	1485.05
Total approved revenue for FY 2015- 16	12791.89	8098.79	8691.82	8104.96	37687.47
Net Revenue Gap for FY 2015-16 after tariff increase	<i>-583.73</i>	140.35	1388.47	909.83	1854.91
Recovery through Regulatory Surcharge	434.99	275.40	295.57	275.61	1281.58
Net Revenue Gap after considering part recovery of Regulatory Asset admitted by the Commission in this	293.74	5871.03	7212.41	6883.92	20261.10



	Particulars	PVVNL	MVVNL	DVVNL	PuVVNL	Consolidat ed for 4 Discoms
C	Order					

8.4.5 The consolidated revenue gap admitted by the Commission after undertaking the Truing up of FY 2013-14 and determining the ARR and revenue for FY 2016-17 is summarised in the table below:

Table 8-5: SUMMARY OF CONSOLIDATED REVENUE GAP FOR 4 STATE OWNED DISTRIBUTION LICENSEES ADMITTED BY THE COMMISSION (Rs. Crore)

Particulars	Petitioner	Approved
Revenue Gap for FY 2013-14	9736.60	4893.40
Revenue Gap / (Surplus) for FY 2016-17 (at existing Tariff)	8579.43	4242.92
Increase in Revenue due to revision in Tariff	2690.22	1537.47
Total approved revenue for FY 2016-17 (Excluding Regulatory Surcharge)	49978.54	49877.91
Net Revenue Gap for FY 2016-17 after tariff increase (Including gap for FY 2013-14)	15625.80	7598.86

- 8.4.6 The Commission in its Tariff Orders for FY 2014-15 and FY 2015-16 for the State Discoms has allowed carrying cost with an interest rate of 10% on regulatory assets accumulated over the years. Hon'ble APTEL in its various Judgments has also held that sufficient carrying cost should be entitled to the Distribution Licensees for the regulatory assets. The Commission has been considering 12.50% as rate of interest for calculating the interest on working capital. So, the Commission is of the view that the Discoms should be allowed carrying cost at a rate same as that of interest on working capital. Thus, the Commission in this Order has considered rate of 12.50% while calculating carrying cost of the regulatory assets.
- 8.4.7 It may be observed that even after a considerable increase in Tariff allowed by the Commission in this Order, there is still a large accumulated revenue gap. The huge and ever increasing cumulative revenue gap to be recovered from the consumers is a matter of great concern for the Commission as well as the Licensees. As discussed in the regulatory surcharge chapter the Discoms despite the directions, Orders, reminders and follow up by the Commission have not submitted the actual amount recovered under Regulatory Surcharge-1 (RS-1) and Regulatory Surcharge-2 (RS-2) separately as a result of which the



- Commission could not make computations for determination of Regulatory Surharge-2 to be made applicable for FY 2016-17.
- 8.4.8 Thus, the Commission for liquidation of the Regulatory asset for past yearsdirects DVVNL, MVVNL and PuVVNL to continue levy of Regulatory Surcharge-2 for FY 2016-17 at the same rate as specified in the Tariff Order for FY 2015-16 i.e. 4.28% till issuance of further Order in this regard.
- 8.4.9 It has been observed that there will be over recovery for PVVNL if Regulatory Surcharge-2 is allowed to be recovered at the same rate of 4.28% as that for PuVVNL, DVVNL and MVVNL applicable for the period of applicability of Tariff Order for FY 2016-17. Regulatory Surcharge is being levied on the consumers for recovery of regulatory asset created out of past revenue gaps. Once the Regulatory Asset is fully recovered then the consumers should not be liable to pay any Regulatory Surcharge which is also in line with the principles of natural justice and Electricity Act, 2003.
- 8.4.10 The Commission has analysed that if the rate of Regulatory Surcharge-2 applicable to the consumers of PVVNL is reduced by 1.25% over the current rate of 4.28% i.e. if the Regulatory Surcharge-2 applicable to the consumers of PVVNL is limited to 3.03% then there will be full recovery of the regulatory asset during FY 2016-17. In this manner by keeping the retail tariff same for all the State Discoms and by varying only a percentage of Regulatory Surcharge-2 levied for recovery of past revenue gap, it will be ensured that the PVVNL is not allowed excess recovery. Thus, for PVVNL the Regulatory Surcharge-2 applicable for FY 2016-17 shall be 3.03% in view of total liquidation of its regulatory assets during FY 2016-17.
- 8.4.11 Further, the Petitioner has submitted that given the significant amount of revenue gap, the whole impact may not be able to be passed through a revision in retail tariffs, as it may lead to massive tariff shock. In view, of the same the Petitioner has requested the Commission to find out a suitable way in which the Petitioner can recover its revenue gap and also the least burden can be passed on to the retail consumers to protect them from tariff shock. The Commission directs that the Petitioner to optimally utilize its resources and undertake various efficiency improvement measures to recover its revenue gap for FY 2016-17, which is the best way possible to recover the balance gap thereby passing least burden to the consumers.



8.4.12 The detailed calculation of Regulatory Surcharge and regulatory assets for the 4 State Discoms (DVVNL, MVVNL, PuVVNL and PVVNL) are provided in the table below:

Table 8-6: REGULATORY SURCHARGE FOR FY 2016-17

Particulars	PVVNL	MVVNL	DVVNL	PuVVNL	Consolidated for 4 Discoms
Net Regulatory Asset after considering part recovery of Regulatory Asset admitted by the Commission in the Tariff Order for FY 2015-16 dated June 18, 2015	293.74	5,871.03	7,212.41	6,883.92	20,261.10
Carrying Cost on the Regulatory Asset as admitted in Order dated June 18, 2015 @ 12.50%	36.72	733.88	901.55	860.49	2,532.64
Total Regulatory Asset (Including Carrying Cost)	330.46	6,604.91	8,113.96	7,744.41	22,793.73
Revenue Gap for FY 2013-14 (Trued Up)	418.85	1,315.68	1,979.03	1,179.85	4,893.40
Carrying Cost on the Regulatory Asset for the Revenue Gap for FY 2013-14 @ 12.5%	35.00	109.94	165.37	98.59	408.90
Total Regulatory Asset for FY 2013-14 including Carrying Cost	453.85	1,425.62	2,144.40	1,278.44	5,302.30
Total Regulatory Asset till FY 2013-14 (including Gap of previous years)	784.31	8,030.53	10,258.36	9,022.84	28,096.04
Net Revenue Gap for FY 2016-17 after tariff increase	(460.21)	0.00	0.00	0.00	(460.21)
Regulatory Surcharge (in %)	3.03%	4.28%	4.28%	4.28%	
Recovery through Regulatory Surcharge	324.10	278.72	301.94	388.98	1,293.75
Net Regulatory Asset after considering part recovery of Regulatory Asset admitted by the Commission in this Order	-	7,751.80	9,956.42	8,633.86	26,342.08

8.4.13 The Licensees are directed to depict the Regulatory Surcharge separately and distinctly in the electricity bills of the consumers. The Commission directs the Licensee to maintain separate accounting fields for the regulatory surcharge and capture the amounts collected as Regulatory Surcharge in both of its



- financial and commercial statements. This would enable the Licensee to correctly report the amounts collected towards Regulatory Surcharge.
- 8.4.14 The Distribution Licensees are directed to submit the actual Regulatory Surcharge recovered in FY 2016-17 on account of the Revenue Gap / Regulatory Asset admitted by the Commission in this Order along with the actual Distribution Losses achieved in FY 2016-17.



### 9. DIRECTIVES

#### 9.1 DIRECTIVES PROVIDED BY COMMISSION AND THEIR COMPLIANCE BY LICENSEE

9.1.1 The Commission had issued several directives to the Licensee in the previous Tariff Order dated May 31, 2013, October 1, 2014 and June 18, 2015. The status of compliance as submitted by the Licensee is as detailed in the following Table:

Table 9-1: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER FOR FY 2013-14 DATED MAY 31, 2013

SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
1	The Commission directs the Licensee to pressingly pursue the proposal for allocation of PPAs to Discoms with GoUP and expedite the process of allocation.	Immediate	The Petitioner submitted that the process of allocation of PPAs to the Discoms has already been sent to the GoUP for notification and the matter is still pending at their level.	pursue the matter with GoUP and complete the process at the earliest.
2	The Commission directs the Licensee to pressingly pursue the GoUP for finalisation of the Transfer Scheme and submit a copy of the same.	Within 3 months	The Petitioner submitted that the matter is being handled through the holding company namely UPPCL on behalf of all the Discoms which is	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			pressingly pursuing the matter with the GoUP for the finalization of the Transfer Scheme.	



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
3	The Commission reiterates its direction to the Licensee to ensure proper maintenance of detailed fixed assets registers as specified in the Distribution Tariff Regulations. As the fixed asset registers are pending since the creation of Discom, the Commission directs the Licensee to submit a status report and provide the proposed timelines / milestones for clearing the backlog. The Commission understands that clearing the backlog would take substantive time. In order to ensure that fixed asset registers are timely and regularly prepared going forward, the Commission directs the Licensee to prepare the fixed asset registers duly accounting for the yearly capitalisation from FY 2012-13 onwards. The capitalisation for the period before that may be shown on gross level basis. This dispensation is merely to ensure that the proper asset registers capturing all necessary details of the asset, including the costs incurred, date of commissioning, location of asset, and all other technical details are maintained for the ensuing years. However, the Licensee would also be required to clear the backlog in a time bound manner. Upon finalisation of the Transfer Scheme and clearing of backlog, the Licensee may update the fixed asset registers appropriately by passing necessary adjustments.	Immediate	The Petitioner submitted that it has not been able to finalise the preparation of the FARs due to the huge backlog of previous financial years. The Petitioner requested time extension in this regard.	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
4	The Commission directs the Licensee to frame an appropriate policy on capitalization of (i) employee costs, and (ii) A&G expenses.	Along with the petition for FY 2014-15	The Petitioner's policy on capitalization of (i) Employee costs, and (ii) A&G expenses has been provided in the Notes on Accounts annexed with the audited accounts which is reproduced below: "Due to multiplicity of functional units as well as multiplicity of function at particular unit, employee cost and general & administration expenses to capital works are capitalised @ 15% on distribution and deposit work, 11% on other works on the amount of total expenditure."	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
5	The Commission directs the Licensee to submit Fresh Actuarial Valuation Study Report in respect to employee expenses.	Along with the petition for FY 2014-15	The Petitioner submitted that the matter would be taken up at UPPCL level as the employees of the Licensee are not its core employees but common employees across all Discoms, UPPTCL and UPPCL.	addressed the same in its directive for FY
6	As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where Orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts along with policy framework for managing bad debts for the Commission's perusal.	Within 1 month	The Petitioner submitted that it had submitted a procedure for identifying and writing off old arrears and a copy of the same was submitted to the Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15. Appropriate directions have been issued to the field units to compile	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			the sample cases based on such Order issued by the licensee.	
7	The Commission directs the Licensee to evolve principles for prudent segregation of ARR towards wheeling function and retail supply function embedded in the distribution function in accordance with Clause 2.1.2 of the Distribution Tariff Regulations.	Within 4 months	The Licensee submitted that the same would be taken up subsequent to the notification of the Multi Year Tariff Regulations which are currently under formulation.	comply with the direction of the Commission as per the



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
8	The Commission directs the Licensee to submit a long term business plan in accordance with Clause 2.1.7 of the Distribution Tariff Regulations.  The Licensee in such business plan shall identify capex projects for the ensuing year and subsequent four years and submit detailed capital investment plan along with a financing plan for undertaking the identified projects in order to meet the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply, system reliability, metering, communication and computerization, etc.	Within 3 months	The Licensee submitted that the same would be taken up subsequent to the notification of the Multi Year Tariff Regulations which are current under formulation.	submit the business plan for the control period as per the
9	The Commission directs the Licensee to conduct benchmarking studies to determine the desired performance standards in accordance with Clause 2.1.8 of the Distribution Tariff Regulations.	Within 3 months	The Petitioner submits that as per the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 the benchmarking studies have to	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			be undertaken by the distribution companies are to be taken up. Accordingly, the distribution companies are most likely to take up the same at the earliest.	
10	The Commission directs the Licensee to conduct proper loss estimate studies for assessment of technical and commercial losses under its supervision so that the Commission may set the base line losses in accordance with Clause 3.2.3 and Clause 3.2.4 of the Distribution Tariff Regulations and submit the report to the Commission.  The study shall segregate voltage-wise distribution losses into technical loss (i.e. Ohmic/Core loss in the lines, substations and equipment) and commercial loss (i.e. unaccounted energy due to metering inaccuracies/inadequacies, pilferage of energy, improper billing, no billing, unrealized revenues etc.).	Within 3 months	PFC Consulting Ltd has submitted a draft approach paper which is in discussion stage. Once the approach paper is finalised, the Petitioner would submit the same to the Commission.	submit the same at the



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
11	The Commission directs the Licensee to conduct Cost of Service studies which would serve as a tool for alignment of costs and charges and submit details regarding the cost of service studies for each category or voltage level.	Within 6 months	PFC Consulting Ltd. has submitted a draft approach paper which is in discussion stage. Once the approach paper is finalised, the Petitioner would submit the same to the Commission.	submit the same at the
12	Commission directs the Licensee to submit a road map for 100% metering in its licensed area. However, based on the ground realities, if the Distribution Licensee seeks exemption towards its metering obligation for any particular category of consumers, it must provide the Commission revised norms specific for its supply area, based on fresh studies, for assessment of consumption for these categories. Sales forecast for un-metered categories shall be validated with norms approved by the Commission on the basis of above study carried out by the Licensee.	Within 2 months	Petitioner submitted that as per the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 the study for assessment of metered and unmetered consumers has to be completed within a defined time frame. The road map of 100% metering has already been defined by the	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			Commission.	
13	The Commission directs the Licensee to install electronic meters in the residential consumers under LMV-10 category and submit a progress report every month.	Within one month	The Petitioner submits that Section 23 (7) of Electricity Reforms Act, 1999 provides that "terms and condition of service of the personnel shall not be less favorable to the terms and condition which were applicable to them before the transfer". The same spirit has been echoed under first proviso of section 133 (2) of the Electricity Act, 2003. The benefits for employees / pensioners as provided in section 12 (b) (ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 include "concessional rate of	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14th January, 2000.	
14	The Commission directs the Licensee to submit data related to its peak demand and off peak demand in MW along with its sales projections in accordance with Clause 3.1.4 of the Distribution Tariff Regulations.	Along with the petition for FY 2014-15	The Petitioner has not submitted any reply.	The Commission has addressed the same in its directive for FY 2016-17
15	The Commission directs the Licensee to reconcile the inter-unit balances lying un-reconciled either itself or through independent chartered accountant firms.	Along with the petition for FY 2014-15	The Petitioner submitted that the determination of tariff is done by the Commission on normative basis based on the Tariff Regulations. As such the inter-unit reconciliation has no forbearance on the ARR and Tariff determination and assessment of revenue	addressed the same in its directive for FY



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance as submitted by Petitioner in Petition	Commission's Direction
			gap.	
16	The Commission directs the Licensee to file submissions in respect of FPPCA in a timely and regular manner.	Every quarter as per the time frame prescribed in the Regulations	The Petitioner may kindly be allowed some more time.	The Commission has addressed the same in its directive for FY 2016-17
17	The Commission directs the Licensee to depict the regulatory surcharge distinctly in the electricity bills of the consumers and create separate accounting fields to capture the amounts collected as regulatory surcharge in both of its financial and commercial statements. The Commission directs the Licensee to provide the details of the regulatory surcharge so collected for FY 2013-14 duly certified by the statutory auditor.	By 30th September 2014	The Petitioner has not submitted any reply.	The Commission has addressed the same in its directive for FY 2016-17



## Table 9-2: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER FOR FY 2014-15 DATED OCTOBER 1, 2014

SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
1	The Licensee are directed to arrange for quarterly meetings between the MDs of the Licensees and the consumer representatives for solving various grievances of the consumers and submit a status report containing details of such meetings along with the next ARR filing.	Immediate	The consumer's grievances are mostly resolved at the sub division level. All complaints are handled at the level of sub divisional officer of the respective Discom. The status report of pending issues, if any, would be submitted in respect of each Discom after the closure of the current financial year.	·



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
2	The Commission directs the Licensee to pay the applicable interest on consumer's security deposit as per the Orders of the Commission and submit the compliance report with the next ARR filing. Licensees are directed to ensure the timely payment of the interest on security deposit to the consumers.	Immediate	The Petitioner submitted that the interest on consumer security deposit is being credited to the consumer's account in terms of the Supply Code and Tariff Orders of the Commission.	Licensee should submit the details of the actual interest on consumer security deposit paid to the consumers in FY 2014-15 & FY 2015-16



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
3	As regards the various complaints of the stakeholders brought to the notice of the Commission during public hearing, the Licensee is directed to look into the matters and take appropriate action on the same. Further, the Licensee must ensure that proper advertising regarding CGRF is done to bring awareness amongst the consumers. The chairperson of the CGRF should also be part of such public hearings so that a direct interaction may take place and the grievances of the consumers could be settled in a more appropriate manner	Immediate	The Petitioner has noted the directions of the Commission and a constructive approach towards prompt address and disposal of consumer grievances is always adopted to the best satisfaction of consumers. The Petitioner also welcomes the suggestion of the Commission towards proper advertising of the CGRFs and is working towards it.	Licensee should submit the advertisement given regarding CGRF to bring awareness amongst the consumers at the earliest



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
4	To provide accurate and effective consumption norms, the Commission directs the Petitioners to conduct a detailed study which should include all the relevant details pointed out by the Commission.	Within 6 months from issue of this Order	The Petitioner submitted that as per the Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 the study for assessment of metered and unmetered consumers has to be completed within a specified time frame. The licensee seeks some more time.	The Commission has addressed the same in its directive for FY 2016-17
5	As regards the Commission's directives to submit a road map for 100% metering in its licensed area given in the Tariff Order dated 31st May, 2013, the Licensees has not complied with the directions of the Commission. The Commission once again directs the Licensee to comply with the direction given by the Commission in this Order and accordingly put it sincere efforts to achieve 100% metering.	3 months from issue of this Order	The Petitioner submitted that the licensee is endeavoring to comply with the targets set by the Commission in terms of metering. The roadmap for 100% metering has already been given by the Commission, which shall be complied with.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
6	The Commission directs the Distribution Licensees to formulate a mechanism so as to make their officials accountable by providing incentives or disincentives for achievement or non-achievement of the distribution loss and the collection efficiency targets. The Policy should include all the relevant details pointed out by the Commission in this Order	Within 2 months from the issue of this Order	The Petitioner requested some more time to comply with the directives of the Commission. However, presently, monthly review meetings are being conducted in the form of video conferencing wherein the progress for each division is been monitored at the central level.	The Commission has addressed the same in its directive for FY 2016-17
7	The Commission further directs the Petitioner to sign the MoUs to be implemented at all levels and submit the copy of the same to the Commission within 2 months from the date of this Order.	Within 2 months from the date of issuance of this Order	The Petitioner requested for some more time to comply with the directives of the Commission.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
8	The Commission directs the Petitioner to provide the actual power purchase data in the format specified by the Commission along with the ARR Petition for FY 2015-16.	Next ARR filing	The Petitioner submitted that it has enclosed a detailed power procurement plan for the FY 2015-16 along with the ARR Petition.	The Commission has addressed the same in its directive for FY 2015-16
9	As regards timely filing of FPPCA the Commission once again directs the Licensee that they should file FPPCA in a timely and regular manner in accordance with the Distribution Tariff Regulations, 2006 failing which the Commission may have to resort to take strict action against the Licensees.	Immediate	The Petitioner requested for some more time.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
10	As regards the increasing number of unmetered consumers the Commission accords a final opportunity to the Distribution Licensee and directs them to ensure that all their unmetered consumers get converted into metered connection.	By 31st March, 2015	The Petitioner is committed to the target set by the Commission.	The Petitioner should adhere to the timeline as specified by the Commission from time to time
11	As regards the RPO Obligation the Licensee are directed to ensure that they procure renewable energy in accordance with Regulation 4 of the UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 during FY 2014-15 to meet their obligation.	Next ARR filing	The Petitioner is procuring power from various renewable energy sources such as bagasse based co-generation plants, small hydro power stations, biomass based renewable energy plants, solar, etc with a view to promote green energy sources and compliance with the UPERC RPO Obligations.	has addressed the same in its



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
12	As regards the choice of connection, the Licensee, in accordance with the provisions of the supply code wherein the consumer has the choice to opt the supplier, is directed to release connections to all such consumers who desire to disconnect their connections from the single point supplier and instead wish to take connections directly from the Licensee and submit the status report on the same along with next ARR filing	Next ARR filing	Wherever feasible (both technical and economical), the Petitioner is complying with the provisions of the Supply Code.	The Commission has addressed the same in its directive for FY 2015-16.



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
13	The Licensee is directed to provide the monthly MRI reports to all the applicable consumers through email. The consumers would be required to register their email to the Licensee and submit the status report on the same along with next ARR filing	Immediate	The MRI reports are being provided to the consumers. However, the possibilities of sending the same by email are being explored by the Petitioner.	The Licensee must expedite the process to comply with the direction given by the Commission and submit the compliance of the same at the earliest.



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
14	The Licensee is directed to file a separate Petition for approval of prior period expenses / incomes. The Petition should clearly indicate the head-wise year-wise bifurcation of prior period expenses / incomes clearly indicating the impact of such expenses / incomes on various ARR components, and such impact should not exceed the normative expenses for any particular year.	1 month from the date of issuance of this Order	The Petitioner submits that the prior period expenses / incomes are recognised in the financial statements in compliance with the Accounting Standards (AS 5) (Revised) on 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' which does not require year wise classification of prior period items. As there was no statutory requirement of classifying the prior items with respect to the each year to which they pertain, such information was not specifically depicted in the audited accounts. Considering this, the expenses and incomes which are omitted to be accounted for in one or more financial years are accounted for as and when such omissions or errors are detected. However, given the directive by the Commission, the Petitioner has instructed the field units to compile such information. The information made available by the field units would be compiled at the zonal level and then zonal accounts would be compiled at the corporate level. Given the complexity of this task, the Petitioner seeks waiver from immediate submission of this information.	The Commission has addressed the same in its directive for FY 2015-16



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
15	The Licensee is directed to submit a note detailing the area-wise actual number of supply hours provided to rural areas by the end of FY 2014-15.	By end of FY 2014-15	The same shall be submitted shortly.	The Commission has addressed the same in its directive for FY 2015-16



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
16	The Licensees are directed to depict the Regulatory Surcharge separately and distinctly in the electricity bills of the consumers. The Commission directs the Licensee to maintain separate accounting fields for both the regulatory surcharges approved vis-a vis the Commission's Order dated 6th June, 2014 and that approved in this Order, and capture the two different amounts collected as Regulatory Surcharges in both of its financial and commercial statements. This would enable the Licensee to correctly report the amounts collected towards Regulatory Surcharges.	Immediate	Suitable instructions have been issued to the billing agencies and field units to create a separate and distinct head under which the regulatory surcharges would be collected.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
17	The Distribution Licensees are directed to submit the actual Regulatory Surcharge recovered in FY 2014-15 on account of the Revenue Gap / Regulatory Asset admitted by the Commission in this Order along with the actual Distribution Losses achieved in FY 2014-15 and additional target consumers added in FY 2014-15 by 15th April, 2015.	By 15th April, 2015	The Petitioner submitted that it would be able to submit the figures of actual regulatory surcharge recovered in FY 2014-15 by 30th June 2015. This is due to the reason that the commercial statements are finalised with a time lag of 2 months.	The Commission has addressed the same in its directive for FY 2016-17



### Table 9-3: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER FOR FY 2015-16 DATED JUNE 18, 2015

SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
1	The Commission directs the Licensee to pressingly pursue the GoUP for finalisation of the Transfer Scheme and submit a copy of the same.	Within 3 months	The Petitioner submitted that efforts are already underway as regards finalization of transfer schemes, line pending for notification by the GoUP.	The Commission has addressed the same in its directive for FY 2016-17
2	The Commission reiterates its direction to the Licensee to ensure proper maintenance of detailed fixed assets registers as specified in the Distribution Tariff Regulations. As the fixed asset registers are pending since the creation of Discom, the Commission directs the Licensee to submit a status report and provide the proposed timelines / milestones for clearing the backlog.	Immediate	The Petitioner submitted that it has not been able to finalise the preparation of the FARs so far owing to the huge backlog of previous financial years. The Petitioner is committed to complete the fixed asset register as early as possible.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
3	The Commission directs the Licensee to frame an appropriate policy on capitalization of (i) employee costs, and (ii) A&G expenses.	Along with the petition for FY 2016-17	The Petitioner's policy on capitalization of (i) employee costs, and (ii) A&G expenses has been provided in the Notes on Accounts annexed with the audited accounts which is reproduced below: "Due to multiplicity of functional units as well as multiplicity of function at particular unit, employee cost and general & administration expenses to capital works are capitalised @ 15% on distribution and deposit work, 11% on other works on the amount of total expenditure."	the same in its directive for FY
4	The Commission directs the Licensee to submit Fresh Actuarial Valuation Study Report in respect to employee expenses.	Along with the petition for FY 2016-17	The Petitioner submitted that the matter would be taken up at UPPCL level as common cadre is maintained in the Discoms and UPPCL.	The licensee must submit the steps taken from its side to take up the matter with UPPCL at the earliest



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
5	As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts along with policy framework for managing bad debts for the Commission's perusal.		The Petitioner submitted that it has framed a policy for identifying and writing off old arrears and a copy of the same was submitted to the Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15. A copy of which again resubmitted and marked as Annexure-4. Appropriate directions have been issued to the field units to compile the sample cases based on such order issued by the licensee.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
6	The Commission directs the Licensee to submit data related to its peak demand and off peak demand in MW along with its sales projections in accordance with Clause 3.1.4 of the Distribution Tariff Regulations.	Along with the petition for FY 2016-17	The Petitioner submitted that the connected load is around 7700 MW and the R.D.M is around 2500 MW.	The Commission has addressed the same in its directive for FY 2016-17
7	The Commission directs the Licensee to reconcile the inter-unit balances lying un-reconciled either itself or through independent chartered accountant firms.	Along with the petition for FY 2016-17	The Petitioner submitted that the determination of tariff is done by the Commission on normative basis based on the Tariff Regulations. As such the inter-unit reconciliation has no forbearance on the ARR and Tariff determination and assessment of revenue gap.	



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
8	The Commission directs the Licensee to pay the applicable interest on consumer's security deposit as per the Orders of the Commission and submit the compliance report with the next ARR filing. Licensees are directed to ensure the timely payment of the interest on security deposit to the consumers.		The Petitioner submitted that the interest on consumer security deposit is being credited to the consumer's account in terms of the Supply Code and Tariff Orders of the Commission.	Licensee should submit the details of the actual interest on consumer security deposit paid to the consumers in FY 2014-15 & FY 2015-16



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
9	As regards the Commission's directives to submit a road map for 100% metering in its licensed area given in the Tariff Order dated 31st May, 2013, the Licensees has not complied with the directions of the Commission. The Commission once again directs the Licensee to comply with the direction given by the Commission in this Order and accordingly put it sincere efforts to achieve 100% metering.	3 months from issue of this Order	The Petitioner submitted that the road map of 100% metering of urban as well as rural consumers as directed by the Commission will be strictly complied with.	The Commission has addressed the same in its directive for FY 2016-17
10	The Commission further directs the Petitioner to sign the MoUs to be implemented at all levels and submit the copy of the same to the Commission	Within three months from the date of issuance of this Order	The Petitioner requested for some more time to comply with the directives of the Commission.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
11	The Commission directs the Petitioner to provide the actual power purchase data in the format specified by the Commission along with the ARR Petition for FY 2016-17	Next ARR filing	The Petitioner submitted that it has provided a detailed power procurement plan for FY 2015-16 and 2016-17 in the present petition.	The petitioner should submit the power procurement data in the required format at the earliest



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
12	As regards timely filing of FPPCA the Commission once again directs the Licensees that they should file FPPCA in a timely and regular manner in accordance with the Distribution Tariff Regulations, 2006 failing which the Commission may have to resort to take strict action against the Licensees like disallowance of additional power purchase expenses and the associated carrying cost on account of additional Power Purchase expenses or any other action that the Commission may deem fit while doing the Truing up.	Immediate	The Petitioner requested for some more time.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
13	As regards the RPO Obligation the Licensee is directed to ensure that they procure renewable energy in accordance with Regulation 4 of the UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 during FY 2014-15 to meet their obligation.	Next ARR filing	The Petitioner submitted that the RPO obligation is being met through purchase from co-generation and solar power producers.	



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
14	As regards the choice of connection, the Licensee, in accordance with the provisions of the supply code wherein the consumer has the choice to opt the supplier, is directed to release connections to all such consumers who desire to disconnect their connections from the single point supplier and instead wish to take connections directly from the Licensee and submit the status report on the same along with next ARR filing		Wherever feasible (both technically and economically), the Petitioner is complying with the provisions of the Supply Code.	The Licensee must submit the status report on the same for FY 2015-16.



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
15	The Licensee is directed to file a separate Petition for approval of prior period expenses / incomes. The Petition should clearly indicate the head-wise year-wise bifurcation of prior period expenses / incomes clearly indicating the impact of such expenses / incomes on various ARR components, and such impact should not exceed the normative expenses for any particular year.	1 month from the date of issuance of this Order	The Petitioner submitted that the prior period expenses / incomes are recognised in the financial statements in compliance with the Accounting Standards (AS 5) (Revised) on 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' which does not require year wise classification of prior period items. As there was no statutory requirement of classifying the prior items with respect to the each year to which they pertain, such information was not specifically depicted in the audited accounts. Considering this, the expenses and incomes which are omitted to be accounted for in one or more financial years are accounted for as and when such omissions or errors are detected. The desired information is required to be made available by the respective field unit which would be compiled at the zonal level and then zonal accounts would be compiled at the corporate level. Given the complexity and time involved in this task, the Petitioner humbly seeks waiver from immediate submission of this information.	Licensee should expedite the process and submit the same at the earliest



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
16	The Licensee is directed to submit a note detailing the area-wise actual number of supply hours provided to rural areas by the end of FY 2015-16.	2015-16	The Petitioner submitted that the information pertaining to the supply hours is being regularly published on the website of the Petitioner. Also the information towards the same has been provided in the succeeding chapter where load forecast has been discussed.	As the financial year 2015-16 is over, the Licensee should submit a note detailing the area-wise (circle wise) actual number of supply hours provided to rural areas during FY 2014-15 & FY 2015-16 at the earliest.



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
17	The Distribution Licensees are directed to submit the actual Regulatory Surcharge recovered in FY 2015-16 on account of the Revenue Gap / Regulatory Asset admitted by the Commission in this Order along with the actual Distribution Losses achieved in FY 2015-16 and additional target consumers added in FY 2015-16 by 15th April, 2016.	By 15th April, 2016	As per the directives of the Commission and the timelines prescribed, the details towards the recovered FPPCA would be submitted by 15th April 2016.	The Commission has addressed the same in its directive for FY 2016-17
18	The Commission directs the Licensee to evolve principles for prudent segregation of ARR towards wheeling function and retail supply function embedded in the distribution function in accordance with Clause 2.1.2 of the Distribution Tariff Regulations.	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner submitted that the Commission being an expert and independent body may kindly like to take up a study in this regard. Alternately, if the Petitioner is required to take up such study, then the Commission is requested to provide the terms of reference of such study so as to ensure that the study is conducted in an objective manner.	



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
19	The Commission directs the Licensee to submit a long term business plan in accordance with Clause 2.1.7 of the Distribution Tariff Regulations.	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17
	The Licensee in such business plan shall identify capex projects for the ensuing year and subsequent four years and submit detailed capital investment plan along with a financing plan for undertaking the identified projects in order to meet the requirement of load growth, refurbishment and replacement of equipment, reduction in distribution losses, improvement of voltage profile, improvement in quality of supply, system reliability, metering, communication and computerization, etc.			



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
20	The Commission directs the Licensee to conduct benchmarking studies to determine the desired performance standards in accordance with Clause 2.1.8 of the Distribution Tariff Regulations.	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17
21	The Petitioner should file its Annual ARR/ Tariff Petition for FY 2016-17 as per the Regulations 12.2, 12.7, 12.8, 12.9 notified vide MYT Regulations, 2014	As per the Time frame stipulated in MYT Regulations, 2014	The instant petition has been filed duly complying with the indicated provisions of the 2014 Tariff Regulations.	The Commission has taken note of the Petitioner submission and directs to comply the same in future filings also.
22	The Petitioner should complete the Assessment Study of metered consumers as per the Regulations 16.2 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
23	The Petitioner should complete the Assessment Study of un-metered consumers to establish base line norms as per the Regulations 17.1 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17
24	The Petitioner should complete the Study of Agriculture feeders segregated and not segregated in significant numbers to determine base line norms as per the Regulations17.2, 17.3 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
25	The Commission reiterates that the Licensees should conduct a detailed study to provide accurate and effective consumption norms as specified by the Commission in its earlier Orders and as per the provisions outlined in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 in the time bound manner.	As per the Time frame stipulated in MYT Regulations, 2014	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17
26	The Petitioner should submit Incremental Power Purchase Cost as per the Regulations 20.1 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission	Within 28 days of quarter end, for each quarter of Tariff Period 1.4.2015 to 31.3.2020	The Petitioner understands that it is required to submit the FPPCA petition up to 31.3.2017.	The Petitioner should adhere to the specified timeline.



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
27	The Petitioner should submit Roadmap for Reduction of Cross Subsidy as per the Regulation 39 notified vide MYT Regulations, 2014	Immediately	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Commission has addressed the same in its directive for FY 2016-17
28	The Petitioner should record and maintain Division wise, Circlewise AT&C Losses and submit the quarterly report to the Commission.	Quarterly for FY 2015-16	The Petitioner had filed such report along with the data gaps reply pertaining to the ARR petition for FY 2015-16.	The Petitioner must submit the Division wise, Circle-wise AT&C Losses for Last Quarter of FY 2015-16 at the earliest
29	The Petitioner should submit month wise details of number of supply hours for rural and urban area for FY 2014-15.	Within one month from issue of this Order	The information pertaining to the supply hours has been submitted along with the instant petition.	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
30	Licensee should provide online facility for submission of application for new connection, name change, load enhancement and load reduction	Within 3 months	The observations of the Commission have been noted and action has been initiated on such matters. The Petitioner has a robust automated consumer interface which has been detailed in the instant petition in the foregoing sections.	The Licensee should submit the current status and expedite the same. The Licensee must submit the status at the earliest
31	Licensee should develop the mobile application for online payments of bills including other services for facilitation to consumers	Within 3 months	The Petitioner is committed to introduce mobile application for online payment of bills and other services. The Petitioner has a robust automated consumer interface which has been detailed in the instant petition in the foregoing sections.	The Licensee should submit the current status and expedite the same. The Licensee must submit the status at the earliest



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance	Commission's Direction
32	The Petitioner should submit Standards of Performance parameters as per the tariff formats of Distribution Tariff Regulations, 2006.	Within one month from issue of this Order	The Petitioner would endeavour to meet the deadlines prescribed by the Commission.	The Licensee should submit the same at the earliest.
33	The Petitioner should submit additional consumers added in FY 2014-15 apart from the normal consumer addition.	Within three month of issue of this Order	The information pertaining to the number of consumers has been provided in the succeeding chapter where load forecast has been discussed.	The Commission has addressed the same in its directive for FY 2016-17
34	The Commission directs the Petitioner to frame guidelines and procedures for identifying, physically verifying and writing off the bad debts and also to fix responsibility of its employees in this regard and submit the same to the Commission for its approval	Within three months of issue of this Order	The Petitioner submitted that it has framed a policy for identifying and writing off old arrears and a copy of the same was submitted to the Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15. Appropriate directions have been issued to the field units to compile the sample cases based on such order issued by the licensee. A copy of same is enclosed and marked as Annerxure-4	The Commission has addressed the same in its directive for FY 2016-17



SI. No	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	om sue	
35	The Commission directs the Licensees that, from FY 2013-14 onwards it should clearly depict the total power purchase cost incurred at UPPCL level, total power purchase cost paid by the Licensees to UPPCL sand power cost payable to UPPCL in its true-up petitions for future years.	Next ARR filing	The directions issued by the Commission have been complied in the instant petition	The Commission has addressed the same in its directive for FY 2016-17
36	The Commission directs the Licensee that Open Access shall be allowed as per the provisions outlined by the Commission in its Regulations and amendments from time to time.	Immediate	Open access has already been operationalised in the MVVNL supply area.	The Licensee should submit the status & detail for the same in its Licensee area.

9.1.2 The Commission once again directs the Licensee to comply with the balance directives issued in the previous Tariff Orders. The compliance report on the said directives shall be submitted to the Commission within one month from the date of issue of this Tariff Order.



- 9.1.3 Further, some of the directives issued by the Commission in the present Tariff Order are in continuation or similar to the directives issued in the previous Tariff Order. In case the Licensees have not complied with the same earlier, it shall be necessary for them to provide reasons for non-compliance and further comply with the same as per the time-lines prescribed in the present Tariff Order.
- 9.1.4 The directives to the Licensee as issued under the present Tariff Order along with the time frame for compliance are given in the Table below:

Table 9-4: DIRECTIVES ISSUED UNDER THE PRESENT TARIFF ORDER

SI.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
1	The Commission directs the Licensee to pressingly pursue the GoUP for finalisation of the Transfer Scheme and submit a copy of the same.	Immediate
2	The Commission again reiterates its direction to the Licensee to ensure proper maintenance of detailed fixed assets registers as specified in the Distribution Tariff Regulations. As the fixed asset registers are pending since the creation of Discom, the Commission directs the Licensee to submit a status report and provide the proposed timelines / milestones for clearing the backlog. Also, the Petitioner must submit the Fixed Asset Register from FY 2012-13 to FY 2015-16 along with the petition for FY 2017-18.	With next ARR filings
3	The Commission directs the Licensee to frame an appropriate policy on capitalization of (i) employee costs, and (ii) A&G expenses.	Immediate
4	The Commission directs the Licensee to submit Fresh Actuarial Valuation Study Report in respect to employee expenses.	Immediate



SI.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
5	As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts along with policy framework for managing bad debts for the Commission's perusal.	Immediate
6	The Commission directs the Licensee to evolve principles for prudent segregation of ARR towards wheeling function and retail supply function embedded in the distribution function in accordance with Regulation 36 of the Multi Year Tariff Regulations, 2014. Further the Licensee is directed to submit the draft Term of Reference for the approval of the Commission.	Immediate
7	The Commission directs the Licensee to submit a business plan for the control period i.e. from April 1, 2017 to March 31, 2020 in accordance with Regulation 5, 12.1 & 13.1 of the Multi Year Tariff Regulations, 2014. The Licensee in such business plan shall submit but not limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets. The licensee should note that the specified timeline of June 1, 2016 for submission of the same under the Multi Year Tariff Regulation is over. The Licensee should submit the same at the earliest.	Immediate
8	The Commission directs the Licensee to conduct benchmarking studies to determine the desired performance standards in accordance with Regulation 4.2.1 of the Multi Year Tariff Regulations, 2014. The licensee should note that specified timeline of September 30, 2015 for submission of the same under the Multi Year Tariff Regulation, 2014 is over. The Licensee should submit the same at the earliest.	Immediate



Sl.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
9	The Commission directs the Licensee to ensure 100 % compliance of the Commission's Orders and targets to achieve 100% metering. The Licensee should submit the Quarterly progress report in this regard	Immediate
10	The Commission directs the Licensee to submit data related to its peak demand and off peak demand in MW along with its sales projections in accordance with Clause 3.1.4 of the Distribution Tariff Regulations. Licensee should submit the same for its licensee area.	Immediate
11	The Commission once again directs the Licensee to reconcile the inter-unit balances lying unreconciled either itself or through independent chartered accountant firms. The Commission has trued-up the ARR for various years. However, it has been observed that the amount shown in head of inter-unit balance is very high and a detailed reconciliation and breakup of the same should be submitted to the Commission. The above details should be submitted for FY 2011-12, FY 2012-13, 2013-14, 2014-15 and 2015-16.	Immediate
12	The Commission once again directs the licensee that they should file FPPCA in a timely and regular manner failing which the Commission may have to resort to take strict action against the Licensee like disallowance of additional power purchase expenses and the associated carrying cost on account of additional Power Purchase expenses or any other action that the Commission may deem fit while doing the Truing up.	Immediate
13	The Commission directs the Licensee to submit the consumer category and sub-category wise Regulatory Surcharges separately for Regulatory Surcharge-1 & Regulatory Surcharge-2 collected for each year since inception at the earliest.	Immediate



Sl.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
14	The Commission reiterates that the Licensee should adhere to the time line outlined in Uttar Pradesh Electricity Regulatory Commission (Multi Year Distribution Tariff) Regulations, 2014 for conducting a detailed study to provide accurate and effective consumption norms as specified by the Commission in its earlier directions. The licensee should note that specified timeline of December 1, 2015 for submission of the same under the Multi Year Tariff Regulation, 2014 has expired. The Licensee should submit the same at the earliest.	Immediate
15	The Commission once again directs the Distribution Licensee to formulate a mechanism so as to make their officials accountable by providing incentives or disincentives for achievement or non-achievement of the distribution loss and the collection efficiency targets. The Licensee should submit the same at the earliest.	Immediate
16	The Commission directs the Petitioner to sign the MoUs to be implemented at all levels and submit the copy of the same to the Commission	Immediate
17	The Petitioner should complete the Assessment Study of metered consumers as per the Regulations 16.2 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission. The licensee should note that specified timeline of September 30, 2015 for submission of the same under the Multi Year Tariff Regulation, 2014 has expired. The Licensee should submit the same at the earliest.	Immediate
18	The Petitioner should complete the Assessment Study of un-metered consumers to establish base line norms as per the Regulations 17.1 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission. The licensee should note that specified timeline of	Immediate



Sl.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
	December 1, 2015 for submission of the same under the Multi Year Tariff Regulation, 2014 is over . The Licensee should submit the same at the earliest.	
19	The Petitioner should complete the Study of Agriculture feeders segregated and not segregated in significant numbers to determine base line norms as per the Regulations17.2, 17.3 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission. The licensee should note that specified timeline of December 1, 2015 for submission of the same under the Multi Year Tariff Regulation, 2014 is over. The Licensee should submit the same at the earliest.	Immediate
20	The Petitioner should submit Roadmap for Reduction of Cross Subsidy as per the Regulation 39 notified vide MYT Regulations, 2014. The licensee should note that specified timeline of October, 2014 for submission of the same under the Multi Year Tariff Regulation, 2014 is over. The Licensee should submit the same at the earliest.	Immediate
21	The Petitioner should submit month wise details of number of supply hours for rural and urban area for FY 2014-15 & FY 2015-16	Within one month from issue of this Order
22	Petitioner should submit information with regard to the performance parameters like number of consumers added, number of unmetered consumers converted to metered consumers and actual distribution loss in FY 2014-15 & FY 2015-16. The Petitioner is hereby directed to submit the relevant information at the earliest from the issuance of this Order.	At the earliest
23	The Commission directs the Petitioner to frame guidelines and procedures for identifying, physically verifying and writing off the bad debts and also to fisx responsibility of its employees in	Immediate



Sl.No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order
	this regard and submit the same to the Commission for its approval.	
24	The Commission directs the Licensee that it should clearly depict the total power purchase cost incurred at UPPCL level, total power purchase cost paid by the Licensee to UPPCL and power cost payable to UPPCL for the year 2016.	At the time of next ARR filings
25	The Commission directs Licensees to submit every month a report comprising the details of the power purchased from all the sources demonstrating that the Merit Order Dispatch Principle has been strictly followed and that the procurement was optimal in regard to cost taking into consideration of the power available at the power exchanges etc.	Monthly Basis
26	The Petitioner should file the MYT Petition for the Control FY 2017-18 to FY 2019-20 as per the Regulations 12.2, 12.7, 12.8 & 12.9 as per MYT Regulations, 2014	As per MYT timeline
27	The Commission directs the Petitioner to submit a proposal for "Rate Schedule" linked to number of hours of supply.	At the time of next ARR filings
28	The Licensee is directed to explore the possibility of having TOD tariff structure for domestic and non-domestic categories and submit their proposal.	At the time of next ARR filings

9.1.5 The Commission would like to mention here that the list given above may not be exhaustive and the Licensee is directed comply with all directives given in the text of this Order.



9.1.6 The Commission directs the Licensee to follow the directions scrupulously and send the periodical reports by 30<sup>th</sup> of every month about the compliance of these directions in the format titled 'Action Taken Report on the Directions Issued by the Commission' provided at Annexure - **Error! Reference source not found.** of this Order.



## 10. APPLICABILITY OF THE ORDER

The Licensee, in accordance to Section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, shall publish the approved tariffs (including rates, regulatory surcharge, open access charges etc.) within three days from the date of this Order. The Licensee shall ensure that the same is published in at least two daily newspapers (one English and one Hindi) having wide circulation in the area of supply. The tariffs so published shall become the notified tariffs applicable in the area of supply and shall come into force after seven days from the date of such publication of the tariffs, and unless amended or revoked, shall continue to be in force till issuance of the next Tariff Order. The Commission may issue clarification / corrigendum / addendum to this Order as it deems fit from time to time with the reasons to be recorded in writing.

(S. K. Agarwal)

Member

(Desh Deepak Verma)

Chairman

**Date**: August 1, 2016

Place: Lucknow



## 11. ANNEXURES

## 11.1 COMMISSION FORECAST OF CONSUMPTION PARAMETERS FOR FY 2016-17

Table 11-1: COMMISSION'S APPROVAL OF NUMBER OF CONSUMERS FOR FY 2016-17

Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recompu ted for FY 15-16	Approved for FY 2016-17
LMV-1: Domestic					
Rural (unmetered)	848,076	888,464	1,208,758	1,184,583	1,160,891
Rural (metered)	294,001	336,631	412,841	652,289	900,159
Bulk Load	28	27	33	36	40
Other Metered	1,284,543	1,286,322	1,312,454	1,443,699	1,588,069
Life Line Consumers/BPL	233,885	321,308	517,364	620,837	745,004
SUBTOTAL (LMV-1)	2,660,533	2,832,752	3,451,450	3,901,444	4,394,163
LMV-2:Non-Domestic					
Rural (unmetered)	21,069	20,609	26,165	27,473	27,473
Rural (metered)	26,232	24,034	25,285	31,606	40,881
Advertising	6,981	-	-	-	-
Other Metered	218,492	220,277	242,489	247,339	252,286
SUBTOTAL (LMV-2)	272,774	264,920	293,939	306,418	320,640
LMV-3: Public Lamps					
Unmetered - Gram Panchayat	1,480	3,683	469	474	474
Unmetered - Nagar Palika&Panchayat	4,383	148	2,544	2,646	2,646
Unmetered - Nagar Nigam	36	44	44	46	46
Metered - Gram Panchayat	2	-	-	-	5
Metered - Nagar Palika&Panchayat	85	97	82	89	203
Metered - Nagar Nigam	71	57	60	63	68
SUBTOTAL (LMV-3)	6,057	4,029	3,199	3,318	3,442
LMV-4: Institutions					
Public	14,479	15,064	16,317	17,622	19,032
Private	1,796	2,239	2,518	2,644	2,776
SUBTOTAL (LMV-4)	16,275	17,303	18,835	20,266	21,808



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recompu ted for FY 15-16	Approved for FY 2016-17
LMV-5: Private Tube Wells					
Rural (unmetered)	130,578	136,615	132,748	138,058	138,058
Rural (metered)	404	1,064	1,694	2,202	8,385
Urban (metered)	6,475	6,181	6,269	6,582	6,912
SUBTOTAL (LMV-5)	137,457	143,860	140,711	146,843	153,355
LMV 6: Small and Medium Power					
Power Loom: Rural	8,236	9,794	1,077	1,292	1,551
Power Loom: Urban	1,518	1,382	10,829	11,370	11,939
Others: Rural	12,495	11,093	11,764	11,999	12,239
Others: Urban	12,870	12,747	12,874	13,646	14,465
SUBTOTAL (LMV-6)	35,119	35,016	36,544	38,309	40,194
LMV-7: Public Water Works					
Rural: Jal Nigam	346	281	301	304	307
Rural: JalSansthan	28	64	57	66	75
Rural: Other PWWs	178	219	252	315	394
Urban: Jal Nigam	188	235	193	247	316
Urban: JalSansthan	622	649	579	602	626
Urban: Other PWWs	366	323	433	455	477
SUBTOTAL (LMV-7)	1,728	1,771	1,815	1,988	2,196
LMV-8: State Tube Wells					
Metered STW	203	439	458	513	763
Unmetered STW	8,847	8,712	9,238	9,423	9,423
Unmetered Laghu Dal Nahar	14	94	9	12	15
SUBTOTAL (LMV-8)	9,064	9,245	9,705	9,947	10,200
LMV-9: Temporary Supply					
Metered: Individual residential	1,604	125	1,807	1,897	1,992
Metered: Others	-	-	-	-	-
Unmetered: Ceremonies	-	-	173	175	176
Unmetered: Temp shops	-	-	-	-	-
SUBTOTAL (LMV-9)	1,604	125	1,980	2,072	2,169
LMV-10: Departmental					



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recompu ted for FY 15-16	Approved for FY 2016-17
Employees					
Class IV	3,665	2,648	3,003	3,153	3,311
Class III	5,166	3,926	4,596	4,688	4,782
Junior Engineers	332	351	385	400	416
Assistant Engineers	103	106	117	122	127
Executive Engineers	586	45	50	51	52
Deputy General Manager	7	6	7	7	7
CGM/GM	1	1	623	623	623
Pensioners	12,402	16,470	15,576	16,822	18,168
SUBTOTAL (LMV-10)	22,262	23,553	24,357	25,866	27,486
HV-1: Non-Industrial Bulk Loads					
Urban: 11 kV	510	655	674	775	891
Urban: Above 11 kV & up to 66 Kv	14	16	16	19	23
Urban: Above 66 kV & up to 132 kV	8	-	-	-	-
Urban: Above 132 kV	-	-	-	-	-
Rural: At 11 kV	3	5	1	1	1
Rural: Above 11 kV & up to 66 kV	-	4	1	1	1
SUBTOTAL (HV-1)	535	680	692	797	917
HV-2: Large and Heavy Power					
Urban: 11 kV	1,005	1,001	1,110	1,143	1,178
Urban: Above 11 kV & up to 66 kV	76	126	152	182	219
Urban: Above 66 kV & up to 132 kV	13	13	13	14	15
Urban: Above 132 kV	1	3	3	3	3
Rural: At 11 kV	109	125	129	161	202
Rural: Above 11 kV & up to 66 kV	1	1	5	5	5
SUBTOTAL (HV-2)	1,205	1,269	1,412	1,509	1,622
HV-3: Railway Traction					
At 132 kV and above	4	5	8	9	11
Below 132 kV	-	-	-	-	-
Metro traction	-	-	-	-	-



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recompu ted for FY 15-16	Approved for FY 2016-17
SUBTOTAL (HV-3)	4	5	8	9	11
HV-4: Lift Irrigation					
At 11kV	12	12	24	27	30
Above 11kV & up to 66kV	5	5	5	6	6
Above 66 kV & up to 132kV	1	1	1	1	1
SUBTOTAL (HV-4)	18	18	30	33	37
Bulk & Extra State					
Extra state & others	1	1	1	1	1
Bulk supply – NPCL	-	-	-	-	-
Bulk supply – KESCO	-	-	-	-	-
Bulk supply – Others	-	-	-	-	-
SUBTOTAL (Bulk & Extra State)	1	1	1	1	1
GRAND TOTAL	3,164,636	3,334,547	3,984,678	4,458,821	4,978,241

Table 11-2: COMMISSION'S APPROVAL OF CONNECTED LOAD (kW) FOR FY 2016-17

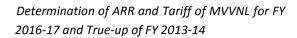
Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
LMV-1: Domestic					
Rural (unmetered)	1,198,461	1,286,645	1,505,967	1,677,499	1,643,949
Rural (metered)	217,960	284,609	320,410	570,156	786,815
Bulk Load	27,326	27,145	34,219	37,641	41,405
Other Metered	2,044,412	2,097,447	2,170,145	2,387,160	2,625,875
BPL	213,336	301,973	571,912	686,294	823,553
SUBTOTAL (LMV-1)	3,701,495	3,997,819	4,602,653	5,358,749	5,921,597
LMV-2:Non-Domestic					
Rural (unmetered)	35,506	36,195	44,042	46,299	48,614
Rural (metered)	74,839	66,002	66,825	90,172	112,714
Advertising	11,503	-	-	-	-
Other Metered	570,020	587,374	652,953	666,012	679,332
SUBTOTAL (LMV-2)	691,868	689,571	763,820	802,482	840,660



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
LMV-3: Public Lamps					
Unmetered - Gram Panchayat	8,999	15,489	12,232	12,354	12,354
Unmetered - Nagar Palika&Panchayat	18,521	13,762	15,795	16,427	17,084
Unmetered - Nagar Nigam	5,213	5,275	5,826	6,690	7,025
Metered - Gram Panchayat	24	-	-	-	124
Metered - Nagar Palika&Panchayat	9,521	13,510	12,186	10,012	10,913
Metered - Nagar Nigam	51,790	40,294	31,658	45,955	48,252
SUBTOTAL (LMV-3)	94,068	88,330	77,697	91,437	95,751
LMV-4: Institutions	02 242	02 204	00 445	442 222	424 244
Public	92,213	92,204	89,115	112,232	121,211
Private	21,465	26,870	24,774	31,599	33,179
SUBTOTAL (LMV-4)	113,678	119,074	113,889	143,831	154,389
LMV-5: Private Tube Wells					
Rural (unmetered)	536,971	574,104	594,068	617,831	642,544
Rural (metered)	2,612	5,810	7,725	14,238	18,509
Urban (metered)	29,869	30,001	30,335	31,852	33,444
SUBTOTAL (LMV-5)	569,452	609,915	632,128	663,920	694,498
LMV 6: Small and Medium Power					
Power Loom: Rural	35,365	40,305	8,175	5,550	6,659
Power Loom: Urban	7,071	6,957	45,635	47,917	50,313
Others: Rural	106,575	102,826	94,051	102,347	104,394
Others: Urban	162,914	163,829	172,250	186,915	198,130
SUBTOTAL (LMV-6)	311,925	313,917	320,111	342,728	359,495
LMV-7: Public Water Works					
Rural: Jal Nigam	13,116	8,910	5,625	11,524	11,640
Rural: JalSansthan	487	5,234	5,116	5,883	6,766
Rural: Other PWWs	3,667	5,036	5,944	12,734	15,917
Urban: Jal Nigam	9,840	7,254	6,096	7,803	9,988
Urban: JalSansthan	36,046	37,964	33,095	34,896	36,292
Urban: Other PWWs	12,707	16,965	21,516	23,039	24,191
SUBTOTAL (LMV-7)	75,863	81,363	77,392	95,879	104,793



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
LMV-8: State Tube Wells					
Metered STW	4,247	6,461	8,163	10,732	12,020
Unmetered STW	129,975	130,901	127,105	142,363	145,210
Unmetered Laghu Dal Nahar	3,536	4,698	3,346	2,910	3,724
SUBTOTAL (LMV-8)	137,758	142,060	138,614	156,004	160,954
LMV-9: Temporary Supply					
Metered: Individual residential	5,139	267	8,289	8,703	9,139
Metered: Others	-	-	_	-	-
Unmetered: Ceremonies	-	-	194	3,564	3,600
Unmetered: Temp shops	-	-	_	-	-
SUBTOTAL (LMV-9)	5,139	267	8,483	12,268	12,739
LMV-10: Departmental Employees					
Class IV	9,962	8,022	7,785	8,571	8,999
Class III	19,953	12,906	14,065	18,106	18,469
Junior Engineers	1,187	1,418	1,375	1,806	1,879
Assistant Engineers	526	602	501	621	646
Executive Engineers	1,120	278	214	218	223
Deputy General Manager	32	29	31	33	33
CGM/GM	7	7	4,413	4,413	4,413
Pensioners	46,324	55,229	42,433	62,834	67,861
SUBTOTAL (LMV-10)	79,111	78,491	70,817	96,603	102,522
HV-1: Non-Industrial Bulk Loads					
Urban: 11 kV	195,429	254,332	252,938	290,879	334,511
Urban: Above 11 kV & up to 66 kV	7,713	8,254	8,044	9,653	11,583
Urban: Above 66 kV & up to 132 kV	6,564	-	- -	-	<u>-</u>
Urban: Above 132 kV	-	-	_	-	-
Rural: At 11 kV	553	724	236	248	260
Rural: Above 11 kV & up to 66 kV	-	380	150	180	216
SUBTOTAL (HV-1)	210,259	263,690	261,368	300,959	346,570
HV-2: Large and Heavy Power					
Urban: 11 kV	318,898	313,998	368,126	379,170	390,545
Urban: Above 11 kV & up to 66 kV	68,160	88,335	99,240	119,088	142,906





Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
Urban: Above 66 kV & up to 132 kV	35,065	33,265	29,665	32,038	34,601
Urban: Above 132 kV	4,500	23,500	23,500	24,675	25,909
Rural: At 11 kV	27,871	32,166	31,712	39,640	49,550
Rural: Above 11 kV & up to 66 kV	212	212	731	731	731
SUBTOTAL (HV-2)	454,706	491,476	552,974	595,342	644,241
HV-3: Railway Traction					
At 132 kV and above	22,425	31,100	52,700	60,605	69,696
Below 132 kV	-	-	-	-	-
Metro traction	-	-	-	-	-
SUBTOTAL (HV-3)	22,425	31,100	52,700	60,605	69,696
HV-4: Lift Irrigation					
At 11kV	8,459	8,599	12,743	14,272	15,985
Above 11kV & up to 66kV	12,252	12,252	12,252	13,600	15,096
Above 66 kV & up to 132kV	2,250	2,250	2,250	2,250	2,250
SUBTOTAL (HV-4)	22,961	23,101	27,245	30,122	33,331
Bulk & Extra State					
Extra state & others	5,000	5,000	5,000	5,000	5,000
Bulk supply – NPCL	-	-	-	-	-
Bulk supply – KESCO	-	-	-	-	-
Bulk supply – Others	-	-	-	-	-
SUBTOTAL (Bulk & Extra State)	5,000	5,000	5,000	5,000	5,000
GRAND TOTAL	6,495,708	6,935,174	7,704,891	8,755,930	9,546,237



Table 11-3: COMMISSION'S APPROVAL OF ENERGY SALES (MU) FOR FY 2016-17

FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
937	1,108	1,543	2,174	2,131
255	251	274	551	965
102	82	100	0	0
2,515	2,796	2,953	3,173	3,860
188	240	393	541	789
3,996	4,476	5,263	6,438	7,745
30	37	45	60	60
75	62	73	128	206
2	5	2	-	-
754	829	865	893	1,004
861	933	984	1,081	1,270
33	40	40	44	44
	_			
65	63	47	71	71
9	16	20	29	29
3	0	0	-	0.44
35	52	47	48	70
180	137	133	225	241
325	308	287	418	456
247	223	206	315	408
52	59	49	81	96
298	282	256	397	503
509	603	755	1.019	1,019
				91
		·····		140
623	731	890	1,191	1,250
	937 255 102 2,515 188 3,996  30 75 2 754 861  33 65 9 3 35 180 325  247 52 298	937 1,108 255 251 102 82 2,515 2,796 188 240 3,996 4,476  30 37 75 62 2 5 754 829 861 933  33 40 65 63 9 16 3 0 35 52 180 137 325 308  247 223 52 59 298 282  509 603 2 10 112 118	937 1,108 1,543 255 251 274 102 82 100 2,515 2,796 2,953 188 240 393 3,996 4,476 5,263  30 37 45 75 62 73 2 5 2 754 829 865 861 933 984  33 40 40 65 63 47 9 16 20 3 0 0 35 52 47 180 137 133 325 308 287  247 223 206 52 59 49 298 282 256  509 603 755 2 10 8 112 118 127	937 1,108 1,543 2,174 255 251 274 551 102 82 100 0 2,515 2,796 2,953 3,173 188 240 393 541 3,996 4,476 5,263 6,438  30 37 45 60 75 62 73 128 2 5 2 - 754 829 865 893 861 933 984 1,081  33 40 40 44 65 63 47 71 9 16 20 29 3 0 0 - 35 52 47 48 180 137 133 225 325 308 287 418  247 223 206 315 52 59 49 81 298 282 256 397  509 603 755 1,019 2 10 8 38 112 118 127 133



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
LMV 6: Small and Medium Power					
Power Loom: Rural	59	99	68	45	69
Power Loom: Urban	63	26	71	413	554
Others: Rural	95	93	84	106	138
Others: Urban	267	271	274	305	383
SUBTOTAL (LMV-6)	484	489	496	869	1,144
LMV-7: Public Water Works					
Rural: Jal Nigam	43	46	29	59	59
Rural: JalSansthan	16	25	16	193	222
Rural: Other PWWs	27	29	29	94	117
Urban: Jal Nigam	38	36	35	44	57
Urban: JalSansthan	181	145	189	199	207
Urban: Other PWWs	82	93	83	149	157
SUBTOTAL (LMV-7)	388	374	380	738	819
LMV-8: State Tube Wells					
Metered STW	77	45	61	194	229
Unmetered STW	798	853	711	604	604
Unmetered Laghu Dal Nahar	22	24	32	1	1
SUBTOTAL (LMV-8)	896	922	804	798	834
LMV-9: Temporary Supply					
Metered: Individual residential	16	1	25	28	30
Metered: Others	-	-	-	-	-
Unmetered: Ceremonies	0	-	0	7	7
Unmetered: Temp shops	-	-	-	-	-
SUBTOTAL (LMV-9)	16	1	25	35	38
LMV-10: Departmental Employees					
Class IV	12	9	10	10	13
Class III	14	14	14	15	18
Junior Engineers	10	1	2	2	3
Assistant Engineers	1	1	1	1	1
Executive Engineers	1	1	0	0	0
Deputy General Manager	0	0	0	0	0
CGM/GM	0	1	6	6	6



Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
Pensioners	97	106	97	107	122
SUBTOTAL (LMV-10)	135	132	130	141	163
HV-1: Non-Industrial Bulk Loads					
Urban: 11 kV	380	492	538	619	712
Urban: Above 11 kV & up to 66 kV	16	18	16	42	50
Urban: Above 66 kV & up to 132 kV	12	9	-	-	-
Urban: Above 132 kV	-	0	-	-	-
Rural: At 11 kV	0	4	4	4	4
Rural: Above 11 kV & up to 66 kV	-	0	3	4	4
SUBTOTAL (HV-1)	408	523	561	669	771
HV-2: Large and Heavy Power					
Urban: 11 kV	887	858	878	1,133	1,167
Urban: Above 11 kV & up to 66 kV	224	260	277	553	664
Urban: Above 66 kV & up to 132 kV	72	78	74	80	86
Urban: Above 132 kV	5	9	11	29	31
Rural: At 11 kV	46	57	60	81	101
Rural: Above 11 kV & up to 66 kV	4	0	2	14	14
SUBTOTAL (HV-2)	1,239	1,263	1,302	1,889	2,062
HV-3: Railway Traction					
At 132 kV and above	34	80	115	132	152
Below 132 kV	1	0	-	-	-
Metro traction	-	-	1	-	-
SUBTOTAL (HV-3)	35	80	117	132	152
HV-4: Lift Irrigation					
At 11kV	36	37	38	61	69
Above 11kV & up to 66kV	65	67	64	78	86
Above 66 kV & up to 132kV	15	13	11	15	15
SUBTOTAL (HV-4)	117	117	113	154	170
Bulk & Extra State					
Extra state & others	59	62	59	59	59
Bulk supply – NPCL	-	-	-	-	-
Bulk supply – KESCO	-	-	-	-	-
Bulk supply – Others	-	-	-	-	-



# Determination of ARR and Tariff of MVVNL for FY 2016-17 and True-up of FY 2013-14

Consumer categories	FY 12-13	FY 13-14	FY 14-15	Recomputed for FY 15-16	Approved for FY 2016-17
SUBTOTAL (Bulk & Extra State)	59	62	59	59	59
GRAND TOTAL	9,880	10,694	11,666	15,010	17,435



## 11.2 RATE SCHEDULE FOR FY 2016-17

#### **RETAIL TARIFFS FOR FINANCIAL YEAR 2016-17:**

#### **GENERAL PROVISIONS:**

These provisions shall apply to all categories unless specified otherwise and are integral part of the Rate Schedule.

#### 1. NEW CONNECTIONS:

All new connections shall be given as per the applicable provisions of Electricity Supply Code and shall be released in multiples of KW only, excluding consumers under categories LMV-5 & LMV-8 of Rate Schedule. Further, for tariff application purposes, if the contracted load (kW) of already existing consumer is in fractions then the same shall be treated as next higher kW load.

#### 2. READING OF METERS:

As per applicable provisions of Electricity Supply Code.

## 3. BILLING WHEN METER IS NOT MADE ACCESSIBLE:

A penalty of Rs. 50 / kW or as decided by the Commission through an Order shall be levied for the purposes of Clause 6.2 (c) of the applicable Electricity Supply Code.

## 4. BILLING IN CASE OF DEFECTIVE METERS:

As per the applicable provisions of Electricity Supply Code.

## 5. KVAH TARIFF:

'kVAh based tariffs' shall be applicable on all consumers having contracted load of 10 kW / 13.4 BHP and above, under different categories with TVM / TOD / Demand recording meters (as appropriate).



The rates prescribed in different categories in terms of kW and kWh will be converted into appropriate kVA and kVAh by multiplying Fixed / Demand Charges and Energy Charges by an average power factor of 0.90. Similarly, the Fixed / Demand Charges expressed in BHP can be converted into respective kVA rates in accordance with formula given below:

Demand Charges in kVA = (Demand Charges in BHP / 0.746) \* 0.90

Demand Charges in kVA = (Fixed Charges in kW \* 0.90)

Energy Charges in kVAh = (Energy Charges in kWh \* 0.90)

**Note:** If the power factor of a consumer is leading and is within the range of 0.95 -1.00, then for tariff application purposes such leading power factor shall be treated as unity. The bills of such consumers shall be prepared accordingly. However, if the leading power factor is below 0.95 (lead) then the consumer shall be billed as per the kVAh reading indicated by the meter. However, the aforesaid provision of treating power factor below 0.95 (lead) as the commensurate lagging power factor for the purposes of billing shall not be applicable on HV-3 category and shall be treated as unity. Hence, for HV-3, lag + lead logic of the meter should not be used and "lag only" logic of the meter should be provided which blocks leading kVARh thereby treating leading power factor as unity and registering instantaneous kWh as instantaneous kVAh in case of leading power factor.

## 6. BILLABLE LOAD / DEMAND:

For all consumers having TVM / TOD / Demand recording meters installed, the billable load / demand during a month shall be the actual maximum load / demand as recorded by the meter (can be in parts of kW or kVA) or 75% of the contracted load / demand (kW or kVA), whichever is higher.

Further in case the licensee fails to note the actual maximum load / demand reading or in case of spot-billing, then the consumer may approach the licensee with a photo of the actual maximum load / demand reading displayed on his meter of the previous month. The licensee shall accept the same for the purpose of computation of billable demand, however if the licensee wishes to, it can get the same verified within 10 days.



## 7. SURCHARGE / PENALTY:

## (i) **DELAYED PAYMENT:**

If a consumer fails to pay his electricity bill by the due date specified therein, a late payment surcharge shall be levied at 1.25% per month; upto first three months of delay and subsequently @ 2.00% per month of delay. Late payment surcharge shall be calculated proportionately for the number of days for which the payment is delayed beyond the due date specified in the bill and levied on the unpaid amount of the bill excluding surcharge. Imposition of this surcharge is without prejudice to the right of the Licensee to disconnect the supply or take any other measure permissible under the law.

#### (ii) CHARGES FOR EXCEEDING CONTRACTED DEMAND:

- a) If the maximum load / demand in any month of a domestic consumer having TVM / TOD / Demand recording meter exceeds the contracted load / demand, then such excess load / demand shall be levied equal to 100% of the normal rate apart from the normal fixed / demand charge as per the maximum load / demand recorded by the meter. Further, if the consumer is found to have exceeded the contracted load / demand for continuous previous three months, the consumer shall be served a notice of one month advising him to get the contracted load enhanced as per the provisions of UPERC Electricity Supply Code, 2005 and amendments thereof. However, the consumer shall be charged for excess load for the period the load is found to exceed the contracted load. The Licensee shall merge the excess load with the previously sanctioned load, and levy additional charges calculated as above, along with additional security. Subsequent action regarding the increase in contracted load, or otherwise shall be taken only after due examination of the consumer's reply to the notice and a written order in this respect by the Licensee.
- b) If the maximum load / demand in any month, for the consumers of other category(except (a) above ) having TVM/ TOD /Demand recording meter exceeds the contracted load /demand , then such excess load /demand shall be levied equal to 200% of the normal rate



- apart from the normal fixed /demand charges as per the maximum load /demand recorded by the meter.
- c) Any surcharge / penalty shall be over and above the minimum charge, if the consumption bill of the consumer is being prepared on the basis of minimum charge.
- d) Provided where no TVM / TOD / Demand recording meter is installed, the excess load / demand penalty shall be billed as per the UPERC Electricity Supply Code, 2005 as amended from time to time.

## 8. POWER FACTOR SURCHARGE:

- i. Power factor surcharge shall not be levied where consumer is being billed on kVAh consumption basis.
- ii. It shall be obligatory for all consumers to maintain an average power factor of 0.85 or more during any billing period. No new connections of motive power loads / inductive loads above 3 kW, other than under LMV-1 and LMV-2 category, and / or of welding transformers above 1kVA shall be given, unless shunt capacitors having I.S.I specifications of appropriate ratings are installed, as described in ANNEXURE 11.4.
- iii. In respect of the consumers with or without static TVMs, excluding consumers under LMV-1 category up to contracted load of 10 kW and LMV-2 category up to contracted load of 5 kW, if on inspection it is found that capacitors of appropriate rating are missing or in-operational and Licensee can prove that the absence of capacitor is bringing down the power factor of the consumer below the obligatory norm of 0.85; then a surcharge of 15% of the amount of bill shall be levied on such consumers. Licensee may also initiate action under the relevant provisions of the Electricity Act, 2003, as amended from time to time.
  - Notwithstanding anything contained above, the Licensee also has a right to disconnect the power supply, if the power factor falls below 0.75.
- iv. Power factor surcharge shall however, not be levied during the period of disconnection on account of any reason whatsoever.



#### 9. PROTECTIVE LOAD:

Consumers getting supply on independent feeder at 11kV & above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the Licensee, except under emergency rostering. An additional charge @ 100% of base demand charges fixed per month shall be levied on the contracted protective (as per Electricity Supply Code) load each month. However, consumers of LMV-4 (A) - Public Institutions will pay the additional charge @ 25% of base demand charges only. During the period of scheduled rostering, the load shall not exceed the sanctioned protective load. In case the consumer exceeds the sanctioned protective load during scheduled rostering, he shall be liable to pay twice the prescribed charges for such excess load.

## 10. ROUNDING OFF:

All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be rounded down to previous rupee and 50 paisa upwards shall be rounded up to next rupee. The difference due to such rounding shall be adjusted in subsequent bills.

## 11. OPTION OF MIGRATION TO HV-1 & HV-2 CATEGORY:

The consumer under LMV-2 and LMV-4 with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-1 category and LMV-6 consumers with contracted load above 50 kW and getting supply at 11 kV & above voltage shall have an option to migrate to the HV-2 category. Furthermore, the consumers shall have an option of migrating back to the original category on payment of charges prescribed in Cost Data Book for change in voltage level.

## 12. PRE-PAID METERS / AUTOMATIC METER READING SYSTEM:

(i) Any consumer having prepaid meters shall also be entitled to a discount of 1.25% on Rate as defined in the Tariff Order.



(ii) The token charges for code generation for prepaid meters shall be Rs. 10/- per token or as decided by the Commission from time to time.

# 13. CONSUMERS NOT COVERED UNDER ANY RATE SCHEDULE OR EXPRESSLY EXCLUDED FROM ANY CATEGORY:

For consumers of light, fan & power (excluding motive power loads) not covered under any rate schedule or expressly excluded from any LMV rate schedule will be categorized under LMV-2.

14. A consumer under metered category may undertake any extension work, in the same premises, on his existing connection without taking any temporary connection as long as his demand does not exceed his contracted demand and the consumer shall be billed in accordance with the tariff applicable to that category of consumer.

## 15. SOLAR WATER HEATER REBATE:

If consumer installs and uses solar water heating system of 100 litres or more, a rebate of Rs. 100 /- per month or actual bill for that month whichever is lower shall be given. The same shall be subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system and is in working condition, which the licensee shall be free to verify from time to time. If any such claim is found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover the total rebate allowed to the consumer with 100% penalty and debar him from availing such rebate for the next 12 months.

## 16. REBATE ON PAYMENT ON OR BEFORE DUE DATE:

A rebate at 0.50% of Rate shall be given in case the payment is made on or before the due date. The consumers having any arrears in the bill shall not be entitled for this rebate. The consumers who have made advance deposit against their future monthly energy bills shall also be eligible for the above rebate applicable on Rate.



# 17. REBATE TO CONSUMERS WHO SHIFT FROM UNMETERED TO METERED CONNECTION:

In case any rural consumer shifts from unmetered to metered category, he shall be entitled to rebate of 10% on Rate which shall be applicable from date of installation of meter till end of FY 2017-18.

## 18. SCHEME FOR ADVANCE DEPOSIT FOR FUTURE MONTHLY ENERGY BILLS:

If a consumer intends to make advance deposit against his future monthly energy bills, the Licensee, shall accept such payment and this amount shall be adjusted only towards his future monthly energy bills. On such advance deposit the consumers shall be paid interest, at the interest rate applicable on security deposit, for the period during which advance exists for each month on reducing balance method and amount so accrued shall be adjusted in the electricity bills which shall be shown separately in the bill of each month. Further, quarterly report regarding the same must be submitted to the Commission.

## 19. FACILITATION CHARGE FOR ONLINE PAYMENT:

- (i) No transaction charge shall be collected from the consumers making their payment through internet banking.
- (ii) The Licensees shall bear the transaction charges for transactions up to Rs. 4,000 for payment of bill through internet using Credit Card / Debit Card.

## 20. MINIMUM CHARGE:

Minimum charge is the charge in accordance with the tariff in force from time to time and come into effect only when sum of fixed / demand charges and energy charges are less than a certain prescribed amount i.e. Minimum Charges. For each month, consumer will pay an amount that is higher of the following:

- Fixed / Demand charges plus Energy Charge on the basis of actual consumption for the month and additional charges such as Electricity Duty, Regulatory Surcharges, FPPCA Surcharges and any other charges as specified by the Commission from time to time.
- Monthly minimum charge as specified by the Commission and computed at the contracted load and additional charges such as Electricity Duty,



Regulatory Surcharges, FPPCA Surcharges and any other charges as specified by the Commission from time to time.

#### 21. EXEMPTION FROM MINIMUM CHARGE FOR USING SOLAR POWER:

If a consumer under LMV-2 (Non domestic light, fan and power) category installs a rooftop solar plant under the provisions of UPERC (Rooftop Solar PV Grid Interactive Systems Gross / Net Metering) Regulations, 2015 with maximum peak capacity of the grid connected rooftop solar PV system not exceeding 100% of the sanctioned connected load / contract demand of the consumer, then such consumer shall be exempted from payment of monthly minimum charges. Such exemption shall be in force till the time the solar plant remains fully operational.

#### 22. INTEREST ON DUES PAYABLE TO CONSUMER BY THE LICENSEE:

If a consumer becomes eligible for dues from the Licensee which may arise out of rectification / adjustment / settlement of bill(s), then such consumer will also be entitled to get interest at an interest rate applicable for interest on security deposits on all the dues payable by the Licensee to the consumer. The Licensee shall compute the interest amount for the period during which such pending amounts exists and adjust such interest towards the future monthly bills of consumers. After adjustment of the interest amount in a particular month, the balance amount, will be carried forward to next month for adjustment with interest on balance amount. The details of such interest amount and adjustment made during the month shall be shown separately in the bill. Further, separate accounting of interest paid must be maintained by the Licensees.

#### 23. DEFINITION OF RURAL SCHEDULE:

Rural Schedule means supply schedule as defined and notified by State Load Despatch Centre (SLDC), Lucknow from time to time.



## **RATE SCHEDULE LMV - 1:**

## **DOMESTIC LIGHT, FAN & POWER:**

#### 1. APPLICABILITY:

This schedule shall apply to:

- a) Premises for residential / domestic purpose, Accommodation for Paying Guests for Domestic purpose (Excluding Guest Houses), Janata Service Connections, Kutir Jyoti Connections, Jhuggi / Hutments, Places of Worship (e.g. Temples, Mosques, Gurudwaras, Churches) and Electric Crematoria.
- b) Mixed Loads

#### i. 50 kW and above

- a. Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with the condition that at least 70% of the total contracted load shall be exclusively for the purposes of domestic light, fan and power. The above mixed load, within 70%, shall also include the load required for lifts, water pumps and common lighting,
- b. Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).

#### ii. Less than 50 kW

Except for the case as specified in Regulation 3.3 (e) of Electricity Supply Code, 2005 as amended from time to time, if any portion of the load is utilized for conduct of business for non-domestic purposes then the entire energy consumed shall be charged under the rate schedule of higher charge

## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.



## 3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

## (a) Consumers getting supply as per 'Rural Schedule':

Description	Description Description Fixed charge		Energy charge)
	Load up to 2 kW	Rs. 180 / kW / month	Nil
i) Un-metered	Load above 2 kW	Rs. 200 / kW / month	Nil
ii) Metered	All Load	Rs. 50 / kW / month	Rs. 2.20 / kWh

# (b) Supply at Single Point for bulk loads (50 kW and above, Supplied at any Voltage):

Description	Fixed Charge	Energy Charge
For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Military Engineer Service (MES) for Defence Establishments (Mixed load without any load restriction).	Rs. 85.00 / kW / Month	Rs. 5.50 / kWh

The body seeking the supply at Single point for bulk loads under this category shall be considered as a deemed franchisee of the Licensee. Such body shall charge not more than 5% additional charge on the above specified 'Rate' from its consumers apart from other applicable charges such as Regulatory Surcharge, Penalty, Rebate and Electricity Duty on actual basis.



The 5% additional charge shall be towards facilitating supply of electricity to the individual members to recover its expenses towards supply of electricity, distribution loss, electrical maintenance in its supply area, billing, accounting and audit etc.

The deemed franchisee is required to provide to all its consumers and the licensee, a copy of the detailed computation of the details of the amounts realized from all the individual consumers and the amount paid to the licensee for every billing cycle on half yearly basis. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee shall arrange to get its account(s) audited by a Chartered Accountant mandatorily. The audited accounts will be made available to all the consumers of the deemed franchisee within 3 months of the closure of that financial year. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee should separately meter the electricity supplied from back up arrangements like DG sets etc. The bill of its consumers should clearly depict the units and rate of electricity supplied through back up arrangement and electricity supplied through Licensee.

The deemed franchisee shall not disconnect the supply of electricity of its consumers on the pretext of defaults in payments related to other charges except for the electricity dues regarding the electricity consumed by its consumers and electricity charges for lift, water lifting pump, streetlight if any, corridor / campus lighting and other common facilities.

In case the deemed franchisee exceeds the contracted load / demand under the provisions of Clause 7(ii) — 'Charges for Exceeding Contracted demand' of the General Provisions of this Rate Schedule, only in such case the deemed franchisee will recover the same from the individual members who were responsible for it on the basis of their individual excess demands.

## (c) OTHER METERED DOMESTIC CONSUMERS:

**1. Lifeline consumers:** Consumers with contracted load of 1 kW, energy consumption up to 150 kWh / month.



Description	Fixed Charge	Energy Charge
Loads of 1 kW only and for consumption up to 50 kWh / month (0 to 50 kWh / month)		Rs. 2.00 / kWh
Loads of 1 kW only and for consumption above 50 kWh / month up to 150 kWh / month (51 to 150 kWh / month)		Rs. 3.90 / kWh

**2. Others:** Other than life line consumers (i.e. consumers who do not qualify under the criteria laid down for lifeline consumers.)

Description	Consumption Range	Fixed Charge	Energy Charge
All loads	For first 150 kWh / month		Rs. 4.40 / kWh
	For next 151 - 300 kWh / month		Rs. 4.95 / kWh
	For next 301 – 500 kWh / month	Rs. 90.00 / kW / month	Rs. 5.60 / kWh
	For above 500 kWh / month		Rs. 6.20 / kWh
	(Starting from 501 <sup>st</sup> unit)		

## Note:

For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the Licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data of maximum demand.



## **RATE SCHEDULE LMV-2:**

## NON DOMESTIC LIGHT, FAN AND POWER:

#### 1. APPLICABILITY:

This schedule shall apply to all consumers using electric energy for Light, Fan and Power loads for Non-Domestic purposes, like all type of Shops including Patri Shopkeepers, Hotels, Restaurants, Private Guest Houses, Private Transit Hostels, Private Students Hostels, Marriage Houses, Show-Rooms, Commercial / Trading Establishments, Cinema and Theatres, Banks, Cable T.V. Operators, Telephone Booths / PCO (STD / ISD), Fax Communication Centres, Photo Copiers, Cyber Café, Private Diagnostic Centres including X-Ray Plants, MRI Centres, CAT Scan Centres, Pathologies and Private Advertising / Sign Posts / Sign Boards, Commercial Institutions / Societies, Automobile Service Centres, Coaching Institutes, Private Museums, Power Looms with less than 5 kW load and for all companies registered under the Companies Act, 1956 with loads less than 75 kW.

## 2. Character and Point of Supply:

As per the applicable provisions of Electricity Supply Code.

#### 3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

## (a) Consumers getting supply as per 'Rural Schedule'

Description	Description	Fixed charge	Energy charge)
i) Un-metered	All Load	Rs. 600 / kW / month	Nil
ii) Metered	All Load	Rs. 65 / kW / month	Rs. 3.50 / kWh



## (b) Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex\*:

For all commercial (road side / roof tops of buildings) advertisement hoardings such as Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex, the rate of charge shall be as below:

Description	Fixed Charge	Energy Charge
Metered	-	Rs. 18.00 / kWh

<sup>\*</sup>Minimum bill payable by a consumer under the category "(b) Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex category" shall be Rs. 1600 / kW / Month.

## Note:

- 1. For application of these rates Licensee shall ensure that such consumption is separately metered.
- (c) In all other cases, including urban consumers and consumers getting supply through rural feeders but exempted from scheduled rostering / restrictions or through co-generating radial feeders in villages / towns.

Contracted Load	Fixed Charge
Up to 2 kW	Rs. 225.00 / kW / month
Above 2 kW to 4 kW	Rs. 275.00 / kW / month
Above 4 kW	Rs. 355.00 / kW / month

Consumption Range	Energy Charge
For first 300 kWh / month	Rs. 6.70 / kWh
For next 301 – 1000 kWh / month	Rs. 7.75 / kWh
For above 1000 kWh / month (Starting from 1001st unit)	Rs. 7.95 / kWh

**Note:** Minimum charge (as defined under Clause 20 of General Provisions) payable by a consumer under the category "(c) In all other cases" shall be Rs. 500 / kW / month (From April to September) and Rs. 375 / kW / month (From October to March).



## Note:

1. For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the Licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand.

## 4. REBATE TO POWER LOOMS:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated June 14, 2006 and the Commission's order dated July 11, 2006 subject to adherence of provision of advance subsidy.



## **RATE SCHEDULE LMV -3:**

## **PUBLIC LAMPS:**

## 1. APPLICABILITY:

This schedule shall apply to Public Lamps including Street Lighting System, Road Traffic Control Signals, Lighting of Public Parks, etc. The street lighting in Harijan Bastis and Rural Areas are also covered by this rate schedule.

## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

#### 3. RATE:

Rate gives the fixed and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed for his consumption during the billing period applicable to the category:

## (a) Un-metered Supply:

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
To be billed on the basis of total connected load calculated as the summation of individual points	•	•	Rs. 3500 per kW or part thereof per month



## (b) Metered Supply:

Description	Gram Pa	ınchayat	Nagar Palika and Nagar Panchayat			
All loads	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	Rs. 120 / kW / month	Rs. 5.75 / kWh	Rs. 150 / kW / month	Rs. 6.00 / kWh	Rs. 160 / kW / month	Rs. 6.25 / kWh

## **TOD Rates applicable for the metered supply (% of Energy Charges):**

18:00 hrs – 06:00 hrs	0%
06:00 hrs – 18:00 hrs	(+) 20%

**4.** For 'Maintenance Charges', 'Provision of Lamps' and 'Verification of Load' refer ANNEXURE 11.2.1.



#### **RATE SCHEDULE LMV-4:**

## LIGHT, FAN & POWER FOR PUBLIC INSTITUTIONS AND PRIVATE INSTITUTIONS:

#### 1. APPLICABILITY:

## LMV- 4 (A) - PUBLIC INSTITUTIONS:

This schedule shall apply to:

- (a) Government Hospitals / Government Research Institutions / Offices of the Government Organizations other than companies registered under Companies Act 1956.
- (b) Government & Government aided (i) Educational Institutions (ii) Hostels (iii) Libraries
- (c) Religious and charitable trusts & Institutions having a valid registration under Section 12 AA & 30G issued by the Income Tax department including orphanage homes, old age homes, hospitals, colleges and those providing services free of cost or at the charges / structure of charges not exceeding those in similar Government operated institutions.
- (d) Railway Establishments (excluding railway traction, industrial premises & Metro) such as Booking Centres, Railway Stations & Railway Research and Development Organization, Railway rest houses, Railway holiday homes, Railway inspection houses.
- (e) All India Radio and Doordarshan
- (f) Guest houses of Government., Semi-Government, Public Sector Undertaking Organisations

## LMV-4 (B) - PRIVATE INSTITUTIONS:

This schedule shall apply to non-Government hospitals, nursing homes / dispensaries / clinics, private research institutes, and schools / colleges / educational institutes & charitable institutions / trusts not covered under (A) above.

## 2. CHARACTER AND POINT OF SUPPLY:



As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

Rate, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

Description	Contracted Load	Fixed Charge
(4) 5 5 11 1 11 11	Up to 2 kW	Rs. 220 / kW / month
(A) For Public Institutions	Above 2 kW to 4 kW	Rs. 230 / kW / month
	Above 4 kW	Rs. 240 / kW / month
(B) For Private Institutions	Up to 3 kW	Rs. 250 / kW / month
	Above 3 kW	Rs. 330 / kW / month

Description	Consumption Range	Energy Charge
	For first 1000 kWh / month	Rs. 7.00/ kWh
(A) For Public Institutions	For next 1001 – 2000 kWh / month	Rs. 7.20/ kWh
	For above 2000 kWh / month (Starting from 2001 <sup>st</sup> unit)	Rs. 7.40/ kWh
	For first 1000 kWh / month	Rs. 7.75 / kWh
(B) For Private Institutions	For above 1000 kWh / month (Starting from 1001 <sup>st</sup> unit)	Rs. 7.95 / kWh



## **RATE SCHEDULE LMV-5:**

## SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:

#### 1. APPLICABILITY:

This schedule shall apply to all power consumers getting supply as per Rural / Urban Schedule for Private Tube-wells / Pumping Sets for irrigation purposes having a contracted load up to 25 BHP and for additional agricultural processes confined to Chaff-Cutter, Thresher, Cane Crusher and Rice Huller. All new connections under this category shall necessarily have the ISI marked energy efficient mono-bloc pump sets with power factor compensation capacitors of adequate rating to qualify for the supply. All existing pump sets shall be required to install power factor compensation capacitors.

## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

Rate gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

(A) For consumers getting supply as per Rural Schedule:

## (i) Un-metered Supply

Fixed Charge	Energy Charge	
Rs. 100 / BHP / month	Nil	
Consumer under this category will be allowed a		
maximum lighting load of 120 Watts.		

## (ii) Metered Supply



Fixed Charge	Minimum Charges	Energy Charge
Rs. 30.00 / BHP / month	Rs. 75 / BHP / month	Rs. 1.00 / kWh

**Note:** Minimum bill payable by a consumer under the category "Rural Schedule (Metered Supply) shall be Rs. 75 per BHP per month, till the installation of the meter.

**(B)** For consumers getting supply as per **Urban Schedule** (Metered Supply) including consumers getting supply through rural feeders exempted from scheduled rostering or through co-generating radial feeders in villages and towns.

Fixed Charge	Minimum Charges	Energy Charge
Rs. 75.00 / BHP / month	Rs. 160 / BHP / month	Rs. 5.20 / kWh

**Note:** Minimum bill payable by a consumer under the category "Urban Schedule (Metered Supply) shall be Rs. 160.00 per BHP per month, till the installation of the meter.

For PTW consumers of Bundelkhand Area located in Gram Sabha, the minimum bill payable by a consumer shall be Rs. 100.00 per BHP per month, till the installation of the meter.



## **RATE SCHEDULE LMV-6:**

## **SMALL AND MEDIUM POWER:**

## 1. APPLICABILITY:

This schedule shall apply to all consumers of electrical energy having a contracted load up to 100 HP (75 kW) for industrial / processing or agro-industrial purposes, power loom (load of 5 kW and above) and to other power consumers, not covered under any other rate schedule. Floriculture / Mushroom farming units having loads up-to 100 BHP (75kW) shall also be covered under this rate schedule. This schedule shall also apply to pumping sets above 25 BHP.

## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

Rate, gives the fixed and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed for his consumption during the billing period applicable to the category:

## (A) Consumers getting supply other than Rural Schedule:

Contracted Load	Fixed Charge
Up to 4 kW	Rs. 245 / kW / month
Above 4 kW to 9 kW	Rs. 255 / kW / month
Above 9 kW	Rs. 275 / kW / month



Consumption Range	Energy Charge
Up to 1000 kWh / month	Rs. 7.00 / kWh on entire consumption
Up to 2000 kWh / month	Rs. 7.35 / kWh on entire consumption
For above 2000 kWh / month	Rs. 7.60 / kWh on entire consumption

## **TOD Rates (% of Energy Charges):**

22:00 hrs – 06:00 hrs	(-) 7.5%
06:00 hrs – 17:00 hrs	0%
17:00 hrs – 22:00 hrs	(+) 15%

## **Optional TOD Structure**

For all such consumers who want to operate at full potential only during the specified night hours with restricted consumption in remaining hours may opt for the TOD structure as follows:

For all such consumers who opt for this structure, the rebate can be availed between 22.00 hrs to 06.00 hrs specifically by such consumers operating at its full potential during this period and for such consumers the load during other hours i.e. 06:00 to 22:00 hours, shall be restricted to 15% of its contracted load. The TOD structure for such consumers is as given below:

## **Optional TOD Structure for Specific Consumers**

Hours	TOD Rates	
06:00 hrs – 22:00 hrs	Restricted Load as specified	
22:00 hrs – 06:00 hrs	-15%	

Such consumers would be required to ask for such ToD structure in advance. However, if the consumer who has opted for optional TOD structure, exceeds the restricted load as specified during the time slot of 06.00 - 22.00 hours in any month, the TOD structure as applicable for LMV-6 category (i.e. as per TOD Rates



specified for all Consumers) will be applicable for such consumer for that particular month.

## (B) Consumers getting supply as per Rural Schedule:

The consumer under this category shall be entitled to a rebate of 7.5% on demand & energy charges as given for under urban schedule without TOD rates.

## 4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

- i) The load of such industry is above 13.4 BHP (for motive power loads) & 10 kW (other loads) and have Tri-vector Meters / TOD meters installed at their premises.
- ii) The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.
- iii) Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration / execution of agreement mentioning the period of operation unambiguously.
- iv) The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.
- v) The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail Licensees supply for miscellaneous loads and other non-process loads.
- vi) The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh / kVAh) for such industries during off-season period will be the same as for normal period. Further, during the off season fixed charges shall be levied on the basis of maximum demand



recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

#### 5. REBATE TO POWER LOOMS:

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated June 14, 2006 and the Commission's order dated July 11, 2006 subject to adherence of provision of advance subsidy.

## 6. FACTORY LIGHTING:

The electrical energy supplied shall also be utilized in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper's office, canteen, staff club, library, crèche, dispensary, staff welfare centres, compound lighting, etc. No separate connection for the same shall be provided.



## **RATE SCHEDULE LMV-7:**

#### **PUBLIC WATER WORKS:**

#### 1. APPLICABILITY:

This schedule shall apply to Public Water Works, Sewage Treatment Plants and Sewage Pumping Stations functioning under Jal Sansthan, Jal Nigam or other local bodies.

#### 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

## (A) Consumers getting supply other than "Rural Schedule":

Rate gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

Fixed Charge	Energy Charge
Rs. 290.00 / kW / month	Rs. 7.95 / kWh

## (B) Consumers getting supply as per "Rural Schedule":

The consumer under this category shall be entitled to a rebate of 7.5% on demand & energy charges as given for under other than rural schedule.



## **RATE SCHEDULE LMV – 8:**

## STATE TUBE WELLS / PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:

## 1. APPLICABILITY:

- (i) This schedule shall apply to supply of power for all State Tube wells, including Tube wells operated by Panchayti Raj, World Bank Tube wells, Indo Dutch Tube wells, Pumped Canals and Lift Irrigation schemes having a load up to 100 BHP.
- (ii) Laghu Dal Nahar having load above 100 BHP.

#### 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

Rate gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

Description	Fixed Charge	Energy Charge
Metered	Rs. 200.00 / BHP / month	Rs. 6.80 / kWh
Un-metered	Rs. 2100.00 / BHP / month	Nil

**4.** For finding out net load during any quarter of the year for this category refer ANNEXURE 11.2.2



## **RATE SCHEDULE LMV – 9:**

## **TEMPORARY SUPPLY:**

## 1. APPLICABILITY:

# A) Un-metered Supply for Illumination / Public Address / Temporary Shops in Melas:

This schedule shall apply to temporary supply of light, fan & power up to 20 KW, Public address system and illumination loads during functions, ceremonies and festivities and temporary shops, not exceeding three months.

## B) Metered Supply for all other purposes:

This schedule shall apply to all temporary supplies of light, fan and power load for the purpose other than mentioned in (A) above.

This schedule shall also apply for power taken for construction purposes including civil work by all consumers and Govt. Departments.

## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE (SEPARATELY FOR EACH POINT OF SUPPLY):

Rate gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

## A. Un-metered:

(i)	Fixed charges for illumination / public address /	Rs. 3500.00 / day
	ceremonies for load up to 20 kW per connection plus Rs.	
	100 per kW per day for each additional kW.	
(ii)	Fixed charges for <i>temporary shops</i> set-up during	Rs. 300.00 / day /
	festivals / melas or otherwise and having load up to 2KW	shop



## B. Metered\*:

Description		Energy Charge			
Individual	Residential	Rs. 7.00 / kWh			
construction		From 3 <sup>rd</sup> year onwards: Base Tariff			
		applicable for current year plus			
		additional 10% of the applicable tariff			
Others		Rs. 7.95 / kWh			
		From 3 <sup>rd</sup> year onwards: Base Tariff			
		applicable for current year plus			
		additional 10% of the applicable tariff			

<sup>\*</sup>Minimum bill payable by a consumer under the category "Metered" shall be Rs.  $200.00 \ / \ kW \ /$  week.

## Note:

Charge as specified at A, shall be paid by the consumer in advance.



## **RATE SCHEDULE LMV-10:**

#### **DEPARTMENTAL EMPLOYEES AND PENSIONERS:**

#### 1. APPLICABILITY:

This schedule shall apply only to such employees (including the cases of retired / voluntary retired or deemed retired) of Licensees / successor entities of erstwhile Uttar Pradesh State Electricity Board (UPSEB), who own electricity connection in their own name and opt for the same for their own use for light, fan and power for domestic appliances, where the energy is being fed directly from Licensee mains. The Schedule shall also apply to spouse of employees served under Licensees / successor entities of erstwhile UPSEB.

#### 2. RATE:

On all such consumers LMV-1 rate schedule will be applicable. However the Licensees are authorised to provide "rebate" as they deem fit to the consumers eligible to get supply under this category.

#### 3. ELECTRICITY DUTY:

Electricity duty on the above shall be levied in addition at the rates as may be notified by the State Government from time to time.

## 4. OTHER PROVISIONS:

- (i) For serving / retired employees and their spouse, the supply will only be given at one place where Licensee's mains exist. The electric supply under this tariff will be given only at one place, within the area of erstwhile UPSEB / its successor companies.
- (ii) Concerned executive engineers will take an affidavit from all employees and pensioners that the electricity supplied to their premises is being used exclusively for the purpose of domestic consumption of themselves and



their dependants. It will have to be certified by the employees/pensioners that such electricity is not being used for any other purpose or to any individual to whom his house has been rented out. Without any prejudice to any legal action as provided in the legal framework, any misuse to above effect shall invalidate him from the facility of LMV-10 on permanent basis.

- (iii) In the event of transfer of the employee, this tariff shall be applied at the new place of posting only when a certificate has been obtained from the concerned Executive Engineer of the previous place of posting, that the supply under this tariff has been withdrawn at previous place of posting. Further, the employee shall also be required to submit an affidavit that he is not availing the benefit of LMV-10 connection anywhere else in the state.
- (iv) Those who are not availing this tariff shall also give a declaration to this effect. This declaration shall be pasted / kept in his service book / personal file / Pensioners record. If the declaration is found wrong, necessary action against the employee shall be taken as per the provisions of service rules. If declaration has already been given at the present place of posting then further declaration is not necessary due to this revision. Pensioners shall also have to give a similar declaration for availing departmental tariff at only one place. In case this declaration is found wrong, this tariff shall be withdrawn forever.
- (v) No other concession shall be admissible on this tariff.
- (vi) The schedule of miscellaneous charges as appended with Licensee's General Tariff as amended from time to time and Electricity Supply (Consumers) Regulation, 1984 as enforced from time to time shall also be applicable on the employee / pensioner receiving supply under this schedule.
- (vii) Retired employees drawing pension from the Treasury / Bank will have to pay the monthly electricity charges as per the rates given in the rate schedule applicable to their category.



## **RATE SCHEDULE HV-1:**

#### NON INDUSTRIAL BULK LOADS:

#### 1. APPLICABILITY:

This rate schedule shall apply to:

- (a) Commercial loads (as defined within the meaning of LMV-2) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.
- (b) Private institutions (as defined within the meaning of LMV-4 (b)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.
- (c) Non domestic bulk power consumer (other than industrial loads covered under HV-2) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and feeding multiple individuals (owners / occupiers / tenants of some area within the larger premises of the bulk power consumer) through its own network and also responsible for maintaining distribution network.
- (d) Public institutions (as defined within the meaning of LMV-4 (a)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels. The institution / consumer seeking the supply at Single point for non-industrial bulk loads under this category shall be considered as a deemed franchisee of the Licensee.
- (e) Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and having less than 70% of the total contracted load exclusively for the purposes of domestic light, fan and power. Figure of 70%, shall also include the load required for lifts, water pumps and common lighting,
- (f) For Offices / Buildings / Guesthouses of UPPCL / UPRVUNL / UPJVNL / UPPTCL / Distribution Licensees having loads above 75 kW and getting supply at 11 kV & above voltages.



## 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

## 3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

(a) Commercial Loads / Private Institutions / Non domestic bulk power consumer with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above:

	For supply at 11kV		For supply at 33 kV & above	
Contracted	Upto 100	Above 100	Upto 100	Above 100
Load	kVA	kVA	kVA	kVA
Demand	Rs. 320.00 /	Rs. 360.00 /	Rs. 320.00 /	Rs. 360.00 /
Charges	kVA / month	kVA / month	kVA / month	kVA / month

	For supply at 11kV		For supply at 33 kV & above		
Consumption	For first 2500	For above	For first 2500 For above		
Range	kVAh /	2500 kVAh	kVAh / month	2500 kVAh /	
	month	/ month		month	
		(Starting	(Starti		
		from 2501st		from 2501st	
		kVAh )		kVAh)	
Energy	Rs. 7.60 /	Rs. 7.95 /	Rs. 7.40 /	Rs. 7.75 /	
Charges	kVAh	kVAh	kVAh	kVAh	

(b) Public Institutions, Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings including Residential Multi-Storied Buildings with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels:

	For supply at 11kV	For	supply	at	33	kV	&
		abo	ve				



Contracted Upto 100 Load kVA		Above 100	Upto 100	Above 100	
		kVA	kVA	kVA	
Demand	Rs. 285.00 /	Rs. 300.00 /	Rs. 285.00 /	Rs. 300.00 /	
Charges	kVA / month	kVA / month	kVA / month	kVA / month	

	For supply at	11kV	For supply a	at 33 kV &
Consumptio n Range	For first 2500 kVAh / month	For above 2500 kVAh / month (Starting from 2501 <sup>st</sup> kVAh)	For first 2500 kVAh / month	For above 2500 kVAh / month (Starting from 2501 <sup>st</sup> kVAh)
Energy Charges	Rs. 7.20 / kVAh	Rs. 7.40 / kVAh	Rs. 7.00 / kVAh	Rs. 7.20 / kVAh

The

body seeking the supply at Single point for bulk loads under this category shall be considered as a deemed franchisee of the Licensee. Such body shall charge not more than 5% additional charge on the above specified 'Rate' from its consumers apart from other applicable charges such as Regulatory Surcharge, Penalty, Rebate and Electricity Duty on actual basis.

The 5% additional charge shall be towards facilitating supply of electricity to the individual members to recover its expenses towards supply of electricity, distribution loss, electrical maintenance in its supply area, billing, accounting and audit etc.

The deemed franchisee is required to provide to all its consumers and the licensee, a copy of the detailed computation of the details of the amounts realized from all the individual consumers and the amount paid to the licensee for every billing cycle on half yearly basis. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee shall arrange to get its account(s) audited by a Chartered Accountant mandatorily. The audited accounts will be made available to all the consumers of the deemed franchisee within 3 months of the closure of that



financial year. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum (CGRF) having jurisdiction over their local area for the redressal of their grievances.

The deemed franchisee should separately meter the electricity supplied from back up arrangements like DG sets etc. The bill of its consumers should clearly depict the units and rate of electricity supplied through back up arrangement and electricity supplied through Licensee.

The deemed franchisee shall not disconnect the supply of electricity of its consumers on the pretext of defaults in payments related to other charges except for the electricity dues regarding the electricity consumed by its consumers and electricity charges for lift, water lifting pump, streetlight if any, corridor / campus lighting and other common facilities.

In case the deemed franchisee exceeds the contracted load / demand under the provisions of Clause 7(ii) — 'Charges for Exceeding Contracted demand' of the General Provisions of this Rate Schedule, only in such case the deemed franchisee will recover the same from the individual members who were responsible for it on the basis of their individual excess demands.



#### **RATE SCHEDULE HV-2:**

#### LARGE AND HEAVY POWER:

#### 1. APPLICABILITY:

This rate schedule shall apply to all consumers having contracted load above 75 kW (100 BHP) for industrial and / or processing purposes as well as to Arc / induction furnaces, rolling / re-rolling mills, mini-steel plants and floriculture & farming units and to any other HT consumer not covered under any other rate schedule.

Supply to Induction and Arc furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirement of tonnage of furnaces. The minimum load of one-ton furnace shall in no case be less than 400 kVA and all loads will be determined on this basis. No supply will be given on loads below this norm.

For all HV-2 consumers, conditions of supply, apart from the rates, as agreed between the Licensee and the consumer shall continue to prevail as long as they are in line with the existing Regulations & Acts.

#### 2. CHARACTER AND POINT OF SUPPLY:

As per the applicable provisions of Electricity Supply Code.

#### 3. RATE:

Rate, gives the demand and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed for his consumption during the billing period applicable to the category:

#### (A) Urban Schedule:

to and about about about about about about about about and about and about abo	r supply ove 11 kV d up to & luding 66 including 132 kV	For supply above 132 kV
--	---	----------------------------



	including 11 and up to &		For supply above 66 kV and up to & including 132 kV	For supply above 132 kV
BASE RATE				
Demand Charges	Rs. 250.00 / kVA / month	Rs. 240.00 / kVA / month	Rs. 220.00 / kVA / month	Rs. 220.00 / kVA / month
Energy Charges	Rs. 6.65 / kVAh	Rs. 6.35 / kVAh	Rs. 6.15 / kVAh	Rs. 5.95 / kVAh
TOD RATE				
*22:00 hrs – 06:00 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%	(-) 7.5%
06:00 hrs – 17:00 hrs	0%	0%	0%	0%
17:00 hrs – 22:00 hrs	(+) 15%	(+) 15%	(+) 15%	(+) 15%

<sup>\*</sup>Note: The TOD rate applicable to the Induction Furnaces / Arc Furnaces, Rolling / Re-Rolling Mill industrial consumers will be (-) 20% in place of (-) 7.5% for 22:00 hrs-06:00 hrs. time period.

#### **Optional ToD Structure**

For all such consumers who want to operate at full potential only during the specified night hours with restricted consumption in remaining hours may opt for the new TOD structure as follows:

For all such consumers who opt for this structure, the rebate can be availed between 22.00 hrs to 06.00 hrs specifically by such consumers operating at its full potential during this period and for such consumers the load during other hours i.e. 06:00 to 22:00 hours, shall be restricted to 15% of its contracted load. The TOD structure for such consumers is as given below:

#### **Optional TOD Structure for Specific Consumers**

Hours	TOD Rates



Hours	TOD Rates
06:00 hrs – 22:00 hrs	Restricted Load as specified
22:00 hrs – 06:00 hrs	-15%

Such consumers would be required to ask for such ToD structure in advance. However, if the consumer who has opted for optional ToD structure, exceeds the restricted load as specified during the time slot of 06.00 - 22.00 hours in any month, the TOD structure as applicable for HV-2 category (i.e. as per ToD Rates specified for all Consumers) will be applicable for such consumer for that particular month.

#### (B) Rural Schedule:

This schedule shall be applicable only to consumers getting supply up to 11 kV as per 'Rural Schedule'. The consumer under this category shall be entitled to a rebate of 7.5% on demand & energy charges as given for 11 kV consumers under urban schedule without TOD rates.

## (C) Consumers already existing under HV-2 category with metering arrangement at low voltage:

Existing consumer under HV-2 with metering at 0.4 kV shall be required to pay as per schedule applicable to 11 kV consumers under HV-2 category.

#### 4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

i. The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.



- ii. Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration / execution of agreement mentioning the period of operation unambiguously.
- iii. The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.
- iv. The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail Licensees supply for miscellaneous loads and other non-process loads.
- v. The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW / kVA and energy charge per kWh / kVAh) for such industries during off-season period will be the same as for normal period. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

#### 5. FACTORY LIGHTING:

The electrical energy supplied shall also be utilized in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper's office, canteen, staff club, library, crèche, dispensary, staff welfare centres, compound lighting, etc. No separate connection for the same shall be provided.



#### **RATE SCHEDULE HV – 3:**

#### **A: RAILWAY TRACTION:**

#### 1. APPLICABILITY:

This schedule shall apply to the Railways for Traction loads only.

#### 2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the Licensee. The supply at each sub-station shall be separately metered and charged.

#### 3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

Description	Charges	
(a) Demand Charge		
For supply at and above 132 kV	Rs. 340.00 / kVA / month	
Below 132 kV	Rs. 350.00 / kVA / month	
(b) Energy Charge (all consumption in a month)		
For supply at and above 132 kV	Rs. 6.95 / kVAh	
Below 132 kV	Rs. 7.20 / kVAh	

**Note:** Minimum bill payable by a consumer under this category shall be Rs. 725.00 / kVA / month.

#### 4. DETERMINATION OF THE DEMAND:



Demand measurement at a particular time will be made on basis of simultaneous maximum demands recorded in summation kilovolt-ampere meter installed at contiguous substation serviced by same grid transformer.

The demand for any month shall be defined as the highest average load measured in Kilo Volt amperes during any fifteen consecutive minutes period of the month.



#### **B: METRO RAIL:**

#### 1. APPLICABILITY:

This schedule shall apply to the Metro Rail Corporation.

#### 2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the Licensee. The supply at each sub-station shall be separately metered and charged.

#### 3. RATE:

Rate, gives the energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

Demand Charges	Rs. 125.00 / kVA / month
Energy Charges	Rs. 5.60 / kVAh

**Note:** Minimum bill payable by a consumer under this category shall be Rs. 600 / kVA / month.

 Penalty @ Rs. 540 / kVA will be charged on excess demand, if demand exceeds contracted load.

#### 4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of delivery. The demand for any month shall be defined as the highest average load measured in Kilo Volt Amperes during any fifteen consecutive minutes period of the month.



#### RATE SCHEDULE HV - 4:

#### **LIFT IRRIGATION WORKS:**

#### 1. APPLICABILITY:

This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW).

#### 2. CHARACTER OF SERVICE & POINT OF SUPPLY:

As per applicable provisions of Electricity Supply Code.

#### 3. RATE:

Rate, gives the demand and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

#### (a) Demand Charges:

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 290.00 / kVA / month
For supply at 33 kV and 66 kV	Rs. 280.00 / kVA / month
For supply at 132 kV	Rs. 270.00 / kVA / month

#### (b) Energy Charges:

Voltage Level	Rate of Charge
For supply at 11 kV	Rs. 7.40 / kVAh
For supply at 33 kV and 66 kV	Rs. 7.25 / kVAh
For supply at 132 kV	Rs. 7.05 / kVAh

#### c) Minimum Charges:



Minimum bill payable by a consumer under this category shall be Rs. 800.00 / kVA / month irrespective of supply voltage

#### 4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of supply. In the absence of suitable demand indicator, the demand as assessed by the Licensee shall be final and binding. If, however, the number of circuits is more than one, demand and energy measurement will be done on the principle of current transformer summation metering.



#### 11.2.1 PUBLIC LAMPS:

#### 1. MAINTENANCE CHARGE:

In addition to the "Rate of Charge" mentioned above, a sum of Rs. 10.00 per light point per month will be charged for operation and maintenance of street lights. This Maintenance Charge will cover only labour charges, where all required materials are supplied by the local bodies. However, the local bodies will have an option to operate and maintain the public lamps themselves and in such case, no maintenance charge shall be recovered. This charge shall not apply to the consumers with metered supply.

#### 2. PROVISION OF LAMPS:

Streets where distribution mains already exist, the Licensee will provide a separate single-phase, 2-wire system for the street lights including light fitting and incandescent lamps of rating not exceeding 100 Watts each. In case the above maintenance charge is being levied, the labour involved in replacements or renewal of lamps shall be provided by the Licensee. However, all the required materials shall be provided by the local bodies. The cost of all other types of street light fittings shall be paid by the local bodies.

The cost involved in extension of street light mains (including cost of substations, if any) in areas where distribution mains of the Licensee have not been laid, will be paid for by the local bodies.

#### 3. VERIFICATION OF LOAD:

The number of light points including that of traffic signals together with their wattage will be verified jointly by the representatives of Licensee and Town Area / Municipal Board / Corporation at least once in a year. However, additions will be intimated by the Town Area / Municipal Board / Corporation on monthly basis. The Licensee will carry out the checking of such statements to satisfy themselves of the correctness of the same. The monthly bills shall be issued on the basis of verified number of points at the beginning of the year and additions, if any, during the months as intimated above. The difference, if any, detected during joint verification in the following year shall be reconciled and supplementary bills shall be issued.



Further, if the authorized representative of concerned local body does not participate in the work of verification of light points, a notice will be sent by concerned Executive Engineer in writing to such local bodies for deputing representative on specific date(s), failing which the verification of the light points shall be done by the concerned representative of Licensee which shall be final and binding upon such local body.

#### 11.2.2 STATE TUBE-WELLS

#### **NET LOAD:**

- (i) Net load hereinafter shall mean the total load connected during the quarter less the load of failed and abandoned tube-wells accounted for during that quarter.
- (ii) The connected load as on 31<sup>st</sup> March of the preceding year will be worked out on the basis of 'Net load' reported by the Executive Engineers of concerned Divisions after joint inspection and verification of the same by the concerned officers of the State Government / Panchayat, joint meter reading shall also be taken during the inspection on quarterly basis. The monthly bills for three months of the first quarter will be issued on the connected load worked out as such at the above rates. The same process shall be repeated for subsequent quarters.



#### 11.3 SCHEDULE OF MISCELLANEOUS CHARGES

Sl. No.	NATURE OF CHARGES	UNIT	RATES (₹)
1.	Checking and Testing of Meters:		
	a. Single Phase Meters	Per Meter	50.00
	b. Three Phase Meters	Per Meter	50.00
	c. Recording Type Watt-hour Meters / Prepaid	Per Meter	175.00
	Meters		
	d. Maximum Demand Indicator	Per Meter	350.00
	e. Tri-vector Meters	Per Meter	1000.00
	f. Ammeters and Volt Meters	Per Meter	50.00
	g. Special Meters / Net Meters	Per Meter	400.00
	h. Initial Testing of Meters	Per Meter	Nil
2.			
	a. Consumer having load above 100 BHP/75kW	Per Job	500.00
	b. Power consumers up to 100BHP/75kW	Per Job	275.00
	c. All other categories of consumers.	Per Job	150.00
3.	Replacement of Meters:		
	a. By higher capacity Meter	Per Job	50.00
	b. Installation of Meter and its subsequent	Per Job	75.00
	removal in case of Temporary Connections c. Changing of position of Meter Board at the consumer's request	Per Job	100.00
4.	Service of Wireman :		
	a. Replacement of Fuse	Per Job	20.00
	b. Inserting and Removal of Fuse in respect of	Per Job	25.00
	night loads.		
	c. Hiring of services by the consumer during	Per wireman	60.00
	temporary supply or otherwise.	/day of 6 Hrs.	
		Per Meter	
5.	Resealing of Meters on account of any reason in		100.00
	addition to other charges payable in terms of		



## Determination of ARR and Tariff of MVVNL for FY 2016-17 and True-up of FY 2013-14

Sl. No.	NATURE OF CHARGES	UNIT	RATES (₹)
	other provision of charging of penalties, etc.)		
6.	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V / 230 V	Per Job	100.00
	b. At 11 kV and above.	Per Job	200.00



## 11.4 LIST OF POWER FACTOR APPARATUS FOR MOTORS:

Sl. No.	Rating of	KVAR Rating of Capacitor			
	Individual Motor	750 RPM	1000 RPM	1500 RPM	3000 RPM
1.	Up to 3 HP	1	1	1	1
2.	5 HP	2	2	2	2
3.	7.5 HP	3	3	3	3
4.	10 HP	4	4	4	3
5.	15 HP	6	5	5	4
6.	20 HP	8	7	6	5
7.	25 HP	9	8	7	6
8.	30 HP	10	9	8	7
9.	40 HP	13	11	10	9
10.	50 HP	15	15	12	10
11.	60 HP	20	20	16	14
12.	75 HP	24	23	19	16
13.	100 HP	30	30	24	20
14.	125 HP	39	38	31	26
15.	150 HP	45	45	36	30
16.	200 HP	60	60	48	40

#### **FOR WELDING TRANSFORMERS:**

SI. No.	Name Plate Rating in KVA of Individual Welding Transformer	Capacity of the Capacitors (KVAR)
1.	1	1
2.	2	2
3.	3	3
4.	4	3
5.	5	4
6.	6	5
7.	7	6
8.	8	6



SI.	Name Plate Rating in KVA of Individual	Capacity of the Capacitors
No.	Welding Transformer	(KVAR)
9.	9	7
10.	10	8
11.	11	9
12.	12	9
13.	13	10
14.	14	11
15.	15	12
16.	16	12
17.	17	13
18.	18	14
19.	19	15
20	20	15
21.	21	16
22.	22	17
23.	23	18
24.	24	19
25.	25	19
26.	26	20
27.	27	21
28.	28	22
29.	29	22
30.	30	23
31.	31	24
32.	32	25
33.	33	25
34.	34	26
35.	35	27



# 11.5 LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT GREATER NOIDA, LUCKNOW AND ALIGARH IN RESPECT OF PROCEEDINGS FOR ARR & TARIFF DETERMINATION FOR FY 2016-17

#### LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT GREATER NOIDA

List of Persons who attended Public Hearing at Greater Noida on May 11, 2016							
Sl. No.	Name	Organisation					
1	Shri R.P. Singh	PVVNL					
2	Shri S.C. Gupta	Director(Commercial), MVVNL					
3	Shri S.P. Sharma	Consumer					
4	Dr. Amit Bhargava	Director (Tariff), UPERC					
5	Shri Z. Rehmann	Consumer					
6	Shri B.R. Bhati	Chairman, IIA					
7	Shri V.K. Kaushik	Advisor, PVVNL					
8	Shri Raghvendra	EE, EUDDI					
9	Shri Sanjay Kumar Chaurasia	Executive Engineer, UPPTCL					
10	Shri S.K. Singh	PVVNL					
11	Shri S. Joshi	UPPCL					
12	Shri A.K. Pathak	UPPCL					
13	Shri Sudhir Goyal	Consumer					
14	Shri Gaurav Nand	IERS					
15	Shri R.D. Tyagi	Consumer					
16	Shri A.K. Tyagi	SE, PVVNL					
17	Shri Ravi Bansal	Consumer					
18	Shri Rahul	Consumer					
19	Shri Nikhil	Consumer					
20	Shri Rakesh	Advocate					
21	Shri Sagar K.	Consumer					
22	Shri Siddharth Shah	Consumer					
23	Shri Lokesh Goswami	Technews					
24	Shri Ilam Singh Nagar	Consumer					
25	Shri Atul Kumar Rai	PuVVNL					
26	Shri Manoj Singh	PuVVNL					
27	Shri R.R. Shah	Consumer					
28	Shri Mohan Singh	Consumer					
29	Shri Harish Juneja	Consumer					
30	Shri Akarsh Garg	Consumer					
31	Shri Amit	Consumer					
32	Shri Ram Gopal Sharma	Consumer					



il. No.	Name	Organisation
33	Shri Rajeev Gupta	UPPCL
34	Shri Atul	Consumer
35	Dr. A.K. Nagar	Consumer
36	Shri Ram Ashray	UPPTCL
37	Shri Sandeep Kumar	UPPTCL
38	Shri R.S. Yadav	MVVNL
39	Shri A.K. Gupta	PVVNL
40	Shri D.C. Verma	EE(RAU), UPPCL
41	Shri Avnish Kumar	UPPCL
42	Shri Suraj Chaudhary	UPPCL
43	Shri Mukesh	IIA
44	Shri Anil Kr.	IIA
45	Shri Rakesh Verma	PVVNL
46	Shri Jagdish Pal	Consumer
47	Shri Govind Singh	Consumer
48	Shri Rahul Bhati	Consumer
49	Shri Mool Chand	Consumer
50	Shri Satish K.	Consumer
51	Shri S.M. Garg	PVVNL
52	Shri Phool Chand	Consumer
53	Shri Jitendra Pareek	GNVM
54	Shri Gagan Tyagi	Dainik Jagran
55	Shri Neeraj Gupta	Consumer
56	Shri S. Kumar	Consumer
57	Shri Rakesh K.	PVVNL
58	Shri P.K. Tiwari	IIA
59	Shri Sushil Kumar	Consumer
60	Shri Manish	Consumer
61	Shri Rajeev	Consumer
62	Shri Naveen Jain	Consumer
63	Shri Parinay Shah	Advocate
64	Shri Saurabh	Consumer
65	Shri Manoj Siradhna	IIA
66	Shri Saurabh	Consumer
67	Shri Alok Nahar	Consumer
68	Shri Titu Sharma	Consumer
69	Shri Raj Sharma	Consumer



List of	List of Persons who attended Public Hearing at Greater Noida on May 11, 2016						
Sl. No.	Name	Organisation					
70	Shri Vikas Sharma	Consumer					
71	Shri Sunil Pradhan	Consumer					
72	Shri N.K. Upadhyay	Consumer					
73	Shri Ramveer	Consumer					
74	Shri Sunil Kumar	Consumer					
75	Smt. Rupa Gupta	Consumer					
76	Shri Harish Kumar	Consumer					
77	Shri Sonu Rastogi	PVVNL					
78	Shri Sonika Hayaran	ABPS-Consultant, UPERC					
79	Shri A.K. Agarwal	CGRF					
80	Shri Atul Shrivastav	IERS					
81	Shri Sandeep Bhati	Consumer					
82	Shri Pradeep Agrawal	IIA					
83	Shri R.K. Rastogi	Regulatory Commission					
84	Shri Pratap Bhanu	CGRF					
85	Shri Ram Gopal	Consumer					
86	Shri K.L. Aggarwal	ASSOCHAM					
87	Shri Subrat Kumar	ABPS-Consultant, UPERC					
88	Shri Ajay Sharma	Consumer					
89	Shri Sandeep	NEA					
90	Shri J.S. Yadav	UPPCL					
91	Shri Harender Bhati	Consumer					
92	Shri Rahul Nagar	Consumer					
93	Shri Atul Sharma	Consumer					
94	Shri Surendra Sing	Consumer					
95	Shri Devender	Consumer					
96	Shri V.K. Sharma	Consumer					
97	Shri Ashish Singh	Consumer					
98	Shri P.K. Gupta	Consumer					
99	Shri Birju	Consumer					
100	Shri Salil Yadav	Consumer					
101	Shri Puneet Gupta	UPPTCL					
102	Shri Naveen Bhati	Consumer					
103	Shri Sanjay Agarwal	Consumer					
104	Shri Alok Singh	Consumer					
105	Shri Devendra Tiger	Consumer					
106	Shri Deepak Bhati	Consumer					



List of Persons who attended Public Hearing at Greater Noida on May 11, 2016									
Sl. No.	. Name Organisation								
107	Shri Rajesh Gupta	Consumer							

#### LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT LUCKNOW

List of	List of Persons who attended Public Hearing at Lucknow on May 13, 2016								
Sl. No.	Name	Organisation							
1	Shri Avadhesh Kumar Verma	Chairman, UPRVUP							
2	Shri Rama Shanker Awasthi	Consumer							
3	Shri Abhishek Gautam	Consumer							
4	Shri Satender Vishwa Karma	Consumer							
5	Shri Viswanath	Consumer							
6	Shri Raju Gautam	UPRVUP							
7	Shri Janaav Khan	UPRVUP							
8	Shri P.K. Maskara	Consumer							
9	Shri M.P. Sharma	Consumer							
10	Shri Ajay Agnihotri	Consumer							
11	Shri Anand Singh	Consumer							
12	Shri V.N. Gupta	Consumer							
13	Shri A.K. Arora	NPCL							
14	Shri B.N. Rai	CGRF							
15	Dr. Amit Bhargava	Director (Tariff), UPERC							
16	Shri Durga Prasad	Consumer							
17	Shri Nitesh Tyagi	ABPS-Consultant, UPERC							
18	Smt. Sonika Hayaran	ABPS-Consultant, UPERC							
19	Shri Subrat Kumar Swain	ABPS-Consultant, UPERC							
20	Shri Vaibhav Gupta	Consumer							
21	Shri Omkar Mishra	Consumer							
22	Shri P.C. Mishra	CGRF							
23	Shri Naveen Gupta	Consumer							
24	Shri Gaurav Srivastava	Consumer							
25	Shri R.S. Prasad	MVVNL							
26	Shri Mohd. Tariq Warsi	MVVNL							
27	Shri A.K. Pathak	CE, UPPCL							
28	Shri Sehdev Singh Goel	UPPTCL							
29	Shri Ram Swarath	Director(Comm),UPPTCL							
30	Shri Sanjay Kr. Chaurasia	UPPTCL							
31	Shri Ashok Das	CGRF							
32	Shri M.L. Agarwal	CGRF							



List of	Persons who attended Pub	lic Hearing at Lucknow on May 13, 2016
SI. No.	Name	Organisation
33	Shri A.K. Singh	KESCO
34	Shri Vivek Dikshit	UPPCL
35	Shri S. Joshi	UPPCL
36	Shri Sayed Abbas Rizvi	UPPCL
37	Shri S.K. Verma	LESA
38	Shri A.K. Kohli	MVVNL
39	Shri Yogesh Hajela	KESCO
40	Shri Kamlesh Chandra	CGRF
41	Shri S.C. Singh	CGRF
42	Shri Anil Kumar	CGRF
43	Shri Vijai Kumar	DVVNL
44	Shri Gaurav Nand	IERS
45	Ms. Priya Dwivedi	IERS
46	Ms. Surabhi Sinha	IERS
47	Shri Hemant Yadav	Consumer

#### LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT ALIGARH

List o	List of Persons who attended Public Hearing at Aligarh on May 20, 2016								
Sl. No.	Name	Organisation							
1	Shri Raj Pal Singh	Consumer							
2	Shri Nawab Singh	Consumer							
3	Shri Jitendra Pal Singh	Consumer							
4	Shri Raj Kumar	Consumer							
5	Shri Mukesh Kumar Yadav	DVVNL							
6	Dr. Amit Bhargava	Director (Tariff), UPERC							
7	Shri R.B. Yadav	CGRF							
8	Shri B.S. Varshney	Consumer							
9	Shri B.L. Jain	CGR							
10	Shri Sachin Jain	Consumer							
11	Shri Subhash Chand	Consumer							
12	Shri Subrat Kumar Swain	ABPS-Consultant, UPERC							
13	Shri Satish Chandra Sharma	Consumer							
14	Shri Abhishek Upadhyay	Consumer							
15	Shri Durvijay Singh	Consumer							
16	Shri J.P. Sharma	Consumer							



List o	List of Persons who attended Public Hearing at Aligarh on May 20, 2016								
SI. No.	Name	Organisation							
17	Shri Akarsh Garg	Consumer							
18	Ms. Mansi J. Garg	Consumer							
19	Shri Suresh Chawla	Consumer							
20	Shri Harish Kumar	Consumer							
21	Shri Devendra Kr. Saxena	Consumer							
22	Shri Chandra Mohan Goyal	Consumer							
23	Shri Haji Sulaiman	Consumer							
24	Shri Gyan Chandra Varshney	Consumer							
25	Shri Mahendra Singh	Consumer							
26	Shri Vinod Varshney	Consumer							
27	Shri Bimal Kumar Kheman	Consumer							
28	Shri Vikram Singh	Consumer							
29	Shri Chandrashekhar Sharma	Consumer							
30	Shri Deepak Goyal	Consumer							
31	Shri S.L. Mukherji	Consumer							
32	Shri M.P. Singh	Consumer							
33	Shri V.K. Mittal	Consumer							
34	Shri O.P. Rathi	Consumer							
35	Shri Y.M. Jha	Consumer							
36	Shri R.S. Upadhyay	Consumer							
37	Shri Sharad K.	Consumer							
38	Shri Girraj	Consumer							
39	Shri Pradeep Singhal	Consumer							
40	Shri A.K. Shukla	UPPTCL							
41	Shri Sandeep Kumar	UPPTCL							
42	Shri S. Joshi	UPPCL							
43	Shri D.C. Verma	UPPCL							
44	Shri N.K. Jain	Consumer							
45	Shri M.L. Upadhyay	Consumer							
46	Shri Girish Chand	UPPCL							
47	Smt. Anguri Solanki	Consumer							
48	Shri Shashi Singh	Consumer							
49	Shri Deepak Sharma	Amar Ujala							
50	Shri Bhupendra Varshney	Consumer							
51	Shri Sugam Srivastava	Hindustan							
52	Shri Surjeet Pundhir	Dainik Jagran							
53	Shri Vivek Kumar	Hindustan							



List o	of Persons who attended Public Hearing at Aligarh on May 20, 2016						
SI. No.	Name	Organisation					
54	Shri B.M. Sharma	Consumer					
55	Shri Nitin Agarwal	Consumer					
56	Shri J.P. Verma	CGRF					
57	Shri U.S. Paul	Consumer					
58	Shri Yatendra YK	Consumer					
59	Shri Rajesh Sorkoda	Consumer					
60	Shri Mukesh K. Singh	Consumer					
61	Shri Moin Khan	Consumer					
62	Mohd. Shami	Consumer					
63	Shri Sukhram	Consumer					
64	Shri A.K. Singh	KESCO					
65	Dr. G.R. Suman	Consumer					
66	Shri Sharif Ahmad	Consumer					
67	Shri Shailesh R. Desai	Torrent Power					
68	Shri Subir Kr. Das	Torrent Power					
69	Shri Rakesh	Torrent Power					
70	Shri Naresh Bharti	DVVNL					
71	Shri A.K. Saxena	DVVNL					
72	Shri Vinod Kumar	CGRF					
73	Shri Karan Singh	DVVNL					
74	Shri Afzal Hameed	Consumer					
75	Shri G.P. Bhardwaj	Consumer					
76	Shri M. Rihan	AMU					
77	Shri A.K. Singh	MVVNL					
78	Shri Niraj Khandelwal	Consumer					
79	Shri K.P. Singh	Consumer					
80	Shri Dulare Khan	Consumer					
81	Shri Musharraf Husain	Consumer					
82	Shri Ilias Ali	Consumer					
83	Shri Iqbal Hussain	Consumer					
84	Shri Mohd. Aslam	Consumer					
85	Shri Prem Narayan	UPPCL					
86	Shri Pradeep Ganga	Consumer					
87	Shri Subodh Kumar	Consumer					
88	Shri Atul Kr. Shrivastav	IERS					
89	Shri Shariq K	Consumer					
90	Shri. S K Gupta	Consumer					



List o	f Persons who attended Public H	earing at Aligarh on May 20, 2016
SI. No.	Name	Organisation
91	Shri Faizan	Consumer
92	Shri Rakesh	Consumer
93	Shri S.Zuber Khan	Consumer
94	Shri Sukhdev Varshney	Consumer
95	Shri Sanjay Mishra	Consumer
96	Shri Deepak Agarwal	Consumer
97	Shri Shiv Dayal Sharma	Consumer
98	Dr. Kailash	Consumer
99	Nawab Arzoo	Consumer
100	Shri Naresh Kumar Sharma	Consumer
101	Shri Govind Sharan Singh	Consumer
102	Shri Suraj	News
103	Shri Mahi Pal	Amar Ujala
104	Shri Dipendra	Consumer
105	Shri Prem Chandra	Consumer
106	Shri Har Narayan	Consumer
107	Shri Pramod	Zee News
108	Shri Manoj Kumar	Consumer
109	Shri Sugam	Hindustan
110	Shri Yash Krishna Singh	Consumer



#### 11.6 FUEL AND POWER PURCHASE COST ADJUSTMENT SURCHARGE

Table 11-4: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2016-17: FPPCA

Y 2016-17													
PVVNL	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Purchase (MU)	3,231	3,550	3,540	3,544	3,576	2,996	2,980	2,661	2,767	2,826	2,485	2,893	37,048
Approved average power per unit (Rs/Unit)													4.26
Allocated Approved Power Purchase Cost (Rs. Crs)	1,377	1,513	1,509	1,511	1,524	1,277	1,270	1,134	1,179	1,204	1,059	1,233	15,791
FY 2016-17													
DVVNL	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Purchase (MU)	2,481	2,726	2,719	2,721	2,747	2,301	2,289	2,043	2,125	2,170	1,908	2,223	28,452
Approved average power power per unit (Rs/Unit)													4.26
Allocated Approved Power Purchase Cost (Rs. Crs)	1,057	1,162	1,159	1,160	1,171	981	975	871	906	925	813	947	12,127



FY 2016-17														
FY 2016-17	7 2016-17													
MVVNL		Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Purchase (MU)		2,043	2,245	2,239	2,242	2,261	1,894	1,884	1,683	1,750	1,787	1,571	1,829	23,430
Approved average power power unit (Rs/Unit)	per													4.26
Allocated Approved Power Purchase Cost (Rs. Crs)		871	957	954	956	964	807	803	717	746	762	669	780	9,986
FY 2016-17					1									
PuVVNL		Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Pu (MU)	ırchase	2,967	3,261	3,251	3,255	3,284	2,752	2,736	2,443	2,541	2,594	2,282	2,657	34,022
Approved average power power per unit (Rs/Unit)														4.26
Allocated Approved Power Purchase Cost (Rs. Crs)		1,265	1,390	1,386	1,387	1,400	1,173	1,166	1,041	1,083	1,106	973	1,133	14,501
FY 2016-17							,							
KeSCO	Apr	May	Jur	ne J	luly	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total



FY 2016-17	_												
Allocation of Approved Power Purchase (MU)	389	427	426	426	430	361	359	321	333	340	299	348	4,462
Approved average power power per unit (Rs/Unit)													4.26
Allocated Approved Power Purchase Cost (Rs. Crs)	166	182	182	182	183	154	153	137	142	145	127	148	1,902
FY 2016-17							•						
UPPCL	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Allocation of Approved Power Purchase (MU)	11,111	12,211	12,174	12,190	12,299	10,305	10,248	9,151	9,515	9,717	8,544	9,952	127,414
Approved average power power per unit (Rs/Unit)													4.26
Allocated Approved Power													



### 11.7 ACTION TAKEN REPORT ON THE DIRECTIONS ISSUED BY THE COMMISSION IN THE ARR / TARIFF ORDER FOR FY 2016-17

SI. No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance
1	The Commission directs the Licensee to pressingly pursue the GoUP for finalisation of the Transfer Scheme and submit a copy of the same.	Immediate	
2	The Commission again reiterates its direction to the Licensee to ensure proper maintenance of detailed fixed assets registers as specified in the Distribution Tariff Regulations. As the fixed asset registers are pending since the creation of Discom, the Commission directs the Licensee to submit a status report and provide the proposed timelines / milestones for clearing the backlog. Also, the Petitioner must submit the Fixed Asset Register from FY 2012-13 to FY 2015-16 along with the petition for FY 2017-18.	With next ARR filings	
3	The Commission directs the Licensee to frame an appropriate policy on capitalization of (i) employee costs, and (ii) A&G expenses.	Immediate	
4	The Commission directs the Licensee to submit Fresh Actuarial Valuation Study Report in respect to employee expenses.	Immediate	
5	As lack of approved transparent policy on identifying and writing off bad debts is hindering allowance of bad debts as an ARR component; the Commission directs the Licensee to submit ten sample cases of LT & HT consumers where orders have been issued for writing off bad debts, clearly depicting the procedure adopted for writing off bad debts	Immediate	



SI. No.	Description of Directive	Time Period for compliance from the date of issue of the Tariff Order	Status of Compliance
	along with policy framework for managing bad debts for the Commission's perusal.		
6	The Commission directs the Licensee to evolve principles for prudent segregation of ARR towards wheeling function and retail supply function embedded in the distribution function in accordance with Regulation 36 of the Multi Year Tariff Regulations, 2014. Further the Licensee is directed to submit the draft Term of Reference for the approval of the Commission.	Immediate	
7	The Commission directs the Licensee to submit a business plan for the control period i.e. from April 1, 2017 to March 31, 2020 in accordance with Regulation 5, 12.1 & 13.1 of the Multi Year Tariff Regulations, 2014. The Licensee in such business plan shall submit but not limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets. The licensee should note that the specified timeline of June 1, 2016 for submission of the same under the Multi Year Tariff Regulation is over. The Licensee should submit the same at the earliest.	Immediate	
8	The Commission directs the Licensee to conduct benchmarking studies to determine the desired performance standards in accordance with Regulation 4.2.1 of the Multi Year Tariff Regulations, 2014. The licensee should note that specified timeline of September 30, 2015 for submission of the same under the Multi	Immediate	



SI.	Description of Directive	Time Period for	Status of
No.		compliance from	Compliance
		the date of issue	
		of the Tariff	
		Order	
	Year Tariff Regulation, 2014 is over. The		
	Licensee should submit the same at the earliest.		
	The Commission directs the Licensee to ensure	Immediate	
	100 % compliance of the Commission's Orders		
9	and targets to achieve 100% metering. The		
	Licensee should submit the Quarterly progress		
	report in this regard		
	The Commission directs the Licensee to submit	Immediate	
	data related to its peak demand and off peak		
10	demand in MW along with its sales projections		
	in accordance with Clause 3.1.4 of the		
	Distribution Tariff Regulations. Licensee should		
	submit the same for its licensee area.		
	The Commission once again directs the Licensee	Immediate	
	to reconcile the inter-unit balances lying un-		
	reconciled either itself or through independent chartered accountant firms. The Commission		
	has trued-up the ARR for various years.  However, it has been observed that the amount		
11	shown in head of inter-unit balance is very high		
	and a detailed reconciliation and breakup of the		
	same should be submitted to the Commission.		
	The above details should be submitted for FY		
	2011-12, FY 2012-13, 2013-14, 2014-15 and		
	2015-16.		
	The Commission once again directs the licensee	Immediate	
	that they should file FPPCA in a timely and		
	regular manner failing which the Commission		
12	may have to resort to take strict action against		
	the Licensee like disallowance of additional		
	power purchase expenses and the associated		
	carrying cost on account of additional Power		



SI.	Description of Directive	Time Period for	Status of
No.		compliance from	Compliance
		the date of issue	
		of the Tariff	
		Order	
	Purchase expenses or any other action that the		
	Commission may deem fit while doing the		
	Truing up.		
	The Commission directs the Licensee to submit	Immediate	
	the consumer category and sub-category wise		
13	Regulatory Surcharges separately for		
	Regulatory Surcharge-1 & Regulatory		
	Surcharge-2 collected for each year since		
	inception at the earliest.		
	The Commission reiterates that the Licensee	Immediate	
	should adhere to the time line outlined in Uttar		
	Pradesh Electricity Regulatory Commission		
	(Multi Year Distribution Tariff) Regulations,		
	2014 for conducting a detailed study to provide		
14	accurate and effective consumption norms as		
	specified by the Commission in its earlier directions. The licensee should note that		
	specified timeline of December 1, 2015 for		
	submission of the same under the Multi Year		
	Tariff Regulation, 2014 has expired. The		
	Licensee should submit the same at the earliest.		
	The Commission once again directs the	Immediate	
	Distribution Licensee to formulate a mechanism		
	so as to make their officials accountable by		
4-	providing incentives or disincentives for		
15	achievement or non-achievement of the		
	distribution loss and the collection efficiency		
	targets. The Licensee should submit the same		
	at the earliest.		
	The Commission directs the Petitioner to sign	Immediate	
16	the MoUs to be implemented at all levels and		
	submit the copy of the same to the Commission		



SI.	Description of Directive	Time Period for	Status of
No.		compliance from	Compliance
		the date of issue	
		of the Tariff	
		Order	
	The Petitioner should complete the Assessment	Immediate	
	Study of metered consumers as per the		
	Regulations 16.2 notified vide MYT Regulations,		
	2014 and subsequently submit the report to the		
17	Commission. The licensee should note that		
	specified timeline of September 30, 2015 for		
	submission of the same under the Multi Year		
	Tariff Regulation, 2014 has expired. The		
	Licensee should submit the same at the earliest.		
	The Petitioner should complete the Assessment	Immediate	
	Study of un-metered consumers to establish		
	base line norms as per the Regulations 17.1		
	notified vide MYT Regulations, 2014 and		
18	subsequently submit the report to the Commission. The licensee should note that		
	specified timeline of December 1, 2015 for		
	submission of the same under the Multi Year		
	Tariff Regulation, 2014 is over . The Licensee		
	should submit the same at the earliest.		
	The Petitioner should complete the Study of	Immediate	
	Agriculture feeders segregated and not		
	segregated in significant numbers to determine		
	base line norms as per the Regulations17.2,		
	17.3 notified vide MYT Regulations, 2014 and		
19	subsequently submit the report to the		
	Commission. The licensee should note that		
	specified timeline of December 1, 2015 for		
	submission of the same under the Multi Year		
	Tariff Regulation, 2014 is over. The Licensee		
	should submit the same at the earliest.		
20	The Petitioner should submit Roadmap for	Immediate	
	Reduction of Cross Subsidy as per the		



SI.	Description of Directive	Time Period for	Status of
No.		compliance from	Compliance
		the date of issue	
		of the Tariff	
		Order	
	Regulation 39 notified vide MYT Regulations,		
	2014. The licensee should note that specified		
	timeline of October , 2014 for submission of the		
	same under the Multi Year Tariff Regulation,		
	2014 is over . The Licensee should submit the		
	same at the earliest.		
	The Petitioner should submit month wise	Within one	
21	details of number of supply hours for rural and	month from issue	
	urban area for FY 2014-15 & FY 2015-16	of this Order	
	Petitioner should submit information with	At the earliest	
	regard to the performance parameters like		
	number of consumers added, number of		
22	unmetered consumers converted to metered		
	consumers and actual distribution loss in FY		
	2014-15 & FY 2015-16. The Petitioner is hereby		
	directed to submit the relevant information at		
	the earliest from the issuance of this Order.		
	The Commission directs the Petitioner to frame	Immediate	
	guidelines and procedures for identifying,		
23	physically verifying and writing off the bad		
	debts and also to fisx responsibility of its		
	employees in this regard and submit the same		
	to the Commission for its approval.		
	The Commission directs the Licensee that it	At the time of	
	should clearly depict the total power purchase	next ARR filings	
24	cost incurred at UPPCL level, total power		
	purchase cost paid by the Licensee to UPPCL		
	and power cost payable to UPPCL for the year		
	2016.	NA .11. 5 .	
	The Commission directs Licensees to submit	Monthly Basis	
25	every month a report comprising the details of		
	the power purchased from all the sources		



SI.	Description of Directive	Time Period for	Status of
No.		compliance from	Compliance
		the date of issue	
		of the Tariff	
		Order	
	demonstrating that the Merit Order Dispatch		
	Principle has been strictly followed and that the		
	procurement was optimal in regard to cost		
	taking into consideration of the power available		
	at the power exchanges etc.		
	The Petitioner should file the MYT Petition for	As per MYT	
26	the Control FY 2017-18 to FY 2019-20 as per the	timeline	
20	Regulations 12.2, 12.7, 12.8 & 12.9 as per MYT		
	Regulations, 2014		
	The Commission directs the Petitioner to	At the time of	
27	submit a proposal for "Rate Schedule" linked to	next ARR filings	
	number of hours of supply.		
	The Commission has directed the Licensee to	At the time of	
	submit every month a report comprising the	next ARR filings	
	details of the power purchased from all the		
28	sources demonstrating that the Merit Order		
20	Dispatch Principle has been strictly followed		
	and that the procurement was optimal in		
	regard to cost taking into consideration of the		
	power available at the power exchanges etc.		